SEPTEMBER 2021

APPENDICES TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

Marea Village Mixed Use Development Project

Case No.: MULTI-003780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786-2020; and CPP-3789-2020
SCH No. 2021020272

Lead Agency:
City of Encinitas
Planning Division
505 South Vulcan Avenue
Encinitas, CA 92024

Preparer:
Michael Baker International
5050 Avenida Encinas, Suite 260
Carlsbad, CA 92008

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Technical Appendices

Appendix A-1	Notice of Preparation and Scoping Documents
Appendix A-2	Citizen Participation Program Report
Appendix B	Air Quality Assessment
Appendix C-1	Biological Resources Assessment
Appendix C-2	Arborist Report
Appendix D-1	Phase I Cultural Resources Identification Technical Memorandum
Appendix D-2	Phase II Archaeological Research, Design, and Site Testing, and Evaluation Technical Report
Appendix E	Greenhouse Gas Emissions and Energy Technical Memorandum
Appendix F	Geotechnical Investigation
Appendix G	Stormwater Intake Form and Storm Water Quality Management Plan
Appendix H	Preliminary Hydrology Study
Appendix I	Paleontological Records Search
Appendix J-1	Phase I Environmental Site Assessments
Appendix J-2	Phase I Environmental Site Assessments
Appendix K	Noise and Groundborne Vibration Technical Memorandum
Appendix L-1	Vehicle Miles Traveled Study
Appendix L-2	Local Transportation Analysis
Appendix M-1	Preliminary Sewer System Study
Appendix M-2	Fire Flow Analysis
Appendix M-3	Preliminary Water Demand Summary
Appendix N	Project Facility Availability Forms

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A-1
NOTICE OF PREPARATION AND SCOPING DOCUMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

CITY OF ENCINITAS

Notice of Preparation of a Draft Environmental Impact Report

FROM: City of Encinitas, Planning Division
505 S. Vulcan Avenue
Encinitas, California 92024

TO: State Clearinghouse, Responsible Agencies, Trustee Agencies, and Interested Persons

PROJECT TITLE: Marea Village Mixed Use Development Project

PROJECT APPLICANT: Encinitas Beach Land Venture, LLC

PROJECT LOCATION: 1900 & 1950 North Coast Highway 101, Encinitas, CA 92024;
County Assessor Parcel Numbers: 216-041-20; 216-041-21; 216-041-06

PROJECT CASE NUMBERS: MULTI-003780-2020, DR-003786-2020, BADJ-003787-2020 & CDP-003788-2020

Pursuant to the California Environmental Quality Act (CEQA), the City of Encinitas (City) is issuing this Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the proposed project. Implementation of the project may require approvals from public agencies. As such, the City seeks input as to the scope and content of the EIR based on your agency's purview of the project (if any). In addition, comments are being solicited from other interested persons. Comments received in response to this Notice will be reviewed and considered by the City in determining the scope of the EIR.

PROJECT DESCRIPTION AND ANTICIPATED ENVIRONMENTAL EFFECTS:

Encinitas Beach Land Venture I, LLC (Applicant) proposes a mixed-use development located at the southwest corner of La Costa Avenue and North Coast Highway 101 in the City of Encinitas. The project would consist of 94 for-lease apartments, a 30-room boutique resort hotel, and 18,262 square feet (SF) of mixed-use commercial. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. Of the 94 apartment units proposed, 19 would be density bonus affordable units dedicated to "low-income" qualifying residents. The project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres. The project is within North Highway 101 Corridor Specific Plan boundary, with the site (and/or portions of) being located within the Coastal Zone, Hillside/Inland Bluff Overlay Zone, and/or a designated Scenic Highway/Visual Corridor. Site 1 is designated as Visitor Serving Commercial (VSC) by the General Plan and zoned as Commercial Residential Mixed 1 (N-CRM-1). Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Limited Visitor-Serving Commercial (N-LVSC) with a Residential-30 (R-30) Zone overlay. As part of the City of Encinitas Housing Element Update, Site 1 of the project was allocated a minimum of 33 residential units if the site is developed at a mixed-use ratio. City approval of a density bonus tentative map, design review permit, and coastal development permit will be required to allow for project development.

Project plans may be reviewed on the City's website at: https://encinitasca.gov/I-Want-To/Public-Notices/Development-Services-Public-Notices under "Environmental Notices." It is anticipated that the EIR will focus on the following environmental issue areas: aesthetics, air quality, biological resources, cultural resources, energy conservation, greenhouse gas emissions, geology and soils, hazards and hazardous materials, hydrology/water quality, land use, noise, public services, recreation, transportation, tribal cultural resources, and utilities and service systems.

COMMENT PERIOD: Please send your comments to Scott Vurbeff, Environmental Project Manager, Encinitas Planning Division, 505 S. Vulcan Avenue, Encinitas, CA 92024, or via email to svurbeff@encinitasca.gov. **All comments must be received by no later than 6:00 p.m. on March 15, 2021.**

Scott Vurbeff

Scott Vurbeff, Environmental Project Manager
City of Encinitas, Planning Division

February 12, 2021
Date

CITY OF ENCINITAS

Notice of Preparation of a Draft Environmental Impact Report
Marea Village Mixed Use Development Project ■ Comment Letters Received

LIST OF LETTERS **Date of Letter**

Agencies

California Department of Fish and Wildlife 3/15/21
California Department of Transportation, District 11 ..... 3/15/21
Native American Heritage Commission 2/17/21
San Diego Association of Governments 3/12/21

Individuals

Carol and Dave Allen 3/11/21
Tom Alper 2/22/21
Ben B. 3/15/21
Tom and Judith Boyd 3/12/21
Dora Clarke 3/13/21
Thomas Clarke 3/13/21
Mrs. Thomas Clarke 3/13/21
Jill Denver 3/17/21
Kevin Finan 3/13/21
Dr. Glenn Frieder 3/14/21
Lynne Gilson, Letter 1 ..... 3/12/21
Lynne Gilson, Letter 2 ..... 3/14/21
Janet Gonzales 3/12/21
Peter and Ruth Heidmann 3/11/21
Caroline Jopes, Letter 1 ..... 3/13/21
Caroline Jopes, Letter 2 ..... 3/13/21
Caroline Jopes, Letter 3 ..... 3/14/21
David and Dena Kerr 3/14/21
Brooke McKallor 3/15/21
Sand Miller 3/12/21
Steve Nelson 2/15/21
Steve and Meg Norton 2/21/21
John M “Rusty” Powell 3/13/21
William Racine, Letter 1 ..... 2/16/21
William Racine, Letter 2 ..... 2/22/21
Tiffany Rogers 3/15/21
Laura Ross 3/14/21
Clara Sanchez 3/14/21
Jim and Zeenia Schmitz 3/12/21
Desire and Chris Smith 3/14/21
Elena and John Thompson 3/15/21
Tim and Frances Walters 3/15/21
Bonnie Woelfel 3/12/21

From: Ludovissy, Jennifer@Wildlife <Jennifer.Ludovissy@Wildlife.ca.gov>
Sent: Monday, March 15, 2021 3:22 PM
To: Scott Vurbeff
Cc: Drewe, Karen@Wildlife; Mayer, David@Wildlife; Howell, Susan@Wildlife; Wildlife CEQA Comment Letters; state.clearinghouse@opr.ca.gov; jonathan_d_snyder@fws.gov; Burlaza, Melanie@Wildlife
Subject: Copy of Comment Letter Re: Marea Village Mixed Use Development Project
Attachments: 2021020272 NOP Marea Village DEIR Encinitas.pdf

[**NOTICE:** Caution: External Email]

Mr. Vurbeff,

Please see attached copy for your records. If you have any questions, please contact Melanie Burlaza at Melanie.Burlaza@wildlife.ca.gov.

Thank you!
Jenny

JENNY LUDOVISSY | Staff Services Analyst
She/Her/Hers

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

South Coast Region 5
3883 Ruffin Rd, San Diego, CA 92123
Office (858) 467-2702 | Cell (858) 716-7147

Please consider the environment before printing this e-mail.

DocuSign Envelope ID: BBFCF105-3EFB-4AAC-8ACE-3AA723330165

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

March 15, 2021

Scott Vurbeff
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
SVurbeff@encinitasca.gov

Subject: Comments on the Notice of Preparation of the Marea Village Mixed Use Development Project Draft EIR, SCH #2021020272

Dear Mr. Vurbeff:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Notice of Preparation (NOP) for the Marea Village Mixed Use Development Project (Project) Draft Environmental Impact Report (DEIR).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The City of Encinitas (City)

participated in the NCCP program by preparing a draft Subarea Plan (SAP) under the San Diego County Multiple Habitat Conservation Plan (MHCP). However, the SAP has not been finalized and has not been adopted by the City or received permits from the Wildlife Agencies (jointly, CDFW and the U.S. Fish and Wildlife Service (USFWS)).

Project Location: The 3.8-acre Project site is located at the southwest corner of La Costa Avenue and North Coast Highway 101 in the City of Encinitas. The Project site address is 1900 and 1950 N. Coast Highway 101. The Project site is surrounded by residential to the west, commercial to the south, the 101 highway and residential and commercial to the east, and commercial and the Batiquitos Lagoon to the north. The Project site is partly developed with mixed commercial uses and is partly undeveloped land.

Project Description and Summary: The proposed Project encompasses approximately 3.8 acres that includes 94 for-lease apartments, a 30-room boutique resort hotel, and 18,262 square feet of mixed-use commercial. The Project would include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The Project site is currently partly developed; construction of the Project would involve demolition, clearing and grading of the existing development.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (i.e., biological) resources.

Specific Comments

1) Biological Baseline Assessment. CDFW recommends providing a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area, with emphasis upon identifying endangered, threatened, sensitive, regionally and locally unique species, and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends avoiding any sensitive natural communities found on or adjacent to the Project. CDFW also considers impacts to Species of Special Concern a significant direct and cumulative adverse effect without implementing appropriate avoid and/or mitigation measures. The DEIR should include the following information:

    a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a state-wide ranking of S1, S2, S3 and S4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities;

b) A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline);

c) A complete, recent, assessment of the biological resources associated with each habitat type onsite and within adjacent areas that could also be affected by the Project. CDFW's CNDDB in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp;

d) CNDDB indicates the occurrence of several special status species within the Project vicinity, these include California least tern, light-footed Ridgway's rail (*Rallus obsoletus levipes*), and western snowy plover (*Charadrius nivosus nivosus*). The DEIR should have a complete, recent, assessment of rare, threatened, and endangered, and other sensitive species onsite and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the USFWS; and,

e) A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.

2) Biological Direct, Indirect, and Cumulative Impacts. Due to the proximity of the Project site to the Batiquitos Lagoon, it is essential to understand how the open space and the biological diversity within it may be impacted by Project activities. This should aid in identifying specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. The following should be addressed in the DEIR:

a) A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (NCCP, Fish & G. Code, § 2800 et. seq.). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

b) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species and identification of any mitigation measures;

c) A discussion on Project-related changes on drainage patterns and downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and, post-Project fate of runoff from the Project site. The Project includes plans for an underground parking structure; therefore, the discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary and the potential resulting impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such Project impacts should be included;

d) An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR; and,

e) A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

3) Sensitive Bird Species. The Project plans indicate that existing shrubs and trees will be removed, and a significant portion of the site will be demolished and graded. A review of California Natural Diversity Database (CNDDB) indicates occurrences of special status bird species, including California gnatcatcher (*Polioptila californica*; gnatcatcher) within 0.80 mile of the Project vicinity. California least tern (*Sternula antillarum browni*; terns) also nests at the Batiquitos Lagoon, 0.22 mile away from the northern border of the Project site. The California least tern nests in open areas free of vegetation and has been known to occur on construction sites due to the cleared habitat. Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs, or nestlings, or otherwise lead to nest abandonment in trees directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.

a) CDFW recommends that measures be taken, primarily, to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

b) Proposed Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and

(as access to adjacent areas allows) any other such habitat within 300-feet of the disturbance area (within 500-feet for raptors). Project personnel, including all contractors working onsite, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

4) California Least Tern. Due to the Project's proximity to the coast and the known California least tern nesting site at the Batiquitos Lagoon, CDFW recommends that the DEIR stipulate that a biologist with expertise in monitoring California least tern conduct surveys for presence or absence before the start of construction and monitor for California least tern throughout the construction phase. Furthermore, the DEIR should include an evaluation of impacts to the nearby tern colony and other sensitive lagoon species from project construction or from the final project as constructed.

5) Bat Species. Bat species may occur within the Project vicinity, the pallid bat (*Antrozous pallidus*) and the western mastiff bat (*Eumops perotis*) are both California Species of Special Concern. Despite the high diversity and sensitivity of bats in Southern California, numerous bat species are known to roost in trees and structures throughout San Diego County. Project activities may have the potential to adversely impact bat populations within the vicinity.

   a. Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish and Game Code § 4150, California Code of Regulations § 251.1). The DEIR should provide a thorough discussion of potential impacts to bats from construction and operation of the Project to adequately disclose potential impacts and to identify appropriate avoidance and mitigation measures. The DEIR shall describe feasible measures which could minimize significant adverse impacts (CEQA Guidelines §15126.4[a][1]).

   b. CDFW recommends the DEIR provide a thorough discussion and adequate disclosure of potential impacts to bats and roosts from Project construction including (but not limited to) disturbances to vegetation, trees, and structures; demolition; grading; and excavating. If necessary, to reduce impacts to less than significant, the DEIR should provide bat-specific avoidance and/or mitigation measures [CEQA Guidelines, § 15126.4(a)(1)].

6) Tree Removal: Sheet L-1 of the Project plan document indicates the existing tree inventory to be removed. Although most of the current tree inventory is nonnative, these mature trees can still serve as habitat for native fauna. Habitat loss is one of the leading causes of native biodiversity loss. To compensate for any loss of trees, CDFW recommends replacing all non-native trees removed as a result of the proposed work activities at least a 1:1 ratio with native trees.

   a) Due to tree removal, Project activities have the potential to result in the spread of tree insect pests and disease into areas not currently exposed to these stressors. This could result in expediting the loss of oaks, alders, sycamore, and other trees in California which support a high biological diversity including special status species. To reduce impacts to less than significant the final environmental document should describe an infectious tree disease management plan and how it will be implemented

in order to avoid significant impacts under CEQA. All trees identified for removal resulting from the Project should be inspected for contagious tree diseases including but not limited to: thousand canker fungus (*Geosmithia morbida*), see http://www.thousandcankers.com/; Polyphagous Shot Hole Borer (*Euwallacea spp*.), see http://eskalenlab.ucr.edu/avocado.html); and goldspotted oak borer (*Agrilus auroguttatus), see* http://ipm.ucanr.edu/PMG/PESTNOTES/pn74163.html. To avoid the spread of infectious tree diseases, diseased trees should not be transported from the Project site without first being treated using best available management practices relevant for each tree disease observed.

7) Landscaping. Sheet L-2 of the Project plan document includes a landscape plan, in which no invasive plant material is proposed. Habitat loss and invasive plants are a leading cause of native biodiversity loss. CDFW recommends that the DEIR also stipulate that no invasive plant material shall be used. Furthermore, we recommend using native, locally appropriate plant species for landscaping on the Project site. A list of invasive/exotic plants that should be avoided as well as suggestions for suitable landscape plants can be found at https://www.cal-ipc.org/solutions/prevention/landscaping/.

General Comments

1) Project Description and Alternatives. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:

   a) A complete discussion of the purpose and need for, and description of, the proposed Project, including all staging areas and access routes to the construction and staging areas; and,

   b) A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. The alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas.

2) Compensatory Mitigation. The DEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration or enhancement should be discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore would not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance, and dedicated to a qualified entity for long-term management and monitoring. Under Government Code section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or non-profit organization to effectively manage and steward land, water, or natural resources on mitigation lands that it approves.

3) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced

qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the City of Encinitas in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Melanie Burlaza, Environmental Scientist, by email at Melanie.Burlaza@wildlife.ca.gov.

Sincerely,

DocuSigned by:
David Mayer
D700B4520375406...

David Mayer
Environmental Program Manager I
South Coast Region

ec: CDFW
Karen Drewe, San Diego – Karen.Drewe@wildlife.ca.gov
Susan Howell, San Diego – Susan.Howell@wildlife.ca.gov
Jennifer Ludovissy, San Diego – Jennifer.Ludovissy@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQAcommentletters@wildlife.ca.gov
State Clearinghouse, Sacramento – State.Clearinghouse@opr.ca.gov
Jonathan Snyder, USFWS – Jonathan_D_Snyder@fws.gov

References

California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Available from: https://wildlife.ca.gov/Data/CNDDB.

California Department of Fish and Wildlife. 2020. Lake and Streambed Alteration Program. Available from: https://wildlife.ca.gov/Conservation/LSA

Cowardin et al. 1970. Classification of Wetlands and Deepwater Habitats of the United States.

Sawyer, J.O., Keeler-Wolf, T., and Evens J.M. 2008. A Manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.

From: Dodson, Kimberly@DOT <kimberly.dodson@dot.ca.gov>
Sent: Monday, March 15, 2021 1:25 PM
To: Scott Vurbeff
Cc: State.Clearinghouse@opr.ca.gov; Eaton, Maurice A@DOT
Subject: Marea Village Mixed Use NOP SCH#2021020272
Attachments: SD_5_44.232_Marea Village Mixed Use 03-15-2021.pdf

[**NOTICE:** Caution: External Email]

Hi Scott,

Please see the attached comments for the Marea Village Mixed Use Project NOP.

Thank you,

Kimberly D. Dodson, GISP
Associate Transportation Planner
Caltrans District 11 LD-IGR Branch
4050 Taylor St., MS-240
San Diego, CA 92110
Kimberly.Dodson@dot.ca.gov
Telework phone: 619-985-1587

DEPARTMENT OF TRANSPORTATION
DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
PHONE (619) 688-3137
FAX (619) 688-4299
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

March 15, 2021

11-SD-5
PM 44.232
Marea Village Mixed Use Development
NOP/SCH#2021020272

Mr. Scott Vurbeff
City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024

Dear Mr. Vurbeff:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Notice of Preparation for the Draft Environmental Impact Report (NOP) for the Marea Village Mixed Use Development located near Interstate 5 (I-5). Per the project's NOP, the Marea Village project proposes 94 for-lease apartments, a 30-room boutique resort hotel, and 18,262 square feet of mixed-use commercial. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Caltrans has the following comments:

Traffic Impact Study

- A Vehicle Miles of Travel (VMT) based Traffic Impact Study (TIS) should be provided for this project. Please use the Governor's Office of Planning and Research Guidance to identify VMT related impacts.[i]

- The TIS may also need to identify the proposed project's near-term and long-term safety or operational issues, on or adjacent any existing or proposed State facilities.

[i] California Governor's Office of Planning and Research (OPR) 2018. "Technical Advisory on Evaluating Transportation Impacts in CEQA." http://opr.ca.gov/docs/20190 I 22-743_Technical_Advisory.pdf

- Please also include a Local Mobility Analysis if required.

Complete Streets and Mobility Network

Caltrans views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the transportation system. Caltrans supports improved transit accommodation through the provision of Park and Ride facilities, improved bicycle and pedestrian access and safety improvements, signal prioritization for transit, bus on shoulders, ramp improvements, or other enhancements that promotes a complete and integrated transportation system. Early coordination with Caltrans, in locations that may affect both Caltrans and the City of Encinitas is encouraged.

To reduce greenhouse gas emissions and achieve California's Climate Change target, Caltrans is implementing Complete Streets and Climate Change policies into State Highway Operations and Protection Program (SHOPP) projects to meet multi-modal mobility needs. Caltrans looks forward to working with the City to evaluate potential Complete Streets projects.

Land Use and Smart Growth

Caltrans recognizes there is a strong link between transportation and land use. Development can have a significant impact on traffic and congestion on State transportation facilities. In particular, the pattern of land use can affect both local vehicle miles traveled and the number of trips. Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation system integrated through applicable "smart growth" type land use planning and policies.

The City should continue to coordinate with Caltrans to implement necessary improvements at intersections and interchanges where the agencies have joint jurisdiction.

Environmental

Caltrans welcomes the opportunity to be a Responsible Agency under the California Environmental Quality Act (CEQA), as we have some discretionary

authority of a portion of the project that is in Caltrans' R/W through the form of an encroachment permit process. We look forward to the coordination of our efforts to ensure that Caltrans can adopt the alternative and/or mitigation measure for our R/W. We would appreciate meeting with you to discuss the elements of the EIR that Caltrans will use for our subsequent environmental compliance.

An encroachment permit will be required for any work within the Caltrans' R/W prior to construction. As part of the encroachment permit process, the applicant must provide approved final environmental documents for this project, corresponding technical studies, and necessary regulatory and resource agency permits. Specifically, CEQA determination or exemption. The supporting documents must address all environmental impacts within the Caltrans' R/W and address any impacts from avoidance and/or mitigation measures.

We recommend that this project specifically identifies and assesses potential impacts caused by the project or impacts from mitigation efforts that occur within Caltrans R/W that includes impacts to the natural environment, infrastructure (highways/roadways/on- and off-ramps) and appurtenant features (lighting/signs/guardrail/slopes). Caltrans is interested in any additional mitigation measures identified for the DEIR.

Right-of-Way

- Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.
- Any work performed within Caltrans R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction.

Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158 or by visiting the website at https://dot.ca.gov/programs/traffic-operations/ep. Early coordination with Caltrans is strongly advised for all encroachment permits.

If you have any questions, please contact Kimberly Dodson, of the Caltrans Development Review Branch, at (619) 985-1587 or by e-mail sent to Kimberly.Dodson@dot.ca.gov.

Sincerely,

electronically signed by

MAURICE EATON, Branch Chief
Local Development and Intergovernmental Review

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

February 17, 2021

Scott Vurbeff
City of Encinitas, Development Services Dept.
505 S. Vulcan Ave.
Encinitas, CA 92024

Re: 2021020272, Marea Village Mixed Use Development Project, San Diego County

Dear Mr. Vurbeff:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

From: Ferchaw, Tracy <Tracy.Ferchaw@sandag.org>
Sent: Friday, March 12, 2021 3:54 PM
To: Scott Vurbeff
Cc: Litchney, Seth; Ferchaw, Tracy
Subject: Marea Village Mixed Use Development Project NOP
Attachments: Marea Village Mixed Use Development Project- SANDAG Comments (002).pdf

[**NOTICE:** Caution: External Email]

Thank you for the opportunity to comment on the Marea Village Mixed Use Development Project. SANDAG is submitting the attached comments. If you have any questions, please contact Seth Litchney (seth.litchney@sandag.org) or Tracy Ferchaw (tracy.ferchaw@sandag.org).

Thank you,

Tracy Ferchaw, MBA
Associate Business Analyst

(619) 699-1977
401 B Street, Suite 800, San Diego, CA 92101

SANDAG hours: Tuesday-Friday and every other Monday from 8 a.m.-5 p.m.
Employees are teleworking while our offices are closed during the COVID-19 pandemic.

SANDAG

401 B Street, Suite 800
San Diego, CA 92101-4231
(619) 699-1900
Fax (619) 699-1905
sandag.org

MEMBER AGENCIES
Cities of
Carlsbad
Chula Vista
Coronado
Del Mar
El Cajon
Encinitas
Escondido
Imperial Beach
La Mesa
Lemon Grove
National City
Oceanside
Poway
San Diego
San Marcos
Santee
Solana Beach
Vista
and
County of San Diego

ADVISORY MEMBERS
Imperial County
San Diego County Regional Airport Authority
California Department of Transportation
Metropolitan Transit System
North County Transit District
United States Department of Defense
Port of San Diego
San Diego County Water Authority
Southern California Tribal Chairmen's Association
Mexico

March 12, 2021 File Number 3100400

Mr. Scott Vurbeff
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024

Dear Mr. Vurbeff:

Subject: Maria Village Mixed use Development Project

Thank you for the opportunity to comment on the Maria Village Mixed use Development Project. The San Diego Association of Governments (SANDAG) appreciates the City's efforts to implement the policies included in San Diego Forward: The Regional Plan that emphasize the need for better land use and transportation coordination. These policies will help provide people with more travel and housing choices, protect the environment, create healthy communities, and stimulate economic growth. SANDAG comments are based on policies included in the Regional Plan and are submitted from a regional perspective.

SANDAG commends Land Venture I, LLC for proposing a mixed-use coastal development along a key travel corridor connecting Leucadia with Carlsbad and other parts of Encinitas. In developing the EIR, SANDAG encourages the Marea Village Mixed-Use Development to include several multimodal strategies to reduce vehicle miles traveled that may result from this project.

The project location near NCTD BREEZE Route 101, COASTER service, the beach, several popular retail sites and restaurants, and the anticipated hotel will enable use of many last-mile connection options that reduce the need to drive alone. SANDAG encourages inclusion of additional pedestrian amenities such as wayfinding signs that direct residents and visitors to the COASTER, beaches, hotel, and local retail centers. In addition, Land Venture I, LLC should consider working with the City of Encinitas to enhance safety for people riding bikes and walking on Coast Highway near the site. Moreover, the planned paseos and pedestrian plazas should consider other active transportation amenities on-site such as secured bike and micromobility parking spots, a residential bikeshare program, and micromobility e-charging options. Parcel delivery lockers can be placed on-site to minimize residents leaving the complex to pick-up or drop-off packages.

The developer should also consider establishing a carshare program for use by residents and visitors. This program would be further benefited by having priority parking spots for the rideshare program in subterranean parking. Another program that could be established is a subsidized or discounted transit pass program for residents, visitors, and employees. This program should also be implemented in the hotel for hotel guests to encourage out of town guests to explore San Diego using nearby transit. To further encourage hotel visitors and on-site employees to utilize the existing transit amenities, priced parking could be considered in addition to shared

parking strategies. Finally, integration of passenger loading zones can make future microtransit or other rideshare connections more seamless and convenient for residents and visitors.

When preparing the EIR, please consider leveraging the SANDAG Mobility Management Toolbox, which describes more than 30 multimodal strategies that can be implemented at the project level to mitigate transportation impacts. Additionally, SANDAG's iCommute program provides several other resources and tools to plan, design, and implement customized Transportation Demand Management (TDM) programs. More information on available regional TDM programs can be accessed through iCommuteSD.com.

We appreciate the ability to comment on the City of San Diego's Stone Creek Draft EIR. If you have any questions, please contact me at (619) 699-1943 or seth.litchney@sandag.org.

Sincerely,

Seth Litchney (Mar 12, 2021 15:41 PST)

SETH LITCHNEY
Senior Regional Planner

SLI/TFE

From: Dave Allen <daveydelt@aol.com>
Sent: Thursday, March 11, 2021 1:49 PM
To: Scott Vurbeff
Subject: Questions/Comments Concerning New Housing & Retail Projects Near La Costa Ave and PCH

[**NOTICE:** Caution: External Email]

Mr. Scott Vurbeff,

We are residents of Leucadia Seabluffe Village located at 1750 N. Coast highway, and have concerns regarding existing and planned projects near our community that would significantly impact the safety of motorists, pedestrians, and cyclists.

As you know, the "Marea Beach Resort" project has recently being completed and scheduled for opening sometime in March. Other projects that are in the permitting/planning stages include:

* Marea Village { Apartment, hotel, retail shops} located just South of the Marea Village Resort

* Multi unit housing development planned for 1967 N. Vulcan Ave

In addition to the projects noted above that are within the City of Encinitas, there are (2) projects in Carlsbad planned for an area near Avenida Encinas and PCH that will also have an impact on traffic and congestion in Northwest Leucadia.

The following are questions/comments that we have concerning these projects:

1) We understand that a traffic study was conducted by LOS Engineering to determine the potential impact on increased traffic volume that will occur if all of these projects are improved and built. What were the results/conclusions determined by this study? Were the results of this study taken into consideration by the Encinitas Planning Division when reviewing the various project applications? Is this information shared with the City of Carlsbad Planning Division?

2) There is a traffic round-about schedule to be installed near the entrance of Leaucadia Seabluffe Village as part of "Streetscape" - will this be installed prior to any further developments are approved?

3) What are the results of any drainage studies that have been done to understand the impact of these developments on storm water run-off (in particular any impact on the Batiquitos Lagoon?).

4) The Marea Village project would necessitate significant excavation and digging to accommodate underground parking. Has the impact of these activities on the coastal bluffs been determined? If so, what were the results?

5) At present, underground water naturally flows from East to West into the ocean. Will the Marea Village project have an impact on this flow? If so, is it acceptable?

Thanks in advance for your reply.

We would be able to meet with you in person or via telephone, if preferred.

Sincerely,

Carol and Dave Allen
1744 Kennington Rd

760-944-8870

From: Tom Alper <tralper8@gmail.com>
Sent: Monday, February 22, 2021 1:37 PM
To: Scott Vurbeff
Subject: Overdevelopment/Public Safety - NW Leucadia

Follow Up Flag: Follow up
Flag Status: Completed

[NOTICE: Caution: External Email]

Dear Scott:

As I'm sure you know, the opposition to overdevelopment in NW Leucadia is growing daily. If you haven't seen the Encinitas traffic study prepared in December 2020 by LOS Engineering, Inc. please review it. In addition to the three proposed developments in NW Leucadia (La Costa Ave by PCH) there are two huge developments in the planning stages about a mile or two north of La Costa Ave. The Ponto Beachfront (Avenida Encinas) is 136 townhomes plus commercial and retail—creating an estimated 2,912 additional Daily trips and there is a 322 room resort hotel development (southeast corner of Avenida Encinas and Carlsbad Blvd.) that is estimated to generate an additional 3,220 additional Daily trips. The total additional DAILY trips is estimated to be 9,700 including the new Marea Beach Resort hotel—-which hasn't even opened yet!

The approval of only one of these new developments, in addition to the soon to be opened Marea Beach Resort hotel, creates a traffic and public safety nightmare. Some of the public safety concerns are:

-Inadequate Infrastructure necessary to keep pedestrians, motorists and cyclists safe -Traffic from new hotel and other proposed developments increase risk to motorists that enter/exit the 255 unit Seabluff community from PCH. A roundabout desperately needs to be completed in front of Seabluff BEFORE any more developments are approved.
-Absence of adequate drainage on PCH risks pollution run-off into ocean and protected Batiquitos Lagoon.
-Local Beach water threatened by run-off from cars dripping oil, tire residuals as well as soil contamination, abatement and excavation associated with the proposed Marea Village development.

Of all the proposed developments the worst of them is clearly "Marea Village"—-94 apartments, 30 hotel rooms and retail—-next door (south) of the new Marea Beach Resort Hotel. Not only will it generate approximately 1,358 additional daily trips risking public safety on PCH but it also risks public safety due to destabilization of the fragile bluffs about 100 yards away. The digging, grading an excavation necessary to build its proposed two story subterranean parking structure risks destabilizing the already fragile bluffs very close to where three people died when they were buried alive in a bluff collapse in August 2019. I urge City representatives to take this bluff instability issue seriously—-and look, in person, at the beach between South Ponto and Grandview at High Tide. The ocean water along this stretch of bluffs frequently goes all the way up to the bluffs at high tide and Beachgoers naturally move their towels close to the bluffs as the tide rises. The underground water that flows downhill from I-5 towards the ocean and literally seeps through the bluffs could also be blocked or diverted by the proposed subterranean parking which could further destabilize the bluffs. Allowing subterranean parking to be built so close to fragile bluffs is a terrible idea and a tragedy waiting to happen. In addition, this development creates more potential financial liability exposure for the city (the City of Encinitas is named in a pending lawsuit from the August 2019 bluff collapse).

It's in the best interest of the citizens of the City of Encinitas to place a moratorium on all new development in NW Leucadia until the important public safety issues referenced above are adequately resolved.

Thank you,

Tom Alper

P.S. Is it true that the the mayor on Encinitas received a large campaign contribution from the Marea Village developer (Larry Jackel and/or Fenway Capital Partners)?

Sent from my iPad

From: Ben B. <bbinford04@gmail.com>
Sent: Monday, March 15, 2021 8:46 PM
To: Scott Vurbeff
Subject: Public Safety at Risk Due to Overdevelopment

[**NOTICE:** Caution: External Email]

Hi Mr. Vurbeff,

My name is Ben Binford and I live on Grandview Street in Leucadia. I am proud to call this amazing town my home. I am writing today because I was informed about the Marea Village development that is being planned right now, and I was told I could email you my comments about it.

The proposed developments will cause harm and irreparable damage to our beautiful coastal corridor and environment. Leucadia Cares outlined how the development will cause many public safety issues and create irreversible environmental damage. I am sure you have heard from them on all of these points, so I will not repeat them.

For me personally, though, it pains me to think about my future children growing up here and having to worry about the safety of swimming and surfing in the water and to think of sweet Leucadia congested with traffic and overdevelopment. As a surfer who spends almost every day at Grandview, I don't want to have to question whether or not it is safe for me to go in the water without getting sick.

I stand with Leucadia Cares and their request for the City of Encinitas to have a moratorium on growth in Northwest Leucadia for the next several months to allow time to address and resolve the public safety concerns of the Marea Village Development that Leucadia Cares has outlined.

Leucadia is a special town with personality and quirkiness and it deserves to maintain its charm throughout time. Also, public safety and the wellness of our ocean waters should always be a priority.

I truly hope you will consider my comments and those of other concerned residents. Thank you so much!

Best,
Ben

From: judith boyd <judboyd@hotmail.com>
Sent: Friday, March 12, 2021 3:22 PM
To: Scott Vurbeff
Subject: Leucadia development and safety issues

[NOTICE: Caution: External Email]

Dear Scott Vurbeff,
My husband and I oppose the Marea Village development which includes a two story subterranean parking structure. The increased traffic on our corridor is a risk to pedestrians, motorists, and bikes. We do not have the infrastructure in place to handle the added volume.
On a personal note, I live on Avocado Street and even today it can take up to 5 minutes to make a right hand turn onto !01. Traffic is a real problem in this area.
Regards,
Tom and Judith Boyd
151 Avocado Street
Encinitas, Ca. 92024

From: dora clarke <decbysea@gmail.com>
Sent: Saturday, March 13, 2021 12:24 PM
To: Scott Vurbeff
Subject: Marea Development Development

[**NOTICE:** Caution: External Email]

I am a resident of Encinitas and when I heard of this project, I was appalled! To destroy and develop this area that has been already impacted by irresponsable development, would add more destruction to our environment, all for greed!!

Dora Clarke

From: thomas clarke <tomasdora@yahoo.com>
Sent: Saturday, March 13, 2021 11:57 AM
To: Scott Vurbeff
Subject: Marea Village development

[**NOTICE:** Caution: External Email]

As a local resident, we are looking at a major destruction of our peace and environment. We need to stop this!

From: thomas clarke <tomasdora@yahoo.com>
Sent: Saturday, March 13, 2021 12:03 PM
To: Scott Vurbeff
Subject: The Marea Village development

[**NOTICE:** Caution: External Email]

I am a local resident of Encintas and I am writing my concerns about the Marea Village development. I feel it will be devastating to our community and environment. It is a horrific plan to destroy our cliffs and lagoon. Please take consideration to our planet and survival of everyone.

Thank you

Mrs Thomas Clarke

From: Jill Denver <jdenver02@yahoo.com>
Sent: Wednesday, March 17, 2021 6:00 PM
To: Scott Vurbeff
Subject: Concerns of Marea Project

[**NOTICE:** Caution: External Email]

-120 unit commercial-residential-hotel project with retail, 90 rental apartments and 30 hotel rooms plus parking for 260 cars. Cars will be parked outside (border of property fence) and in a subterranean garage to be built.

-Over-densification of this fragile coastal zone, currently sorely lacking adequate infrastructure for a project of this size next to an existing 130 room hotel and very unsafe today in terms of vehicular access, ped and bike access, access to the beach.

-Concerns over the fragile coastal environment over densification, the construction of a subterranean parking garage (fragile and crumbling bluff, lawsuit over this now), night lighting, noise and sound from HVAC systems, trash pick-up and delivery services, run-off, surface water pollution from cars, pets, chemicals, people, night sky lighting and more. All of this stands to impact the neighboring community and protected, adjacent Batiquitos lagoon.

-Concerns over dated traffic study, not conducted at peak summer season.

Jill Denver

From: Kevin Finan <kfinan@msn.com>
Sent: Saturday, March 13, 2021 5:53 PM
To: Scott Vurbeff
Subject: Fwd: Proposed Marea Village Development

[**NOTICE:** Caution: External Email]

Sent from my iPad

Begin forwarded message:

> **From:** KEVIN FINAN <kfinan@msn.com>
> **Date:** March 13, 2021 at 5:19:53 PM PST
> **To:** svurbeff@encinitas.gov
> **Subject: Proposed Marea Village Development**
>
> Dear Mr Vurbeff,
>
> I am writing because of my concern that the proposed Marea Village development project is being forced through the approval process without careful consideration for the impact of the development on traffic, public safety, the environment, beach water pollution, and bluff stability.
>
> Combined with developments proposed in Carlsbad just to the north, the additional 94 Apts and 30 hotel rooms in Marea Village, the shopping/restaurant parking, and Leucadia Streetscape, not only will traffic be driven to a standstill, but without planning and mitigation before the project is approved, we face years of extremely unsafe entry and exit onto both LaCosta Ave and Hwy 101. Attempting to exit any street in Leucadia onto Hwy 101 and proceeding north is risky at best, without the impact of the development already planned. There is simply no excuse for not requiring the traffic, pedestrian, and bicycle issues to be resolved before the development is approved and certainly before it breaks ground.
>
> I believe proceeding with the planned Marea Village development prior to adequate environmental review and mitigation will place both the city and the development at a great liability risk should there be another bluff collapse, increase in traffic accidents/injuries, or significant ocean water degradation.
>
> I appreciate your careful consideration of the issues raised, and hope you will make recommendations appropriate for protecting the safety and quality of life in Encinitas/Leucadia.
>
> Very Respectfully,
>
> Kevin Finan
> 1841 Haymarket Rd
> Encinitas, CA

From: Glenn Frieder <drg@drglennfrieder.com>
Sent: Sunday, March 14, 2021 7:31 PM
Cc: Scott Vurbeff; leaucadiacares@gmail.com
Subject: Re: We Oppose Marea Village Development

[NOTICE: Caution: External Email]

Dr Glenn B. Frieder
drg@drglennfrieder.com
760 230-2928 home office
760 481-9210 IPhone

>
> Dear Mr. Vurbeff,
>
> As a property owner in our lovely town of Leucadia, I want to express that I strongly oppose the Marea Village development for the following reasons:
>
> 1) A development of this type will create nearly 10,000 additional daily trips in our already very busy traffic areas. This will create more safety issues, as well as more pollution of our beach waters by run-off from cars dripping oil, tire residuals, and exhaust.
>
> 2) Inadequate infrastructure for keeping pedestrians, motorists, and cyclists safe. This is one of the busiest cycling and walking areas in North County San Diego!
>
> 3) Excavation, grading, and digging needed to build the two-story subterranean parking for the proposed Marea Village risks destabilizing fragile bluffs about 100 yards away where 3 people tragically died in a bluff collapse. Underground water that naturally flows downhill from I-5 corridor towards the ocean could be blocked or diverted by Marea Village subterranean parking and further destabilize the fragile bluffs.
>
> This development and other proposed developments in NW Leucadia will cause permanent and irreparable harm to our coastal corridor and environment. I ask that the City of Encinitas have a moratorium on growth in NW Leaucadia for the next 6 months to allow time to address and resolve these important environmental and public safety issues.
>
> With warm regards and love of our Leaucadia beach town,
>
Dr Glenn Frieder
> 1816 Eucalyptus Ave
> Leucadia, CA 92024
> laura.ross@mac.com
>

From: Lynne Gilson <gilson.lynne@gmail.com>
Sent: Friday, March 12, 2021 3:59 PM
To: Scott Vurbeff
Subject: Marea Village

[**NOTICE:** Caution: External Email]

Dear Mr. Vurbeff,

I am writing to object to the Marea Village development plan as it now exits. And given the rampant huge development projects proposed and underway all within a couple of blocks of this one, while the city simultaneously claims it will narrow Leucadia 101 to one lane, AND Encinitas having ZERO beach/bluff maintenance plans for this end of Encinitas, all I can say is "you've got to be sh*tting me".

Leucadia deserves better treatment. No project the size of Marea Village should be considered until we see a complete plan for northern Leucadia, rather than the piecemeal stuff that is thrown at us. We should be shown a plan that includes ALL the proposed developments, "Streetscape", bicycle lane improvements, railroad corridor expansion, groundwater and pollution management, AND Beach maintenance for District 1.

And before we go any further, I want to see whether or not "Streetscape" works for what is already here, and I want a beach/bluff maintenance strategy agreed upon and enacted.

In case you are not aware, the Mayor has done much to trumpet the "Encinitas-Solana Beach Sand Replenishment project", but fails to point out that it only helps the Encinitas beaches in Districts 2 and 3 (i.e. south of Beacons Beach through Cardiff-By-The-Sea). For northern Leucadia (South Ponto beach to Beacons Beach), the location for these proposed developments, there is not a single plan. Zero. Nada. When I talked with Mayor Blakespeare about this last Nov. at first she lied, saying that it is not the city that makes plans for the beach maintenance. Then she said she had no idea if there were any plans. Stunning (whether that was another lie or the truth, either way it is stunning). It's 23% of Encinitas coastline. So I checked with Jamie Timberlake, who said "yep, no plans".

Educate yourselves, the city council, and the citizens. Please get a holistic plan together. Act fairly and responsibly with Leucadia's District 1. Put a hold on any further development plans until you are actually ready with infrastructure.

Sincerely,
Lynne Gilson
Homeowner, Grandview St. Encinitas

From: Lynne Gilson <gilson.lynne@gmail.com>
Sent: Sunday, March 14, 2021 9:25 PM
To: Scott Vurbeff
Subject: Marea Village

[**NOTICE:** Caution: External Email]

Dear Mr. Vurbeff,

The more I think about the proposed Marea Village expansion, the more stunned I am that Encinitas is considering it.

The amount of the bluff that is proposed to be dug out is unsafe, in addition to not respecting the natural structure and beauty of our coastline.

I live on Grandview St., close to the site of the Grandview bluff collapse which killed three people. Prior to that horrific event I told folks that the digging out of the first stage of the Marea Resort would be increasing the fracturing of the bluffs and increasing collapses. Yes, I am a scientist, but you didn't need to be one to have that thought. All of the homeowners in our neighborhood could feel the ground shake from the work being done at Marea.

The loss of those lives by being crushed to death is bad enough. But now the city also has a lawsuit (my tax dollars hard at work). While it may be difficult to prove definitively, it will not be hard to find experts who will attest that the way the natural bluff was being abused probably in some way contributed to the collapse. To repeat this, would be a most incredible folly.

It is time for Encinitas to show some respect for northern Leucadia.

Sincerely,
Lynne Gilson, Ph.D.

From: Janet Gonzales <janzales@gmail.com>
Sent: Friday, March 12, 2021 3:27 PM
To: Scott Vurbeff
Subject: Avenida Encinas development

[NOTICE: Caution: External Email]

Dear Sir,
The proposed development in the area of the Marea Beach Resort will adversely impact the quality of life for the citizens living near there.
La Costa Ave and 101 is already a heavily travelled corner, without adding LOS Engineering Inc traffic study of an additional 10,000 daily trips.
Plus our coastal corridor is already overbuilt and open space is dwindling.
I moved to Encinitas in 1979, bought my home in 1985 on Arcadia Rd and raised my family which now includes grandchildren in this beautiful area.
Please help retain some of our charm and small beach town ambiance and limit the size of coastal development.
Thank you,
Janet Gonzales

Sent from my iPhone

From: Peter Heidmann <pete.heidmann@gmail.com>
Sent: Thursday, March 11, 2021 5:39 PM
To: Scott Vurbeff
Subject: Marea village

[NOTICE: Caution: External Email]

I live on Andrew street near the the new hotel. My wife and I are very concerned about the planned developments in the area. Too many too dense.

We moved to this neighborhood because we liked the small beach friendly community.

All our neighbors are distressed at where things are heading too. Not only will it degrade our community, but will undermine the value of our properties.

We understand that people have rights to develop but there must be consideration for the existing home owners. Please help stop the excess developments

Please help,
Ruth and Peter Heidmann

From: Caroline Jopes <carolinejopes@gmail.com>
Sent: Saturday, March 13, 2021 6:45 AM
To: Scott Vurbeff
Subject: Marsa village

[**NOTICE:** Caution: External Email]

This is a really bad idea. Make the intelligent decision to nix it.

From: Caroline Jopes <carolinejopes@gmail.com>
Sent: Saturday, March 13, 2021 6:51 AM
To: Scott Vurbeff
Subject: Marse development

[**NOTICE:** Caution: External Email]

Does Encinitas have the funds to pay all those "home" buyers, i.e., investment clients, for the soon-to-be necessity of planned retreat? Please think in terms of the future that looms instead of immediate campaign perspectives.

From: Caroline Jopes <carolinejopes@gmail.com>
Sent: Sunday, March 14, 2021 8:30 AM
To: Scott Vurbeff
Subject: Re: Marea development

[**NOTICE:** Caution: External Email]

I would like to correct my misspelling of Marea development. Still a really gross misuse of that parcel; however, "Marea" means tide in spanish, a clue to what will happen when Encinitas overdevelops that property and sea levels rise, as they are doing already. Planned retreat isn't popular with property owners, but eventually they'll have to accept it. Why plan a situation that will require it?

On Sat, Mar 13, 2021, 6:51 AM Caroline Jopes <carolinejopes@gmail.com> wrote:

> Does Encinitas have the funds to pay all those "home" buyers, i.e., investment clients, for the soon-to-be necessity of planned retreat? Please think in terms of the future that looms instead of immediate campaign perspectives.

From: David Kerr <drkerr@ucsd.edu>
Sent: Sunday, March 14, 2021 6:50 PM
To: Scott Vurbeff
Subject: NW Leucadia

[**NOTICE:** Caution: External Email]

Mr. Verbuff,

I am a long time resident of NW Leucadia (Asbury and Eucalyptus). I am writing to you to urge a moratorium in growth in the is sector of Leucadia. I am fearful of the traffic flow down Vulcan, La Costa and the 101 with the addition of the new Marea Beach resort and the proposed development along the 101 and La Costa Ave. will be untenable. Vulcan traffic has already increased substantially after the 101 was necked down for bicycles.

Please consider slowing things down while these issues are addressed.

Thanks
David and Dena Kerr
760-632-0139

From: Brooke McKallor <brookemckallor@gmail.com>
Sent: Monday, March 15, 2021 6:57 PM
To: Scott Vurbeff
Subject: Comments Regarding the Marea Village Development

[**NOTICE:** Caution: External Email]

Hi Mr. Vurbeff,

My name is Brooke Mckallor and I live on Range Street in Leucadia. I am 28 years old and have lived here for almost 3 years now and I am proud to call this amazing town my home. I am writing today because I was informed about the Marea Village development that is being planned right now, and I was told I could email you my comments about it. So, here we go!

The proposed developments will cause harm and irreparable damage to our beautiful coastal corridor and environment. Leucadia Cares outlined how the development will cause many public safety issues and create irreversible environmental damage. I am sure you have heard from them on all of these points, so I will not repeat them.

For me personally, though, it pains me to think about my future children growing up here and having to worry about the safety of swimming and surfing in the water and to think of sweet Leucadia congested with traffic and overdevelopment. As a surfer who spends almost every day at Grandview or Beacons, I don't want to have to question whether or not it is safe for me to go in the water without getting sick.

I stand with Leucadia Cares and their request for the City of Encinitas to have a moratorium on growth in Northwest Leucadia for the next several months to allow time to address and resolve the public safety concerns of the Marea Village Development that Leucadia Cares has outlined.

Leucadia is a special town with personality and quirkiness and it deserves to maintain its charm throughout time. Also, public safety and the wellness of our ocean waters should always be a priority.

I truly hope you will consider my comments and those of other concerned residents. Thank you so much!

Warm wishes,
Brooke

From: sand@sandmiller.com
Sent: Friday, March 12, 2021 9:46 AM
To: Scott Vurbeff
Subject: Marea Village development

[**NOTICE:** Caution: External Email]

I am opposed to the current proposed Marea Village development. I favor a moratorium on growth in Northwest Leucadia until traffic impacts and more public input can be studied.

Sand Miller
1841 Wilstone Ave
Encinitas, CA 92024
760-522-7892

From: Steve Nelson <steve.srnoffice@gmail.com>
Sent: Monday, February 15, 2021 9:43 AM
To: Scott Vurbeff
Subject: Proposed Marea Village

[**NOTICE:** Caution: External Email]

Dear Scott,

I saw the recent notice posted in the coast News regarding the proposed development of the Marea Village. As a resident and owner in Leucadia, I find this proposal totally in conflict with the city's needs.

In light of the adjacent development of the Alila Marea hotel we do not need another resort hotel. Furthermore the addition of 94 high density apartments is both an eyesore and will further contribute to traffic congestion on an already crowded Hwy 101.

I find this project offensive as a mixed use of the land and not a positive contribution to the city of Encinitas and especially the community of Leucadia.

It would be my hope the city of Encinitas can find a more attractive use of this land that would be in harmony with the community of Leucadia.

I hope the City rejects this proposal as it would further an already challenging traffic situation with another hotel and an ugly dense housing project that will be a blight to Leucadia.

Sincerely

Steve

Steven R. Nelson
MOBILE 408.203.9819

Sent from my iPad

From: Nortons <nortsurf4@yahoo.com>
Sent: Sunday, February 21, 2021 4:51 PM
To: Scott Vurbeff
Subject: Marea Village EIR
Attachments: EIR for Marea Village.docx; EIR for Marea Village - map.docx

[**NOTICE:** Caution: External Email]

Hi Scott,

Thank you for your "Notice of Preparation of a Draft Environmental Impact Report" dated February 12th for the propose Marea Village Mixed Use Development.

Based on my review of the Notice (specifically the issue areas that the EIR will focus on), I drafted and presented via Zoom to both the City Council and the Planning Commission last week the attached brief piece regarding my -- and very many residents in the northwest corner of Leucadia -- major concerns over the apparent lack of attention to the traffic and public safety implications of said proposed development.

I hope that my (our) message of great concern has reached you via the Council members and/or Planning Commissioners. Please confirm and I welcome your feedback at your earliest opportunity. These issues over traffic, public safety and the current inadequate infrastructure in this small area is going to remain as an extremely important topic every time the City considers future developments within this tiny La Costa Ave. corridor!

By the way, we are already seeing very substantial traffic back up on west bound La Costa Ave. (we're at 283) due to the longer intervals between green lights at the 101 because of the new, not-even-open Alila Marea Hotel...just wait until it opens! And, one can only imagine the terrible implications for the already highly dangerous, poorly controlled La Costa/Vulcan Ave. intersection!

Thank you in advance for your considerations and I would be happy to talk with you about these concerns.

Steve Norton
(760) 633-4536

Dear Planning Commission members,

Thank you for this opportunity to address you tonight. I gave the following presentation to Council members last night and have also sent you a copy of the following but feel it's also important to read it to you in case you haven't had the opportunity to review it.

As long-term residents of a single-family home off of La Costa Ave. in northwest Leucadia, my wife and I have been closely following the recent and very rapid development of our area. That development includes the imminent opening of the very large Alila Marea Hotel at La Costa and 101 and the numerous proposed houses, apartments, hotels, and multi-use developments in the mere one-mile road corridor from the I-5 to the 101 and slightly south from there.

As daily walkers to Ponto Beach, we have been increasingly more concerned about our safety and that of bicyclists along La Costa Ave.- a two-lane road without an elevated off-road sidewalk, unlike almost every other major transit road within our city. Not only have the car speeds remained in excess of the posted 35 mph limit, but, as you very well know, drivers have become ever more distracted with the advent of cell phones and the perceived need to remain constantly connected to their work, family and friends!

Consequently, during our walks we are constantly at risk, with our eyes always focused on oncoming traffic, largely because of the absence of a proper off-road sidewalk and, of course, the very hazardous La Costa/Vulcan Ave. intersection.

I speak to you tonight in light of the City's very recent "Notice of Preparation of a Draft Environmental Impact Report" for the proposed Marea Village Mixed Use Development Project, just south of the new Alila Marea Hotel. Specifically, within that notice, it states that the EIR will focus on 16 different environmental issue areas. The 14th item is "transportation", which can be interpreted in a number of different ways, although I suspect that it does not include "traffic and public safety." We would like to suggest to all members tonight that "traffic and public safety" should be a stand-alone topic of study AND one at the top of the priority list for investigation, not the 14th out of 16 items, if in fact it is even included in the City's definition of "transportation".

Given the very serious traffic issues already highlighted in the February 2020 traffic study for the proposed apartment complex at La Costa and Vulcan, we simply cannot imagine any comprehensive EIR that does not address the major traffic and public safety issues and implications for La Costa Ave., which the City managers hopefully continue to support maintaining as a two-lane road.

In sum, we ask that the City ensure that the forthcoming EIR fully address this very important topic, one which the City managers claim is of utmost importance when considering any future development within our city. And, I might add, traffic and public safety should be thoroughly addressed before any future developments within this very small quadrant of our City. Specifically, the Alila Marea Hotel, Marea Village, the 1967 Vulcan Ave. apartment complex and the likely development at Surfer's Point are ALL within ¼ mile of each other. Please think of the huge associated traffic and public safety issues before going ahead with these proposed developments!

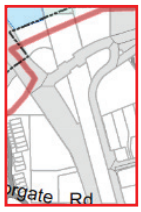
Thanks in advance for all of your considerations,

Steve and Meg Norton

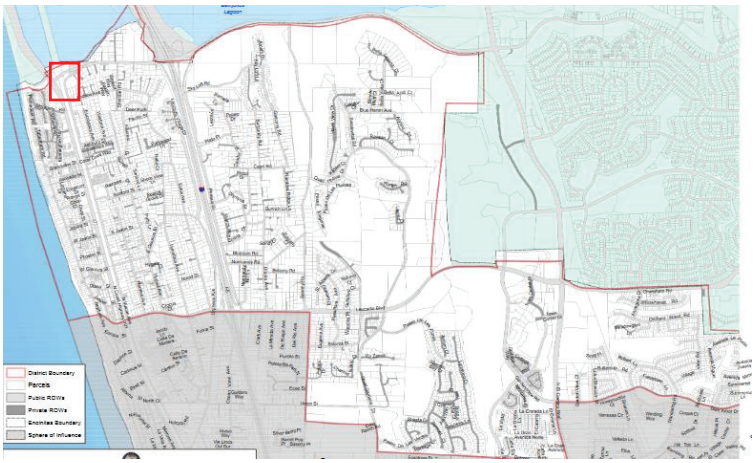
283 La Costa Ave.

As you surely are aware, the developments nearing completion or currently being discussed are all located within a ¼ mile of each other. Below is a visual aid to seeing what a tiny proportion of Encinitas will be impacted by these developments. Note, these projects are not single-family residences, but hotels and apartments accommodating well over 300 people. And this does not show the projects on La Costa Ave. about ½ mile closer to I-5 where approximately 48 homes and a boutique hotel are planned!

Map of Encinitas Voting Districts



Enlarged area includes
Alila Marea Hotel, Marea Village,
1967 N. Vulcan, and Surfer's Point!



Encinitas District 1

From: rusty@jpowell.com
Sent: Saturday, March 13, 2021 10:15 AM
To: Scott Vurbeff
Cc: janice@jpowell.com; Leucadiacares@gmail.com
Subject: Opposition to Marea Village

[**NOTICE:** Caution: External Email]

Dear City of Encinitas

While I am certainly not opposed to all development in Leucadia, I am very concerned that too many projects are being pursued concurrently without sufficient cumulative analysis of the many environmental and social impact to the community. To my knowledge, there are at least 5 large development projects currently proposed for northern Leucadia and South Carlsbad, in addition to the recently completed Marea Hotel. Traffic, parking, drainage, intersection capacities are just a few of the significant impacts.

As a result, I want to go on record as opposing any approvals for the Marea Village project until a comprehensive study is prepared to address the cumulative impacts of proposed developments in northern Leucadia and Southern Carlsbad. Together, the numerous proposed projects will create significant problems. Encinitas and Carlsbad need to work together to address the cumulative impacts, rather than approach these proposed developments as if they are separate unrelated projects in independent Cities.

Thank you for your consideration.

Sincerely

John M. "Rusty" Powell

1824 Wilstone Avenue
Leucadia, CA 92024
(760) 942-1803 Res.
(760) 500-1721 cell
(760) 942-1596 fax
email: *rusty@jpowell.com*

From: William Racine <wcracine@yahoo.com>
Sent: Tuesday, February 16, 2021 1:31 PM
To: City Clerk <CityClerk@encinitasca.gov>
Subject: EIR for Marea Village - City Council Meeting of February 16, 2021

[**NOTICE:** Caution: External Email]

My wife and I have lived on La Costa Avenue for the last 42 years. We have been witnesses to the tremendous increases in traffic and traffic accidents on the road over that time. One or both of us walk to the beach almost every day even though the journey is becoming more and more dangerous.
I am concerned that the subject EIR will not adequately address the negative traffic impacts that Marea Village will add to an already dangerous situation on La Costa Avenue. I have listed below the existing problems on La Costa Avenue, along with possible solutions. The EIR should address these problems and suggest ways Marea Village will add to them. The EIR also should provide suggested ways that Marea Village should mitigate their increased impacts of traffic and speed on the many pedestrians who walk on La Costa Avenue.

Crosswalk at La Costa and Vulcan

Trying to cross Vulcan on La Costa can only be described a very dangerous proposition. There is no crosswalk or signal to protect pedestrians and dog walkers. Westbound and eastbound cars turn south from La Costa to Vulcan while northbound cars on Vulcan turn on to La Costa. There is a lone stop sign on Vulcan with no other traffic control devices, so we end up with a free-for-all which has and will continue to result in injury accidents.

I suggest installing a crosswalk with flashing yellow lights to alert motorists when someone is walking across Vulcan. This would be similar to the crosswalk / signal arrangements that one sees on Hwy 101 in Encinitas and Carlsbad.

Sidewalk along La Costa

Currently, there are bicycle and pedestrian lanes marked on the south side of La Costa Avenue. Motorists routinely drift in and out of the bicycle and pedestrian lanes, especially where the road curves. This is an extremely dangerous situation which has resulted in many near misses of pedestrians.

I suggest installing a raised sidewalk to the south of the current pedestrian lane to separate cars and bikes from pedestrians.

Speed Limit on La Costa

Motorists routinely drive well over the 35 mph limit on La Costa. This, of course, contributes to traffic hazards on our street. We need some traffic calming measures to protect motorists, pedestrians and cyclists.

I suggest lowering the speed limit to 25 mph from Hwy 101 to the freeway. I also suggest installing speed bumps similar to those recently installed on Hwy 101 in Leucadia.

Signal at 101 and La Costa

As currently configured, this traffic signal allows pedestrian crossing of Hwy 101 only on the south side of La Costa. As a result all pedestrians (and their dogs in many cases) who are going north on 101 toward Ponto beach will have to cross in front of the new hotel. This negative impact on hotel guests could be mitigated if pedestrians could walk diagonally across 101. In addition, it would be far safer for pedestrians to avoid the cars entering and leaving the hotel driveway.

I suggest installing a signal that will stop all traffic at the La Costa / 101 intersection to allow pedestrians to walk parallel or diagonally across Hwy 101. This would be similar to the signals at Hwy 101 Carlsbad Village Drive in Carlsbad.

Marea Village, along with the numerous other proposed developments along La Costa Avenue, will add considerable traffic and increase the risks to pedestrians and cyclists alike. These negative impacts must be spelled out in the Marea Village EIR and mitigation should be provided prior to approval of the development.

W C Racine
Leucadia

From: William Racine <wcracine@yahoo.com>
Sent: Monday, February 22, 2021 1:52 PM
To: Scott Vurbeff
Subject: Comments on Draft EIR for Marea Village

Follow Up Flag: Follow up
Flag Status: Completed

[**NOTICE:** Caution: External Email]

Comments on Notice of Draft Environmental Impact Report

Marea Village Mixed Use Development

Transportation Issues

I have reviewed the Marea Village EIR Notice and associated conceptual plans for the development. The design appears to be well thought out and it could be an interesting addition to the Highway 101 corridor in Leucadia. However, the traffic generated by the project will severely impact the already congested and dangerous conditions on Hwy 101, La Costa Ave and Vulcan Ave.

As a resident of La Costa Ave, I am very concerned that the EIR will not properly address the negative impacts of Marea Village on an already overused infrastructure and hazardous traffic situation. Some of the basic traffic issues that should be addressed in the EIR include the following.

Increased Congestion on both La Costa Ave and Hwy 101

Hazards to Pedestrians, Cyclists and Drivers at Vulcan and La Costa Ave

Walking Safety on La Costa Ave from Sheridan to Hwy 101

Speeding Motorists on La Costa Ave

Pedestrians Crossing Hwy 101 at La Costa Ave

The Draft EIR should document these and other baseline traffic problems and fully estimate the increased traffic issues associated with the proposed project. Also, the baseline traffic conditions should not be based on the lighter traffic during the pandemic but should be based on traffic flows before and after the pandemic. Baseline traffic also should include increased trips to and from the new hotel on Hwy 101 and La Costa Ave.

I am confident that a proper traffic baseline will show that traffic on La Costa Ave is already well over its design capacity. Therefore, no new developments should be allowed until developers and/or the City of Encinitas mitigate all traffic issues.

In summary, the existing infrastructure will not support any additional development impacting traffic on La Costa Ave. In fact, significant upgrades are required now to reduce current traffic congestion and hazardous conditions. These upgrades and additional mitigation measures for Marea Village should be completed prior to beginning construction at Marea Village.

Submitted to Scott Vurbeff by W C Racine

February 22, 2021

From: Tiffany Rogers <tiffrogers74@me.com>
Sent: Monday, March 15, 2021 10:15 AM
To: Scott Vurbeff
Subject: Marea Village Development -PLEASE READ

[NOTICE: Caution: External Email]

Hi Scott,
I am writing to you in regards to the development just south of the new Alila hotel. This is a very difficult email for me to send as I am a survivor of the bluff collapse that occurred at Grandview on August 2, 2019. As I was sitting there chatting with my best friend and her family the bluff collapse killing 3 ladies that were near and dear to my heart my then five-year-old daughter and I barely escaped some cuts and bruises. At times I have wondered if the development of the new hotel contributed to the bath collapse. I strongly urge you to not develop the land south of the new hotel as I do not feel it would be safe for any of us to go to the beach is down there.
This is about all I can write to you right now because of the sensitivity of the issue but I'm sure you can respect where I'm coming from. Please feel free to reach out if you have any questions.
Thank you,
Tiffany Rogers
619-857-7855

Sent from my iPhone

From: LAURA A ROSS <laura.ross@me.com>
Sent: Sunday, March 14, 2021 6:07 PM
To: Scott Vurbeff
Cc: leaucadiacares@gmail.com
Subject: We Oppose Marea Village Development

[NOTICE: Caution: External Email]

Dear Mr. Vurbeff,

As a property owner in our lovely town of Leucadia, I want to express that I strongly oppose the Marea Village development for the following reasons:

1) A development of this type will create nearly 10,000 additional daily trips in our already very busy traffic areas. This will create more safety issues, as well as more pollution of our beach waters by run-off from cars dripping oil, tire residuals, and exhaust.

2) Inadequate infrastructure for keeping pedestrians, motorists, and cyclists safe. This is one of the busiest cycling and walking areas in North County San Diego!

3) Excavation, grading, and digging needed to build the two-story subterranean parking for the proposed Marea Village risks destabilizing fragile bluffs about 100 yards away where 3 people tragically died in a bluff collapse. Underground water that naturally flows downhill from I-5 corridor towards the ocean could be blocked or diverted by Marea Village subterranean parking and further destabilize the fragile bluffs.

This development and other proposed developments in NW Leucadia will cause permanent and irreparable harm to our coastal corridor and environment. I ask that the City of Encinitas have a moratorium on growth in NW Leaucadia for the next 6 months to allow time to address and resolve these important environmental and public safety issues.

With warm regards and love of our Leaucadia beach town,

Laura Ross
1816 Eucalyptus Ave
Leucadia, CA 92024
laura.ross@mac.com

From: Clara Sanchez <clarajsanch@gmail.com>
Sent: Sunday, March 14, 2021 10:19 PM
To: Scott Vurbeff
Subject: Marea Village

[**NOTICE:** Caution: External Email]

Mr Vurbeff:

I have lived in Encinitas since 1984 and in my current location since 1997. While I understand development is going to occur; I am very concerned that infrastructure including sewer/water issues and traffic have not been adequately addressed with all of the proposed developments in our small area.
It is difficult enough now, before the new Alila beach resort is open, to leave my cul de sac, let alone considering what traffic will be like when all of the proposed developments are built.

I understand a traffic study was done in November 2020. However, how accurate can a traffic study be during covid and fall months? It seems a ridiculous, effortless waste of time and money.

Can the city's existing waste plumbing accommodate all of the proposed developments?

I suggest you drive on La Costa during work hours or when I-5 freeway has traffic issues to see for yourself what travel is like now on La Costa between I-5 and the coast before any more development has occurred.

Best Regards,

Clara Sanchez
321 La Costa Ave.
Encinitas, CA 92024

Mail Delivery Subsys

From: Zenia Schmitz <zeesjims@gmail.com>
Sent: Friday, March 12, 2021 1:49 PM
To: Scott Vurbeff
Cc: leucadiacares@gmail.com
Subject: Public Safety at Risk due to Over-Development

[NOTICE: Caution: External Email]

Scott,

My husband and I have owned property in Leucadia since 1975. We chose to retire into that property in 1998. We have seen a lot of changes over the decades; some good and some not so good.

It has recently been brought to our attention that there are significant changes coming along our coastline and along the 101 highway south of the Marea Village development. This is extremely concerning to us as the amount of traffic has increased ten fold in recent years making it difficult to exit Bishops Gate Road in our development at Sea Bluff village and 101 highway. The concerns are so significant to the point of needing another round about or a signal at that entrance/exit. Any future development is only going to exacerbate this existing problem.

We are urging the City of Encinitas and its Planning Division to reconsider any/all further developments to the South of Marea Village and HALT these projects until further consideration can be applied to the existing traffic concerns.

Regards,
Jim and Zeenia Schmitz

Sent from my iPad

From: desire smith <desiresmith12@gmail.com>
Sent: Sunday, March 14, 2021 7:48 AM
To: Scott Vurbeff <SVurbeff@encinitasca.gov>; Planning <planning@encinitasca.gov>; Kathy Hollywood <khollywood@encinitasca.gov>
Cc: Traffic User <traffic@encinitasca.gov>; Tony Kranz <tkranz@encinitasca.gov>
Subject: Marea Village EIR Comments

[NOTICE: Caution: External Email]

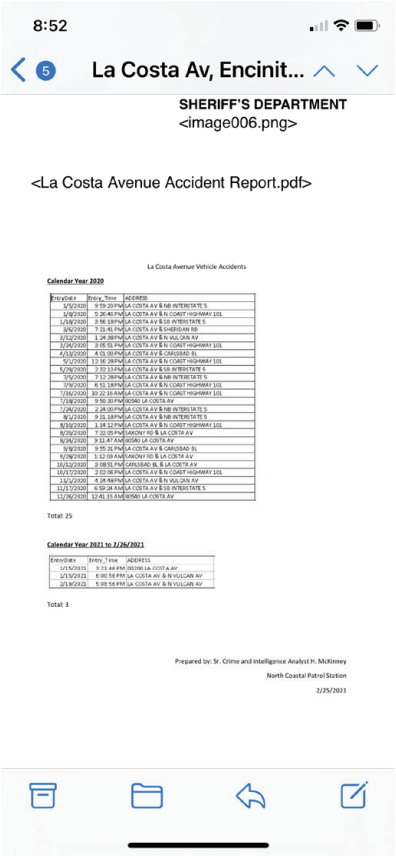
Dear Council and Staff,

Once again we implore you to provide a CURRENT comprehensive Traffic Study done during peak summer months with calculations of ALL the approved and pending development projects for the Northwest corridor of Leucadia.

I've attached a Traffic Accident report that only list accidents where the Police and/or Sheriff department was summoned, as noted by the Encinitas Sheriff's Department, this report DOES NOT include reports taken by Carlsbad Police Department, nor the almost 2 per month fender benders that have gone unreported as the drivers pull off to the side of the road and exchange information then drive off.

Please make the safety of our community to existing residents and future residents your priority and work together for the benefit of all.

Kind Regards,
Desiré and Chris Smith
1920 Paxton Way
Encinitas (Leucadia)



8:52

5 La Costa Av, Encinit...

SHERIFF'S DEPARTMENT
<image006.png>

<La Costa Avenue Accident Report.pdf>

La Costa Avenue Vehicle Accidents

Calendar Year 2020

EntryDate	Entry_Time	ADDRESS
1/5/2020	9:59:20 PM	LA COSTA AV & NB INTERSTATE 5
1/8/2020	5:20:40 PM	LA COSTA AV & N COAST HIGHWAY 101
1/28/2020	3:56:18 PM	LA COSTA AV & SB INTERSTATE 5
3/4/2020	7:21:41 PM	LA COSTA AV & SHERIDAN RD
3/12/2020	1:24:28 PM	LA COSTA AV & N VULCAN AV
3/24/2020	3:05:51 PM	LA COSTA AV & N COAST HIGHWAY 101
4/13/2020	4:01:30 PM	LA COSTA AV & CARLSBAD BL
5/2/2020	12:16:28 PM	LA COSTA AV & N COAST HIGHWAY 101
5/29/2020	2:32:13 PM	LA COSTA AV & SB INTERSTATE 5
7/9/2020	7:12:26 PM	LA COSTA AV & NB INTERSTATE 5
7/9/2020	6:51:18 PM	LA COSTA AV & N COAST HIGHWAY 101
7/26/2020	10:22:16 AM	LA COSTA AV & N COAST HIGHWAY 101
7/18/2020	9:50:20 PM	00580 LA COSTA AV
7/26/2020	2:49:33 PM	LA COSTA AV & NB INTERSTATE 5
8/1/2020	9:21:18 PM	LA COSTA AV & NB INTERSTATE 5
8/10/2020	1:14:12 PM	LA COSTA AV & N COAST HIGHWAY 101
8/20/2020	7:32:05 PM	SAKONY RD & LA COSTA AV
8/24/2020	9:11:47 AM	00580 LA COSTA AV
9/9/2020	9:55:16 PM	LA COSTA AV & CARLSBAD BL
9/28/2020	1:12:03 AM	SAKONY RD & LA COSTA AV
10/12/2020	2:08:51 PM	CARLSBAD BL & LA COSTA AV
10/17/2020	2:02:06 PM	LA COSTA AV & N COAST HIGHWAY 101
11/2/2020	4:24:46 PM	LA COSTA AV & N VULCAN AV
11/17/2020	6:59:24 AM	LA COSTA AV & SB INTERSTATE 5
12/26/2020	12:41:15 AM	00580 LA COSTA AV

Total: 25

Calendar Year 2021 to 2/26/2021

EntryDate	Entry_Time	ADDRESS
1/15/2021	3:21:44 PM	00200 LA COSTA AV
2/15/2021	6:00:56 PM	LA COSTA AV & N VULCAN AV
2/18/2021	5:08:56 PM	LA COSTA AV & N VULCAN AV

Total: 3

Prepared by: Sr. Crime and Intelligence Analyst H. McKinney
North Coastal Patrol Station
2/25/2021

Sent from my iPhone

From: Elena Thompson <elenathompson@cox.net>
Sent: Monday, March 15, 2021 7:32 AM
To: Scott Vurbeff; Planning; Tony Kranz
Cc: Kathy Hollywood
Subject: 3-15-21 Marea Village EIR Comments

[NOTICE: Caution: External Email]

Hello City Staff,

Our comments are:

-good there is an EIR being conducted
-traffic studies should be current, conducted in 2021 during peak summer season (June, July, August) now that the adjacent hotel is up and operational -concerned about all environmental impacts in this fragile lagoon, coastal region -concerned about over-development of this quadrant of Leucadia - where little to no public safety exists such as a sidewalk on La Costa Avenue, crosswalks to bus stops, crosswalk at La Costa (it was removed), overflow parking impacts -concerned about night lighting impacts on night sky and neighboring SeaBluffe -concerned about the sound and hum of HVAC systems impacting environmental health, with commercial so close to residential units (255 SeaBluffe units) -concerned that Proposition A is being ignored

A nice project, but size and scale is too much for the area. Please lob off the apartments and keep the hotel, pool and commercial-retail, make above modifications to appease the community.

Please consider ALL these items.

Thank you,

Elena & John Thompson

From: Frances Walters <franceswalters55@gmail.com>
Sent: Monday, March 15, 2021 5:04 PM
To: Scott Vurbeff
Subject: Northwest Leucadia

[**NOTICE:** Caution: External Email]

Dear Mr. Vurbeff,
I am trying to wrap my head around all of the new construction and proposed new construction in this area. I need you and the Planning Division to please use your common sense and think of this area as not just a dumping ground for rubber stamp approval developments.
I understand that the owners of these parcels of land want to improve them but please NOT at the expense of our neighborhoods.
-Traffic - where do I begin? I've lived here for 14 years and the increase has been horrendous. While trying to keep pedestrians and bicyclists safe it has made existing traffic back up from the coast to the freeway, as in gridlock! Impossible to move. It makes me fearful I could not receive emergency help fast enough. And with "Streetscape" going forward there really will be gridlock especially during Spring and Summer.
-Excavating/grading - I still will be willing to bet the recent bluff collapse that killed 3 people was caused by the Marea Hotel. I run by there all the time and heard it and felt it. I thought the bluffs in front of the hotel would go, but unfortunately I wasn't far off. More of this? Really? With the bluffs so fragile? And a subterranean parking garage for said hotel?
-Environment - with all the cars sitting and idling, going nowhere. There goes the pollution into beaches/lagoons.
I realize there needs to be growth and development, but Leucadia needs to have a SMART plan. We don't even have sidewalks or safe rail crossing! La Costa Avenue is going to be hit so hard with all these proposed developments, not to mention the builders are putting together designs that are just boxes and not trying to blend in with the environment. One of the proposed apartment buildings looks like it belongs in the commercial district of Carlsbad. That makes it obvious the developers are just looking to build cheaply and run. No quality, no pride in their work.
We need a MORATORIUM on growth around here. Please put the brakes on and and take the time to address and resolve these issues. These are important public safety issues that deserve your care and time for all of us. Even the vacationers who don't live here, they need to have safe travels.
Thank you for your consideration,
Tim and Frances Walters
1863 Wilstone Ave.
Encinitas (Leucadia)

From: Bonnie Woelfel <bwoelfel13@gmail.com>
Sent: Friday, March 12, 2021 8:32 AM
To: Scott Vurbeff
Subject: Marea Village

[**NOTICE:** Caution: External Email]

I oppose this development. The hotel taking up our whole intersection at La Costa is enough! There is no possible way Coast Highway can handle this amount of traffic. I am also concerned about runoff into the ocean. Our sand at Grandview Beach is more mud than sand after we watched the dumping of the "sand" from the digging of the hotel parking lot. I felt it with my own hands and it was not sand.
Please do not ruin our beaches and quiet in the neighborhood.

Bonnie Woelfel, local Leucadia resident

APPENDIX A-2
CITIZEN PARTICIPATION PROGRAM REPORT

THIS PAGE INTENTIONALLY LEFT BLANK

Citizen Participation Plan Final Report

MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786-2020; and CPP-3789-2020

2100 N Coast Hwy 101, Encinitas, CA 92024
Marea Village Beach Resort

A Citizens Participation meeting was held on December 15, 2020 at 6:00 p.m. on a virtual ZOOM meeting platform. There were 89 participants. A project presentation was given by Larry Jackel and architect Steve Dalton. After the presentation, there were a number of questions and also appreciation for the thoughtfulness that the applicant has given to the project expressed by the community. These questions, comments and responses are in the following report.

1. Notice to the public:
    a. A letter and vicinity map notifying all property owners and occupants within 500 feet of the project site was mailed on November 25, 2020. Additional interested parties were also made aware of the notice. Of the approximately 550 notices that were mailed out, 90 have been returned as undeliverable.

2. Below is a summary of concerns, issues and comments heard:
    a. What is the maximum number of parking spaces available?
    b. What will the traffic be like?
    c. Thoughtful project
    d. We need affordable housing
    e. How will beach access be impacted?
    f. What type of landscaping will be used?
    g. Traffic concerns along La Costa Ave.
    h. What type of retail/commercial?
    i. How many units?
    j. Keeping the Leucadia vibe is important as well as use of local artists
    k. How will this impact the Seabluffe community?

3. Questions and concerns were addressed in a Q&A session, in addition to comments. This was led by Larry Jackel and his project team which included: Steve Dalton, architect; Justin Suiter, civil engineer; Justin Rasas, traffic engineer; and Marco Gonzales, legal. Attendees were given the opportunity to type their questions into the chat feature or through asking their question via microphone. Chat questions were read aloud by a moderator and were sufficiently answered one-by-one by the project team.

    Each question was responded to, and are outlined below:

1. Nancy - What variances, waivers, adjustments, special permits, entitlements are you requesting? And how has zoning been calculated when 2 parcels have been up zoned and one has not?

    a. answer – one waiver for building height, all other aspects comply with zoning ordinance, 4 buildings on ground level require a height waiver
    b. Zoning calculation, 2 parcels meet setbacks based on lot lines, parcel 3 outside of the R30 zone, complies individually with the zone.
2. Patricia - Traffic survey data – where is it available? Also, what mitigations or improvements will the developer support to improve traffic safety for pedestrians, cyclists and motorists on the La Costa corridor, given the significant increases in vehicle traffic as a result of this development?
    a. It will be in the draft EIR, over next couple of months and will be available for comment, part of the mitigations is safety for pedestrians, but we cannot comment on a study that has not been complete yet.
3. Patricia - At maximum occupancy of the hotel, apartments and retail space, what percentage of visiting/resident cars will be accommodated by your planned parking?
    a. The City calculations were used to calculate our spaces and the project meets the requirements and will be able to accommodate all parking. We will have 257 spaces.
4. Anne Marie Quinn comment: YES! As local residents we feel this will bring value to our homes and neighborhoods. This project takes an area that was not very attractive and was known for "a bad area" and will turn it around and be a quality attractive project! We feel it will bring class, safety and a quality appearance to an otherwise rough area! Thank you!!
5. Angela – comment
   I am a 10-year resident of Encinitas raising 3 children here. we lack these types of amenities in our town and especially close to the coast. I could not be more pleased to see this coming our way. thanks for addressing traffic. That is stressful but something we have to address as we grow and make space for our children.
6. Diane & Corrie – do you have any plans to improve or develop walking/biking access over the rail corridor for the Leucadia residents east of the rail?
    a. Pedestrian access, we agree that something needs to be done at the intersection, we want to support ease of access to beach hotel, etc. These amenities are for them, we are all for helping push the city to figure out how to solve.
7. Susan- Is this a density unit project, y or n, Yes?
    a. Yes, this is a density bonus project, but we are building below what would be allowed by density bonus. We are proposing 94 units, but under density bonus it could actually be for 146 units.
    b. We are not maxing out the site but trying to make the project be sure to have an affordable housing element. 20% will be low income, in lieu of 15 % required, we could add more if we wanted to, but we are building less than we could.
8. Elena - why such a large unit count?
    a. To be financially feasible, nor is the unit count at the maximum it could be.
9. Scott - How do you qualify for affordable?

    a. 80% of AMI average medium income
10. Scott - What type of retailers? Can you bring back El Callejon?
    a. We are not sure, we do not want chains, and would like to see local restaurants, retailers, local artists, furniture makers, would like it all to be local, possibly a grocer
11. Hadley - What prevents the project from going the way of Del Mar Plaza – and is there sufficient parking?
    a. There is sufficient parking. It is not going to be the type of retail that Del Mar has. We envision it to be like the Leucadia art walk 365 days a year, artist, shops, not for high end or maximizing retail density. A lot of thought has gone into the design, and we want it to be funky, for bathing suits and bare feet
12. Diane – Plan for overflow parking?
    a. Yes, and we are uniquely able to use hotel parking, valet parking at hotel, there will also be a direct connection to the hotel, where you enter on 3rd level of the hotel to use hotel restaurant
13. Patricia - How to access draft EIR?
    a. We can send you a copy and it will be publicly available on the City's website.
14. Judi- how do you think the traffic congestion will look like?
    a. The project will have a full EIR in the coming months that will publicly available for comment and review.
15. John rider –comment - buy surfers point and put parking there.
16. Rob - Will parking traffic of other projects be taken into consideration? Will you consider contributing to a bridge?
    a. Yes, in the EIR. And we are open to being a part of the discussion about access. There are a lot of different entities that need to be at the table – developers, city, NCTD, residents, etc.
17. Corrie – Comment - locally owned should get first refusal –
    a. yes, that's the plan, would love to have local artists and restaurants
18. Doug - Pedestrian access is a concern; Vulcan and La Costa should be a roundabout.
    a. There is a light planned at that intersection, we will support whatever is best for the community, traffic light or a roundabout
19. Delores – thank you for underground parking.
20. Steve/Susan – beach access? –
    a. A path is part of the project, this remains the path to the beach. the hotel path will be spectacular.
21. Desiree – keeping Leucadia vibe, is the height no higher than Seabluffe housing?
    a. Correct, we didn't want to look down on Seabluffe. The apartments are significantly lower than 35' height limit, specifically kept apartments away from

existing homes in Seabluffe, close to 90', property line to the garage is 62', and it is 87' to the apartment building from the nearest house, this is a significant setback.

22. Ron- Traffic study in summer? –
    a. The data is what the town sets, this is in coordination with city staff, the draft EIR will be a great place for those comments.
23. Sean - What sf of apartments?
    a. The apartments range from 645- 1,220 sf, only 2 are at 1,200 sf, 18 at 1,000 sf, and the rest are lower.
24. Jeff - Traffic VMT or LOS?
    a. this will be in draft EIR, LOS elements will be in EIR, should review at that time
25. Sean - Parking for hotel employees?
    a. The hotel anticipates 40-50 employees at a time, half will be walking or biking, rest easily fit into the hotel Parking Garage.
26. Desire - Does traffic include other projects? -
    a. Yes, the traffic study takes into consideration any other projects in process
27. Susan – comment 101 buildings look too contemporary
    a. We appreciate that feedback. We are trying for modern funky, that will continue to be funky in 20 years
28. Susan - Will affordable be similar in quality? And comment - thanks for keeping it funky!
    a. Yes, the affordable units, are not downgraded, all low-income units are inclusionary.
29. Sean – Where will tracker trailers deliver – will they double park?
    a. No ,this is also a concern with City, we have a turn around, and a shipping and delivery area with 2 designated loading zones. There is also fire truck access. This will not block the highway.
30. Michele - Why another hotel?
    a. This is not a 2nd hotel, and it is required by Coastal Commission, they want public access to beach and water, and want overnight accommodations on site. This is an opportunity to connect to the hotel, as villas, this is more family-oriented villa style, with kitchenettes and will be run as a part of Alila Beach Resort.
31. Elena – comment – too many units
    a. It was reiterated that Marea Village is not building to capacity allowed on the site and the project is designed to complement the area and be inclusive by also building affordable housing.
32. Ron – comment -Stick with art friendly concept and local artists
33. Jim – with 94 apartments and hotels rooms are you studying the impact to beach use density – concerned about overcrowding and bluff stability.

    a. Of course we are taking into consideration population, yet we need to remember that these are public beaches, anyone can come from anywhere, if locals use it, others may not use the beach if crowded by locals. There are a lot of beach opportunities in Encinitas.

34. Amy - Landscaping should be native – not tropical
    a. The city has native requirements, our goal to provide appropriate palette, not jungle or tropical.
35. Sean – comment – northern area is rarely visited by locals, great area where locals can hang out.
36. Amy/Jeff - Will landscaping and downlighting be used?
    a. Yes, all lighting will be downwards and shielded, and we will use as much landscape and trees that are native as we can.
37. Sue - Is there any solar?
    a. yes, there will be solar on the roofs
38. Jeff – Will the project implement the 101 Streetscape plan?
    a. Yes, on the frontage, timing is still uncertain, but we will be coordinating with the city on implementation, it will depend on who builds first, it will be the approved streetscape plan built either way.
39. Dianna – What are the projected rents? Higher rents lead to higher occupancy.
    a. The rents will be market rate, the project is conceptual, and we don't know what the market rents will be in a few years. We are sensitive to the comment, and plan to own and operate, we won't want overcrowding in units either, and can share that with the property leasing manager.
40. Doug - How to work together with city of Encinitas?
    a. The hotel is a revenue source for city, nice amenity, this will provide needed housing for the city, pedestrian bridges, tunnels, try to get approved, city can't just pay for infrastructure, but there are state grants, we all can work together to improve infrastructure, push on together, we all want this, hotel needs, community needs, feel strongly
41. Patrick – Comment – nice plan, good mix, nice flavor to the north end of Leucadia which has been "forgotten."
42. Doug – How do we work with the City to address joint concerns?
    a. Contact city council member, city staff and we are happy to help facilitate
    b. Ongoing conversations have been had with Doug
43. Lise and Ken - Seabluff residents concerned
    a. Will be available for ongoing conversations and outreach
44. Russell - During construction of hotel there has been tree damage – will project replace them?

    a. For sure, not sure what trees you are referencing but please let us know more so we can plant more. We planted a lot of new trees already, please let us know if there is more we can do.

45. Nancy – Where is the ingress and egress? + comment – loves commercial plans
    a. The ingress/egress for vehicles is via the only driveway at the southeastern corner of the site. Vehicles will be able to access the site from both the northbound and southbound lanes of N Coast Highway 101. Vehicles leaving the site must turn onto southbound N Coast Highway 101.
46. Corrie - Will solar panels be included in waiver?
    a. No, there are parapets around the roofs that will screen solar and mechanical. The building heights include the parapets.
    b. The height waiver is because commercial spaces need higher ceilings spaces than apartments.
47. Sean – Will there be purple pipe?
    a. Did not have the answer at the time.
    b. Followed up in email after receiving confirmation that no purple pipe is west of coast highway and will not be used.
48. Desiree – comment – applaud you for being neighborly and not over shadowing current resident's homes.
49. Delores – comment- love design
50. Ron – concerned about delivery trucks
    a. Reiterated, this is also a concern with City, we have a turn around, and a shipping and delivery area with 2 designated loading zones. There is also fire truck access. This will not block the highway.
51. Ron – comment - Pressure on state parks to improve restrooms.
    a. We agree they need improving, Larry is still having these discussions with state parks regarding the hotel.
52. Jennifer- Overpopulating beach, how do you intend to keep it clean and safe?
    a. discussion with state parks, there is a fee for guests at the hotel which will go to improve beach cleanup, and we will remain engaged and committed to being a part of keeping our beaches clean and safe.
53. Ron solar panels PV – doesn't show on section view
    a. This view is not through the building, it is an elevation view.
54. Patricia - How have you partnered in past to improve infrastructure?
    a. We had much smaller projects in past, that were not of this magnitude. We are thankful for community engagement like this, so we know how to partner and have collaborative conversations.
55. Ron - Will the Leucadia sign come back?
    a. Absolutely.

56. Sean - Can we anticipate any bars/breweries opening?
    a. We are not going for alcohol license right now, that can be addressed when a restaurant comes in. It will have to go through the process, at that time. Restaurants receive a conditional license and can always be evaluated. We don't believe it will be a concern
57. Jennifer - What are we doing to ensure bluffs are safe?
    a. All projects are done with geological studies, vibration studies, it is very technical, and we are taking great caution.
    b. Justin Suiter – (civil engineer) – soils engineer will have analysis, on file with city referenced in the EIR. These are studies by a professional engineer, if there is an issue the City would bring to our attention, detailed questions need to be addressed by soils engineer with expertise.
58. Rob – Help with a bike pedestrian bridge at La Costa?
    a. Happy to have those conversations.
59. David – likes the project, wants more commercial is only concerned about the possibility to include a railroad overpass from Vulcan. And if there will be a local rate for staycations?
    a. GM at the hotel is very open to local rates. There will be opportunities for rate adjustments. We want a hotel to be a place locals love, programs for locals coming soon
    b. Overpass will be an ongoing conversation that we're happy to be a part of. It is a lot of jurisdictions that need to be at the table – NCTD, City, etc.
60. Sean - Public restrooms, available at our location?
    a. yes, in the project, for sure
61. Elena – appreciate what doing trying best to support – but why so many units?
    a. We chose a quality way to build which includes underground parking which is the most expensive construction to build. We could build 146 units, but we are only building 94, can't financially build less, don't want to build more, trying to be sensitive.
62. Delores- comment - disagrees we need a balance with affordable and smaller units
63. Ron – comment - Suggestion for local artist for sign design
64. Doug - Who has financial responsibility for walking safety? is this the city?
    a. Request clarity – Justin Suiter – confusion, for the infrastructure costs – City counts on developers to share cost , we will share costs, as well as other projects
    b. Marco – city released a study of additional crossing of railway, El Portal by school started this spring, not just developer or city, but NCTD, has to be vetted through their train, local councilman is the chair of the board, as projects move forward, rise of voices to NCTD to get pedestrians from Vulcan across 101, process is

confusing, residents on La Costa, not safe, city points to developer, concern for safety addressed first,

c. Larry – understands, want to figure out in perfect world, all those things would be great, mitigate at the same time as part of construction, that would be great, figure out how the logistics can happen would be great

65. Jim – Asked if Marco could help with crossings
    a. He said he'd be happy to
66. Patricia - Traffic — well railway crossing is an issue, biking and walking on La Costa is unsafe, want to walk to new sites, but dangerous, considered either curb and gutter sidewalk construction or walking and biking to site off La Costa.
    a. We share your concerns, and understand La Costa Ave is dangerous, agree completely, don't know if engineering is the answer but in full support to the extent, we can help to make it happen. Hope there is something we can do to create a better path for bikes and pedestrians, Leucadian Cares Group,
    b. Update – Larry has had ongoing conversations with Patricia to be involved

4. All questions were addressed. There were some that either need to be worked out once the full EIR is available with adequate traffic data or a couple of questions that were responded to after the CPP meeting via email, such as the use of purple pipe and ongoing discussion about engagement for safety along La Costa Ave. (attached in final report). Additionally, Larry and his team have made their information available should anyone want to engage further or have questions come up.

   The CPP meeting lasted two hours. The attendees were informed that a report including comments, list of attendees and correspondence received would be prepared and submitted to the Development Services Department. Once approved, a copy of the report will be distributed to all CPP participants.

Citizen Participation Program

Date: November 25, 2020
Encinitas Beach Land Venture I, LLC
Invites you to attend a VIRTUAL neighborhood meeting
Project name: Marea Village
Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos: MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786-2020; and CPP-3789-2020

The Marea Village project proposes a Design Review Permit, Coastal Development Permit and Lot Line Adjustment to allow for the construction of a mixed use development consisting of 94 for rent apartment units, 30 hotel rooms and 18,262 square feet of retail uses, to construct walls over six feet in height, to cut grade greater than eight feet and fills greater than four feet as well as a lot line adjustment between parcels 216-041-21 and 216-041-20. The project site is located at 1900 North Coast Highway 101 (APN 216-041-06) & 1950 North Coast Highway 101 (APNs 216-041-20, 216-041-21) in the Leucadia community of Encinitas. The project is utilizing California Density Bonus and will be requesting waivers. The property is owned by Encinitas Beach Land Venture I, LLC.

The Design Review Permit is required in order to ensure project consistency with North 101 Corridor Specific Plan Design Recommendations established by the City of Encinitas. A Lot Line Adjustment is required to determine resulting lot zoning standard consistency. The Coastal Development Permit is required in conjunction with the issuance of the aforementioned permits, given the project's location within the Coastal Zone.

The project would consist of 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza and an outdoor seating area. Of the 94 residential units proposed in the community, 74 would be rented at market-rate and 20 would be affordable units dedicated to "low income" qualifying residents. The proposed project includes a variety of building sizes roof shapes, colors, and materials to reflect the eclectic nature of Leucadia.

The project site is currently occupied by an operating restaurant, a commercial center and an abandoned building formerly operated as a restaurant. The project is one of 15 sites (APNs 216-041-20, 216-041-21) identified in the City of Encinitas Housing Element Update, which was certified by the California Department of Housing and Community Development on October 8, 2019. As part of the Housing Element Update, a portion of the project site was designated with an R-30 overlay zone and allocated a minimum of 33 residential units. As indicated above, the proposed project would consist of 94 residential units.

Surrounding land uses include North Coast Highway 101 (to the east), the existing Seabluffe residential community (to the south and west), and the Encinitas Beach Hotel currently under construction (to the north).

The Site's General Plan designation is North 101 Corridor Specific Plan, and the Zoning designation is N-LVSC with a R-30 overlay as part of the City's Housing Element Update for (APNs 216-041-20, 216-041-21) and N-CRM-1 for APN 216-041-06.

We look forward to meeting you virtually and discussing any concerns or questions you may have regarding this proposed project. Materials to be presented at the meeting will be available at the meeting and can also be requested in advance of the meeting as an email attachment or hard copy. A comment card and return envelope may also be requested if internet access is not available to you. If you are unable to attend the meeting or have questions prior to the meeting, please contact Encinitas Beach Land Venture I, LLC at (858) 436-3614.

Please join us on:

Tuesday, December 15, 2020

6:00pm – 9:00pm

Via Zoom

Please RSVP to receive login information. Instructions, if requested, will be provided upon RSVP. Contact Leanna Ferrante at lferrante@fenwayca.com or 858-436-3614.

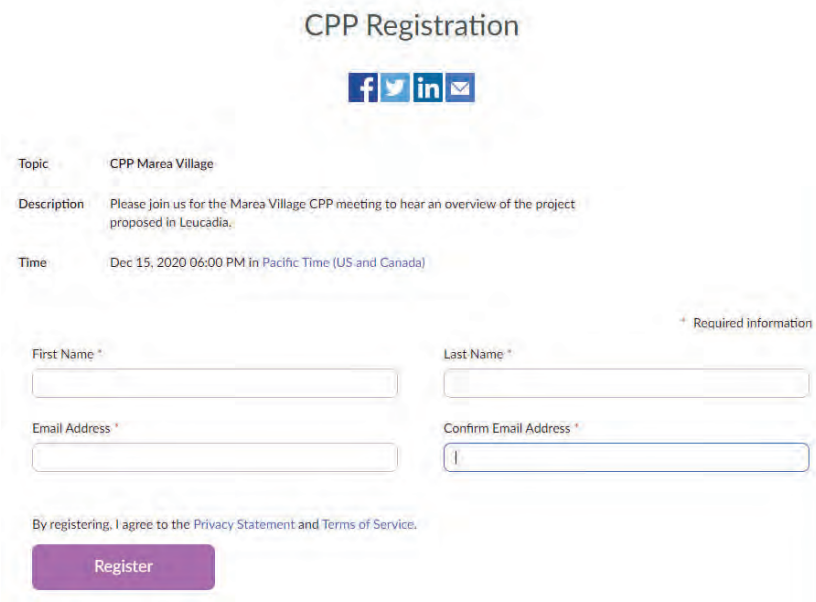
Vicinity Map

*This notice is being sent to you in fulfillment of the City of Encinitas Citizen Participation Program requirements (E.M.C. 23.06). This outreach effort to our neighbors is necessary because an application for development has been or will be filed with the City of Encinitas, Development Services Department. The sole purpose of this process is to be a preliminary tool for opening a dialogue and to ensure that the project applicants and the citizens both have an opportunity in the planning process to discuss, understand, and try to resolve neighborhood issues related to potential impacts of a proposed project on the surrounding neighborhood. It is not meant to necessarily change or prevent a project as proposed. Please continue to monitor any notices you receive as changes may be made to the project before the final decision is made. Questions about this notice and the proposed development should be directed to the contact person above. Questions regarding the Citizen Participation Program should be direct to the Development Services Department at (760) 633-2710.

Step by Step to Register for the Zoom

1. **Click on the Zoom link in your email**

2. **Zoom will take you to their registration page. Attendees must register for this CPP so attendance can be taken, and attendees can comment.**



3. **Zoom will make you verify you are a person.**

Step by Step to Register for the Zoom

4. **You will be forwarded to a confirmation screen on Zoom. This email link is specific to you. If you forward it, only one person can use it at a time. Everyone should register individually.**

Webinar Registration Approved

Topic	CPP Marea Village
Description	Please join us for the Marea Village CPP meeting to hear an overview of the project proposed in Leucadia.
Time	Dec 15, 2020 06:00 PM in Pacific Time (US and Canada) Add to calendar
Webinar ID	851 3274 7475

To Join the Webinar

Join from a PC, Mac, iPad, iPhone or Android device:

Please click this URL to join. https://us02web.zoom.us/w/85132747475?tk=yG516O2EODXucwEOLi3GS1XHcxy8ZfK73YPTDQ-DkFg.DQIAAAAT0k6i0xZvc0NCeHoydlRxQ09MV3FJN2FBR2xBAAAAAAAAAAAAAAAAAAAAAAAAAAAA&pwd=TGNrOHljM1hJdEY5U3V3T2tnN3QzUT09&uuid=WN__H_RNVmbQ4ugNxM5G-J4WA

To Cancel This Registration

You can cancel your registration at any time.

5. **You will also be sent a confirmation email from Zoom.**

You are invited to a Zoom webinar.

Date Time: Dec 15, 2020 06:00 PM Pacific Time (US and Canada)
Topic: CPP Marea Village

Join from a PC, Mac, iPad, iPhone or Android device:
Click Here to Join
Note: This link should not be shared with others; it is unique to you.
Passcode: 924987
Add to Calendar Add to Google Calendar Add to Yahoo Calendar
Description: Please join us for the Marea Village CPP meeting to hear an overview of the project proposed in Leucadia.

Or iPhone one-tap:
US: +16699006833,,85132747475# or +13462487799,,85132747475#

Or Telephone:
Dial(for higher quality, dial a number based on your current location):
US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 312 626 6799 or +1 929 205 6099 or +1 301 715 8592
Webinar ID: 851 3274 7475
Participant ID: 186649
Passcode: 924987
International numbers available: https://us02web.zoom.us/u/kccHet5Dsr

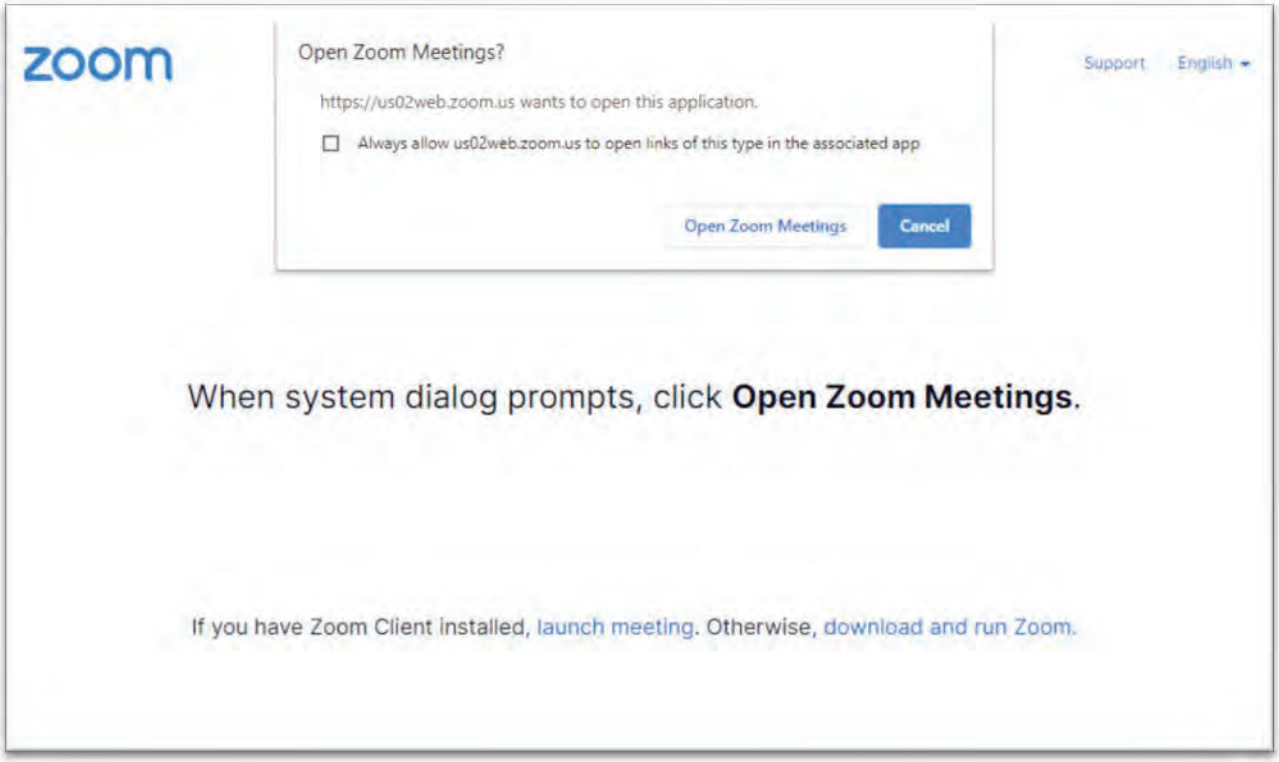
6. **Zoom now requires passcodes to join meetings to stop spammers. The email has the passcode: 924987 included.**

ZOOM TUTORIAL

We recommend watching the Zoom.com tutorials. Please download the latest Zoom software to make sure all features are up to date. Zoom will prompt you to do so.

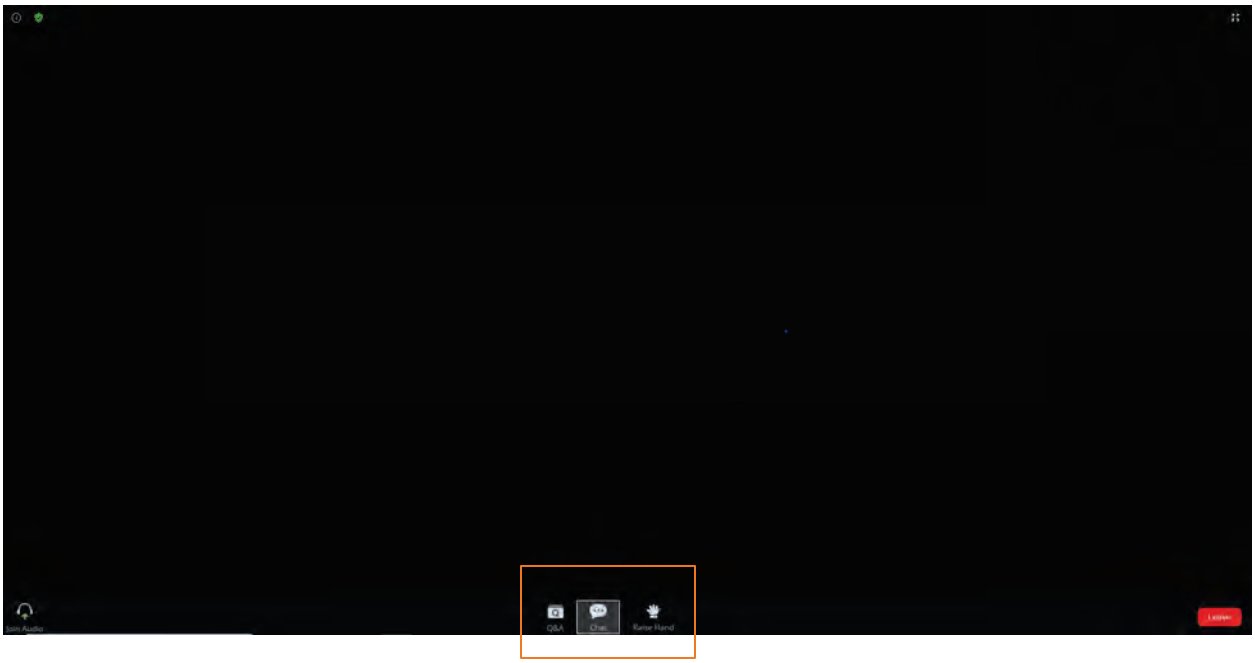
Joining a meeting: https://support.zoom.us/hc/en-us/articles/201362193

1. From your confirmation email, click the link to Open Zoom Meetings.



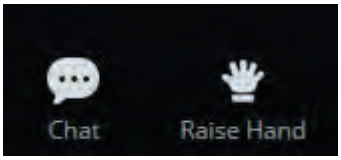
2. You'll need to put in the passcode: 924987 to join.

3. The Zoom landing page will look similar to this screen:

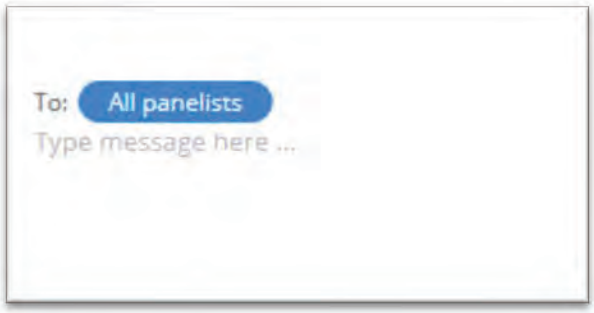


ZOOM TUTORIAL

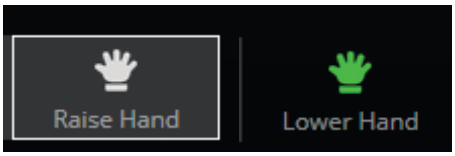
Here are a couple functions for attendees: CHAT & RAISE HAND



The Chat Function is for attendees to directly communicate with the Host.



Every attendee will be muted at the start. Only the host can unmute an attendee. The attendee must **"raise their hand"** and the host will unmute the attendee. If only connected by phone, an attendee can raise their hand by pressing *9 .



CPP sign in sheet - Marea Village
Dec. 15, 2020

First Name	Last Name	Email
Adrian	hall	adrian.hall33@gmail.com
Amy	Freeman	amyfreeman@cox.net
Andree	Pyfer	apyfer@gmail.com
Angela	Yon	Angela@borettomerrill.com
AnnMarie	Quinn	aquinn@geotekusa.com
Audrey	Jackel	Audrey@jackelsd.com
Bill	Blair	billyblair8@gmail.com
Brad	Johnson	bjunreply@gmail.com
Brenda	Tirshfield	captmomt@yahoo.com
Brenna	Olsen	brenna@thecreativecellar.com
Buzz	Mills	buzzard06@gmail.com
Caitlin	Jensen	Caitlinejensen@gmail.com
Carol	Scoville	carolrscoville@gmail.com
Chiara	Tripodi	chiaradoc@gmail.com
Christine	Purkiss	cpurkiss@live.com
Corrie	Martin	fiercecorrie@gmail.com
craig	ronholm	craigronholm@hotmail.com
Cydne	Holt	cydneholt@live.com
dar	jacobs	darjhere@gmail.com
Dave	Licosati	licosati@gmail.com
David	Langdon	david@prgestates.com
David	McLaren	david.mclaren@cox.net
Delores	Loedel	Kaindee@cox.net
Dennis	Simmons	sandman55@cox.net
Desire' and Chris	Smith	desire@isensecloud.com
Diane	Lantz	lantz.diane@gmail.com
dianna	Nunez	dnunez@cox.net
Doug	Jensen	djensen@dac-usa.com
Douglas	Wierenga	dougwierenga@icloud.com

elena	thompson	elenathompson@cox.net
Ellyn	Lakin	ellyn.audrey@gmail.com
Fenton	Cross	Crossf44@yahoo.com
Hadley	Comer	2hadley@gmail.com
Hugh	Buchanan	brh361@yahoo.com
J	D	leucadiajohn@dslextreme.com
J-K	Investments	bigbenshipstores@hotmail.com
Jamie	Davis	jamie4549@mac.com
Jeff	Hunt	jeffreyshunt@aol.com
Jennifer	Covell	eve@vintagegoodsapparel.com
Jim	Alwan	Alwan1@cox.net
Jim	Kverno	Jimkverno@yahoo.com
Joan	TEDESCO	joanietedesco@gmail.com
JOAN	OLIVER	palmolivers@sbcglobal.net
Joan	Jordan	Peralta02@charter.net
Joel	Garcia	Garcialua@sbcglobal.net
John	Rider	wheelsbb61@gmail.com
John	Nichols	johnfnichols@gmail.com
Joshua	Nunnally	josh@sdarchitects.net
Karen	Fraser	kfrasershop@gmail.com
Karl	Marquette	KHMARQUETTE22@GMAIL.COM
Kelson	Splavec	Kelsonsplavec@gmail.com
Liinda		lbergelson@att.net
Linda	Meeker	leucadialinda@dslextreme.com
Lise	Mahoney	lisemarie3@gmail.com
Manon	Maschue	pbmanon@gmail.com
Maria	Bohl	tigramaria60@yahoo.com
Mary	Tavan	marytavan@gmail.com
Melinda	Dudley	mdudley333@yahoo.com
Michele	Alper	mrmalper@gmail.com
Michelle	Turnbull	turnbullmich@gmail.com
Nancy	DeGhionno	dogs92024@yahoo.com
Norman	Arkoff	narkoff@hotmail.com

Patricia	Vasquez	mspmvasquez@gmail.com
Patrick	Johnson	pl_johnson@hotmail.com
Patrick	McAllister	Patrickm@wermersproperties.com
Patrick	Tribolet	ptribolet@fenwayca.com
Patrick	Doyle	patrick@doyleire.com
Paul	Ecke	paulecke3@icloud.com
Peter	Curry	peter.curry@cushwake.com
Queenie	Cocjin	queenie@sdarchitects.net
Richard	Smith	azsmith@pobox.com
Rob	Fleener	rflee@hotmail.com
ron	ranson	rranson@ucsd.edu
Russell	Levan	russelllevan@gmail.com
Samuel	Losh	samlosh@earthlink.net
Sandra	Jackel	sandyj15@hotmail.com
Scott	Potter	spotter@suffolk.com
Scott	Peterson	Scottwpeterson@hotmail.com
Sean	Olsen	seansolsen@yahoo.com
Sean	Maschue	smaschue@qti.qualcomm.com
Shari	Chambers	punkchambers@gmail.com
Steve	Norton	nortsurf4@yahoo.com
Sue	Ferraro	sferraro01@charter.net
Susan	Turney	susankturney@gmail.com
Susan	Glasser	slglasser@comcast.net
Suzi	Shatto	sq_shatto@yahoo.com
Tina		vinandt@roadrunner.com
Tom	Wermers	Tomw@wermerscompanies.com
Z	Hammond	zach.hammond@gmail.com

18:06:45 From Desire Smith To All Panelists : Desire' and Chris Smith
18:06:58 From Desire Smith To All Panelists : desiresmith12@gmail.com
18:08:26 From Nancy DeGhionno To All Panelists : what variances, waivers, adjustments, special permits, entitlements,etc. are you requesting?
18:08:39 From Michelle Turnbull To All Panelists : I was your child's teacher, Larry. I know what their neighborhood looked liked and I'm saddened that you want to destroy our neighborhood with yet another overbuilt money maker. Leucadia is NOT the place for this. You have profited enough from this community. We just want to live a calm and peaceful life in this neighborhood without big time real estate taking over our town.
18:08:49 From Haley Wonsley | Intesa Communications Group To Desire Smith and All Panelists : Thanks for being with us again tonight!
18:09:37 From Nancy DeGhionno To All Panelists : how has zoning been calculated when 2 parcels have been up-zoned and one has not?
18:11:43 From Haley Wonsley | Intesa Communications Group : Please place your name, email, phone number and address in the chat. Thank you all for being with us this evening, we look forward to discussing your questions at the end of the presentation.
18:14:06 From Haley Wonsley | Intesa Communications Group To Christine Purkiss and All Panelists : Hi Christine, I see your hand raised and we will get to your question and call on you after the presentation. Thanks!
18:15:17 From Patricia Vasquez To All Panelists : Patricia Vasquez, mspmvasquez@gmail.com, 858-752-3112, 207 La Costa Avenue, Encinitas, 92024.
18:15:51 From Suzi Shatto To All Panelists : Suzi Shatto sq_shatto@yahoo.com 760.815.2847 177 Andrew Ave. Leucadia
18:16:32 From Sue Ferraro To All Panelists : Sue & Tom Ferraro sferraro01@charter.net. 9098156225, 1755 Whitehall Rd.
18:16:41 From Michelle Turnbull To All Panelists : Stop Larry. You really don't care about the community.
18:17:13 From Scott Peterson To All Panelists : Scott Peterson
18:17:35 From Michelle Turnbull To All Panelists : I was the person that posted the chat and said I taught Larry's child...My name is Michelle Turnbull and I continue to teach in the neighborhood where Larry's children went to school. Larry's take on this is not taking into consideration the families that live here. My phone number is 858.337.1737 and my email is turnbullmich@gmail.com. Traffic is indeed a concern, but more so is the spirit of our town being lost to greed.
18:17:37 From Patricia Vasquez To All Panelists : Can you please discuss the traffic survey/data that was used for this proposal? Where can I access that information?

Also, what mitigations or improvements will the developer support to improve traffic safety for pedestrians, cyclists and motorists on the La Costa corridor, given the significant increases in vehicle traffic

as a result of this development?

Thanks,
Patricia Vasquez
18:17:49 From Scott Peterson To All Panelists : Scott Peterso , scottwpeterson@hotmail.com, 858-945-4946
18:17:57 From Delores Loedel To All Panelists : Delores Loedel 760-207-2982 kaindee@cox.net
18:17:57 From Michelle Turnbull To All Panelists : You are full of shit! This will ruin our community.
18:18:17 From Kelson Splavec To All Panelists : Kelson Splavec, kelsonsplavec@gmail.com, 760-470-4770. 180 Andrew Ave, Encinitas 92024
18:19:06 From AnnMarie Quinn To All Panelists : AnnMarie Quinn, aquinn@geotekusa.com 951-675-8715
18:19:17 From AnnMarie Quinn To All Panelists : 700 Blossom Rd, Encinitas CA 92024
18:20:00 From AnnMarie Quinn To All Panelists : Tom Quinn 951-522-5185 amqservices@hotmail.com 700 Blossom Rd, Encinitas CA 92024
18:20:42 From Scott Potter To All Panelists : Scott Potter
18:20:50 From Michelle Turnbull To All Panelists : Stop talking Marco, you guys are doing this for to benefit yourselves, not to benefit anyone else. You will have a fight.
18:21:04 From dianna Nunez To All Panelists : Dianna Mansi Nunez
18:21:18 From Scott Potter To All Panelists : 949-275-3587; 7619 Galleon Way, Carlsbad 92009
18:21:50 From Jim Alwan To All Panelists : Jim and Kelly Alwan 327 La Costa Ave alwan1@cox.net. 858 776 0045
18:22:10 From Scott Peterson To All Panelists : the site rendering looks amazing! any more pictures to show?
18:22:26 From dianna Nunez To All Panelists : Dianna Mansi Nunez 399 Hillcrest Drive, Encinitas, CA 92024 dnunez@cox.net 760-632-7011
18:22:38 From Michelle Turnbull To All Panelists : We know the area and how you will destroy it.
18:23:33 From elena thompson To All Panelists : why cant we see comments? need a new public CPP, transparency welcome.
18:24:00 From David McLaren To All Panelists : David McLaren, david.mclaren@cox.net, 858-337-5999, 1149 N. Vulcan Ave. #4
18:24:02 From Michelle Turnbull To All Panelists : You have no idea about our town. Stop talking out of your ass.
18:24:20 From Haley Wonsley | Intesa Communications Group To elena thompson and All Panelists : Hi Elena, The chat is to help facilitate questions and answers at the end of the presentation. The full chat will be available in the CPP report to the city and will be made public.
18:25:25 From AnnMarie Quinn To All Panelists : YES! As local residents we feel this will bring value to our homes and neighborhoods. This project takes an area that was not very attractive and was known for "a bad area" and will turn it around and be a quality attractive project! We feel it will bring class, safety

and a quality appearance to an otherwise rough area! Thank you!!
18:25:40 From Haley Wonsley | Intesa Communications Group To elena thompson and All Panelists : Hi Elena, I see your hand raised and have added your name to the list so you can ask a question at the end of the presentation. Thanks!
18:27:23 From Angela Yon To All Panelists : my name is Angela Merrill and I am a 10 year resident of Encinitas raising 3 children here. we lack these types of amenities in our town and especially close to the coast. I could not be more pleased to see this coming our way. thanks for addressing traffic. That is stressful but something we have to address as we grow and make space for our children. My address is 1616 jerrilynn place.
18:27:46 From Michelle Turnbull To All Panelists : Are we building a hotel in Carmel Valley, Larry? Taking over your family's neighborhood, Larry? I really hope you think about the devastation this will bring to our neighborhood. I'm just really disappointed. Michelle Turnbull, turnbullmich@gmail.com, 858.337.1737
18:28:25 From Patricia Vasquez To All Panelists : At maximum occupancy of the hotel, apartments and retail space, what percentage of visiting/resident cars will be accommodated by your planned parking?
18:29:15 From dianna Nunez To All Panelists : Currently there is no safe pedestrian or bike access for residents on the northeast side of the railway between Leucadia Blvd and La Costa Blvd to cross to your project. Because local residents' use of Marea Village would benefit this project, do you have any plans to improve or develop walking/ biking access over the rail corridor for the Leucadia residents east of the rail?
18:30:01 From Susan Turney To All Panelists : Is this a density bonus project. yes or no please?
18:30:17 From Delores Loedel To All Panelists : beautiful!
18:30:29 From Scott Peterson To All Panelists : nice attention to detail. what kind of retailers do you envision?
18:30:45 From Melinda Dudley To All Panelists : Melinda Dudley
18:31:06 From Melinda Dudley To All Panelists : mdudley333@yahoo.com
18:31:19 From elena thompson To All Panelists : Cannot see CPP dialogue, being snuffed out during COVID
18:31:21 From Melinda Dudley To All Panelists : 760-613-2585
18:31:31 From Melinda Dudley To All Panelists : 1149 N Vulcan Avenue Unit 7
18:31:44 From Melinda Dudley To All Panelists : Leucadia, CA 92024
18:32:22 From Haley Wonsley | Intesa Communications Group To elena thompson and All Panelists : Hi Elena,
18:32:25 From AnnMarie Quinn To All Panelists : Such an awesome project!
18:33:22 From Haley Wonsley | Intesa Communications Group To elena thompson and All Panelists : Again, I see your hand raised, I am going to lower it, but I will call on you during Q&A. Thanks for your patience
18:33:27 From Hadley Comer To All Panelists : Hadley Comer

2hadley@gmail.com 323-793-4495
18:34:40 From Sean Olsen To All Panelists : Sean Olsen
18:35:08 From Sean Olsen To All Panelists : seansolsen@yahoo.com, 1959 Park Crest Dr Cardiff, 660-805-8985
18:35:29 From Hadley Comer To All Panelists : What is to prevent this development from “going the way” of Del Mar Plaza in old Del Mar, and the Whole Foods Development in Encinitas? That said, I like the thought put into it and the vision. Also, is that sufficient parking?
18:36:45 From dianna Nunez To All Panelists : Is there a plan for overflow parking?
18:37:54 From elena thompson To All Panelists : Why cant we see CPP chat?
18:38:14 From Ellyn Lakin To All Panelists : Ellyn Lakin
18:38:49 From Ellyn Lakin To All Panelists : 390 E Glaucus St - ellyn.audrey@gmail.com
18:39:06 From Haley Wonsley | Intesa Communications Group To elena thompson and All Panelists : Yes, it will be made available after the presentation in the full city report.
18:40:18 From Corrie Martin To All Panelists : As a resident of the neighborhood just East of Vulcan, I would like my family to be able to access the future businesses located at the proposed Marea Village. Currently, our area of Northwest Leucadia does not have a rail crossing or even safe bike or walk path to do so. I would like to see Fenway work with our community to insist the city implements a rail crossing, safe walk & bike paths along La Costa & Coast Hwy as well as necessary traffic mitigation measures in the surrounding area (not just La Costa & Coast Hwy). Thank you. Corrie Martin fiercecorrie@gmail.com 310-880-4318 1922 Stewart Way Encinitas, CA 92024
18:40:46 From Patricia Vasquez To All Panelists : How can we access the draft EIR?
18:41:04 From Scott Peterson To All Panelists : a good amount of affordable. what are the requirements for tenants to qualify?
18:42:00 From Ellyn Lakin To All Panelists : I like the plan. It seems very well thought out, and I appreciate the design elements that pull from the diverse aspects of Leucadia and Encinitas.
18:42:02 From Amy Freeman To All Panelists : Amy Freeman
18:42:28 From John Rider To All Panelists : John Rider wheelsbb61@gmail.com / Judi Brent jascherbrent@yahoo.com 1911 Paxton way, encinitas 760.633.3962. since the hotel has 208 parking avail and over 250 for the village. we are looking at over an additional 100 cars daily and that is just a wild guess. How do you think the traffic congestion will look like? you can not guarantee anyone taking buses or other transportation other than their own cars.
18:42:31 From Nancy DeGhionno To All Panelists : Nancy DeGhionno 1773 Wilstone Ave leucadia, dogs92024@yahoo.com 760-632-9467. I wrote the first 2 questions. thanks
18:43:39 From Rob Fleener To All Panelists : will the traffic study take into consideration the other projects being planned along la costa and on 101 across from pinto

18:43:43 From Amy Freeman To All Panelists : 760 803 3251 1731 Wilstone Ave Leucadia
18:43:55 From Amy Freeman To All Panelists : amyfreema@cox.net
18:44:18 From Amy Freeman To All Panelists : amyfreeman@cox.net
18:44:19 From Corrie Martin To All Panelists : I would also like to see our current locally owned, independent restaurants & businesses that make up our wonderful community and unique culture be given first right of refusal on affordable rent at Marea Village. Thank you.
18:44:34 From John Rider To All Panelists : JohnRider....why don't you buy surfers point and put a parking garage there.
18:44:44 From Russell Levan To All Panelists : Russell Levan, russelllevan@gmail.com, 760-802-5690, 1317 Hymettus Avenue Encinitas, CA 92024
18:44:46 From Scott Peterson To All Panelists : any chance to bring back El Callejon in this project? that would be the icing on the cake for this cool new development
18:44:46 From elena thompson To All Panelists : NO need for such density. Totally out of character for this area. Greedy unit count, Why so HUGE, please answer why Larry? Intention? Walkable? No safe infrastricture for that
18:44:47 From Patricia Vasquez To All Panelists : We would love to walk to the retail and dining sites. However, we live on La Costa Avenue. How could be possibly walk there safely?
18:44:55 From Doug Wierenga To All Panelists : Doug & Steph Wierenga. 325 La Costa Ave, 18 year homeowners. We don't love the density of your project, but appreciate the thoughtful and representative design elements. We are very concerned about traffic and safety along La Costa. Can Vulcan and La Costa be a roundabout? I read the city's traffic program online. The projectsed cost difference isn't high vs. a light. (~<$50k delta). A roundabout at La Costa and 101 would be much preferred, as well. There presently isn't safe way to access your project from the nearby neighborhoods on foot / bike.
18:45:10 From Rob Fleener To All Panelists : would you consider contributing to the construction of a pedestrian bike bridge across the rail tracks at la costa to get us safely to your project
18:45:17 From Rob Fleener To All Panelists : Rob Fleener
18:45:27 From Delores Loedel To All Panelists : thank you for doing underground parking
18:45:47 From Steve Norton To All Panelists : How is it going to work in terms of everyone`s access to the beach? Is the access point only via the pathway that`s now being developed off of the large hotel driveway?
18:47:07 From Tina To All Panelists : Tina Ravizza, vinandt@roadrunner.com, 7602131629, 1669 Honeysuckle Ct Encinitas 92024
18:47:51 From Amy Freeman To All Panelists : Leucadia is not the tropics. Why not use California native plants in landscaping plan- saves water and provides a better habitat for local birds/butterflies etc

18:48:22 From Desire Smith To All Panelists : Thank you Larry and Team, First I appreciate your acknowledging the concerns of residents and keeping the Leucadia Vibe. Is the maximum height of this project no higher than Seabluff Housing?
18:48:48 From ron ranson To All Panelists : Ron Ranson rranson@ucsd.edu 174 Andrew Ave. 760-547-6039 The traffic study seems to be taken at the wrong time of year. it needs to be studied during summer for a full picture of what's out there. Having a November study is a cop out.
18:49:19 From Steve Norton To All Panelists : Steve Norton, nortsurf4@yahoo.com, 760-633-4536, 283 La Costa Ave.
18:49:58 From Sean Maschue To All Panelists : what is the Square footage ranges of the apartment units?
18:50:41 From ron ranson To All Panelists : Ron Ranson rranson@ucsd.edu 174 Andrew Ave 7605476039. Nice variety of design styles, angles, colors and variety of textures. Congratulations. Don't agree with building waivers.
18:51:02 From Patricia Vasquez To All Panelists : We would love to walk to the retail and dining sites. However, we live on La Costa Avenue. How could we possibly walk there safely?
18:51:23 From Brenna Olsen To All Panelists : As a local small business owner, I am looking forward to bringing more traffic to retail locations that are struggling right now
18:51:51 From Jeff Hunt To All Panelists : Traffic VMT has to be addressed with the EIR. But does Encinitas still have policies regarding LOS?
18:51:55 From Sean Maschue To All Panelists : Is there also parking for all the hotel employees/contractors during normal hotel operation once complete?
18:52:13 From Susan Glasser To All Panelists : Bill Glasser, Stewart Way, Encinitas, WJGlasser@gmail.com
18:52:39 From Scott Potter To All Panelists : I believe the project will make this part of Leucadia more pedestrian friendly. I look forward to having a place that I can bike to with my family and utilize after a day at the beach.
18:52:58 From Susan Glasser To All Panelists : 1. Is there beach access from the development?
18:53:19 From Desire Smith To All Panelists : you mentioned that the traffic study was done in 2019, did this included all the projects that are slated for this corridor?
18:53:47 From Susan Glasser To All Panelists : 2. Project looks great but the buildings along the 101 look a bit too contemporary
18:55:52 From Susan Glasser To All Panelists : 3. Will the "affordable" units have the same finishes and sizes as the market rate units?
18:56:24 From Susan Glasser To All Panelists : Thanks for keeping it Funky!
18:56:42 From Sean Maschue To All Panelists : how/where will large tractor-trailers pull-up to make deliveries to the commercial/ restaurants? will they need to double-park on the highway?

18:56:47 From Michele Alper To All Panelists : Why would you be proposing to build a second hotel next door to a new hotel that is just being completed?
18:57:26 From elena thompson To All Panelists : "not that much space"..
18:57:55 From elena thompson To All Panelists : too many units...
18:58:06 From ron ranson To All Panelists : Ron Ranson 174 Andrew ave rranson@ucsd.edu 760 5476039 Thanks for including an emphasis on local artists. Stick with this art friendly concept.
18:58:27 From elena thompson To All Panelists : Ha! LeucadiArt Walk!
18:58:29 From Jim Alwan To All Panelists : With 94 apts and 30 more hotel rooms, in addition to the new hotel and other projects, are you studying the impact to beach use density. For existing comparison, with today's available beach parking, it is a small beach and easily over crowded. Backing people down the beach and against the cliffs is potentially dangerous.
18:58:36 From AnnMarie Quinn To All Panelists : Yes, keep it local as posiable
18:58:41 From Sean Olsen To All Panelists : as a previous resident of Leucadia I can attest to the fact that the northern area in question was rarely visited by locals. I think this will be a great area where locals can hang out.
18:59:32 From Hadley Comer To All Panelists : Thank you! I pray your vision holds its course! ☺️
18:59:41 From elena thompson To All Panelists : Sorry, fighting for towm, quality of life, community character, thisbis NOT Leucadia
19:00:24 From Jeff Hunt To All Panelists : Will landscaping and downlighting and other design elements be used to address impacts to Seabluffe?
19:00:52 From AnnMarie Quinn To All Panelists : YES....affordable rent for locals
19:00:56 From elena thompson To All Panelists : Parkimg studyist be in summer momths,, not November
19:01:25 From Patrick Doyle To All Panelists : Patrick Doyle patrick@doyleire.com 760-533-4602 215 Sanford St Leucadia
19:02:18 From Sue Ferraro To All Panelists : is there solar in the project?
19:02:19 From Jeff Hunt To All Panelists : Will the project implement the 101 Streetscape Plan along the frontage of the project?
19:02:22 From dianna Nunez To All Panelists : This is a lovely designed project and your efforts to not over densify the area is very much appreciated. What are your projected rents for the market rate apartments? The concern is that if the market rates are high, this may encourage higher occupancy of each unit. Higher occupancy of each unit would result in greater impacts on traffic and parking. Will there be leasing controls in place that will discourage over occupancy per unit?
19:02:39 From Patrick Doyle To All Panelists : nice plan, good mix of house, hotel and retail. It will add a nice flavor to the north end of Leucadia which has been "forgotten" P Doyle

19:03:57 From Doug Wierenga To All Panelists : Can you tell us how we would work together with the city of Encintas to address joint concerns? Many of us are naive to the mechanics of development. Thank you.
19:04:56 From elena thompson To All Panelists : Seabuffe stairs are private!!!
19:05:14 From Lise Mahoney To All Panelists : Ken Mahoney. ken@uv3masterguard.com, 760-207-9905, 1821 Wilton. it's great that a lot of people are excited about the project but I don't hear a lot of comments from Seabluffe residents. this project in my opinion will effect many properties here in Seabluffe. my home is right behind this project. I am concerned.
19:06:04 From Russell Levan To All Panelists : During the course of constructing the hotel several of the trees the community / city planted about 9-10(?) years ago have been hit / damaged and run over. Will you be replacing those trees and hopefully encouraging the workers to take more care during the construction of this project?
19:06:32 From Nancy DeGhionno To All Panelists : where is ingress/ egress?
19:06:58 From Nancy DeGhionno To All Panelists : love your commercial plans
19:08:00 From Corrie Martin To All Panelists : Will you be using solar panels and, if so, will the height of the solar panels be included in the waiver application in the 39 ft height?
19:09:15 From Desire Smith To All Panelists : I applaud you for being neighborly and not over shadowing current resident's homes. Maybe you should talk to the folk on the Vulcan project to follow your lead :-)
19:10:58 From Sean Maschue To All Panelists : will there be purple-pipe recycled water brought to the project ?
19:11:39 From Carol Scoville To All Panelists : Carol Scoville; carolrscoville@gmail.com; 818-389-5994; Seabluffe
19:12:10 From elena thompson To All Panelists : Why so many units?
19:13:03 From Delores Loedel To All Panelists : I absolutely love the design.
19:13:31 From Sue Ferraro To All Panelists : if yes, does the building height include the solar or does the solar add to the 35'?
19:14:24 From Tina To All Panelists : Tina Ravizza, vinandt@roadrunner.com, 760-213-1629, 1669 Honeysuckle Ct, Encinitas, 92024 I'm so impressed with the variety of architecture, sizes, colors, and especially walkability of the plaza. The positives here so outweigh the concerns. Someone is going to build this site, so I'm glad to hear it's locals who care about the community and so thoughtfully coming together. Cant wait to eat, ride and walk here with my family. Make the Farmer's Market happen!!Great project.
19:14:44 From Susan Glasser To All Panelists : Steve, Great job!
19:16:25 From ron ranson To All Panelists : Ron RANSON 174 Andrew Ave rranson@ucsd.edu 760-547-6039 Now I'm concerned about delivery trucks inside the project - backing up with beeping of their safety devices. Could be a big annoying problem.

19:17:59 From Doug Wierenga To All Panelists : Doug & Steph Wierenga 325 La Costa Ave (copy, but with name and address. Can you tell us how we would work together with the city of Encintas to address joint traffic and safety and ped / bike access concerns? Many of us are naive to the mechanics of development process. Thank you. We appreciate your collaborative style and approach.
19:19:04 From Scott Peterson To All Panelists : I'm excited to ride my bike with the family to this hotel and retail area. seems like a solid fit. thank you Fenway team for making this a real nice fit into the existing community.
19:19:17 From ron ranson To All Panelists : ron Ranson rranson@ucsd.edu 174 Andrew ave 760-5476039 I would like to see you put pressure on the state parks system to improve the restrooms, showers and trash pick up. It's substandard and a poor image for your guests.
19:21:30 From Jennifer Covell To All Panelists : I disagree. There is no way that you will not be over populating our local beach. That is why people would come here to visit. What do you plan to do to help keep our beaches clean and safe?
19:22:12 From Jennifer Covell To All Panelists : Eve Covell Sciacqua
19:22:23 From Jennifer Covell To All Panelists : 760-497-9567
19:22:25 From ron ranson To All Panelists : Ron Ranson 174 Andrew Ave 760-5476039 rranson@ucsd.edu Just heard about solar on the roofs. This doesn't show up on the section views. Please explain.
19:26:08 From Patricia Vasquez To All Panelists : How have you partnered in past with other communities to improve infrastructure?
19:28:40 From ron ranson To All Panelists : Ron RAnson 174 andrew 760-5476049 rranson@ucsd.edu Will there be a return of a WELCOME TO LEUCADIA sign that is on the property?
19:29:42 From Sean Maschue To All Panelists : how late can the retail stay open at night? I'm wondering if we can anticipate any bars/breweries opening?
19:30:10 From Jennifer Covell To All Panelists : We also lost our friends in the collapse of the Sea Buff at Grand View. What are you doing insure that the Sea bluff and cliffs are safe ? Especially during construction.
19:34:28 From Rob Fleener To All Panelists : Rob fleener. would you contribute to a bike pedestrian bridge at la costa to help us get to your project
19:35:29 From Sean Maschue To All Panelists : Public restrooms up near the commercial area are important, as we've learned at seabluffe and from the Roberto's bathrooms. will your commercial area have some public restrooms available?
19:39:32 From David Langdon To All Panelists : Jennie Langdon, david@prgestates.com, (858) 205-4420 1753 Wilstone Ave, Enc. 92024. These plans look great. The mixed use is much needed in this area! I'd personally love to see more commercial space, as we don't have a lot of stores at the north end of Leucadia. The small commercial incubator concept is exactly what Leucadia needs. My only concern lies with improvements that need to be made by the City, including an railroad

overpass from Vulcan and traffic mitigation on La Costa. Lastly, will you have a “local” rate for staycations? I’ve already booked the first night open at Alila :)
19:44:47 From Delores Loedel To All Panelists : I disagree. We definitely need more affordable and smaller housing.
19:46:28 From Scott Peterson To All Panelists : I’m at Quail and Leucadia. 90 units with a developer who cares is important to our community needs and uses. I’m much more concerned about the 200-400 units like those proposed on Quail with no regard for traffic to the freeway and community design integration.
19:47:26 From ron ranson To All Panelists : Ron Ranson 174 Andrew Ave rranson@ucsd.edu 760-5476039 As per Welcome to Leucadia - I suggest using a local artist perhaps a contest for the design.
19:47:47 From Doug Wierenga To All Panelists : Doug & Steph. Who has financial responsibility for walking / ped / safety infrastructure? Is this solely the city to shoulder this burden?
19:48:46 From Doug Wierenga To All Panelists : We’ve met the city recently. They point to the developers. Seems the developers point to the city… WE ARE CONFUSED
19:49:17 From Doug Wierenga To All Panelists : cost to build new infrastructure.
19:49:21 From Doug Wierenga To All Panelists : not liability.
19:50:21 From Jim Alwan To All Panelists : Are you willing to put financial support toward pedestrian and cycling access to your development for your future customers? Similar to Doug’s ask....do you accept a wider responsibility to such local improvements along with the city?
19:50:25 From ron ranson To All Panelists : For railroad crossing - there is a lot of talk about tunnels. The city has given up on grade level crossings for some reason. There are hundreds of successful at grade crossings in California and very clever ways of preventing dangerous situations.
19:52:11 From Jim Alwan To All Panelists : Marco, it’s a good point, but please know that Catherine Blakespear and Tony Kranz met with us and explained how many years have elapsed to get El Portal approved. They could not project if/when such a facility could be done here. Can you help?
19:52:59 From Marco Gonzalez To Jim Alwan and All Panelists : Yes, I'll be doing what I can to help.
19:56:46 From AnnMarie Quinn To All Panelists : good point.... biking is very dangerous along that road
19:57:21 From AnnMarie Quinn To All Panelists : maybe an underground tunnel?
19:59:59 From dianna Nunez To All Panelists : Thank you very much. NOWLeucadia is also an advocacy in NW Leucadia that would love to meet regarding this wonderful project and future collaboration.

COMMENT CARDS VIA EMAIL

Email correspondence received: Marea Village

1. Follow up question from CPP meeting.
   Sean Maschue asked at CPP meeting if there will be purple-pipe recycled water brought to the project. We needed to ask the city for follow up, and got back to him with the answer on 12/19/20

   Response:
   From: Larry Jackel <ljackel@fenwayca.com>
   Date: Saturday, December 19, 2020 at 3:40 PM
   To: "smaschue@qti.qualcomm.com" <smaschue@qti.qualcomm.com>
   Subject: Marea Village CPP Question

   Hi Sean,

   Hope you're having a nice weekend.

   I wanted to get back to you since we were not prepared to answer your question the other night about the recycled water at the project. Specifically, you asked if we were going to have purple-pipe recycled water brought to the project.

   We did check with the City and found out that the answer to that question is no, we will not. Their response to us is that "recycled water will not be a condition of the project due to the fact that all of the existing recycled water mainlines are on the east side of the I-5 freeway."

   I agree that it would have been nice to have recycled water already in existence on this side of town, but unfortunately it is not.

   I'm sorry we didn't have the answer the other night, but glad we could find out.

   Thank you.

   Larry Jackel | Managing Partner | Fenway Capital Advisors
   674 Via De La Valle | Suite 310
   Solana Beach, CA 92075
   D 858.436.3610 | C 619.889.8895
   ljackel@fenwayca.com | **www.fenwayca.com**

2. Follow up from CPP meeting

Invitation to work with the city and residents on safety of La Costa Ave.

From: Doug Wierenga <dougwierenga@icloud.com>
Sent: Tuesday, December 15, 2020 8:00 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Re: CPP Marea Village Confirmation

Hi Leanna,
Larry Jackel had said during the CPP he would work with local residents and the city to make La Costa Ave corridor safety in terms of pedestrian and biking.
His leadership and knowledge will be a huge asset to us locals in working with the city.
We are grateful for that offer and will take him up on it.

Lets please arrange a joint meeting with the city leadership and local neighbors to discuss ped / biking walking safety.
Maybe with all of the potential nearby developers.

Thank you very much,

Doug and Stephanie Wierenga
325 La Costa Ave.

Response:
On Dec 16, 2020, at 4:27 PM, Larry Jackel <ljackel@fenwayca.com> wrote:

Hi there Doug,

Thanks for your message, and thanks for being part of the meeting last night.

I think your idea of a meeting sounds great. Not exactly sure how to facilitate that at this time, with the holidays and other projects the City staff is involved with, but I would be happy to have a meeting like that. For what it's worth, I'm very certain that Councilman Kranz, Mayor Blakespear and the rest of the Council are huge fans of making these improvements as well. I know that a lot of this will come down to what can be worked out with NCTD as they have rights to everything around the railroad tracks. But you are absolutely right, that with all of us working together we are sure to have better success in accomplishing the goal of a much safer and friendlier bike and pedestrian path at La Costa and 101.

Maybe we should try to approach the city at some point in January. Also open to chat with you about it any time. Very happy to work on that with you and the other folks in your neighborhood.

Thanks again, and let's talk soon. Happy Holidays!!!

Larry Jackel | Managing Partner | Fenway Capital Advisors
674 Via De La Valle | Suite 310
Solana Beach, CA 92075
D 858.436.3610 | C 619.889.8895
ljackel@fenwayca.com | **www.fenwayca.com**

Hi Larry,
Much (much) appreciated! As you mentioned last night, it'd sure seem the right time to fix La Costa issues along with the other construction and in advance of the future residents and guests. We are excited about the amenities your project will bring our community, especially if safely accessible by bike and foot.

I sure wish the 1967 Vulcan project had as much thoughtful design investment as yours. The difference between you all and Wermers' approach is night and day.

Happy Holidays to you and your family and will be back in touch early in January to pick up where we left off.

Thank you again,

Doug

3. Question (during) CPP meeting:
From: Patricia Vasquez <mspmvasquez@gmail.com>
Sent: Tuesday, December 15, 2020 6:01 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Question for CPP on Marea Village

Can you please discuss the traffic survey/data that was used for this proposal? Where can I access that information?

Also, what mitigations or improvements will the developer support to improve traffic safety for pedestrians, cyclists and motorists on the La Costa corridor, given the significant increases in vehicle traffic as a result of this development?

Thanks,
Patricia Vasquez

Response:

For sure Patricia. At this point I'm pretty open that week so please let me know when you guys figure out your Zoom schedule. Look forward to chatting with you.

Thanks and Happy Holidays!!!

Larry Jackel
Fenway Capital Advisors
(w) 858-436-3610
(c) 619-889-8895

On Dec 16, 2020, at 8:17 PM, Patricia Vasquez <mspmvasquez@gmail.com> wrote:

Hi Larry,
Very nice to meet you as well! I appreciate your willingness to collaborate with our group and local government to address burning infrastructure needs in the La Costa Corridor.

We are working to prioritize infrastructure needs with a survey of our members. We would should be in good shape to discuss our consolidated point of view in early January. Would you be available the week of January 4th for a Zoom call with some of our team?

Thanks very much!
Patricia

Response:
On Wed, Dec 16, 2020 at 4:35 PM Larry Jackel <ljackel@fenwayca.com> wrote:

Hi there Patricia,

Nice meeting you last night. Just wanted to send you a quick note so that you have my contact info and know that I'm open to chat anytime with you and the folks from Leucadia Cares. I know it sounds like rhetoric, but the truth is, I would love to be involved with your group. Of course I have my project that I'm working on, but honestly my interest goes way deeper than that. As a neighbor with my resort project, I'd love to be part of it so that we can all work together and hopefully have some success with the State of California, City of Encinitas, and NCTD in trying to get everyone together in helping to solve the circulation flow in North Leucadia. I just think we would all be much happier knowing that we and our friends and families can all feel safe walking and biking out on the roads.

My contact info is below, and I'm happy to be involved anytime.

Thanks!

Larry Jackel | Managing Partner | Fenway Capital Advisors

674 Via De La Valle | Suite 310

Solana Beach, CA 92075

D 858.436.3610
ljackel@fenwayca.com | **www.fenwayca.com**

4. Email questions on Marea Village
   -----Original Message-----
   From: Michelle Turnbull <turnbullmich@gmail.com>
   Sent: Tuesday, December 15, 2020 6:01 PM
   To: Leanna Ferrante <lferrante@fenwayca.com>
   Subject: Questions

   1-what is the proposed building that will go into this place?
   2-what infrastructure is going to be put into place in order to balance the hotel, the affordable housing complex that's being put in on Vulcan, as well as this?
   3- how are locals being taken into account on this? We brought our children here for a purpose, and the vibe of the neighborhood is completely being destroyed.
   4- Who are the people buying this property and developing it? Where are they from? Do they have any association with this neighborhood, or is this strictly for profit?

   Sent from my iPhone

   Response:
   These questions were covered at the CPP meeting and Ms. Turnbull was in attendance.

5. Comment Card emailed for CPP meeting:

   From: Janice bartlett <seenatawnee@cox.net>
   Sent: Tuesday, December 15, 2020 5:06 PM
   To: Leanna Ferrante <lferrante@fenwayca.com>
   Subject: Fenway Project

Project Name: Marea Village **COMMENT CARD** Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020
1. Do the documents and presentation clearly identify the scope of the project? Y/N If no, please describe areas requiring clarification.
We have concerns re: waivers for walls, grading and fills——they should not exceed 6ft, 8ft, and 4ft respectively.

---

2. Do you have any other issues or concerns requiring further review? Y/N If yes, please explain.
We are also concerned re: parking and increased traffic/safety issues resulting from this project. North Leucadia seems to be suffering from a high density building boom; we would like projects to fit with the character of our community, not the El Camino Real corridor.

Name (please print): Address:
Thank you for your attention,
Janice and Richard Bartlett
1486 Sanford Lane
Leucadia 92024

Response:
This was addressed in the group email response at the bottom of this section.

6. Comments for CPP
From: Nortons <nortsurf4@yahoo.com>
Sent: Tuesday, December 15, 2020 1:15 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Re: Marea Village CPP - December 15, 2020

Hi Leanna,
Thank you for forwarding all the pertinent info related to tonight's CPP.

While I expect others may have provided advance inputs, and this may have already been flagged, please make sure that your group's presentation addresses probably the most

significant issue related to this proposed development - traffic! (Also, please make sure to include the following comments in your records).

As residents in a small 5-house cul-de-sac off of La Costa Ave. (between the I-5 and N. Vulcan Ave.), we are already faced with major safety issues along the two-lane La Costa Ave., and that's only going to get far worse with the new very large hotel at the La Costa/101 intersection!

What a lot of us see as a total disconnect is the City's pronounced commitment to keeping La Costa Ave. as a two-lane road (in addition to the financial, engineering and environmental constraints to any desired widening effort) AND the planned Leucadia Streetscape Project whereby 101 will be narrowed to one lane each for both south- and north-bound traffic.

As just two of the many daily walkers along the south side of La Costa (where everyday it's a challenge to safely get to the beach as there is not a sidewalk and the Vulcan.Ave/La Costa intersection is a safety nightmare), my wife and I are very concerned about what your proposed development and the amazing number of other proposed developments in this immediate area will mean to our ability to safely get out onto La Costa Ave. in our cars, let alone safely walk either west or east from our house. The speeding and distracted drivers along La Costa Ave. is already beyond belief!

The major problem we see with your and the other proposed large developments in this very small area (comprised almost entirely of single-family homes) is the total absence of the supporting infrastructure (and frankly not likely to ever be), i.e., adequate roads (w/ essential sidewalks and bike lanes) and parking to accommodate such a huge increase in car traffic and people.

While it's not incumbent on your company, there needs to be a major "step back for a moment" assessment by the City of Encinitas managers regarding the huge implications that all these envisioned projects have on this very small area of northwest Encinitas. Nonetheless, we hope that as conscientious developers, you will engage the City managers in a thoughtful and considerate discussion about what is the appropriate development for your parcel of land given these obvious issues. We're sorry but we don't believe what you are proposing meets that definition.

Thank you for considering our inputs,
Steve and Meg Norton
283 La Costa Ave.

Response:
Steve was in attendance at the CPP meeting and his questions were asked in the chat and were responded to.

7. Email for CPP
-----Original Message-----
From: Hugh Buchanan <brh361@yahoo.com>
Sent: Tuesday, December 15, 2020 6:57 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Traffic

How are you going to handle the excess traffic that is going to be caused by the hotel and the Vulcan project And how do you go north on Coast Highway when the traffic will be Impossible to do a U-turn into heavy traffic?

Sent from my iPad

Response:
Hugh was in attendance at the CPP meeting and questions were asked about traffic which was reiterated many times will be evaluated and available for public comment in the full EIR.

-----Original Message-----
From: Hugh Buchanan <brh361@yahoo.com>
Sent: Monday, December 21, 2020 6:58 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Construction

I listened to the CPP meeting on Marea and had a question. When this project is under construction are all the construction materials and machines etc. going to stay on site Or Will the construction company Have an offsite supply area? Thank you

Sent from my iPad

Response:

On 12/23/20, 6:15 PM, "Leanna Ferrante" <lferrante@fenwayca.com> wrote:

Hi Hugh,

Thank you for being a part of the CPP meeting on Dec. 15th and for your follow up email about construction. We do not yet have the construction plan, but it is our anticipation that the construction trailers, materials and machines will be kept onsite and moved accordingly around our site as we stage our construction.

Thank you

Leanna Ferrante | Asset Management | Fenway Capital Advisors
674 Via de la Valle | Suite 310
Solana Beach, CA 92075
D 858.436.3614 | C 619.405.9505
lferrante@fenwayca.com | www.fenwayca.com

COMMENT CARD

8. **From:** Lorie Sousa <lorie@coreducational.com>
Sent: Saturday, December 19, 2020 8:23 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Marea Village Comment Card
Project Name: Marea Village
Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N

   No. Environmental impact is unclear. Noise, traffic, security, and cliff destabilization are my primary concerns.
2. Do you have any other issues or concerns requiring further review? Y/N

   I own a property that abuts both the new hotel and the proposed Marea Village. Here are some of my concerns.

1. I have grave concerns about the impact to the foundation of my home. We have already seen cracks in our walls that were not there prior to the hotel construction (we have photographic verification of this done by a civil engineer who took photos before construction began). If they build on the other side of the property, the instability could cause cracks to my foundation. Is there an Environmental Impact Report that can provide information on how all of this construction, the vibration, and the water runoff could be further destabilizing the cliff our homes reside upon?
2. Traffic. Has anyone done a study to determine how the additional traffic will impact the homeowners and movement of transportation through the area?
3. Beach Access. I am concerned about the safety and liability related to public use of the stairways from the beach as beachgoers trespass through private property, which happens with great frequency already.
4. Parking. Is there enough parking to house the volume of traffic the project will greatly increase? Has anyone done a study on this?

5. Security. My property sits right where the Marea Village will link up with the hotel. A bridge was mentioned between the two properties that will essentially run through my back yard. Will this be secure and keep people out of our community? I'm concerned about guests jumping fences and getting on to our property. Defeats the purpose of having a gated community of hotel guests have easy access.
6. Noise. I'm really concerned about the noise level with so many villas, apartments, and commercial units proposed. I'm already going to have to replace all of my windows and soundproof my home at great personal costa at a time when my property value has plummeted because I used to have a 180 degree ocean and lagoon view and now I have a view of industrial A/C units.

From: Lorie Sousa <lorie@coreducational.com>
Sent: Wednesday, December 23, 2020 6:19 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: chriscarrico@cox.net
Subject: Re: Marea Village CPP

What about noise and destabilization of the cliff?

Response:
This was addressed in the group email response at the bottom of this section and the second inquiry sent after the group email was addressed below:

Hi Lorie,

Thanks for your message.

We are sorry to hear that you are concerned about the potential noise from the project. We do not anticipate there being significant noise impacts from our retail services. We will have 94 apartment units and 30 hotel units between your house and our retail. While we expect the retail uses to be fairly quiet anyway, we will also have tenants who we will ensure have their ability to have a nice living environment, so it cannot be too noisy. As you'd imagine any noise will be much greater for them than you. In addition to those units, there is significant landscape, with lush trees, between your house and our project. It seems that you should have nice insulation.

Regarding concerns over bluff instability, hopefully you understand that the city officials and coastal commission are far more concerned about the coastline and

bluffs than any of us can imagine. They will ensure that all of our construction standards are adhered to and monitored throughout.

Thank you again for your message.

9. **From:** Nortons <nortsurf4@yahoo.com>
Sent: Thursday, December 17, 2020 5:33 PM
To: Larry Jackel <ljackel@fenwayca.com>
Subject: Your wonderful beach access walkway

Hi Larry,
I've never approached a developer directly before but after reading your nice message to our neighbor, Doug Wierenga (in the cul-de-sac just to the east of us), I thought that I would follow up on my question during the CPP on Tuesday re: your great beach access walkway. It was the best CPP I've "attended" for quite some time. Please know that my following question is likely based on inadequate information and observations!

My question: Based on our daily walks to the beach from our 283 La Costa Ave. residence, my wife and I have recently observed that it appears that the public walkway to the beach will be accessed from the north side of the main driveway which leads, we presume, to the subterranean parking garage. What we are considered about is that the walkway's entrance/exit comes directly off the driveway (where cars will be turning into and out of) rather than directly onto the short section of sidewalk that's already been poured just to the north of the driveway entrance. Such a sidewalk ingress/egress would be a whole lot safer for everyone rather than being on the driveway, albeit for a relatively short distance, but, nonetheless, not as safe!

So, sorry for possibly not minding my own business but I thought that it was worth floating my question to you for further consideration by your design/construction people.

As you wrote to Doug, we look forward to "meeting" you again and discussing ways that you and numerous other developers in our immediate area will be able to maintain and hopefully improve upon the car, ped and bike safety for those of us living directly on or off of La Costa Ave.

Happy holidays to you and yours,
Steve and Meg Norton
(760) 633-4536

<u>Response:</u>

From: Larry Jackel <ljackel@fenwayca.com>
Date: Saturday, December 19, 2020 at 3:44 PM
To: Haley Peterson <haley@intesacom.com>
Cc: Leanna Ferrante <lferrante@fenwayca.com
Subject: FW: Your wonderful beach access walkway

Haley,

Below is another question from a neighbor across the street.

I called and spoke to Steve Norton on Friday evening, 12/18/20 at about 6:30 PM. Very nice guy, and we had a nice conversation.

He was confused about the entrance to the project and the parking. He thought that our emergency access driveway North of the resort is our entrance to the parking lot, and felt that would be dangerous and make circulation difficult for cars and pedestrians. Once I pointed out that the entry to the parking is in the center of our hotel lobby entry, and that this was just the emergency road that will not have any vehicles, he was relieved and completely understands.

He was very grateful that I called and spoke to him about the project and cleared up the confusion. We had a very nice chat about a lot of things regarding the roads and access.

Thanks.

Larry Jackel | Managing Partner | Fenway Capital Advisors
674 Via De La Valle | Suite 310
Solana Beach, CA 92075
D 858.436.3610 | C 619.889.8895
ljackel@fenwayca.com | **www.fenwayca.com**

10. **From:** andrew tedesco <astedesco@gmail.com>
Sent: Saturday, December 19, 2020 1:26 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: acolamussi@encinitasca.gov; Chaz Blackledge <chaz.blackledge@seabreezemgmt.com>; Chris Carrico <chriscarrico@cox.net>
Subject: Marea Comments

Please see our comments below.
Thank you.
Andy & Joanie Tedesco
1811 Parliament Rd

Encinitas, Ca 92024

--
Andrew S. Tedesco M.D./FAAD
astedesco@gmail.com

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

There is no mention of foot traffic through the Seabluffe Community. Wear and tear on our beach access is a big concern.

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

We have liability concerns as well for the Seabluffe Community. Beach access should be encouraged either Grandview or So. Carlsbad State Beach.

Name (please print): Andrew & Joan Tedesco

Address: 1811 Parliament Rd. 92024

Response:
This was addressed in the group email response at the bottom of this section.

11. **From:** lynda bissell <lyndabissell@hotmail.com>
Sent: Saturday, December 19, 2020 2:27 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: acolmussi@encinitasca.gov; Chaz Blackledge <chaz.blackledge@seabreezemgmt.com>; chriscarrico@cox.net
Subject: Comment card for Proposed Marea Village

Please see my attached comment card. This project needs much more community input.

Thank you,

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

- EIR - needed for current + past developers
- traffic & parking issues not clear re: this land
- Coastal Commission opinion on EIR's

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

- bluff stability (or instability) 3 people died when bluff collapsed
- sand replenishment a must - no beach at mid to high Tide now

Name (please print): LYNDA BISSELL

Address: 1754 Whitehall Rd

- safety + liability issues for SB
- project too big & too dense for site
- no hotel rooms since developer already has new large hotel
- fewer apartments
- 2 stories rather than 3

Response:
This was addressed in the group email response at the bottom of this section.

12. **From:** larry riis <larryriis@hotmail.com>
Sent: Saturday, December 19, 2020 2:48 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: chris seabluff <chriscarrico@cox.net>; Chaz Blackledge <chaz.blackledge@seabreezemgmt.com>; acolamussi@encinitasca.gov
Subject: comment card, marea village

Please see attached comment card.

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

1) Impact of construction to bluff not clear
2) Height of units not shown - impact Seabluff vie
3) Traffic impact not shown at all

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

1) Addition to hotel should not be allowed
2) Number of units too great
3) Seabluff resident units view to east should not be block
4) Sand restoration should have been a requirement for ho

Name (please print): Larry Riis

Address: 1754 Whitehall Rd
Encinitas, CA 92024

Any consideration of this project should be throughly vetted by all agencies so that residents of Encinitas are not adversely affected

Response:
This was addressed in the group email response at the bottom of this section.

13. **From:** David Brandt <daveebrandt@yahoo.com>
Sent: Saturday, December 19, 2020 4:03 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: acolamussi@encinitasca.gov; Chaz Blackledge <chaz.blackledge@seabreezemgmt.com>; chriscarrico@cox.net
Subject: Project Name: Marea Village

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024 Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N

If no, please describe areas requiring clarification.

2. Do you have any other issues or concerns requiring further review? Y/N Yes

- Increased public use of our community as access to the beach by way of our private stairs. This is a safety concern as people will cut through Seabluffe, jump the fences, to use our stairs which we maintain privately. This also is increased liability for us as more traffic uses the stairs to sit on the beach below our bluffs. We are already in litigation because of public use under an area of our private community. How will this affect us?

- Another critical piece of information is the EIR or Environmental Impact Report. This would give more information as to how shaking from the digging and earth moving will affect our community and our already destabilized bluffs. Also water runoff not only from the project but from the lagoon as water is redirected because of the project. Can you provide that study?

- What is the Coastal Commission opinion on environmental impacts.

- Have you done a traffic study during peak season as opposed to off season.

- Have you done a Parking study - where will these cars park? Where will overflow and guest parking be located?

- Public safety infrastructure – how can Leucadia support this when we don't even know the impact of the hotel which has not yet opened or the other proposed projects that have not yet been built along La Costa and Vulcan?

- What will the overall mitigation process be? Will the you install sidewalks, bike lanes and parks in the project? Will you fund putting sidewalks on Hwy. 101, La Costa and other impacted areas?

- Will there be exposed utilities, as the hotel has, in full view? Will there be any noise mitigation of utilities?

Name (please print): Bethany & Dave Brandt

Address: 1867 Haymarket Rd

Response:

This was addressed in the group email response at the bottom of this section.

14. -----Original Message-----
From: Lee Waterman <lee.kav.waterman@shaw.ca>
Sent: Sunday, December 20, 2020 11:48 AM
To: acolamussi@encinitasca.gov
Cc: Leanna Ferrante <lferrante@fenwayca.com>; Chaz Blackledge <chaz.blackledge@seabreezemgmt.com>; chriscarrico@cox.net
Subject: 1900&1950 101 Highway project

Hello,
I am writing to express my concern about potential traffic and personal safety risks resulting from the proposed project at 1900&1950 highway 101 in Encinitas.
Visibility along 101 is already dangerous, and safety has been further jeopardized by the hotel construction and anticipated traffic.
I had difficulty finding the method of completing your Comment Card, so I am writing a separate message to you, Lee Waterman
1855 Parliament Road

Sent from my iPad

Response:

This was addressed in the group email response at the bottom of this section.

15. **From:** smith38@cox.net <smith38@cox.net>
Sent: Sunday, December 20, 2020 8:25 PM
To: Leanna Ferrante <lferrante@fenwayca.com>; 'Anna Colamussi' <acolamussi@encinitasca.gov>
Subject: RE: CPP Comment Card - Morea Village - 1900 & 1950 North Coast Highway, Encinitas, CA 92024

Please see the attached Comment Card regarding the above. Kindly acknowledge receipt by return email.

Going forward, please include me on any further announcements, notices and related correspondence on this matter.
Parliament Sea Bluff LLC

Charles Smith, Member
656 Normandy Road
Encinitas, CA 92024

Thank you for your assistance. .
Charles Smith

Project Name: Marea Village **COMMENT CARD**

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project?
Y/N If no, please describe areas requiring clarification.

No. There are many areas that fall short and need additional clarification. These include plans to address the increase in traffic. First the area has been subjected to the "road diet", the additional traffic from the hotel and now additional traffic from this project as well as the Vulcan project. Has a comprehensive traffic been completed and shared with the community? Is it the City's goal to eliminate north/south vehicle traffic west of I-5? Also, parking has not been adequately addressed. Additionally, both the noise and air pollution should be addressed. It appears that this small corner of Vulcan/LaCosta/ 101 is being grossly over built. Would love to hear the rationale from City planners.

Assuming the construction will result in underground parking, I have concerns with the bluff stability. Considering the recent bluff collapse, how can you justify continued excavation in the bluff area? Has an independent geologist evaluated this?

2. Do you have any other issues or concerns requiring further review? Y/N If yes, please explain.

yes. Please provide a traffic study that includes the impact of the "road diet", the Hotel, the proposed project on Vulcan and this project. This should be representative of the peak summer season. The traffic study should include both bicycle traffic (packs of 100+ on the weekend) and vehicles.

I fear that the City is blinded to the realities of the impact this project will have on the surrounding community when they consider the tax revenue to the City

Name (please print): Parliament Sea Bluff LLC; Charles R Smith, Member/Property Owner
Property Address:

1873 Parliament Road, Encinitas CA 92024
Owner Mailing Address: 656 Normandy Road, Encinitas, CA 92024

Distribution via E-mail:
Leanna Ferrante, Fenway Capital
Anna Colamussi, City Planner, City of Encinitas\

Response:
This was addressed in the group email response at the bottom of this section.

---

16. **From:** Kristen Smith <kristen-jordan@cox.net>
Sent: Sunday, December 20, 2020 3:23 PM
To: Leanna Ferrante <lferrante@fenwayca.com>; Anna Colamussi <acolamussi@encinitasca.gov>
Cc: Rick Smith <smith38@cox.net>
Subject: CPP Comment Card - Morea Village - 1900 & 1950 North Coast Highway, Encinitas, CA 92024

Please see the attached Comment Card regarding the above. Kindly acknowledge receipt by return email.

Going forward, please include me on any further announcements, notices and related correspondence on this matter.
Parliament Sea Bluff LLC
Kristen Smith, Member
656 Normandy Road
Encinitas, CA 92024

Thank you for your assistance. Wishing you good health and Happy Holidays.
Kristen Smith

Kristen L. Smith
C: 760-468-4800
H: 760-230-6194
kristen-jordan@cox.net

Project Name: Marea Village **COMMENT CARD**

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789- 2020

1. Do the documents and presentation clearly identify the scope of the project?

Y/N If no, please describe areas requiring clarification.
NO. The areas requiring clarification include: The developer's plan to address

the increase in traffic and parking demands and the mitigation of increased noise and air pollution. The density of this project is of extreme concern and will be damaging to the adjacent neighborhood and overall community character of Leucadia. While housing/affordable housing is important to the City of Encinitas, why is it necessary to over-build this area?

2. Do you have any other issues or concerns requiring further review?

Y/N If yes, please explain.
YES. Please provide a realistic traffic study to include traffic patterns throughout the full year, including the busy summer months. Also, please provide copies of the Environmental Impact Report and current geological reports on the bluff. The ongoing stability of the bluff is a major concern, especially considering the recent bluff failures and pending litigation against the City of Encinitas. Traffic is already a problem in this area, but will become a HUGE issue, especially when the Hotel becomes fully operational. This is particularly important to residents in the surrounding neighborhood and emergency responders. This project will have a negative impact on residential property values and businesses in the immediate area due to extreme traffic congestion. The existing 101 corridor is much too small to accommodate the increase in vehicle and bicycle traffic.
Additional neighborhood meetings and time for public comment are needed ASAP to broaden the outreach to Encinitas residents and property owners.

Name (please print):
Parliament Sea Bluff LLC
Kristen Smith, Member/Property Owner
Property Address: 1873 Parliament Road, Encinitas, CA 92024
PropertyOwnerMailingAddress: 656NormandyRoad,Encinitas,CA 92024

Distribution via Email:
Leanna Ferrante, Fenway Capital
Anna Colamussi, City Planner, City of Encinitas

Response:

This was addressed in the group email response at the bottom of this section.

17. **From:** Elena Thompson <elenathompson@cox.net>
Sent: Sunday, December 20, 2020 9:03 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: acolamussi@encinitasca.gov
Subject: Marea-Jackel CPP - Public Comment

Hello Larry,

Kindly confirm receipt.

Let's work together to create, design and develop a better project, can we? A win-win for Leucadia, the "Art and Soul of Encinitas".

Regards and happy holidays,
Elena and John
760-822-3873

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

1. What is mitigation plan for traffic, noise, excess parking?

2. Where is the EIR and Geological Bluff Report?

3. It is unclear why you have to make this such a "dense" project, very damaging and harmful to existing community character, at current residents expense!

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

1. Traffic study needed during peak season: July 1-20. Current report not accurate reflection of situation.

2. Concerns about apartment density impacting our property values and quality of life. An unlikely project for this area. Poor placement, bad idea plain and simple.

3. Concerns about environmental degradation to coastal resources, the lagoon, bluff, night sky, excessive lighting and sound from over-population of precious coastal land.

Name (please print): John & Elena Thompson, owners of 1734 Kennington Road, SeaBluffe

Address: 1734 Kennington

12/17/2020

Sent Comment Card back to Fenway Capital and city of Encinitas, even though no return address provided for public comments on CPP mailed notice OR this e-comment card.

Response:
This was addressed in the group email response at the bottom of this section.

18. **From:** Sandy divine <scdivine@gmail.com>
Sent: Monday, December 21, 2020 7:34 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: acolamussi@encinitasca.gov; Chaz Blackledge <chaz.blackledge@seabreezemgmt.com>; Nicole Montgomery <nicole@seabluffe.com>; chriscarrico@cox.net
Subject: Marea Village comment card

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

1. Impact of traffic / cars, trucks, etc.
2. Environmentally impact of our bluffs and foundations
3) Security issues of project residents using our private beach stairs and front entry

Name (please print): Sandra C. Divine

Address: 1866 Haymarket Rd. Encinitas, Ca 92024

Response:
This was addressed in the group email response at the bottom of this section.

19. **From:** desire smith <desiresmith12@gmail.com>
Sent: Monday, December 21, 2020 8:32 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: Lillian Doherty <ldoherty@encinitasca.gov>; acolamussi@encinitasca.gov
Subject: Marea CPP – Public Comment

Please confirm receipt of this email.

Project Name: Marea Village COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024

Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N If no, please describe areas requiring clarification.

No. Please confirm maximum vehicles

Parking for guest. Is overnight guest parking

Permitted in Visitor Parking? If so, how will

you ensure guest leave to provide adequate

parking for day time visitors?

2. Do you have any other issues or concerns requiring further review? Y/N If yes, please explain. Yes, please confirm traffics study of maximum traffic flow in and out of La Costa Blvd. Also map of traffic congestion cause and effect onto neighboring streets such as Vulcan based on PCH and La Costa traffic congestion. Current report done in 2019 and NOT at peak Sumer season. Needs to be redone. Add this project to the adjacent hotel (120 rooms), proposed Vulcan LLC (72 units) and Meyer La Costa Ave project (approved for 48 homes), Boutique Hotel next to Chevron (14 room plus BAR) and this will bring Leucadia to dangerous

traffic situation (376 units!) for public safety,
neighborhood access, and environmental degradation.

Thank you,

Chris and Desire' Smith

1920 Paxton Way

Encinitas, CA 92024

(650)333-5473

PS: overall nice development with consideration to
height for current residential neighbors.

Response:
This was addressed in the group email response at the bottom of this section.

20. **From:** John Thompson <johnrthompson@cox.net>
Sent: Monday, December 21, 2020 9:25 AM
To: Leanna Ferrante
<lferrante@fenwayca.com>; ldoherty@encinitasca.gov; acolamussi@encinitasca.gov
Subject: Marea CPP – Public Comment

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

No. Too much is missing at this time for the project to move forward. An environment impact report should be perform. What happens to the rain water since it can no longer soak into the ground. Will the lagoon and ocean be contaminated? Where with all the human waste go? Sewage treatment plant is at capacity. Landfill is full, electric grid - rolling blackouts, water supply - entering drought cycle. Traffic flow? Need a roundabout at Seabluff. Need railroad crossing at Grandview for cars and pedestrians. Need crosswalk for people parking on northbound hwy101. What about air pollution? Encinitas just declared a "Climate Crisis".

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

The city needs to put all new construction on hold until all these issues are addressed. The city must look at all the proposed projects along La Costa Ave, Vulcan and Hwy101 together not piecemeal. The total combined impact must be evaluated.

Name (please print): John Thompson
Address: 402 Andrew Ave, Leucadia CA 92024

Response:
This was addressed in the group email response at the bottom of this section.

21. **From:** Clara Sanchez <clarajsanch@gmail.com>
Sent: Monday, December 21, 2020 10:39 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: ldoherty@encinitasca.gov; acolamussi@encinitasca.gov
Subject: Marea CPP – Public Comment

Dear Ms Ferrante:

I have lived in Encinitas for 36 years and have resided at my current home, which is adjacent to La Costa Ave. for 23 years.

While I acknowledge that this project will move forward, I would like to have my concerns addressed.
I feel that we are now being overdeveloped without any regard for parking, traffic and the least talked about sewer/waste systems.

Living so close to the ocean causes parking issues during the busy summer months and will only be exacerbated by all the new projects being jammed into our small

corridor. Although the traffic study was just recently performed in November 2019, it does not take into account the summer months and does our area a disservice. I have trouble now with existing traffic, exiting my cul de sac onto La Costa especially during busy morning and afternoon traffic and this is before the Alila Marea hotel finally opens. I would appreciate a new traffic study to accurately reflect actual traffic summer months.

I walk from my home to the coast everyday and now find that I can only do this on the south side of La Costa because of crosswalk restrictions on 101. There are no crosswalks for me to safely walk across to/from the north side of La Costa to visit neighbors living on the north side of Sheridan. This will only be worse once all the proposed projects including this hotel/apartment/retail complex are completed and traffic has increased. We need safety addressed before project has final approval.

Having owned a plumbing company for 30 years, I am concerned about the impact on the existing sewer/waste and storm drain system. The infrastructure needs to be addressed first! We don't want band aids applied when flooding occurs or the overburdening of our systems.

We live in a unique area and would like to have the project keep with our character and not have another Newport Beach like city.

Again, would like to make sure we can participate and address our concerns before this project moves forward.

Please send a confirmation that this email has been received.

Thank you for your consideration.
Clara & Ernie Sanchez
321 La Costa Ave.
Encinitas, CA
Response:
This was addressed in the group email response at the bottom of this section.

22. **From:** John Kiechle <johnkiechle@gmail.com>
Sent: Monday, December 21, 2020 11:49 AM
To: Leanna Ferrante <lferrante@fenwayca.com>
Cc: ldoherty@encinitasca.gov; acolamussi@encinitasca.gov
Subject: Marea CPP – Public Comment

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1.Do the documents and presentation clearly identify the scope of the project? Y/N If no, please describe areas requiring clarification.

YES

2. Do you have any other issues or concerns requiring further review? Y/N If yes, please explain.

I heard that the developer modelled his design after something in Spain?! How does this approach work for our unique coastal environment? It doesn't seem to fit.

Name

John Kiechle
1711 Aldersgate Rd.
Encinitas, CA 92024
johnkiechle@gmail.com

Response:

From: Leanna Ferrante <lferrante@fenwayca.com>
Date: Wednesday, December 23, 2020 at 6:17 PM
To: John Kiechle <johnkiechle@gmail.com>
Subject: RE: Marea CPP – Public Comment

Hi John,

Thank you for taking the time to submit a comment card for the proposed Marea Village project. We will include it in the final CPP report. In response to your question about the unique coastal character, the concept and inspiration for Marea Village stems from the compelling and unique charm of Leucadia itself. It is a modern interpretation of a vibrant, Old World town center, like you see in Europe. This community infuses the ocean, outdoors and artistic vibe to create an economically resilient, aesthetically compelling project. It is pedestrian in character and focuses on walkability and the connections between a mix of uses. What you heard on the CPP call was that the project feel was inspired by visits we have made to other countries where they appreciate a relaxed, community atmosphere that promotes eating outside, people watching, and is short on the hustle and bustle of the busy city life.

We appreciate your engagement.

Thank you
Leanna Ferrante | Asset Management | Fenway Capital Advisors
674 Via de la Valle | Suite 310
Solana Beach, CA 92075
D 858.436.3614 | C 619.405.9505
lferrante@fenwayca.com | **www.fenwayca.com**

23. **From:** Ranson, Ron <rranson@ucsd.edu>
Sent: Monday, December 21, 2020 2:13 PM
To: Leanna Ferrante <lferrante@fenwayca.com>; Lillian Doherty <ldoherty@encinitasca.gov>; acolamussi@encinitasca.gov
Cc: Tony Kranz <tkranz@encinitasca.gov>
Subject: CPP COMMENTS: 1900 & 1950 North Coast Highway, Encinitas CA 92024

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024

Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

Comment "Card" Submitted by Ron Ranson 174 Andrew Ave Leucadia, CA 92024 760 547-6039 rranson@ucsd.edu

Notify me that these comments have been received.

The comment card on the CPP emailed information is not compatible with my Mac. Here are my comments.

1. The timing of the traffic study for this property was brushed aside at the CPP. The presenter said the study was approved by the city planning department. Why was a study of a beach resort done in November when there is light traffic? And why did the city approve this timing? Please explain. This needs to be redone in July and August. This is cheat to the residents and is not acceptable.
2. The situation on La Costa Ave is very dangerous for residents attempting to reach the beach. There need to be sidewalks and other mitigation safety measures put in place to protect the residents and to be the responsibility of the developer. Why should the taxpayers and residents pay for these improvements? Please explain.
3. There will now be 376 new homes and hotel rooms in the 3-block area. Sheridan and Andrew will be heavily impacted with cut through traffic and enormous parking problems. Especially employee parking along Vulcan. How will the city and developers eliminate this problem?

4. The scale of the 1900 and 1950 project in enormous. **STORY POLES NEED TO BE USED** to give the city and residents a suitable to weigh in on the massive scale of the project. When will this be done?
5. This was a limited CPP attendance due to the 500 ft measurement outlined by the city. Hundreds of people to the east of the project were not notified of the CPP or the project. Another CPP must be held that includes homes all the way to I-5 and south to Hillcrest. This is only fair to those of us who have paid taxes and have improved this area of Leucadia - that the developer is highlighting in the publicity.
6. I appreciate the underground parking design, but service trucks entering the property will need to back up to exit and their safety beeping will be heard by residents of the complex, Sea Bluff and across the tracks onto the Andrew area. This is already a problem with only Roberto's. What will it be like with multiple businesses? The hotel guests will not appreciate the beeping noise at 6 am. How will the developer eliminate this noise problem?
7. Parking on the east side of highway 101 is already a problem along that section as customers park on the east and run across the highway to businesses and housing on the west side. Parking the east side will certainly happen for hotel employees and visitors. How will this safety concern be realistically addressed? A fence in the middle of highway 101? No parking signs? This is a serious concern.
8. I like the idea on an arts area and emphasis on local artists. We don't need any Laguna Beach type galleries or out of town artists there. Contact the Encinitas 101 Artists Colony.
9. My impression is that the sidewalk leaving this property and going north to the beach is very narrow and dangerous. How do the developers plan to improve this area and make it safer?
10. The building height set by the city code must be kept as is. No variances must be given for any reason.
11. Did I see a giant fence to the west of the property? I can't find it now but one illustration shows a "Trump wall" to the west of the property. Correct me if I'm wrong. The city has a code about this and it's 6 ft. No variances of any kind are to be given to this project. Live with it.
12. Please notify me that these comments have been received. I await a response.
    ###

Response:
This was addressed in the group email response at the bottom of this section and Ron was in attendance at the CPP meeting and asked many of these questions then that were also responded to at that time.

24. **From:** mrmalper@gmail.com <mrmalper@gmail.com>
    Sent: Monday, December 21, 2020 2:55 PM
    To: Leanna Ferrante <lferrante@fenwayca.com>

Cc: ldoherty@encinitasca.gov acolamussi@encinitasca.gov
Subject: Marea CPP - Public Comment

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N If no, please describe areas requiring clarification

   No. The ingress and egress of the multitude of additional cars and people that the proposed development will bring to this small parcel of land was not adequately addressed. The noise and privacy affecting the neighbors of the Seabluffe community was not adequately addressed. It was unclear for people not attending the Zoom meeting how they can submit written comments. It was unclear how many attended the Zoom meeting, and you could not see other residents or their written (chat) concerns. Why didn't the comment card have a deadline date for submission?

2. Do you have any other issues or concerns requiring further review? Y/N If yes, please explain

   Yes, we are genuinely concerned about public safety. First, there is inadequate infrastructure to support Marea Village. There is no roundabout at the entrance to the Seabluffe Community, limited bike lanes, and intermittent sidewalks. Someone is going to be injured or killed walking or biking with the hundreds of additional cars going in and out of the new hotel and proposed Marea Village. Second, the digging of a two-story subterranean parking structure and the heavy equipment involved with such a large development may further destabilize the bluffs that are about 100 yards away. The subterranean parking could block the water that runs downhill naturally from Interstate 5 and seeps through the bluffs resulting in reduced water seepage through the bluffs that are directly in front of the proposed subterranean parking and additional water seepage through the bluffs to the south.

   At high tide, the ocean water comes all the way up to the bluff between South Ponto Beach and Grandview and consequently beach goers migrate right up against the bluffs as the tide rises. Three people died when they were buried alive when the fragile bluff collapsed on the south end of the Seabluffe Community. The City of Encinitas, Seabluffe Community and the California Coastal Commission were all sued because of this tragic event. The recently completed hotel and the proposed Marea Village will add hundreds of people to the beach. Does the city of Encinitas really want to risk more people perishing due to collapsing bluffs that we already know are fragile and unstable?

Name: Michele and Tom Alper
Address: 1854 Haymarket Rd. Encinitas, CA 92024

Response:
This was addressed in the group email response at the bottom of this section.

25. **From:** Chris Carrico
Sent: Sunday, December 20, 2020 4:11 PM
To: acolamussi@encinitasca.gov
Cc: ldoherty@encinitasca.gov
Subject: Marea CPP Public Feedback

Anna Colamussi:
I am enclosing our comment card regarding the above project. We have several concerns of which we have mentioned some in the enclosed comment card but we are greatly concerned regarding the increased Legal issues that may be more prominent and threatening to us. With a great number of people going through our complex and down our private stairs, we as homeowners will have more expense with the maintenance of the stairs, and if someone falls, trips etc on the stairs we as homeowners will be sued personally (HOA). We are currently in a lawsuit because people below us sat under the bluff and were killed. Now we will have more people on the beach and we know there will be more bluff failures. Who will pay our legal fees and damages if people sue???. This directly falls on us without any of our consents.

We would also like to see the final CPPZoom meeting posted on the city website for review.

We are directly behind this project on Haymarket and are concerned about our foundation, and noise from air conditioning, and items on the roof. We would like to see much better blocking of these ugly items hidden more since our kitchen, dining room and living room looks directly on it. We don't feel the blocking currently on the hotel will be adequate since we will be closer and can still see the equipment. We have good windows now but we are looking at probably having to get more sound proof windows which will be a hugh expense to us. This was not planned in our budget.

We are growth people but this was a giant shock to us. This is massive for such a small area. Downsizing it would be more acceptable.

Taking away our 4 lane hwy down to two lanes, adding the hotel, Marea Village, the project across the rail road tracks and the two major housing projects on La Costa and not being able to add roads or lanes on La Costa or the Coast Hwy and no other place to digest all the additional cars has to be considered. We calculate a min. of an additional 1,000 cars per day and I think that is a very low number and that doesn't include all the cars for the two housing projects on La Costa, people coming to the retail part of Marea Village or visitors eating at the

restaurants and large events at the hotel. That is a lot of cars for this very small area and no place to add hwy to accommodate this.

If there is a plan for more roads to and from these new projects than we would be ok with it.

We don't want to stop growth but we do need help with additional services to keep up with the growth.

Thank you for your consideration.
Sincerely,

Mike and Chris Carrico
760-473-4738

Project Name: Marea Village

COMMENT CARD

Project address: 1900 & 1950 North Coast Highway, Encinitas CA 92024
Case Nos. MULTI-3780-2020; CDP-3788-2020; BADJ-3787-2020; DR-3786; 2020; and CPP-3789-2020

1. Do the documents and presentation clearly identify the scope of the project? Y/N
If no, please describe areas requiring clarification.

EIR not done, Traffic study, parking, Beach access, Public safety, Double tracking of R.R., Bike lanes, major increase of people on the beach.

2. Do you have any other issues or concerns requiring further review? Y/N
If yes, please explain.

Impact of "Bonus Density Law" Encinitas City Council adopted 12/12/2020. Need access to final CPP Zoning. Combined impact of Hotel, Maria Village, Homes on Vulca, and apartment development. How can this happen?

Name (please print): Myron L. Carrico

Address: 1805 Parliament Road
Encinitas, Ca 92024
760 994 8207

What will be the impact of large numbers of visitors using the "Private" stairs to access the beach through Sea Bluff property? Accidents, liability?? Law suits?? City of Encinitas liability?
What is the Coastal Commission's position on this massive development of hotel, apartments, and homes in a very small area of Encinitas??

Response:
This was addressed in the group email response at the bottom of this section.

Group Response:

The response below was sent to the following people since their comments and questions were all similar in scope:

Janice Bartlett	Ron Ranson
Lorie Sousa	
andrew tedesco	Elena Thompson
lynda bissell	Sandy divine
larry riis	Chris and Desire Smith
David Brandt	John Thompson
Lee Waterman	Clara Sanchez
Charles Smith	Michele and Tom Alper
Kristen Smith	Chris Carrico

From: Leanna Ferrante <lferrante@fenwayca.com>
Date: Wednesday, December 23, 2020 at 6:13 PM
To: Leanna Ferrante <lferrante@fenwayca.com>
Subject: Marea Village CPP

Dear Marea Village Neighbors,

We have received emails from the Seabluffe community and surrounding Leucadia neighbors in the past week which included comment cards and questions about the proposed Marea Village project. All of the emails and comment cards will be included in the final CPP report. Most of these questions were addressed at the CPP meeting on December 15th, but I know not all of you on this email were able to attend. Since most of the comments received were duplicative in scope, we would like to share a summary of responses to your questions.

Traffic & infrastructure:
The traffic study is being performed as part of a full Environmental Impact Report (EIR)which will be underway shortly and available for public review in early 2021. This will include traffic studies, mitigation and necessary infrastructure improvements. Until we have accurate data and studies, we cannot comment further on information we simply do not have yet.

This process will also include review and approval from Coastal Commission. Furthermore, we are continuing to have these types of conversations to see how we can collaborate with the City and other jurisdictions to make sure North Leucadia and La

Costa Ave. feel safe walking and biking on our roads. That remains a top priority for our team.

In reference to capacity concerns and runoff we will be following all governmental regulations and requirements in dealing with these aspects of our development.

Parking:
Marea Village parking complies with the City's parking requirements. There will be 257 parking spots combined with a very small amount of surface spots and the remainder in a subterranean garage. The parking should be able to accommodate all users and guests to the property.

Beach Access and safety
The safest and best beach access for the Marea Village residents and guests will be the new pathway that has just been completed a few steps North of the neighboring hotel, which will be recommended for the community. There are plenty of access areas to the beach, which are all public.

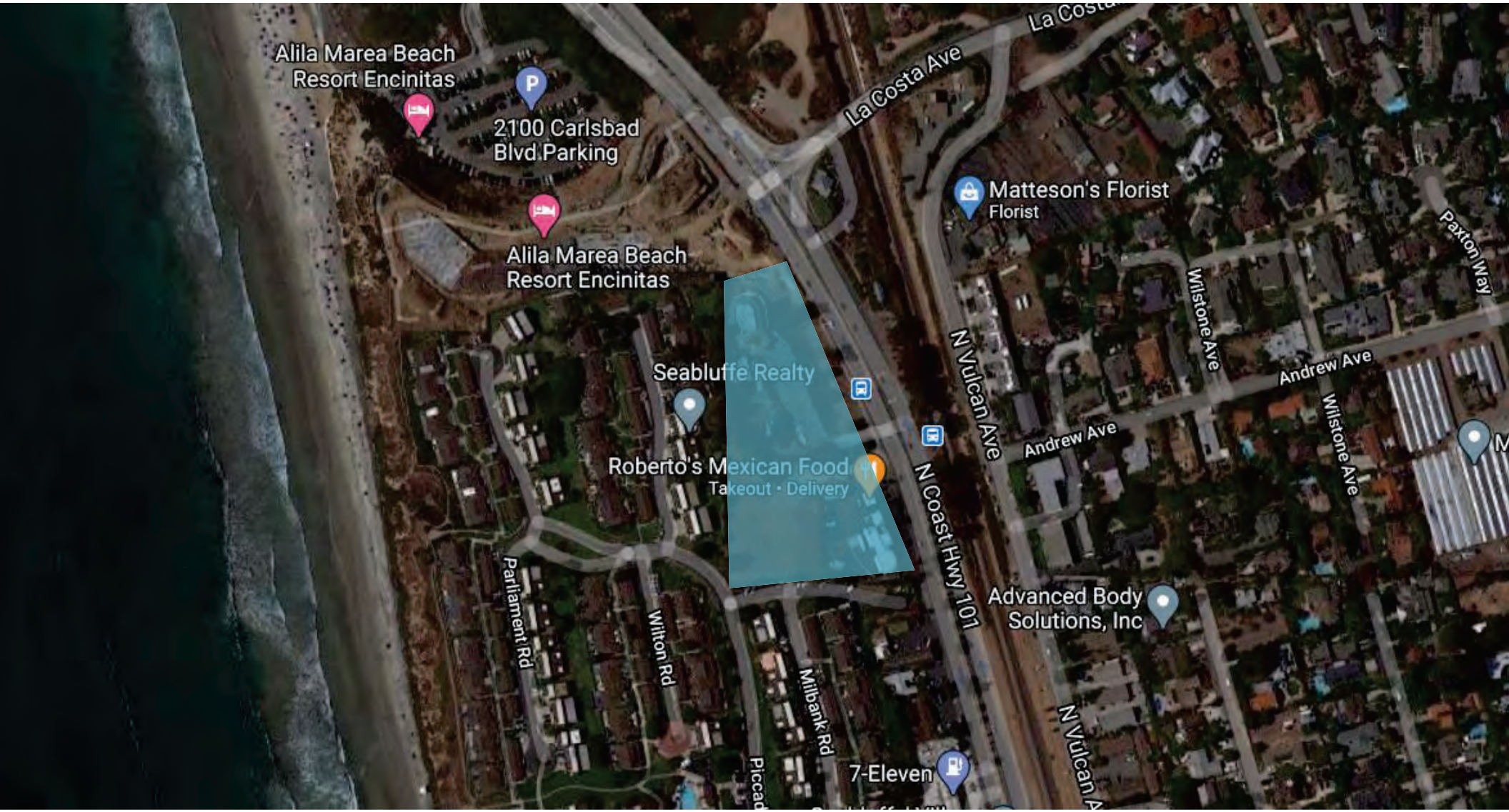
Thank you,
Leanna Ferrante | Asset Management | Fenway Capital Advisors
674 Via de la Valle | Suite 310
Solana Beach, CA 92075
D 858.436.3614 | C 619.405.9505
lferrante@fenwayca.com | **www.fenwayca.com**

sda ARCHITECTS

MAREA VILLAGE

LEUCADIA

FENWAY CAPITAL ADVISORS



MAREA VILLAGE

SITE LOCATION

MAREA VILLAGE

PROJECT INFORMATION

ABOUT THE LOT:

• LOT SIZE:	3.786 AC
• LOT COVERAGE:	33.4%
• LANDSCAPE COVERAGE:	23.9%

RESIDENTIAL AREA:	73,752 SF
• STUDIO UNITS	6 UNITS
• ONE-BEDROOM UNITS	66 UNITS
• TWO-BEDROOM UNITS	22 UNITS
• **TOTAL**	**94 UNITS**

→ MARKET RATE UNITS: 74

→ AFFORDABLE UNITS: 20

COMMERCIAL AREA:	
• RETAIL	7,040 SF
• RESTAURANT HIGH-TURNOVER	3,905 SF
• RESTAURANT QUALITY	2,134 SF
• COMMERCIAL/OFFICE	3,638 SF
• ARTIST STUDIO	1,544 SF
• **TOTAL COMMERCIAL AREA**	**18,261 SF**

MAREA VILLAGE

PROJECT INFORMATION

HOTEL:

• TOTAL HOTEL AREA:	18,109 SF
• HOTEL ROOMS (VILLAS):	30 KEYS

PROJECT AREA:

• COMMERCIAL AREA	18,261 SF
• RESIDENTIAL AREA	73,752 SF
• HOTEL AREA	18,109 SF
• UTILITIES	4,914 SF
• **TOTAL PROJECT AREA**	**115,036 SF**

PARKING:

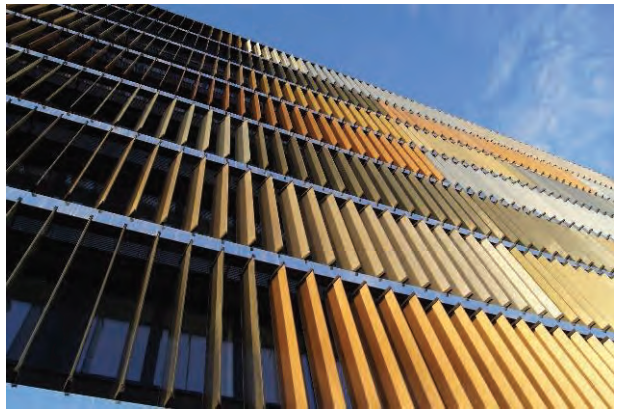
• SURFACE SPACES	44
• GARAGE SPACES	213
TOTAL PARKING SPACES	**257**

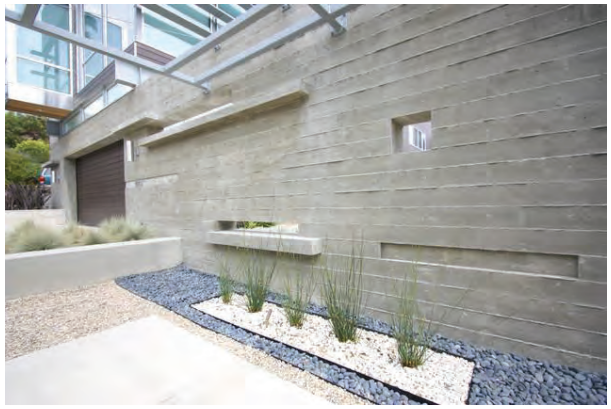
MAREA VILLAGE

PROJECT TIMELINE

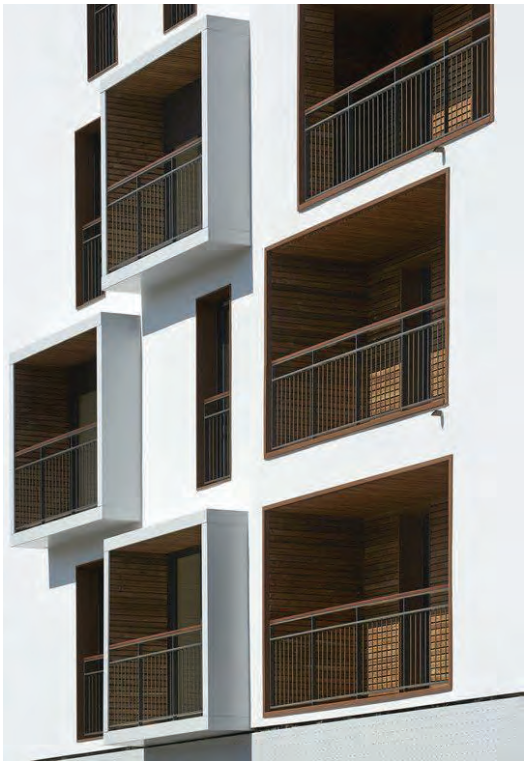
CITIZEN PARTICIPATION PROGRAM:	12/15/2020
CITY STAFF REVIEW (CYCLE 3):	1/18/2021
ENVIRONMENTAL IMPACT REPORT (EIR) PUBLISHED:	TBD
PUBLIC EIR REVIEW PERIOD:	TBD
PLANNING COMMISSION HEARING:	SUMMER 2021

TIMELINE





MATERIALS & INSPIRATION



MATERIALS & INSPIRATION

MAREA VILLAGE

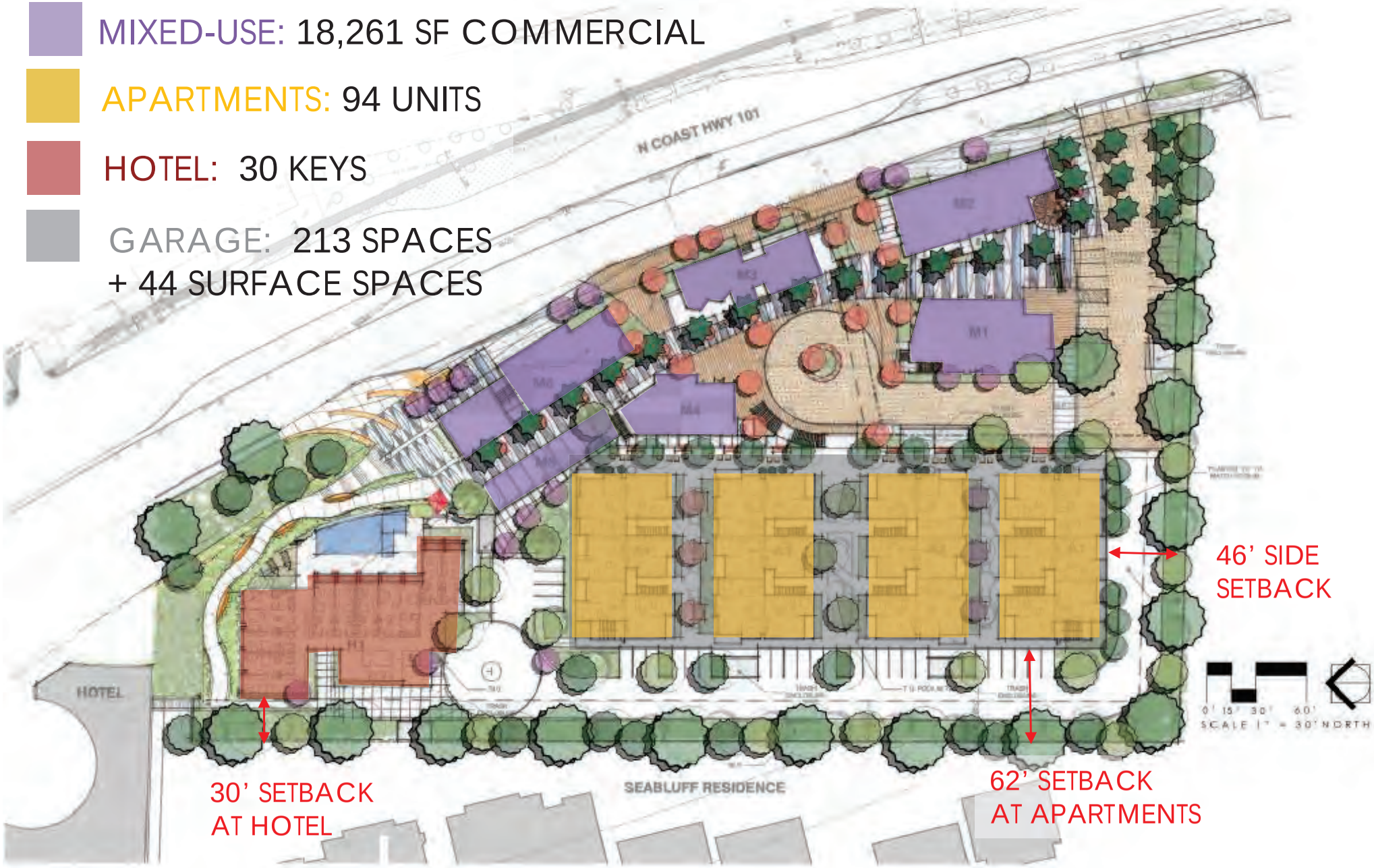
DESIGN & RENDERINGS

MIXED-USE: 18,261 SF COMMERCIAL

APARTMENTS: 94 UNITS

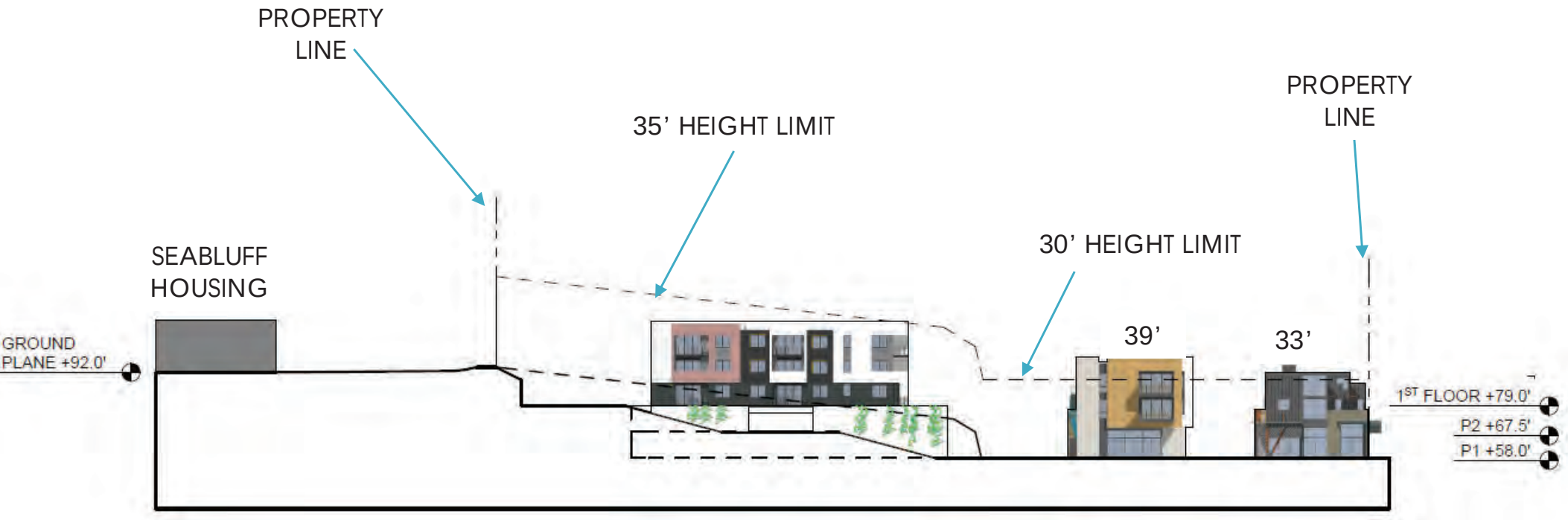
HOTEL: 30 KEYS

GARAGE: 213 SPACES
+ 44 SURFACE SPACES



SITE PLAN

LANDSCAPE PLAN



SITE SECTION

MAREA VILLAGE

STREET VIEW : BUILDING 3

MAREA VILLAGE

BUILDING 3 VIEW FROM HWY 101

MAREA VILLAGE

BUILDING 2

MAREA VILLAGE

HWY 101 ENTRANCE

MAREA VILLAGE

STREET VIEW : BUILDING 6

MAREA VILLAGE

HOTEL (BUILDING 9)

MAREA VILLAGE

PEDESTRIAN BRIDGE VIEW

MAREA VILLAGE

ARTIST STUDIOS

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545400500
1724 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075541185 *0504-00256-30-40

92024 IA
92075-3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 5

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544802900
1717 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-13596-30-41

IA
92024 92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544900200
1761 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00239-30-40

IA
92024 92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545000200
1825 Wilton Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341183 *0304-00047-30-40

IA
92024103
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544902100
1743 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341183 *0304-00075-30-40

IA
92024103
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

EARNEST ALYSON
2545001100
1804 WILTON RD
ENCINITAS, CA 92024-1038

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00134-30-40

IA
92024

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 5 L

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544802600
1729 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-14167-30-41

IA
92024

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545001500
1816 Wilton Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0504-00129-30-40

IA
92024 92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 5L

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544802100
1738 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-14095-30-41

IA
92024 92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544702200
1730 Kennington Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00272-30-40

92024 IA 1025 .000
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544800500
1729 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00251-30-40

92024 IA 1025 .000
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545401100
1708 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2104-04504-30-40

IA
92024-100308

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544800400
1733 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-02470-30-42

IA
92024-100533

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545201700
1812 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00121-30-40

92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

WILCOX MELINDA J TRUST 06-01-03
2545001800
1824 WILTON RD
ENCINITAS, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00238-30-40

92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545102100
1868 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-05251-30-40

92024-1090 IA
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545201900
1818 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00280-30-40

92024-1090 IA
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545100700
1857 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-05297-30-40

IA
92024-109767
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545102200
1870 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-13951-30-41

IA
92024-109070
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO
CA 920
30 NOV '20
PM 4 L

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545101000
1847 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2004-06339-30-41

IA
92024-1538247

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 4 L

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545100800
1855 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-05285-30-40

IA
92024-1092255
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 5 L

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544401300
1841 Haymarket Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-12555-30-41

IA
92024-101184
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 2 L

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544402100
1854 Haymarket Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-05298-30-40

IA
92024-101754
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544500500
1825 Milbank Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0504-00122-30-40

92024-1025 IA C
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544502200
1830 Milbank Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-05324-30-40

92024-1025 IA
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544501400
1801 Milbank Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075541185 *0304-00528-30-40

IA
92075541185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 3 L

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544501200
1807 Milbank Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075541185 *2104-21095-30-42

IA
92075541185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

Mailed From
11/30/2020
032A 0061

LEWIS EDWARD M II AND SANDRA B
FAMILY TRUST 09-05-
2540602800
PO BOX 83
CARDIFF, CA 92007

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2252-05250-11-25

IA
92075>3411

8000 9601 8020

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061023680

Current Resident
2544900900
1744 Whitehall Rd
Encinitas, CA 92024

NIXIE 910 CE 1 7212/11/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-00284-30-40

UTF
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO
CA 920
30 NOV '20
PM 4 L

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2540712600
1853 N Vulcan Ave
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2004-06052-30-41

IA
92024753188

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2160532200
1887 N Vulcan Ave
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00186-30-40

IA
92024753188

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2540711300
1827 N Vulcan Ave
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-11387-30-41

IA
92024-115295
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2160530300
1873 N Vulcan Ave
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1404-03574-01-00

IA
92024-0165981

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 3 L

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2540711200
1835 N Vulcan Ave
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2104-05322-30-40

IA
92024-13609

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2540711100
1845 N Vulcan Ave
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2204-11506-30-41

IA
92024-11509
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 5

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

REYNOLD PAUL R JR AND BARBARA
1990 REVOCABLE FAMIL
2545300900
1745 TATTENHAM RD
ENCINITAS, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-14028-30-41

IA
92024-1745 11

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2160412600
2100 N Coast Highway 101
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00197-30-40

IA
92024-2100 11

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

BELL THOMAS H AND LAWS LINDA K
2544500100
956 CAPRI RD
ENCINITAS, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-14214-30-41

IA
92024/23 56 11

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

MILLS 2015 FAMILY TRUST 08-31-15
2545100500
1863 PARLIAMENT RD
ENCINITAS, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *0304-00073-30-40

IA
92024/03 41 P

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545300800
1747 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341183 *0304-00327-30-40

92024$1023 0008
IA
92075>3411

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341183 *2252-04653-11-22
IA
92075>3411

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2160421200
1967 N Coast Highway 101
Encinitas, CA 92024

92024$1023 0008

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545301100
1744 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075541185 *0304-00332-30-40

92024$00.00 IA
92075541185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545300200
1769 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075541185 *0304-00337-30-40

92024$00.00 IA
92075541185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO
CA 920
30 NOV '20
PM 4 L

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545400200
1738 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2004-02243-30-40

IA
92024-1738 92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM 5 L

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545400800
1716 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *1504-13837-30-41

IA
92024-1716 92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO CA 920
30 NOV 2020PM

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

MAYHEW WILLIAM M
2160524600
PO BOX 2010
DEL MAR, CA 92014

NIXIE 911 FE 1 0012/09/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *2104-04999-30-40

9400920852344190

UTF
92024-5341

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

SAN DIEGO
CA 920
30 NOV '20
PM 4 L

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2545401000
1710 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20
RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD
BC: 92075341185 *2004-06152-30-41

IA
92024-1835

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

LAVERY JOHN W AND CHARLOTTE D
2545101600
15 MADISON AVE
SPRING LAKE, NJ 07762

976 DCE 1 B19C0012/08/20
FORWARD TIME EXP RTN TO SEND
LAVERY JOHN W
PO BOX 232644
ENCINITAS CA 92023-2644

RETURN TO SENDER

FWD
92075>3411
07782 1409 C

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/30/2020
032A 0061823680

Current Resident
2544901700
1764 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/11/20

RETURN TO SENDER
INSUFFICIENT ADDRESS
UNABLE TO FORWARD

BC: 92075341185 *0504-00297-30-40

IA
92024 1095 C00
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAL

Current Resident
1729 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05061-20-38

UTFK1: 9333110637

FWD
UTF
92075>3411

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1729 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04920-20-38

UTFK1: 9333110637

FWD

---

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1738 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05135-20-38

FWD

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1708 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05053-20-38

UTFK1: 9333110637

---

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1710 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05075-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1724 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05080-20-38

UTFK1: 9333110637

FWD
UTF

---

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1716 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05066-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1747 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04918-20-38

UTFK1: 9333110637

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1738 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04924-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1861 Haymarket Rd
Encinitas, CA 92024

NIXIE 911 FE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04939-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1764 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05113-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

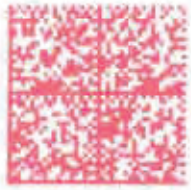
VAC

Current Resident
1854 Haymarket Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04930-20-38

FWD
UNF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075



US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1852 Haymarket Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05006-20-38

FWD
UNF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1857 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04935-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1847 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05001-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1812 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05129-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1855 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04932-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1733 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05133-20-38

FWD
UTF
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1723 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05079-20-38

FWD
UTF
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1769 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05116-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1717 Tattenham Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05056-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

JAC

Current Resident
1761 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05110-20-38

FWD
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

JAC

Current Resident
1762 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05109-20-38

FWD
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1813 Wilton Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04944-20-38

FWD
UTF
92075>3411-1

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1743 Whitehall Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04926-20-38

FWD
UTF
92075>3411-1

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VK

Current Resident
1816 Wilton Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04947-20-38

FWD
UTF
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1811 Wilton Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05124-20-38

FWD
UTF
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

VAC

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

Current Resident
1841 Haymarket Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05002-20-38

FWD
UTF
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

VAC

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

Current Resident
1802 Parliament Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05119-20-38

FWD
UTF
92075341185

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

VAC

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

Current Resident

1807 Milbank Rd

Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD

BC: 92075341185 *0304-05122-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

VAC

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

Current Resident

1801 Milbank Rd

Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD

BC: 92075341185 *0304-05120-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1724 Kennington Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05059-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1950 N Coast Highway 101
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04987-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1730 Kennington Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05131-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1739 Aldersgate Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-05138-20-38

FWD
UTF

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

WARD-CHANDLER BUILDING COMPANY

PO BOX 232099

ENCINITAS, CA 92023

NIXIE 911 DE 1 0012/16/20

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD

BC: 92075341185 *0304-05094-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

PARK FAMILY TRUST 12-18-14

1727 KENNINGTON RD

ENCINITAS, CA 92024

NIXIE 911 FE 1 0012/16/20

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD

BC: 92075341185 *0304-05288-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

VAC

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

Current Resident

1900 N Coast Highway 101 A

Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD

BC: 92075341185 *0304-04979-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

VAC

US POSTAGE
$00.50º
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

Current Resident

1967 N Coast Highway 101

Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD

BC: 92075341185 *0304-04981-20-38

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1830 Milbank Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341181 *0304-04967-20-38

FWD
UTF

---

674 Via de la Valle
Suite 310
Solana Beach, CA 92075

US POSTAGE
$00.50⁰
First-Class
Mailed From 92075
11/20/2020
032A 0061823680

VAC

Current Resident
1825 Milbank Rd
Encinitas, CA 92024

NIXIE 911 DE 1 0012/16/20
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 92075341185 *0304-04959-20-38

FWD
UTF

APPENDIX B
AIR QUALITY ASSESSMENT

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

Technical Memorandum:
AIR QUALITY

Marea Village Mixed Use Development Project

MBAKERINTL.COM

Technical Memorandum

TO:	City of Encinitas	**DATE:**	May 2021
FROM:	Michael Baker International	**SUBJECT:**	Air Quality for the Marea Village Mixed Use Development Project

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential short- and long-term air quality impacts resulting from the construction and operation of the project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site is via North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area.

Vehicular access to the site would be provided via a right turn in from the southbound lane of North Coast Highway 101 and a new left turn lane from the northbound North Coast Highway 101. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. It is anticipated there would also be pedestrian access to the site from the property to the north of the project which is the site of a hotel that is currently under construction. The hotel is anticipated to be operational prior to the project.

Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone overlay. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Limited Visitor-Serving Commercial (N-LVSC) with a Coastal Zone and Residential-30 (R-30) Zone overlay. As part of the City of Encinitas Housing Element Update, Site 1 of the project site was allocated a minimum of 33 residential units if the site is developed at a mixed-use ratio.

Project construction would occur over approximately 15 months. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating.

EXISTING SITE CONDITIONS

The project site is currently occupied by an operating restaurant, a small commercial center, and a vacant structure formerly operated as a restaurant, along with various supporting surface parking areas and a small area of previously undeveloped land.

The topography of the project site varies. Developed areas in the southern portion of the site are generally flat; however, approximately 14 percent of the overall site has a slope greater than 25 percent, with some on-site slopes exceeding 40 percent.

The existing Seabluffe residential community of 255-gated townhomes is located directly adjacent to the south and west. Moorgate Road and approximately 18 parking stalls run along the southern boundary of the site. The Pacific Ocean lies further west, approximately 0.14-mile from the site. A new hotel (currently under construction) is located adjacent to the north of the project site. The intersection of La Costa Avenue and North Coast Highway 101 lies approximately 215 feet to the northeast. North Coast Highway 101, a four-lane divided highway with two lanes and a dedicated bike lane in both directions, forms the eastern boundary of the project site. Sidewalks are only available along southbound Highway 101 on the north half of the project site. The North County Transit District (NCTD) railroad runs north-south and parallels Highway 101 on the east, approximately 135 feet to the east of the project site at its nearest point.

ENVIRONMENTAL SETTING

Regional Topography

The City is located within the San Diego Air Basin (Basin). The topography in the Basin varies greatly, from beaches on the west to mountains and desert on the east. Much of the topography in between consists of mesa tops intersected by canyon areas. The region's topography influences air flow and the dispersal and movement of pollutants in the basin. The mountains to the east prevent air flow mixing and prohibit dispersal of pollutants in that direction.

Climate

The City, like the rest of San Diego County's coastal area, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The mean annual temperature in the City is 60 degrees Fahrenheit (°F). The average annual precipitation is 11 inches, falling primarily from November to April. Winter low temperatures in the City average about 54°F, and summer high temperatures average about 71°F. The average relative humidity is 69 percent and is based on the yearly average humidity at Lindbergh Field.

The dominant meteorological feature affecting the region is the Pacific high-pressure zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from

the coast toward the inland areas. Consequently, air quality near the coast is generally better than that at the base of the coastal mountain range. Most of the City consists of coastal plains, which lie adjacent to the Pacific Ocean and extend approximately 6 miles east of the Pacific Ocean. Because of its locational advantage, the westerly portion of the City has a mild climate with cool summers on the coast, where fog is common.

Fluctuations in the strength and pattern of winds from the Pacific high-pressure zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the Basin. Beneath the inversion layer, pollutants become "trapped" as their ability to disperse diminishes. The prevailing westerly wind pattern is sometimes interrupted by regional Santa Ana conditions. A Santa Ana wind occurs when a strong high-pressure system develops over the Nevada-Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea. Strong Santa Anas tend to blow pollutants out over the ocean, producing clear days inland. However, at the onset or during breakdown of these conditions or if the Santa Anas are weak, local air quality may be adversely affected.

Criteria Air Pollutants

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide.

Ozone (O_3). O_3 occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O_3 layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen oxides (NO_X), and sunlight to form; therefore, VOCs and NO_X are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to O_3 at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level O_3 and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at elevated levels.

Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (CARB) adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal $PM_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. On July 8, 2016, EPA made a finding that the South Coast has attained the 1997 24-hour and annual $PM_{2.5}$ standards based on 2011-2013 data. However, the Basin remains in nonattainment as the EPA has not determined that California has met the Federal Clean Air Act requirements for redesignating the Basin nonattainment area to attainment.

Sulfur Dioxide (SO_2). Sulfur dioxide (SO_2) is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_X. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and reactive organic gases (ROG) (see below) are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC are often used interchangeably.

Local Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The closest air monitoring station to the project site is the Del Mar-Mira Costa College Monitoring Station, which monitors 1-hour and 8-hour O_3 concentrations. The closest air monitoring station to the project site that monitors CO, NO_2, $PM_{2.5}$, and PM_{10} are San Diego-11403 Rancho Carmel Drive Monitoring Station, Camp Pendleton Monitoring Station, and San Diego-Kearny Villa Road Monitoring Station. Local air quality data from 2016 to 2018 is provided in Table 1, *Summary of Air Quality Data*. This table lists the monitored maximum concentrations and number of exceedances of State/Federal air quality standards for each year.

Table 1
Summary of Air Quality Data

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration[5]	Days (Samples) State/Federal Std. Exceeded
Ozone (O_3)[1] (1-hour)	0.09 ppm for 1 hour	NA[8]	2016 2017 2018	0.079 ppm 0.075 *	0/0 0/0 *
Ozone (O_3)[1] (8-hour)	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2016 2017 2018	0.071 ppm 0.061 *	1/1 0/0 *
Carbon Monoxide (CO)[2] (1-hour)	20 ppm for 1 hour	35 ppm for 1 hour	2016 2017 2018	2.000 ppm 2.000 1.900	0/0 0/0 0/0
Nitrogen Dioxide (NO_2)[3]	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2016 2017 2018	0.072 ppm 0.063 0.048	0/0 0/0 0/0
Fine Particulate Matter ($PM_{2.5}$)[3, 7]	No Separate Standard	35 µg/m^3 for 24 hours	2016 2017 2018	28.8 µg/m^3 26.0 30.5	* * *
Particulate Matter (PM_{10})[4, 6, 7]	50 µg/m^3 for 24 hours	150 µg/m^3 for 24 hours	2016 2017 2018	36.0 µg/m^3 47.0 38.0	0/0 0/0 0/0

ppm = parts per million; PM_{10} = particulate matter 10 microns in diameter or less; µg/m^3 = micrograms per cubic meter; $PM_{2.5}$ = particulate matter 2.5 microns in diameter or less; NA = not applicable; * = insufficient data available to determine the value

Notes:
1. Data collected from the Del Mar-Mira Costa College Monitoring Station located at 215 9th Street, Del Mar CA 92014.
2. Data collected from the San Diego-11403 Rancho Carmel Drive Monitoring Station located at 11403 Rancho Carmel Drive, San Diego CA 92128.
3. Data collected from the Camp Pendleton Monitoring Station located at 21441 West B Street, Camp Pendleton CA 92019.
4. Data collected from the San Diego-Kearny Villa Road Monitoring Station located at 6125A Kearny Villa Road, San Diego CA 92145.
5. Maximum concentration is measured over the same period as the California Standards.
6. PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
7. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.
8. The Federal standard was revoked in June 2005.

Sources:
California Air Resources Board, *ADAM Air Quality Data Statistics*, http://www.arb.ca.gov/adam/, accessed October 14, 2020.
California Air Resources Board, *AQMIS2: Air Quality Data*, https://www.arb.ca.gov/aqmis2/aqdselect.php, accessed October 14, 2020.

REGULATORY SETTING

San Diego Air Pollution Control District

San Diego County Regional Air Quality Strategy

The San Diego Air Pollution Control District (SDAPCD) is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County. The air district regulates most air pollutant sources, except for motor vehicles, marine vessels, aircraft, and agricultural equipment, which are regulated by CARB or the EPA. State and local government projects, as well as projects proposed by the private sector, are subject to SDAPCD requirements if the sources are regulated by SDAPCD.

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the Basin; refer to Table 2, *San Diego Air Basin Attainment Status by Pollutant*.

The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1992 and last updated in 2016. The RAQS outlines SDAPCD's plans and control measures designed to attain the State air quality standards for O_3. The SDAPCD has also developed input to the State Implementation Plan (SIP), which is required under the federal Clean Air Act for pollutants that are designated as being in nonattainment of the National Ambient Air Quality Standards (NAAQS) for the Basin.

Table 2
San Diego Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment[1]	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM_{10}	Unclassifiable[2]	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

Notes:
1. The federal 1-hour standard of 12 pphm [parts per hundred million] was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.
2. At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Source: San Diego Air Pollution Control District, *Attainment Status*, https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html, accessed October 14, 2020.

The RAQS relies on information from CARB and SANDAG, such as mobile and area source emissions, as well as information from local jurisdictions regarding projected growth, to project future emissions and establish the strategies necessary for the reduction of emissions through regulatory controls. Projects that propose development consistent with the growth anticipated by the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) would be consistent with the RAQS. In the event that a project proposes development which is less intensive than anticipated in the RAQS, the project would likewise be consistent with the strategy. If a project proposes development that is greater than that anticipated in the growth projections, the project could conflict with the RAQS and the SIP and could have a potentially significant impact on air quality.

The SIP relies on the same information from SANDAG to develop emissions inventories and emissions reduction strategies that are included in the attainment demonstration for the Basin. The SIP also includes rules and regulations that have been adopted by the SDAPCD to control emissions from stationary sources. These SIP-approved rules may be used as guidelines to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the NAAQS for O_3.

SDAPCD Measures to Reduce Particulate Matter in San Diego County

In 2005, the SDAPCD adopted the *Measures to Reduce Particulate Matter in San Diego County*. This document identifies fugitive dust as the major source of directly emitted particulate matter in the county, with mobile sources and residential wood combustion as minor contributors. Data on $PM_{2.5}$ source apportionment indicates that the main contributor to $PM_{2.5}$ in the county is combustion organic carbon, followed closely by ammonium sulfate and ammonium nitrate from combustion sources.

The main contributors to PM_{10} include resuspended soil and road dust from unpaved and paved roads, construction and demolition sites, and mineral extraction and processing. Based on the report's evaluation of control measures recommended by CARB to reduce particulate matter emissions, the SDAPCD adopted Rule 55, Fugitive Dust Control, in June 2009. The SDAPCD requires that construction activities implement the measures listed in Rule 55 to minimize fugitive dust emissions. Rule 55 requires the following:

1. No person shall engage in construction or demolition activity in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
2. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall be minimized by the use of any of the equally effective track-out/carry-out and erosion control measures listed in Rule 55 that apply to the project or operation. These measures include track-out grates or gravel beds at each egress point; wheel-washing at each egress during muddy conditions; soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; watering for dust control; and using secured tarps or cargo covering, watering, or treating of transported material for outbound transport trucks. Erosion control measures must be removed at the conclusion of each workday when active operations cease, or every 24 hours for continuous operations.

Air Quality Screening Thresholds

The SDAPCD Rule 20.2 outlines the screening criteria for the preparation of air quality impact assessments. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the State and federal ambient air quality standards. These daily and annual emissions screening thresholds for construction and operations are shown in Table 3, *Screening Thresholds for Criteria Pollutants*.

Table 3
Screening Thresholds for Criteria Pollutants

Emissions	Pollutant						
	ROG[1]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	Lead
Daily Maximum (lbs/day)	75	250	550	250	100	67	3.2
Annual (tons/year)	13.7	40	100	40	15	10	0.6

Notes: ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter up to 10 microns; $PM_{2.5}$ = particulate matter up to 2.5 microns; lbs = pounds
1. SDAPCD Rule 20.2 does not establish threshold for ROG. The threshold of significance for ROG from the South Coast Air Quality Management District is used. The annual emissions threshold is calculated from 75 lbs/day multiplied by 365 days/year and divided by 2000 lbs/ton.

Source: San Diego Air Pollution Control District, *Rule 20.2.*

SDAPCD Rule 51 - Odor Impacts

The State of California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 SDAPCD Rule 51 (Public Nuisance), and the City's Municipal Code prohibit emissions from any source in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

SDAPCD Rule 51 also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are subjective by the nature of odors themselves and due to the fact that their measurements are difficult to quantify. Therefore, this guideline is qualitative and focuses on existing and potential surrounding uses and the location of sensitive receptors.

Other SDAPCD Rules and Regulations

As discussed above under Regional Air Quality Strategy, state law dictates that local air districts such as the SDAPCD have primary responsibility for controlling emissions from non-mobile (stationary) sources. The stationary source control measures identified in the RAQS and the SIP have been developed by the air district into regulations through a formal rulemaking process. Rules are developed to set limits on the amount of emissions from various types of sources and/or by requiring specific emissions control technologies. Following rule adoption, a permit system is used to impose controls on new and modified stationary sources and to ensure compliance with regulations by prescribing specific operating conditions or equipment on a source.

SDAPCD Regulation XIV (Title V Operating Permits) contains the requirements for implementing the Title V permit program. The program requires all major sources of criteria air contaminants, all major sources of hazardous air pollutants, all sources that emit more than 100 tons per year of any regulated air contaminant, and certain other specified sources to obtain Title V permits. Permits are issued pursuant to Regulation XIV and incorporate state and local requirements that are contained in existing SDAPCD permits for these sources. Examples of operations that require permits are surface coating operations, adhesive materials application, automotive refinishing operations, dry cleaning operations, fiberglass or plastic product manufacturing, and gas stations.

The SDAPCD also implements New Source Review (NSR) in the air basin. Prior to the installation of new, modified, relocated, or replacement equipment that results in an increase of air pollution emissions, the SDAPCD requires that an Authority to Construct be obtained and that the equipment be evaluated in accordance with applicable NSR rules. A Permit to Operate from the SDAPCD would be required to authorize operation or use of the equipment. If such equipment would exceed air pollutant thresholds, it must use Best Available Control Technology (BACT) to reduce emissions. BACT definitions and requirements are outlined in SDAPCD Rule 20.1, NSR–General Provisions.

It is difficult to ensure that new or modified sources do not interfere with attainment or maintenance of the established air quality standards for ozone. Since ozone is a secondary pollutant (i.e., ozone is not directly emitted, but results from complex chemical reactions in the atmosphere from precursor pollutants), control of the precursors is required. Control of emissions of volatile organic compounds (VOCs) (also known as reactive organic gases, or ROG) and nitrogen oxides, the ozone precursors, is essential. The SDAPCD adopted Rule 67.0.1, Architectural Coatings, which establishes VOC content limits for architectural coatings, in 2015.

Additionally, SDAPCD Rule 1210, Toxic Air Contaminant Public Health Risks–Public Notification and Risk Reduction, implements the public notification and risk reduction requirements of the California Air Toxics “Hot Spots” Act (AB 2588) and requires facilities to reduce risks to acceptable levels within five years.

Adopted in 1996 and mostly recently revised in 2019, Rule 1200, Toxic Air Contaminants - New Source Review, requires evaluation of potential health risks for any new, relocated, or modified emission units that may increase emissions of one or more toxic air contaminant(s). In regard to an increase of cancer risk, Rule 1200 requires the following:

- **T-BACT Not Applied.** The increase in maximum incremental cancer risk at every receptor location is equal to or less than one in one million for any project for which new, relocated, or modified emission units that increases maximum incremental cancer risk are not equipped with T-BACT; and

- **T-BACT Applied.** Except as provided in (d)(1)(iii), the increase in maximum incremental cancer risk at every receptor location is equal to or less than 10 in one million for any project for which all new, relocated, or modified emission units that increases maximum incremental cancer risk are equipped with T-BACT (SDAPCD 2019).

Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these rules and regulations, or state and federal law.

SDAPCD Rule 361.145, Standard for Demolition and Renovation, requires owner or operator of a demolition or renovation activity to provide written notice of intention to SDAPCD Control Officer that includes procedure and analytical methods to detect the presence of regulated asbestos-containing material (RACM) and Category I and Category II nonfriable Asbestos-Containing Material. Rule 361.145 also includes procedures for asbestos emission control that each owner or operator of a demolition or renovation activity shall follow.

City of Encinitas

City of Encinitas General Plan

The General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life in the City. The General Plan states that a goal of the City is to analyze proposed land uses to ensure that the designations would contribute to a proper balance of land uses within the community. The relevant goals and policies for the project include:

<u>Circulation Element</u>

- **Goal 3**: The City of Encinitas will promote the use of other modes of transportation to reduce the dependence on the personal automobile.
    - **Policy 3.11**: The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following:
        - All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network.
        - The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use.
        - The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.

<u>Resource Management Element</u>

- **Goal 5**: The City will make every effort to participate in programs to improve air and water quality in the San Diego region.

- **Policy 5.1**: The City will monitor and cooperate with the ongoing efforts of the U. S. Environmental Protection Agency, the San Diego Air Pollution Control District, and the State of California Air Resources Board in improving air quality in the regional air basin. The City will implement appropriate strategies from the San Diego County SIP which are consistent with the goals and policies of this plan.

- **Goal 13**: Create a desirable, healthful, and comfortable environment for living while preserving Encinitas, unique natural resources by encouraging land use policies that will preserve the environment.
  - **Policy 13.1**: The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring.

- **Goal 15**: The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.
  - **Policy 15.1**: The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development.
  - **Policy 15.2**: The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.
  - **Policy 15.3**: Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.

Encinitas North 101 Corridor Specific Plan

The project is located within the Encinitas North 101 Corridor Specific Plan (Specific Plan). Chapter 9.5, "Resource Management" of the Specific Plan identifies the goals and policies of the General Plan and Local Coastal Program that are related to air quality in the Specific Plan area and addresses the Specific Plan's consistency with these policies. The introduction of mixed-use development in the Specific Plan area will provide more opportunities for live/work situations to occur, as well as residential uses which are closer to the commercial uses. This should reduce automobile trips, therefore, improving future air quality consistent with Specific Plan requirements.

Encinitas Climate Action Plan

The City's Climate Action Plan (CAP) was most recently updated and adopted on November 18, 2020. It builds upon the goals identified in the 2018 CAP and serves as a guiding document and outlines a course of action for community and municipal operations to reduce greenhouse gas emissions and the potential impacts of climate change within the jurisdiction. The updated CAP commits to implementing specific programs and projects aimed at reducing and mitigating the impacts of GHG emitting activities by targeted dates. The CAP organizes strategies, goals, and actions tied to various emissions sources (e.g., onroad transportation, electricity, natural gas, solid waste, water, off-road transportation, and wastewater). As of this time, the City has not adopted implementing ordinances for these requirements. Of particular relevance to the project, the CAP requires all new residential and commercial buildings to be constructed with rooftop solar panels and electric vehicle charging stations.

The following strategies would help improve air quality:

- RE-2: Require New Homes to install Solar Photovoltaic Systems
- RE-3: Require Commercial Buildings to install Solar Photovoltaic Systems
- CET-4: Require Residential Electric Vehicle Charging Stations
- CET-5: Require Commercial Electric Vehicle Charging Stations

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) THRESHOLDS

Based on Appendix G of the State CEQA Guidelines, a project may have a significant adverse impact related to noise and vibration if it would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable Federal or State ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

METHODOLOGY

The analysis describes and addresses the requirements set forth by the SDAPCD's *Regional Air Quality Strategy* to estimate and analyze potential air quality impacts.

Construction emissions were quantified with the California Emissions Estimator Model version 2016.3.2 (CalEEMod). Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of CalEEMod. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The air pollutant emissions during construction were compared to the SDAPCD regional thresholds of significance. Naturally occurring asbestos impacts were discussed qualitatively.

Operational (i.e., area, energy, and mobile source) emissions were quantified and compared to the SDAPCD regional thresholds of significance. Two CalEEMod models have been conducted to calculate the long-term emissions from the operation of the existing restaurant and small commercial center and the proposed project, respectively. The net increase of total emissions represents the project-generated emissions.

Project-generated vehicle emissions were estimated using CalEEMod as well as the CARB's EMission FACtor Model 2017 (EMFAC2017). Based on the *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis* (Traffic Impact Analysis) prepared by LOS Engineering, Inc. (dated November 12, 2020)[1], typical daily activities are forecast to

[1] LOS Engineering, Inc., *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, dated November 12, 2020.

generate a net increase of 1,122 average daily trips, including 60 trips during the a.m. peak hour and 102 trips during the p.m. peak hour.

The resultant human health impacts from the project's short-term construction and long-term operational air emissions were analyzed, as well as the potential for CO hotspot impacts and health impacts to sensitive receptors from exposure to Toxic Air Contaminants (TACs).

AIR QUALITY IMPACTS ANALYSIS

Impact AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The project site is located within the San Diego Air Basin and is regulated by the SDAPCD. As described above, the SIP and RAQS are the applicable air quality plans for the SDAPCD. Consistency with the SIP and RAQS means that a project is consistent with the goals, objectives, and assumptions set forth in the SIP and RAQS that are designed to achieve Federal and State air quality standards.

The basis for the RAQS and SIP is the growth rate in population in the region as projected by SANDAG. SANDAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. In March 2019, the City adopted the Housing Element Update (HEU) that included updated employment and residential growth projections. The HEU Environmental Assessment (EA) determined that the HEU would result in a cumulative impact on air quality due to the increase in residential units which were not accounted for in the RAQS and SIP at that time. As part of the mitigation requirements of the HEU EA, the City provided a revised housing forecast to SANDAG to ensure that any revisions to the residential and employment growth projections used by SDAPCD are accounted for in the RAQS and the SIP.[2]

The project would be consistent with the City's General Plan, Specific Plan, and HEU land use and zoning designations. In addition, because the project site is included in the HEU and the associated residential and employment growth projections have been provided to SANDAG to be included in the RAQS and SIP, the project would not cause the SANDAG's population forecast to be exceeded and ensure that any revisions to the residential and employment growth projections used by SDAPCD are accounted for in the RAQS and the SIP. Therefore, emissions generated by the project would be addressed in the RAQS and SIP. In addition, as discussed in Impact Statement AQ-2, the project would result in emissions that would be below the SDAPCD thresholds. Therefore, the project would not conflict with or obstruct implementation of the RAQS and SIP.

The proposed project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards, would be consistent with General Plan Policy 5.1 and Policy 13.1, and the impact would be less than significant.

Mitigation Measures: No mitigation is required.

Impact AQ-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Less Than Significant Impact.

[2] City of Encinitas, *2013-2021 Housing Element Update Environmental Assessment, Chapter 4.2, Air Quality*, June 2018.

Short-Term Construction

The project involves construction activities associated with demolition, grading, building construction, paving, and architectural coating applications. The project would be constructed over approximately 15 months. The proposed construction schedule and equipment list are shown in Table 3, *Construction Schedule and Equipment List*.

Table 3
Construction Schedule and Equipment List

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	09/01/2021	09/30/2021	
Concrete/Industrial Saws			1
Crawler Tractors			1
Crushing/Proc. Equipment			1
Excavators			1
Other Construction Equipment			2
Rubber Tired Loaders			1
Grading	09/16/2021	01/31/2022	
Bore/Drill Rigs			2
Cranes			1
Crawler Tractors			1
Excavators			2
Plate Compactors			2
Rollers			1
Rough Terrain Forklifts			2
Rubber Tired Loaders			1
Scrapers			1
Signal Boards			2
Skid Steer Loaders			1
Building Construction	11/02/2021	08/31/2022	
Cranes			1
Other Construction Equipment			3
Paving Equipment			1
Rough Terrain Forklifts			2
Rubber Tired Loaders			1
Signal Boards			2
Skid Steer Loaders			1
Tractors/Loaders/Backhoes			2
Paving	10/05/2022	12/05/2022	
Cement and Mortar Mixers			2
Graders			1
Off-Highway Trucks			4
Paving Equipment			1
Rollers			1
Rubber Tired Loaders			1
Signal Boards			2
Surfacing Equipment			1
Tractors/Loaders/Backhoes			2
Architectural Coating	05/22/2022	11/22/2022	
Air Compressors			1

Source: Refer to Appendix A, for detailed model input/output data.

The analysis of daily construction emissions has been prepared using CalEEMod. Refer to Appendix A, *Air Quality Emissions Data*, for the CalEEMod outputs and results. Table 4, *Short-Term Construction Emissions*, presents the anticipated daily short-term construction emissions.

Table 4
Short-Term Construction Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 1						
Construction Related Emissions[2]	8.08	95.41	70.48	0.20	6.83	3.87
Year 2						
Construction Related Emissions[2]	14.03	82.73	68.75	0.20	9.11	4.09
SDAPCD Thresholds	75	250	550	250	100	67
Is Threshold Exceeded?	No	No	No	No	No	No

Notes:
1. Emissions were calculated using CalEEMod, version 2016.3.2. Winter emissions represent worst-case.
2. Modeling assumptions include compliance with standard dust control measures (water exposed surfaces three times daily) and SDAPCD Rule 67.0.1 (architectural coatings with ROG content of less than 50 grams per liter for flat coatings and 100 grams per liter for non-flat coatings).

Source: Refer to Appendix A, for detailed model input/output data.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from site preparation, grading, and construction is expected to be short-term and would cease upon project completion. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Construction activities would comply with SDAPCD *Rule 55 – Fugitive Dust Control* as well as standard dust control measures that excessive fugitive dust emissions be controlled by regular watering. Adherence to dust control measures would greatly reduce PM_{10} and $PM_{2.5}$ concentrations. It should be noted that these reductions were applied in CalEEMod. As depicted in Table 4, total PM_{10} and $PM_{2.5}$ emissions would not exceed the SDAPCD thresholds during construction. Thus, construction-related air quality impacts from fugitive dust emissions would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in Table 4, construction equipment and worker vehicle exhaust emissions would be below the established SDAPCD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emission would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. As required, all architectural coatings for the proposed project structures would comply with SDAPCD *Rule 69.0.1 – Architectural Coating*. Rule 69.0.1 provides specifications on painting practices as well as regulates the ROG content of paint. ROG emissions associated with the proposed project would be less than significant; refer to Table 4.

Total Daily Construction Emissions

As indicated in Table 4, criteria pollutant emissions during construction of the proposed project would not exceed the SDAPCD significance thresholds. Thus, total construction related air emissions would be less than significant.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the CARB in 1986. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California.

Naturally occurring asbestos (NAC) can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*[3], serpentinite and ultramafic rocks are not known to occur within the project area.

Prior to the 1980s, a variety of building construction materials commonly used asbestos for insulation and as a fire retardant. Some types of nonfriable building materials may still contain asbestos. These products include roofing felt, vinyl asbestos floor tile, ceiling tiles, transite building materials, and roofing coatings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). If asbestos containing material (ACM) is damaged or disturbed by construction or demolition activities, microscopic fibers become airborne and can be inhaled.

Due to the age of the buildings on the project site, there is the potential for ACM to be present and encountered during demolition. Demolition activities of structures containing ACM could result in significant air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Mitigation Measure MM AQ-1 would require the project to prepare

[3] Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed December 10, 2020.

a demolition plan to identify potential hazardous building materials and MM AQ-2 implement health and safety measures to protect construction workers and the community. With the implementation of Mitigation Measures MM AQ-1 and MM AQ-2, the impacts would be less than significant.

Lead-based Paint

Lead-based paint (LBP) is recognized as a potential health risk because of its known toxics that affect the central nervous system, kidneys, and bloodstream. Lead-based paints were used in residential and commercial buildings until it was banned in 1978. Structures built in the U.S. before 1978 are likely to have some lead-based paint. Improper demolition of structures coated with lead-based paint can result in the release of lead containing particles from the project site and pose a potentially significant impact. Mitigation Measure MM AQ-1 would require the project to prepare a demolition plan to identify potential hazardous building materials and MM AQ-2 implement health and safety measures to protect construction workers and the community. With the implementation of Mitigation Measures MM AQ-1 and MM AQ-2, the impacts would be **less than significant**.

MM AQ-1: Prepare and Implement a Demolition Plan

Prior to or concurrent with building permit applications, the Applicant or Construction Contractor shall provide a Demolition Plan to the City for review and approval. The Demolition Plan shall include the procedures for pre-demolition surveys and testing for hazardous building materials such as asbestos, lead-based paint, mercury, and polychlorinated biphenyls, and removal and disposal of hazardous building materials. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations, including San Diego County Air Pollution Control District Rule 361.145 – Standards for Demolition and Renovation. All identified hazardous materials shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures. The Applicant or Construction Contractor shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the City showing that abatement of hazardous building materials has been completed in full compliance with all applicable regulations. The City shall document that the Demolition Plan has been approved prior to issuance of demolition permits and that the requirements of the Demolition Plan have been met.

Timing/Implementation: Before and during all construction activities.

Enforcement/Monitoring: City of Encinitas

MM AQ-2: Prepare and Implement a Health and Safety Plan

Prior to construction, the Applicant or Construction Contractor shall prepare a Worker Health and Safety Plan (WHSP) for City review and approval. The WHSP shall include all laws, rules, and regulations required to protect construction workers and the general public from potentially hazardous building materials and collapsible soils. The WHSP may include, but not be limited to: required engineering controls, signage, monitoring, and security measures, to reduce potential construction hazards both on and off site. The plan shall also include the latest construction site COVID-19 safety and hygiene protocols recommended by the County of San Diego Health and Human Services Department, California State Public Health Officer and Director of the California Department of Public Health, and California Occupational Health and Safety Administration. The plan shall identify the designated contractor and/or personnel responsible for the implementation of the WHSP ensuring compliance with all required measures applicable to health and safety and verifications during the performance of the construction work.

Timing/Implementation: Before and during all construction activities.

Enforcement/Monitoring: City of Encinitas (pre-construction); Construction contractor (construction).

Long-Term (Operational) Emissions

Mobile Source Emissions

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$); however, CO tends to be a localized pollutant, dispersing rapidly at the source.

Table 5, *Long-Term Operational Air Emissions*, presents the anticipated mobile source emissions. As shown in Table 5, emissions generated by vehicle traffic associated with the project would not exceed established SDAPCD thresholds. In addition, consistent with General Plan Policy 3.11, the project would include bicycle parking spaces on-site to encourage bicycle travel. Impacts from mobile source air emissions would be less than significant.

Area Source Emissions

Area source emissions would be generated from consumer products, architectural coating, and landscaping. As required, all architectural coatings for the proposed project structures would comply with SDAPCD *Rule 69.0.1 – Architectural Coating*. As shown in Table 5, area source emissions from the proposed project would not exceed SDAPCD thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Energy Source Emissions

Energy source emissions would be generated as a result of electricity and natural gas (non-hearth) usage associated with the proposed project. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As a design feature, the project would install high efficiency lighting fixtures. In addition, although not quantified and included in Table 5, the project would install 250 kilowatt (kW) solar panels on-site, which would be consistent with General Plan Policy 15.1, Policy 15.2, and Policy 15.3. As shown in Table 5, energy source emissions from the proposed project would not exceed SDAPCD thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Total Operational Emissions

As shown in Table 5, the net increase of total operational emissions for both summer and winter would not exceed established SDAPCD thresholds. Therefore, impacts in this regard would be less than significant.

Table 5
Long-Term Operational Air Emissions

Emissions Source	Pollutant (lbs/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Conditions Summer Emissions						
Area Source Emissions	0.21	<0.01	<0.01	0.00	0.00	0.00
Energy Emissions[2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mobile Emissions[3]	1.79	2.64	14.05	0.04	4.08	1.11
Total Emissions[4]	2.00	2.64	14.05	0.04	4.08	1.11
Proposed Project Summer Emissions						
Area Source Emissions	3.31	1.49	8.39	0.01	0.16	0.16
Energy Emissions[2]	0.08	0.72	0.51	<0.01	0.06	0.06

Mobile Emissions[3]	4.22	6.41	34.19	0.10	10.09	2.75
Total Emissions[4]	7.61	8.62	43.09	0.12	10.30	2.96
Net Increase of Total Emissions[4]	5.61	5.98	29.04	0.08	6.22	1.85
SDAPCD Threshold	75	250	550	250	100	67
Is Threshold Exceeded?	No	No	No	No	No	No
Existing Conditions Winter Emissions						
Area Source Emissions	0.21	<0.01	<0.01	0.00	0.00	0.00
Energy Emissions[2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mobile Emissions[3]	1.87	2.82	14.21	0.04	4.08	1.11
Total Emissions[4]	2.08	2.82	14.21	0.04	4.08	1.11
Proposed Project Winter Emissions						
Area Source Emissions	3.31	1.49	8.39	0.01	0.16	0.16
Energy Emissions[2]	0.08	0.72	0.51	<0.01	0.06	0.06
Mobile Emissions[3]	4.40	6.86	34.45	0.10	10.09	2.75
Total Emissions[4]	7.79	9.07	43.34	0.11	10.30	2.96
Net Increase of Total Emissions[4]	5.71	6.25	29.13	0.07	6.22	1.85
SDAPCD Threshold	75	250	550	250	100	67
Is Threshold Exceeded?	No	No	No	No	No	No

Notes:
1. Emissions were calculated using CalEEMod, version 2016.3.2 and the California Air Resources Board EMission FACtor model 2017 (EMFAC2017).
2. As a design feature, the project would install high efficiency lighting fixtures.
3. The mobile source emissions were calculated using the trip generation data provided in the LOS Engineering, Inc., City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis, dated November 12, 2020.
4. The numbers may be slightly off due to rounding.

Source: Refer to Appendix A, for detailed model input/output data.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, ozone precursors ROGs and NO_x affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

As noted in the Brief of Amicus Curiae by the South Coast Air Quality Management District (SCAQMD),[4] the SCAQMD acknowledged that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD),[5] SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

[4] South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

[5] San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

The SCAQMD acknowledges that health effects quantification from ozone, as an example is correlated with the increases in ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_X and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify ozone-related health impacts caused by NO_X or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Since the project would not exceed SDAPCD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts as well.

Mitigation Measures: No mitigation is required.

Impact AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Sensitive receptors closest to the project site are multi-family residences (Seabluffe Village) located immediately adjacent to the west and south of the project site.

Localized Air Quality Health Impacts

Construction

The project construction activities are anticipated to involve the operation of diesel-powered equipment, which would emit Diesel Particulate Matter (DPM). In 1998, the CARB identified diesel exhaust as a Toxic Air Contaminant (TAC). Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. The project would construct mixed-use buildings in 15 months while complying with the California Code of Regulations (CCR), Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. Implementation of these regulations would reduce the amount of DPM emissions from the construction of the project.

The closest sensitive receptors to the project site are multi-family residential development located adjacent to the west and south of the project site. However, health impacts on sensitive receptors associated with exposure to DPM from project construction are anticipated to be less than significant because construction activities are expected to occur well below the 30-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the proposed project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors and the impact would be less than significant.

Operations

The project would construct mixed-use buildings including residential use, office, retail, restaurant, and hotel and would result in very limited operational activities with potential health risks, including landscaping maintenance operations and boilers for restaurants. None of these activities would result in the generation of excessive TAC emissions, or associated health risks from the project's operation. Therefore, operation of the proposed project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors and the impact would be less than significant.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The Basin is designated as an attainment area for the Federal and State CO standards. There has been a decline in CO emissions even though vehicle miles traveled on U.S. urban and rural roads have increased. Nationwide estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.[6] CO emissions have continued to decline since this time. Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A potential CO hotspot may occur at any location where the background CO concentration already exceeds 20 parts per million (ppm), which is the 1-hour California ambient air quality standard. As shown in Table 1, the closest monitoring station to the project site that monitors CO concentration is the San Diego-11403 Rancho Carmel Drive Monitoring Station, and the maximum CO concentration was measured at 1.900 ppm in 2018. Given that the background CO concentration does not currently exceed 20 ppm, a CO hotspot would not occur at the project site. Therefore, CO hotspot impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

Impact AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. According to CARB's *Air Quality and Land Use Handbook*[7], land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the CARB as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. The project would also comply with the SDAPCD *Rule 69.0.1 – Architectural Coating*, which would

[6] United States Environmental Protection Agency¸ *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed December 10, 2020.

[7] California Air Resources Board, *Air Quality and Land Use Handbook*, April 2005.

minimize odor impacts from ROG emissions during architectural coating. Any impacts to existing adjacent land uses would be short-term and are less than significant.

Mitigation Measures: No mitigation is required.

Cumulative Impacts

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether the project's individual emissions would have a cumulatively significant impact on air quality. Cumulative air quality impacts may potentially result when the emissions from cumulative projects combine to degrade air quality conditions below attainment levels for the Basin, delay attainment of air quality standards, affect sensitive receptors, or subject surrounding areas to objectionable odors. The cumulative study area for air quality includes the Basin, which is contiguous with the County because air quality is evaluated at the air basin level. Cumulative impacts on sensitive receptors and odors are more localized and include surrounding areas close to the project site.

With respect to the proposed project's construction-related air quality emissions and cumulative Basin-wide conditions, the SDAPCD has developed strategies to reduce criteria pollutant emissions outlined in the RAQS pursuant to State and Federal mandates. As such, the proposed project would comply with SDAPCD rules and regulations, and the adopted RAQS emissions control measures. Per SDAPCD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., rules and regulations compliance, the implementation of all feasible mitigation measures, and compliance with adopted RAQS emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects.

As discussed previously, the proposed project would not result in short- or long-term air quality impacts, as emissions would not exceed the SDAPCD adopted thresholds. Additionally, adherence to SDAPCD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, the project's incremental operational impacts would be less than cumulatively considerable and impacts in this regard are less than significant.

REFERENCES

Documents

1. California Air Resources Board, *ADAM Air Quality Data Statistics*, http://www.arb.ca.gov/adam/, accessed October 14, 2020.
2. California Air Resources Board, *AQMIS2: Air Quality Data*, https://www.arb.ca.gov/aqmis2/aqdselect.php, accessed October 14, 2020.
3. California Air Resources Board, *Air Quality and Land Use Handbook*, April 2005.
4. City of Encinitas, 2013-2021 Housing Element Update Environmental Assessment, Chapter 4.2, Air Quality, June 2018.
5. City of Encinitas, *General Plan Circulation Element*, last amended January 22, 2003.
6. City of Encinitas, *General Plan Resource Management Element*, last amended March 9, 2011.
7. Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed December 10, 2020.
8. LOS Engineering, Inc., City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis, November 12, 2020.
9. South Coast Air Quality Management District, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.
10. San Joaquin Valley Air Pollution Control District, Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.
11. San Diego Air Pollution Control District, *Attainment Status*, https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html, accessed October 14, 2020.
12. San Diego Air Pollution Control District, *Rule 20.2 New Source Review Non-Major Stationary Sources*, latest revision adopted April 27, 2016.
13. San Diego Air Pollution Control District, 2016 Revision of The Regional Air Quality Strategy For San Diego County, December 2016.
14. United States Environmental Protection Agency¸ *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed December 10, 2020.
15. United States Environmental Protection Agency¸ *Revisions to the General Conformity Regulations*, March 24, 2010, https://www.epa.gov/sites/production/files/2016-03/documents/20100324rule.pdf, accessed December 10, 2020.

Websites / Programs

1. Google Earth, 2020.
2. South Coast Air Quality Management District, California Emissions Estimator Model (CalEEMod), version 2016.3.2.

Michael Baker
INTERNATIONAL

Appendix A:
Air Quality Emissions Data

Fenway North Coast Highway 101

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
City Park	0.65	Acre	0.65	28,200.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	30.00	Room	0.50	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	2.19	73,284.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - per traffic study and site plan; city park = open space; based on site plan, 42 surface parking spaces, remaining subterranaen; total lot 3.8 acres

Construction Phase - per construction questionnaire

Off-road Equipment -

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Demolition -

Grading -

Architectural Coating - SDAPCD Rule 67.0.1 Non-flat coatings

Vehicle Trips - based on traffic study; pass-by trips incorporated in trip rate, so set to 0%

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Area Coating - SDAPCD Rule 67.0.1 Non-flat coatings

Construction Off-road Equipment Mitigation - dust control implemented by applicant

Area Mitigation - no wood-burning hearth

Energy Mitigation - 2019 Title 24. Applicant will install high efficiency lighting

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00

tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaCoating	Area_Parking	5697	4989
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	98.00
tblConstructionPhase	NumDays	18.00	44.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.4350e-003	0.00
tblFleetMix	MCY	5.9380e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	1.0560e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9340e-003	0.00
tblFleetMix	SBUS	7.5700e-004	0.00
tblFleetMix	UBUS	1.8880e-003	0.00
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00

tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	28,200.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	43,560.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	73,284.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	1.00	0.50
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	2.19
tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	36.00	34.00
tblTripsAndVMT	WorkerTripNumber	133.00	129.00
tblTripsAndVMT	WorkerTripNumber	27.00	26.00
tblTripsAndVMT	WorkerTripNumber	38.00	33.00
tblVehicleEF	HHD	0.59	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.74	6.66
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.37	9.0030e-003
tblVehicleEF	HHD	4,504.81	1,118.02
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	15.07	5.75
tblVehicleEF	HHD	1.98	2.66
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.1570e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.0200e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02

tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.43	0.45
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.51	0.52
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.56	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.27	6.57
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.17	8.4620e-003
tblVehicleEF	HHD	4,772.44	1,105.76
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.09

tblVehicleEF	HHD	15.55	5.50
tblVehicleEF	HHD	1.91	2.56
tblVehicleEF	HHD	19.51	2.38
tblVehicleEF	HHD	0.01	2.7490e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	9.6380e-003	2.6300e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.40	0.48
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.49	0.55
tblVehicleEF	HHD	1.4300e-004	1.0000e-005

tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.64	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	2.40	6.80
tblVehicleEF	HHD	1.09	0.48
tblVehicleEF	HHD	3.46	9.2430e-003
tblVehicleEF	HHD	4,135.22	1,134.96
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	14.40	6.09
tblVehicleEF	HHD	1.98	2.65
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.7200e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.5590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004

tblVehicleEF	HHD	0.46	0.41
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.56	0.48
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	6.1170e-003	2.0310e-003
tblVehicleEF	LDA	7.4160e-003	0.05
tblVehicleEF	LDA	0.58	0.53
tblVehicleEF	LDA	1.39	2.07
tblVehicleEF	LDA	248.05	253.20
tblVehicleEF	LDA	54.17	51.49
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003

tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	7.5890e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.10	0.20
tblVehicleEF	LDA	2.4840e-003	2.5050e-003
tblVehicleEF	LDA	5.6600e-004	5.1000e-004
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	6.5890e-003	2.2110e-003
tblVehicleEF	LDA	6.4700e-003	0.04
tblVehicleEF	LDA	0.65	0.60
tblVehicleEF	LDA	1.15	1.71
tblVehicleEF	LDA	262.13	267.26
tblVehicleEF	LDA	54.17	50.84
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.04	0.06

tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	8.1610e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.09	0.18
tblVehicleEF	LDA	2.6260e-003	2.6440e-003
tblVehicleEF	LDA	5.6200e-004	5.0300e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDA	6.0150e-003	1.9880e-003
tblVehicleEF	LDA	7.8030e-003	0.05
tblVehicleEF	LDA	0.56	0.52
tblVehicleEF	LDA	1.49	2.22
tblVehicleEF	LDA	245.50	250.66
tblVehicleEF	LDA	54.17	51.77
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.08	0.18
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10

tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	7.4640e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.21
tblVehicleEF	LDA	2.4590e-003	2.4790e-003
tblVehicleEF	LDA	5.6800e-004	5.1200e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.12	0.23
tblVehicleEF	LDT1	0.01	5.8260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.15	1.12
tblVehicleEF	LDT1	2.76	2.33
tblVehicleEF	LDT1	318.80	308.27
tblVehicleEF	LDT1	69.57	63.74
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12

tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.2010e-003	3.0510e-003
tblVehicleEF	LDT1	7.4400e-004	6.3100e-004
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT1	0.01	6.2810e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.28	1.25
tblVehicleEF	LDT1	2.27	1.92
tblVehicleEF	LDT1	336.12	323.06
tblVehicleEF	LDT1	69.57	62.92
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.03	0.03

tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	3.3760e-003	3.1970e-003
tblVehicleEF	LDT1	7.3600e-004	6.2300e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.18	0.34
tblVehicleEF	LDT1	0.01	5.7180e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	1.13	1.10
tblVehicleEF	LDT1	2.97	2.50
tblVehicleEF	LDT1	315.67	305.60
tblVehicleEF	LDT1	69.57	64.07
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.23	0.90

tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	3.1700e-003	3.0240e-003
tblVehicleEF	LDT1	7.4800e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.22	0.42
tblVehicleEF	LDT2	5.2450e-003	3.5940e-003
tblVehicleEF	LDT2	5.9320e-003	0.07
tblVehicleEF	LDT2	0.65	0.78
tblVehicleEF	LDT2	1.31	2.67
tblVehicleEF	LDT2	352.67	328.12
tblVehicleEF	LDT2	76.85	68.00
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.27
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.08	0.30

tblVehicleEF	LDT2	3.5310e-003	3.2460e-003
tblVehicleEF	LDT2	7.9000e-004	6.7300e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.09	0.33
tblVehicleEF	LDT2	5.6410e-003	3.8950e-003
tblVehicleEF	LDT2	5.1630e-003	0.06
tblVehicleEF	LDT2	0.72	0.87
tblVehicleEF	LDT2	1.09	2.20
tblVehicleEF	LDT2	372.26	342.39
tblVehicleEF	LDT2	76.85	67.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.7270e-003	3.3870e-003

tblVehicleEF	LDT2	7.8600e-004	6.6400e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	5.1590e-003	3.5220e-003
tblVehicleEF	LDT2	6.2490e-003	0.07
tblVehicleEF	LDT2	0.63	0.76
tblVehicleEF	LDT2	1.41	2.86
tblVehicleEF	LDT2	349.13	325.54
tblVehicleEF	LDT2	76.85	68.36
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.28
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	3.4950e-003	3.2210e-003
tblVehicleEF	LDT2	7.9200e-004	6.7700e-004

tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LHD1	4.6610e-003	4.6580e-003
tblVehicleEF	LHD1	0.02	9.0720e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.84
tblVehicleEF	LHD1	2.19	0.96
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.79
tblVehicleEF	LHD1	27.83	10.50
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.05
tblVehicleEF	LHD1	0.85	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003

tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.1900e-004	1.0400e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6680e-003
tblVehicleEF	LHD1	0.02	9.2260e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	2.07	0.91
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.82
tblVehicleEF	LHD1	27.83	10.41
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.42	1.01

tblVehicleEF	LHD1	0.81	0.27
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5190e-003
tblVehicleEF	LHD1	3.1700e-004	1.0300e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6540e-003

tblVehicleEF	LHD1	0.02	9.0050e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.83
tblVehicleEF	LHD1	2.25	0.98
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.78
tblVehicleEF	LHD1	27.83	10.54
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.04
tblVehicleEF	LHD1	0.87	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005

tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.2000e-004	1.0400e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.24	0.08
tblVehicleEF	LHD2	3.3670e-003	3.1630e-003
tblVehicleEF	LHD2	7.3190e-003	7.0780e-003
tblVehicleEF	LHD2	6.3840e-003	8.1370e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.64
tblVehicleEF	LHD2	1.07	0.58
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.02
tblVehicleEF	LHD2	23.94	7.63
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.80	1.03
tblVehicleEF	LHD2	0.44	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1690e-003
tblVehicleEF	LHD2	7.3940e-003	7.1360e-003
tblVehicleEF	LHD2	6.1320e-003	7.8000e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.65
tblVehicleEF	LHD2	1.02	0.55
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.03
tblVehicleEF	LHD2	23.94	7.57

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.99
tblVehicleEF	LHD2	0.42	0.17
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5800e-004	7.5000e-005
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.09	0.04

tblVehicleEF	LHD2	3.3670e-003	3.1600e-003
tblVehicleEF	LHD2	7.2860e-003	7.0520e-003
tblVehicleEF	LHD2	6.4980e-003	8.2880e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.55	0.64
tblVehicleEF	LHD2	1.10	0.59
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.01
tblVehicleEF	LHD2	23.94	7.65
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.79	1.02
tblVehicleEF	LHD2	0.45	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004

tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.15	20.36
tblVehicleEF	MCY	9.73	8.62
tblVehicleEF	MCY	182.50	220.59
tblVehicleEF	MCY	45.45	60.38
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.41	2.43
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.10	1.86

tblVehicleEF	MCY	2.2260e-003	2.1830e-003
tblVehicleEF	MCY	6.7500e-004	5.9700e-004
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.99	3.00
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.29	2.02
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	19.19	19.39
tblVehicleEF	MCY	8.77	7.73
tblVehicleEF	MCY	182.50	218.78
tblVehicleEF	MCY	45.45	58.13
tblVehicleEF	MCY	1.04	1.04
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.34	2.35
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2080e-003	2.1650e-003

tblVehicleEF	MCY	6.5100e-004	5.7500e-004
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.90	2.91
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	20.81	21.03
tblVehicleEF	MCY	10.22	9.08
tblVehicleEF	MCY	182.50	221.81
tblVehicleEF	MCY	45.45	61.49
tblVehicleEF	MCY	1.17	1.17
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	2.45	2.47
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	2.2370e-003	2.1950e-003
tblVehicleEF	MCY	6.8700e-004	6.0900e-004

tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	3.04	3.05
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.43	2.15
tblVehicleEF	MDV	8.8620e-003	4.0850e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.94	0.82
tblVehicleEF	MDV	2.31	2.98
tblVehicleEF	MDV	472.46	396.95
tblVehicleEF	MDV	101.95	81.91
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.7270e-003	3.9230e-003
tblVehicleEF	MDV	1.0600e-003	8.1100e-004
tblVehicleEF	MDV	0.05	0.07

tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.19	0.41
tblVehicleEF	MDV	9.5090e-003	4.4250e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	0.92
tblVehicleEF	MDV	1.92	2.45
tblVehicleEF	MDV	498.02	411.39
tblVehicleEF	MDV	101.95	80.91
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.19	0.29
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	4.9840e-003	4.0660e-003
tblVehicleEF	MDV	1.0530e-003	8.0100e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15

tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	8.7270e-003	4.0050e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.92	0.81
tblVehicleEF	MDV	2.49	3.21
tblVehicleEF	MDV	467.83	394.33
tblVehicleEF	MDV	101.95	82.33
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	4.6810e-003	3.8980e-003
tblVehicleEF	MDV	1.0630e-003	8.1500e-004
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08

tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.20	0.43
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.63	1.44
tblVehicleEF	MH	5.98	2.11
tblVehicleEF	MH	1,229.84	1,578.48
tblVehicleEF	MH	59.91	18.87
tblVehicleEF	MH	1.50	1.64
tblVehicleEF	MH	0.88	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0300e-004	1.8700e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07

tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.16	0.12
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.72	1.48
tblVehicleEF	MH	5.59	1.98
tblVehicleEF	MH	1,229.84	1,578.55
tblVehicleEF	MH	59.91	18.64
tblVehicleEF	MH	1.42	1.56
tblVehicleEF	MH	0.83	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.33	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9700e-004	1.8400e-004
tblVehicleEF	MH	1.33	1.10

tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.60	1.42
tblVehicleEF	MH	6.17	2.18
tblVehicleEF	MH	1,229.84	1,578.45
tblVehicleEF	MH	59.91	18.98
tblVehicleEF	MH	1.50	1.63
tblVehicleEF	MH	0.90	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0700e-004	1.8800e-004

tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.39	0.11
tblVehicleEF	MHD	0.02	4.0650e-003
tblVehicleEF	MHD	4.2710e-003	2.3930e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	0.34	0.31
tblVehicleEF	MHD	5.31	1.27
tblVehicleEF	MHD	143.80	80.44
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.83
tblVehicleEF	MHD	0.42	0.50
tblVehicleEF	MHD	1.14	1.40
tblVehicleEF	MHD	11.05	1.63
tblVehicleEF	MHD	1.5900e-004	4.7800e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.5200e-004	4.5700e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02

tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.3830e-003	7.6300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5600e-004	1.0700e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.02	3.8640e-003
tblVehicleEF	MHD	4.3360e-003	2.4460e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.24	0.36
tblVehicleEF	MHD	0.35	0.31
tblVehicleEF	MHD	4.99	1.20
tblVehicleEF	MHD	152.31	80.75
tblVehicleEF	MHD	1,192.51	1,110.80
tblVehicleEF	MHD	56.35	10.70
tblVehicleEF	MHD	0.43	0.50
tblVehicleEF	MHD	1.10	1.34
tblVehicleEF	MHD	11.01	1.63
tblVehicleEF	MHD	1.3400e-004	4.0600e-004

tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.2800e-004	3.8900e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.4640e-003	7.6600e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	1.0600e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	0.02	4.3540e-003
tblVehicleEF	MHD	4.2430e-003	2.3680e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.46	0.50
tblVehicleEF	MHD	0.34	0.30

tblVehicleEF	MHD	5.46	1.31
tblVehicleEF	MHD	132.03	80.00
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.88
tblVehicleEF	MHD	0.40	0.51
tblVehicleEF	MHD	1.14	1.39
tblVehicleEF	MHD	11.07	1.64
tblVehicleEF	MHD	1.9400e-004	5.7700e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.8500e-004	5.5200e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2720e-003	7.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5900e-004	1.0800e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	5.3900e-004	3.2400e-004

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	OBUS	0.01	8.7080e-003
tblVehicleEF	OBUS	9.2660e-003	9.7640e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.59
tblVehicleEF	OBUS	0.60	1.09
tblVehicleEF	OBUS	5.69	2.71
tblVehicleEF	OBUS	97.15	83.74
tblVehicleEF	OBUS	1,321.20	1,532.41
tblVehicleEF	OBUS	68.99	20.78
tblVehicleEF	OBUS	0.20	0.32
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.24	0.75
tblVehicleEF	OBUS	1.9000e-005	1.0700e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.8000e-005	1.0300e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.32

tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	9.3900e-004	7.9800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9000e-004	2.0600e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.7890e-003
tblVehicleEF	OBUS	9.4730e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.58
tblVehicleEF	OBUS	0.61	1.12
tblVehicleEF	OBUS	5.32	2.54
tblVehicleEF	OBUS	101.91	82.81
tblVehicleEF	OBUS	1,321.20	1,532.46
tblVehicleEF	OBUS	68.99	20.48
tblVehicleEF	OBUS	0.21	0.30
tblVehicleEF	OBUS	0.81	1.18
tblVehicleEF	OBUS	2.19	0.74
tblVehicleEF	OBUS	1.6000e-005	9.5000e-005
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.5000e-005	9.1000e-005

tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.8400e-004	7.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8300e-004	2.0300e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6110e-003
tblVehicleEF	OBUS	9.1750e-003	9.6490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.60
tblVehicleEF	OBUS	0.60	1.08
tblVehicleEF	OBUS	5.86	2.80
tblVehicleEF	OBUS	90.56	85.02
tblVehicleEF	OBUS	1,321.20	1,532.39

tblVehicleEF	OBUS	68.99	20.92
tblVehicleEF	OBUS	0.20	0.34
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.26	0.76
tblVehicleEF	OBUS	2.3000e-005	1.2400e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	8.7600e-004	8.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.0700e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.39	0.14

tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.4420e-003
tblVehicleEF	SBUS	0.08	2.7370e-003
tblVehicleEF	SBUS	6.51	1.26
tblVehicleEF	SBUS	0.93	0.75
tblVehicleEF	SBUS	7.02	0.43
tblVehicleEF	SBUS	1,202.36	332.94
tblVehicleEF	SBUS	1,104.05	1,097.57
tblVehicleEF	SBUS	42.89	2.06
tblVehicleEF	SBUS	9.97	4.02
tblVehicleEF	SBUS	4.09	7.31
tblVehicleEF	SBUS	14.11	0.63
tblVehicleEF	SBUS	9.4890e-003	5.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	9.0780e-003	4.9200e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.36	0.02

tblVehicleEF	SBUS	0.01	3.1570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5000e-004	2.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.39	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.5710e-003
tblVehicleEF	SBUS	0.07	2.3800e-003
tblVehicleEF	SBUS	6.39	1.21
tblVehicleEF	SBUS	0.95	0.77
tblVehicleEF	SBUS	5.49	0.34
tblVehicleEF	SBUS	1,261.22	344.72
tblVehicleEF	SBUS	1,104.05	1,097.59
tblVehicleEF	SBUS	42.89	1.91
tblVehicleEF	SBUS	10.29	4.13
tblVehicleEF	SBUS	3.94	7.04
tblVehicleEF	SBUS	14.07	0.63
tblVehicleEF	SBUS	7.9990e-003	4.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	7.6530e-003	4.1540e-003

tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	0.77	0.13
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.11	0.13
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.31	0.01
tblVehicleEF	SBUS	0.01	3.2680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2400e-004	1.9000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	1.11	0.18
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.34	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.3810e-003
tblVehicleEF	SBUS	0.08	2.9140e-003
tblVehicleEF	SBUS	6.68	1.32
tblVehicleEF	SBUS	0.92	0.75
tblVehicleEF	SBUS	7.78	0.48
tblVehicleEF	SBUS	1,121.06	316.67

tblVehicleEF	SBUS	1,104.05	1,097.55
tblVehicleEF	SBUS	42.89	2.14
tblVehicleEF	SBUS	9.53	3.87
tblVehicleEF	SBUS	4.07	7.28
tblVehicleEF	SBUS	14.12	0.63
tblVehicleEF	SBUS	0.01	6.2490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	0.01	5.9780e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.38	0.02
tblVehicleEF	SBUS	0.01	3.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6300e-004	2.1000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004

tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.41	0.02
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.16	1.23
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.21
tblVehicleEF	UBUS	6.89	0.40
tblVehicleEF	UBUS	13.92	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2970e-003	1.4100e-004

tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.69	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.04	0.01
tblVehicleEF	UBUS	7.43	38.17
tblVehicleEF	UBUS	6.11	1.06
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	13.93
tblVehicleEF	UBUS	6.64	0.40
tblVehicleEF	UBUS	13.86	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	8.6180e-003	0.02

tblVehicleEF	UBUS	0.58	0.05
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2790e-003	1.3800e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.02
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.63	1.31
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.34
tblVehicleEF	UBUS	6.85	0.40
tblVehicleEF	UBUS	13.94	0.14
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003

tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.66	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.3050e-003	1.4200e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	2.23	5.00
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.72	0.07
tblVehicleTrips	HO_TTP	39.60	39.50
tblVehicleTrips	HS_TTP	18.80	18.90
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	77.00	81.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	38.00	82.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	ST_TR	7.16	6.00

tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	19.24
tblVehicleTrips	ST_TR	158.37	141.10
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	94.36	87.82
tblVehicleTrips	ST_TR	42.04	33.95
tblVehicleTrips	SU_TR	6.07	6.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	19.24
tblVehicleTrips	SU_TR	131.84	141.10
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	72.16	87.82
tblVehicleTrips	SU_TR	20.43	33.95
tblVehicleTrips	WD_TR	6.59	6.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	19.24
tblVehicleTrips	WD_TR	127.15	141.10
tblVehicleTrips	WD_TR	8.17	10.00
tblVehicleTrips	WD_TR	89.95	87.82
tblVehicleTrips	WD_TR	44.32	33.95

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	7.9832	95.2312	70.4069	0.1985	4.5799	3.2660	7.8459	0.9670	3.0128	3.9798	0.0000	19,871.0329	19,871.0329	4.4854	0.0000	19,983.1687
2022	14.0030	82.5928	68.6817	0.1972	7.3501	2.7684	10.1185	1.6470	2.5547	4.2017	0.0000	19,748.2293	19,748.2293	4.4771	0.0000	19,860.1568
Maximum	**14.0030**	**95.2312**	**70.4069**	**0.1985**	**7.3501**	**3.2660**	**10.1185**	**1.6470**	**3.0128**	**4.2017**	**0.0000**	**19,871.0329**	**19,871.0329**	**4.4854**	**0.0000**	**19,983.1687**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	7.9832	95.2312	70.4069	0.1985	3.5673	3.2660	6.8332	0.8559	3.0128	3.8686	0.0000	19,871.0329	19,871.0329	4.4854	0.0000	19,983.1687
2022	14.0030	82.5928	68.6817	0.1972	6.3374	2.7684	9.1058	1.5358	2.5547	4.0905	0.0000	19,748.2293	19,748.2293	4.4771	0.0000	19,860.1568
Maximum	**14.0030**	**95.2312**	**70.4069**	**0.1985**	**6.3374**	**3.2660**	**9.1058**	**1.5358**	**3.0128**	**4.0905**	**0.0000**	**19,871.0329**	**19,871.0329**	**4.4854**	**0.0000**	**19,983.1687**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.98**	**0.00**	**11.27**	**8.51**	**0.00**	**2.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	147.0004	2.8991	185.3642	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8546	3,719.3973	2.4227	0.2053	3,841.1558
Energy	0.0963	0.8581	0.6104	5.2500e-003		0.0665	0.0665		0.0665	0.0665		1,050.0863	1,050.0863	0.0201	0.0193	1,056.3264
Mobile	4.2230	6.4149	34.1941	0.1031	10.0075	0.0807	10.0882	2.6702	0.0754	2.7456		10,625.1545	10,625.1545	0.6644		10,641.7653
Total	**151.3196**	**10.1721**	**220.1686**	**0.4305**	**10.0075**	**25.0881**	**35.0956**	**2.6702**	**25.0828**	**27.7530**	**2,610.5427**	**12,784.0954**	**15,394.6381**	**3.1073**	**0.2246**	**15,539.2476**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3075	1.4931	8.3854	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5605	1,805.5605	0.0479	0.0328	1,816.5468
Energy	0.0803	0.7160	0.5118	4.3800e-003		0.0555	0.0555		0.0555	0.0555		875.7269	875.7269	0.0168	0.0161	880.9309
Mobile	4.2230	6.4149	34.1941	0.1031	10.0075	0.0807	10.0882	2.6702	0.0754	2.7456		10,625.1545	10,625.1545	0.6644		10,641.7653
Total	**7.6107**	**8.6240**	**43.0912**	**0.1168**	**10.0075**	**0.2927**	**10.3001**	**2.6702**	**0.2874**	**2.9576**	**0.0000**	**13,306.4419**	**13,306.4419**	**0.7292**	**0.0489**	**13,339.2430**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**94.97**	**15.22**	**80.43**	**72.86**	**0.00**	**98.83**	**70.65**	**0.00**	**98.85**	**89.34**	**100.00**	**-4.09**	**13.56**	**76.53**	**78.23**	**14.16**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/30/2021	5	22	
2	Grading	Grading	9/16/2021	1/31/2022	5	98	
3	Building Construction	Building Construction	11/2/2021	8/31/2022	5	217	
4	Architectural Coating	Architectural Coating	5/22/2022	11/22/2022	5	132	
5	Paving	Paving	10/5/2022	12/5/2022	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 147

Acres of Paving: 0.38

Residential Indoor: 148,400; Residential Outdoor: 49,467; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42

Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Rollers	1	8.00	80	0.38
Grading	Rough Terrain Forklifts	2	8.00	100	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	3	8.00	172	0.42
Building Construction	Paving Equipment	1	8.00	132	0.36
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Paving	Graders	1	8.00	187	0.41
Paving	Off-Highway Trucks	4	8.00	402	0.38
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	203	0.36
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	50.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	129.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4983	0.0000	0.4983	0.0755	0.0000	0.0755			0.0000			0.0000
Off-Road	2.8598	28.2801	23.4293	0.0449		1.3349	1.3349		1.2586	1.2586		4,320.0239	4,320.0239	1.0706		4,346.7889
Total	**2.8598**	**28.2801**	**23.4293**	**0.0449**	**0.4983**	**1.3349**	**1.8332**	**0.0755**	**1.2586**	**1.3341**		**4,320.0239**	**4,320.0239**	**1.0706**		**4,346.7889**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0169	0.5826	0.1425	1.7500e-003	0.0397	1.7800e-003	0.0415	0.0109	1.7000e-003	0.0126		192.2001	192.2001	0.0170		192.6245
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	**0.0791**	**0.6230**	**0.6200**	**3.2200e-003**	**0.1876**	**2.8000e-003**	**0.1904**	**0.0501**	**2.6400e-003**	**0.0527**		**338.7994**	**338.7994**	**0.0212**		**339.3285**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1943	0.0000	0.1943	0.0294	0.0000	0.0294			0.0000			0.0000
Off-Road	2.8598	28.2801	23.4293	0.0449		1.3349	1.3349		1.2586	1.2586	0.0000	4,320.0239	4,320.0239	1.0706		4,346.7889
Total	**2.8598**	**28.2801**	**23.4293**	**0.0449**	**0.1943**	**1.3349**	**1.5292**	**0.0294**	**1.2586**	**1.2880**	**0.0000**	**4,320.0239**	**4,320.0239**	**1.0706**		**4,346.7889**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0169	0.5826	0.1425	1.7500e-003	0.0397	1.7800e-003	0.0415	0.0109	1.7000e-003	0.0126		192.2001	192.2001	0.0170		192.6245
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	**0.0791**	**0.6230**	**0.6200**	**3.2200e-003**	**0.1876**	**2.8000e-003**	**0.1904**	**0.0501**	**2.6400e-003**	**0.0527**		**338.7994**	**338.7994**	**0.0212**		**339.3285**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6602	0.0000	1.6602	0.1823	0.0000	0.1823			0.0000			0.0000
Off-Road	3.9173	44.1100	32.5945	0.0782		1.7273	1.7273		1.5929	1.5929		7,506.1590	7,506.1590	2.3908		7,565.9300
Total	**3.9173**	**44.1100**	**32.5945**	**0.0782**	**1.6602**	**1.7273**	**3.3874**	**0.1823**	**1.5929**	**1.7752**		**7,506.1590**	**7,506.1590**	**2.3908**		**7,565.9300**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4583	15.8246	3.8714	0.0476	1.3013	0.0483	1.3496	0.3503	0.0462	0.3965		5,220.7814	5,220.7814	0.4612		5,232.3108
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1384	0.0899	1.0610	3.2700e-003	0.3286	2.2700e-003	0.3309	0.0872	2.0900e-003	0.0893		325.7764	325.7764	9.3000e-003		326.0088
Total	**0.5966**	**15.9145**	**4.9323**	**0.0509**	**1.6299**	**0.0506**	**1.6805**	**0.4374**	**0.0483**	**0.4857**		**5,546.5577**	**5,546.5577**	**0.4705**		**5,558.3196**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6475	0.0000	0.6475	0.0711	0.0000	0.0711			0.0000			0.0000
Off-Road	3.9173	44.1100	32.5945	0.0782		1.7273	1.7273		1.5929	1.5929	0.0000	7,506.1590	7,506.1590	2.3908		7,565.9300
Total	**3.9173**	**44.1100**	**32.5945**	**0.0782**	**0.6475**	**1.7273**	**2.3748**	**0.0711**	**1.5929**	**1.6640**	**0.0000**	**7,506.1590**	**7,506.1590**	**2.3908**		**7,565.9300**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4583	15.8246	3.8714	0.0476	1.3013	0.0483	1.3496	0.3503	0.0462	0.3965		5,220.7814	5,220.7814	0.4612		5,232.3108
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1384	0.0899	1.0610	3.2700e-003	0.3286	2.2700e-003	0.3309	0.0872	2.0900e-003	0.0893		325.7764	325.7764	9.3000e-003		326.0088
Total	**0.5966**	**15.9145**	**4.9323**	**0.0509**	**1.6299**	**0.0506**	**1.6805**	**0.4374**	**0.0483**	**0.4857**		**5,546.5577**	**5,546.5577**	**0.4705**		**5,558.3196**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6602	0.0000	1.6602	0.1823	0.0000	0.1823			0.0000			0.0000
Off-Road	3.4831	37.0839	31.5540	0.0782		1.4531	1.4531		1.3406	1.3406		7,510.5632	7,510.5632	2.3923		7,570.3698
Total	**3.4831**	**37.0839**	**31.5540**	**0.0782**	**1.6602**	**1.4531**	**3.1132**	**0.1823**	**1.3406**	**1.5229**		**7,510.5632**	**7,510.5632**	**2.3923**		**7,570.3698**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4303	14.4810	3.8476	0.0469	4.0715	0.0409	4.1124	1.0302	0.0391	1.0693		5,152.6747	5,152.6747	0.4566		5,164.0905
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1308	0.0820	0.9866	3.1500e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		313.8239	313.8239	8.5200e-003		314.0370
Total	**0.5611**	**14.5630**	**4.8341**	**0.0500**	**4.4001**	**0.0431**	**4.4432**	**1.1174**	**0.0412**	**1.1585**		**5,466.4986**	**5,466.4986**	**0.4652**		**5,478.1275**

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6475	0.0000	0.6475	0.0711	0.0000	0.0711			0.0000			0.0000
Off-Road	3.4831	37.0839	31.5540	0.0782		1.4531	1.4531		1.3406	1.3406	0.0000	7,510.5632	7,510.5632	2.3923		7,570.3698
Total	**3.4831**	**37.0839**	**31.5540**	**0.0782**	**0.6475**	**1.4531**	**2.1005**	**0.0711**	**1.3406**	**1.4117**	**0.0000**	**7,510.5632**	**7,510.5632**	**2.3923**		**7,570.3698**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4303	14.4810	3.8476	0.0469	4.0715	0.0409	4.1124	1.0302	0.0391	1.0693		5,152.6747	5,152.6747	0.4566		5,164.0905
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1308	0.0820	0.9866	3.1500e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		313.8239	313.8239	8.5200e-003		314.0370
Total	**0.5611**	**14.5630**	**4.8341**	**0.0500**	**4.4001**	**0.0431**	**4.4432**	**1.1174**	**0.0412**	**1.1585**		**5,466.4986**	**5,466.4986**	**0.4652**		**5,478.1275**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9203	31.4546	28.5762	0.0497		1.4735	1.4735		1.3579	1.3579		4,777.0909	4,777.0909	1.5234		4,815.1746
Total	**2.9203**	**31.4546**	**28.5762**	**0.0497**		**1.4735**	**1.4735**		**1.3579**	**1.3579**		**4,777.0909**	**4,777.0909**	**1.5234**		**4,815.1746**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1028	3.4622	0.8823	9.2100e-003	0.2302	7.2700e-003	0.2374	0.0663	6.9500e-003	0.0732		990.5966	990.5966	0.0708		992.3662
Worker	0.4462	0.2899	3.4216	0.0105	1.0597	7.3200e-003	1.0670	0.2811	6.7400e-003	0.2878		1,050.6287	1,050.6287	0.0300		1,051.3783
Total	**0.5490**	**3.7521**	**4.3039**	**0.0198**	**1.2899**	**0.0146**	**1.3045**	**0.3473**	**0.0137**	**0.3610**		**2,041.2253**	**2,041.2253**	**0.1008**		**2,043.7445**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9203	31.4546	28.5762	0.0497		1.4735	1.4735		1.3579	1.3579	0.0000	4,777.0909	4,777.0909	1.5234		4,815.1746
Total	**2.9203**	**31.4546**	**28.5762**	**0.0497**		**1.4735**	**1.4735**		**1.3579**	**1.3579**	**0.0000**	**4,777.0909**	**4,777.0909**	**1.5234**		**4,815.1746**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1028	3.4622	0.8823	9.2100e-003	0.2302	7.2700e-003	0.2374	0.0663	6.9500e-003	0.0732		990.5966	990.5966	0.0708		992.3662
Worker	0.4462	0.2899	3.4216	0.0105	1.0597	7.3200e-003	1.0670	0.2811	6.7400e-003	0.2878		1,050.6287	1,050.6287	0.0300		1,051.3783
Total	**0.5490**	**3.7521**	**4.3039**	**0.0198**	**1.2899**	**0.0146**	**1.3045**	**0.3473**	**0.0137**	**0.3610**		**2,041.2253**	**2,041.2253**	**0.1008**		**2,043.7445**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6202	27.4096	28.2762	0.0497		1.2588	1.2588		1.1604	1.1604		4,777.7987	4,777.7987	1.5236		4,815.8881
Total	**2.6202**	**27.4096**	**28.2762**	**0.0497**		**1.2588**	**1.2588**		**1.1604**	**1.1604**		**4,777.7987**	**4,777.7987**	**1.5236**		**4,815.8881**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0956	3.2719	0.8356	9.1100e-003	0.2302	6.2600e-003	0.2364	0.0663	5.9800e-003	0.0722		981.2868	981.2868	0.0686		983.0022
Worker	0.4218	0.2644	3.1817	0.0102	1.0597	7.1600e-003	1.0669	0.2811	6.6000e-003	0.2877		1,012.0821	1,012.0821	0.0275		1,012.7692
Total	**0.5174**	**3.5363**	**4.0173**	**0.0193**	**1.2899**	**0.0134**	**1.3033**	**0.3473**	**0.0126**	**0.3599**		**1,993.3689**	**1,993.3689**	**0.0961**		**1,995.7714**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6202	27.4096	28.2762	0.0497		1.2588	1.2588		1.1604	1.1604	0.0000	4,777.7986	4,777.7986	1.5236		4,815.8881
Total	**2.6202**	**27.4096**	**28.2762**	**0.0497**		**1.2588**	**1.2588**		**1.1604**	**1.1604**	**0.0000**	**4,777.7986**	**4,777.7986**	**1.5236**		**4,815.8881**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0956	3.2719	0.8356	9.1100e-003	0.2302	6.2600e-003	0.2364	0.0663	5.9800e-003	0.0722		981.2868	981.2868	0.0686		983.0022
Worker	0.4218	0.2644	3.1817	0.0102	1.0597	7.1600e-003	1.0669	0.2811	6.6000e-003	0.2877		1,012.0821	1,012.0821	0.0275		1,012.7692
Total	**0.5174**	**3.5363**	**4.0173**	**0.0193**	**1.2899**	**0.0134**	**1.3033**	**0.3473**	**0.0126**	**0.3599**		**1,993.3689**	**1,993.3689**	**0.0961**		**1,995.7714**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**9.9066**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0850	0.0533	0.6413	2.0500e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3300e-003	0.0580		203.9855	203.9855	5.5400e-003		204.1240
Total	**0.0850**	**0.0533**	**0.6413**	**2.0500e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3300e-003**	**0.0580**		**203.9855**	**203.9855**	**5.5400e-003**		**204.1240**

3.5 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**9.9066**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0850	0.0533	0.6413	2.0500e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3300e-003	0.0580		203.9855	203.9855	5.5400e-003		204.1240
Total	**0.0850**	**0.0533**	**0.6413**	**2.0500e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3300e-003**	**0.0580**		**203.9855**	**203.9855**	**5.5400e-003**		**204.1240**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8809	34.5904	28.2497	0.0879		1.3463	1.3463		1.2426	1.2426		8,443.0988	8,443.0988	2.6924		8,510.4080
Paving	0.0226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.9035**	**34.5904**	**28.2497**	**0.0879**		**1.3463**	**1.3463**		**1.2426**	**1.2426**		**8,443.0988**	**8,443.0988**	**2.6924**		**8,510.4080**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1079	0.0676	0.8139	2.6000e-003	0.2711	1.8300e-003	0.2729	0.0719	1.6900e-003	0.0736		258.9047	258.9047	7.0300e-003		259.0805
Total	**0.1079**	**0.0676**	**0.8139**	**2.6000e-003**	**0.2711**	**1.8300e-003**	**0.2729**	**0.0719**	**1.6900e-003**	**0.0736**		**258.9047**	**258.9047**	**7.0300e-003**		**259.0805**

3.6 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8809	34.5904	28.2497	0.0879		1.3463	1.3463		1.2426	1.2426	0.0000	8,443.0988	8,443.0988	2.6924		8,510.4080
Paving	0.0226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.9035**	**34.5904**	**28.2497**	**0.0879**		**1.3463**	**1.3463**		**1.2426**	**1.2426**	**0.0000**	**8,443.0988**	**8,443.0988**	**2.6924**		**8,510.4080**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1079	0.0676	0.8139	2.6000e-003	0.2711	1.8300e-003	0.2729	0.0719	1.6900e-003	0.0736		258.9047	258.9047	7.0300e-003		259.0805
Total	**0.1079**	**0.0676**	**0.8139**	**2.6000e-003**	**0.2711**	**1.8300e-003**	**0.2729**	**0.0719**	**1.6900e-003**	**0.0736**		**258.9047**	**258.9047**	**7.0300e-003**		**259.0805**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.2230	6.4149	34.1941	0.1031	10.0075	0.0807	10.0882	2.6702	0.0754	2.7456		10,625.1545	10,625.1545	0.6644		10,641.7653
Unmitigated	4.2230	6.4149	34.1941	0.1031	10.0075	0.0807	10.0882	2.6702	0.0754	2.7456		10,625.1545	10,625.1545	0.6644		10,641.7653

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,664,152	1,664,152
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	70.03	70.03	70.03	175,445	175,445
High Turnover (Sit Down Restaurant)	550.29	550.29	550.29	1,274,735	1,274,735
Hotel	300.00	300.00	300.00	603,293	603,293
Quality Restaurant	187.06	187.06	187.06	445,494	445,494
Strip Mall	291.29	291.29	291.29	568,918	568,918
Parking Lot	0.00	0.00	0.00		
Total	1,962.67	1,962.67	1,962.67	4,732,038	4,732,038

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.90	39.50	89	11	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	81	19	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	82	18	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	60	40	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
City Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Enclosed Parking with Elevator	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
High Turnover (Sit Down Restaurant)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Hotel	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Quality Restaurant	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Strip Mall	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0803	0.7160	0.5118	4.3800e-003		0.0555	0.0555		0.0555	0.0555		875.7269	875.7269	0.0168	0.0161	880.9309
NaturalGas Unmitigated	0.0963	0.8581	0.6104	5.2500e-003		0.0665	0.0665		0.0665	0.0665		1,050.0863	1,050.0863	0.0201	0.0193	1,056.3264

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2890.95	0.0312	0.2664	0.1134	1.7000e-003		0.0215	0.0215		0.0215	0.0215		340.1115	340.1115	6.5200e-003	6.2400e-003	342.1327
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	201.236	2.1700e-003	0.0197	0.0166	1.2000e-004		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		23.6749	23.6749	4.5000e-004	4.3000e-004	23.8155
High Turnover (Sit Down Restaurant)	1865.63	0.0201	0.1829	0.1536	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.4855	219.4855	4.2100e-003	4.0200e-003	220.7898
Hotel	2895.95	0.0312	0.2839	0.2385	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.7002	340.7002	6.5300e-003	6.2500e-003	342.7248
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1019.53	0.0110	0.1000	0.0840	6.0000e-004		7.6000e-003	7.6000e-003		7.6000e-003	7.6000e-003		119.9442	119.9442	2.3000e-003	2.2000e-003	120.6570
Strip Mall	52.4447	5.7000e-004	5.1400e-003	4.3200e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1700	6.1700	1.2000e-004	1.1000e-004	6.2066
Total		**0.0963**	**0.8581**	**0.6104**	**5.2500e-003**		**0.0665**	**0.0665**		**0.0665**	**0.0665**		**1,050.0863**	**1,050.0863**	**0.0201**	**0.0193**	**1,056.3265**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2.34661	0.0253	0.2163	0.0920	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.0720	276.0720	5.2900e-003	5.0600e-003	277.7125
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.153424	1.6500e-003	0.0150	0.0126	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003		18.0499	18.0499	3.5000e-004	3.3000e-004	18.1571
High Turnover (Sit Down Restaurant)	1.75034	0.0189	0.1716	0.1442	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.9222	205.9222	3.9500e-003	3.7800e-003	207.1459
Hotel	2.19238	0.0236	0.2149	0.1806	1.2900e-003		0.0163	0.0163		0.0163	0.0163		257.9270	257.9270	4.9400e-003	4.7300e-003	259.4598
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.956523	0.0103	0.0938	0.0788	5.6000e-004		7.1300e-003	7.1300e-003		7.1300e-003	7.1300e-003		112.5321	112.5321	2.1600e-003	2.0600e-003	113.2009
Strip Mall	0.0444016	4.8000e-004	4.3500e-003	3.6600e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2237	5.2237	1.0000e-004	1.0000e-004	5.2548
Total		**0.0803**	**0.7160**	**0.5118**	**4.3800e-003**		**0.0555**	**0.0555**		**0.0555**	**0.0555**		**875.7269**	**875.7269**	**0.0168**	**0.0161**	**880.9309**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3075	1.4931	8.3854	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5605	1,805.5605	0.0479	0.0328	1,816.5468
Unmitigated	147.0004	2.8991	185.3642	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8546	3,719.3973	2.4227	0.2053	3,841.1558

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3817					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	143.8571	2.8094	177.5760	0.3217		24.8979	24.8979		24.8979	24.8979	2,610.5427	1,094.8235	3,705.3662	2.4091	0.2053	3,826.7847
Landscaping	0.2366	0.0897	7.7882	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0311	14.0311	0.0136		14.3712
Total	**147.0004**	**2.8991**	**185.3642**	**0.3221**		**24.9409**	**24.9409**		**24.9409**	**24.9409**	**2,610.5427**	**1,108.8546**	**3,719.3973**	**2.4227**	**0.2053**	**3,841.1558**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3817					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1642	1.4034	0.5972	8.9600e-003		0.1135	0.1135		0.1135	0.1135	0.0000	1,791.5294	1,791.5294	0.0343	0.0328	1,802.1756
Landscaping	0.2366	0.0897	7.7882	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0311	14.0311	0.0136		14.3712
Total	**3.3074**	**1.4931**	**8.3854**	**9.3700e-003**		**0.1565**	**0.1565**		**0.1565**	**0.1565**	**0.0000**	**1,805.5605**	**1,805.5605**	**0.0479**	**0.0328**	**1,816.5468**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Fenway North Coast Highway 101

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
City Park	0.65	Acre	0.65	28,200.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	30.00	Room	0.50	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	2.19	73,284.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - per traffic study and site plan; city park = open space; based on site plan, 42 surface parking spaces, remaining subterranaen; total lot 3.8 acres

Construction Phase - per construction questionnaire

Off-road Equipment -

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Demolition -

Grading -

Architectural Coating - SDAPCD Rule 67.0.1 Non-flat coatings

Vehicle Trips - based on traffic study; pass-by trips incorporated in trip rate, so set to 0%

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Area Coating - SDAPCD Rule 67.0.1 Non-flat coatings

Construction Off-road Equipment Mitigation - dust control implemented by applicant

Area Mitigation - no wood-burning hearth

Energy Mitigation - 2019 Title 24. Applicant will install high efficiency lighting

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00

tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaCoating	Area_Parking	5697	4989
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	98.00
tblConstructionPhase	NumDays	18.00	44.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.4350e-003	0.00
tblFleetMix	MCY	5.9380e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	1.0560e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9340e-003	0.00
tblFleetMix	SBUS	7.5700e-004	0.00
tblFleetMix	UBUS	1.8880e-003	0.00
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00

tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	28,200.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	43,560.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	73,284.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	1.00	0.50
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	2.19
tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	36.00	34.00
tblTripsAndVMT	WorkerTripNumber	133.00	129.00
tblTripsAndVMT	WorkerTripNumber	27.00	26.00
tblTripsAndVMT	WorkerTripNumber	38.00	33.00
tblVehicleEF	HHD	0.59	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.74	6.66
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.37	9.0030e-003
tblVehicleEF	HHD	4,504.81	1,118.02
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	15.07	5.75
tblVehicleEF	HHD	1.98	2.66
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.1570e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.0200e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02

tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.43	0.45
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.51	0.52
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.56	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.27	6.57
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.17	8.4620e-003
tblVehicleEF	HHD	4,772.44	1,105.76
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.09

tblVehicleEF	HHD	15.55	5.50
tblVehicleEF	HHD	1.91	2.56
tblVehicleEF	HHD	19.51	2.38
tblVehicleEF	HHD	0.01	2.7490e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	9.6380e-003	2.6300e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.40	0.48
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.49	0.55
tblVehicleEF	HHD	1.4300e-004	1.0000e-005

tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.64	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	2.40	6.80
tblVehicleEF	HHD	1.09	0.48
tblVehicleEF	HHD	3.46	9.2430e-003
tblVehicleEF	HHD	4,135.22	1,134.96
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	14.40	6.09
tblVehicleEF	HHD	1.98	2.65
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.7200e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.5590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004

tblVehicleEF	HHD	0.46	0.41
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.56	0.48
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	6.1170e-003	2.0310e-003
tblVehicleEF	LDA	7.4160e-003	0.05
tblVehicleEF	LDA	0.58	0.53
tblVehicleEF	LDA	1.39	2.07
tblVehicleEF	LDA	248.05	253.20
tblVehicleEF	LDA	54.17	51.49
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003

tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	7.5890e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.10	0.20
tblVehicleEF	LDA	2.4840e-003	2.5050e-003
tblVehicleEF	LDA	5.6600e-004	5.1000e-004
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	6.5890e-003	2.2110e-003
tblVehicleEF	LDA	6.4700e-003	0.04
tblVehicleEF	LDA	0.65	0.60
tblVehicleEF	LDA	1.15	1.71
tblVehicleEF	LDA	262.13	267.26
tblVehicleEF	LDA	54.17	50.84
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.04	0.06

tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	8.1610e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.09	0.18
tblVehicleEF	LDA	2.6260e-003	2.6440e-003
tblVehicleEF	LDA	5.6200e-004	5.0300e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDA	6.0150e-003	1.9880e-003
tblVehicleEF	LDA	7.8030e-003	0.05
tblVehicleEF	LDA	0.56	0.52
tblVehicleEF	LDA	1.49	2.22
tblVehicleEF	LDA	245.50	250.66
tblVehicleEF	LDA	54.17	51.77
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.08	0.18
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10

tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	7.4640e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.21
tblVehicleEF	LDA	2.4590e-003	2.4790e-003
tblVehicleEF	LDA	5.6800e-004	5.1200e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.12	0.23
tblVehicleEF	LDT1	0.01	5.8260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.15	1.12
tblVehicleEF	LDT1	2.76	2.33
tblVehicleEF	LDT1	318.80	308.27
tblVehicleEF	LDT1	69.57	63.74
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12

tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.2010e-003	3.0510e-003
tblVehicleEF	LDT1	7.4400e-004	6.3100e-004
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT1	0.01	6.2810e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.28	1.25
tblVehicleEF	LDT1	2.27	1.92
tblVehicleEF	LDT1	336.12	323.06
tblVehicleEF	LDT1	69.57	62.92
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.03	0.03

tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	3.3760e-003	3.1970e-003
tblVehicleEF	LDT1	7.3600e-004	6.2300e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.18	0.34
tblVehicleEF	LDT1	0.01	5.7180e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	1.13	1.10
tblVehicleEF	LDT1	2.97	2.50
tblVehicleEF	LDT1	315.67	305.60
tblVehicleEF	LDT1	69.57	64.07
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.23	0.90

tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	3.1700e-003	3.0240e-003
tblVehicleEF	LDT1	7.4800e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.22	0.42
tblVehicleEF	LDT2	5.2450e-003	3.5940e-003
tblVehicleEF	LDT2	5.9320e-003	0.07
tblVehicleEF	LDT2	0.65	0.78
tblVehicleEF	LDT2	1.31	2.67
tblVehicleEF	LDT2	352.67	328.12
tblVehicleEF	LDT2	76.85	68.00
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.27
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.08	0.30

tblVehicleEF	LDT2	3.5310e-003	3.2460e-003
tblVehicleEF	LDT2	7.9000e-004	6.7300e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.09	0.33
tblVehicleEF	LDT2	5.6410e-003	3.8950e-003
tblVehicleEF	LDT2	5.1630e-003	0.06
tblVehicleEF	LDT2	0.72	0.87
tblVehicleEF	LDT2	1.09	2.20
tblVehicleEF	LDT2	372.26	342.39
tblVehicleEF	LDT2	76.85	67.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.7270e-003	3.3870e-003

tblVehicleEF	LDT2	7.8600e-004	6.6400e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	5.1590e-003	3.5220e-003
tblVehicleEF	LDT2	6.2490e-003	0.07
tblVehicleEF	LDT2	0.63	0.76
tblVehicleEF	LDT2	1.41	2.86
tblVehicleEF	LDT2	349.13	325.54
tblVehicleEF	LDT2	76.85	68.36
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.28
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	3.4950e-003	3.2210e-003
tblVehicleEF	LDT2	7.9200e-004	6.7700e-004

tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LHD1	4.6610e-003	4.6580e-003
tblVehicleEF	LHD1	0.02	9.0720e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.84
tblVehicleEF	LHD1	2.19	0.96
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.79
tblVehicleEF	LHD1	27.83	10.50
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.05
tblVehicleEF	LHD1	0.85	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003

tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.1900e-004	1.0400e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6680e-003
tblVehicleEF	LHD1	0.02	9.2260e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	2.07	0.91
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.82
tblVehicleEF	LHD1	27.83	10.41
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.42	1.01

tblVehicleEF	LHD1	0.81	0.27
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5190e-003
tblVehicleEF	LHD1	3.1700e-004	1.0300e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6540e-003

tblVehicleEF	LHD1	0.02	9.0050e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.83
tblVehicleEF	LHD1	2.25	0.98
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.78
tblVehicleEF	LHD1	27.83	10.54
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.04
tblVehicleEF	LHD1	0.87	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005

tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.2000e-004	1.0400e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.24	0.08
tblVehicleEF	LHD2	3.3670e-003	3.1630e-003
tblVehicleEF	LHD2	7.3190e-003	7.0780e-003
tblVehicleEF	LHD2	6.3840e-003	8.1370e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.64
tblVehicleEF	LHD2	1.07	0.58
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.02
tblVehicleEF	LHD2	23.94	7.63
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.80	1.03
tblVehicleEF	LHD2	0.44	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1690e-003
tblVehicleEF	LHD2	7.3940e-003	7.1360e-003
tblVehicleEF	LHD2	6.1320e-003	7.8000e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.65
tblVehicleEF	LHD2	1.02	0.55
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.03
tblVehicleEF	LHD2	23.94	7.57

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.99
tblVehicleEF	LHD2	0.42	0.17
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5800e-004	7.5000e-005
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.09	0.04

tblVehicleEF	LHD2	3.3670e-003	3.1600e-003
tblVehicleEF	LHD2	7.2860e-003	7.0520e-003
tblVehicleEF	LHD2	6.4980e-003	8.2880e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.55	0.64
tblVehicleEF	LHD2	1.10	0.59
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.01
tblVehicleEF	LHD2	23.94	7.65
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.79	1.02
tblVehicleEF	LHD2	0.45	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004

tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.15	20.36
tblVehicleEF	MCY	9.73	8.62
tblVehicleEF	MCY	182.50	220.59
tblVehicleEF	MCY	45.45	60.38
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.41	2.43
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.10	1.86

tblVehicleEF	MCY	2.2260e-003	2.1830e-003
tblVehicleEF	MCY	6.7500e-004	5.9700e-004
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.99	3.00
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.29	2.02
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	19.19	19.39
tblVehicleEF	MCY	8.77	7.73
tblVehicleEF	MCY	182.50	218.78
tblVehicleEF	MCY	45.45	58.13
tblVehicleEF	MCY	1.04	1.04
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.34	2.35
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2080e-003	2.1650e-003

tblVehicleEF	MCY	6.5100e-004	5.7500e-004
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.90	2.91
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	20.81	21.03
tblVehicleEF	MCY	10.22	9.08
tblVehicleEF	MCY	182.50	221.81
tblVehicleEF	MCY	45.45	61.49
tblVehicleEF	MCY	1.17	1.17
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	2.45	2.47
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	2.2370e-003	2.1950e-003
tblVehicleEF	MCY	6.8700e-004	6.0900e-004

tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	3.04	3.05
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.43	2.15
tblVehicleEF	MDV	8.8620e-003	4.0850e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.94	0.82
tblVehicleEF	MDV	2.31	2.98
tblVehicleEF	MDV	472.46	396.95
tblVehicleEF	MDV	101.95	81.91
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.7270e-003	3.9230e-003
tblVehicleEF	MDV	1.0600e-003	8.1100e-004
tblVehicleEF	MDV	0.05	0.07

tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.19	0.41
tblVehicleEF	MDV	9.5090e-003	4.4250e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	0.92
tblVehicleEF	MDV	1.92	2.45
tblVehicleEF	MDV	498.02	411.39
tblVehicleEF	MDV	101.95	80.91
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.19	0.29
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	4.9840e-003	4.0660e-003
tblVehicleEF	MDV	1.0530e-003	8.0100e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15

tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	8.7270e-003	4.0050e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.92	0.81
tblVehicleEF	MDV	2.49	3.21
tblVehicleEF	MDV	467.83	394.33
tblVehicleEF	MDV	101.95	82.33
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	4.6810e-003	3.8980e-003
tblVehicleEF	MDV	1.0630e-003	8.1500e-004
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08

tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.20	0.43
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.63	1.44
tblVehicleEF	MH	5.98	2.11
tblVehicleEF	MH	1,229.84	1,578.48
tblVehicleEF	MH	59.91	18.87
tblVehicleEF	MH	1.50	1.64
tblVehicleEF	MH	0.88	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0300e-004	1.8700e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07

tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.16	0.12
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.72	1.48
tblVehicleEF	MH	5.59	1.98
tblVehicleEF	MH	1,229.84	1,578.55
tblVehicleEF	MH	59.91	18.64
tblVehicleEF	MH	1.42	1.56
tblVehicleEF	MH	0.83	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.33	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9700e-004	1.8400e-004
tblVehicleEF	MH	1.33	1.10

tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.60	1.42
tblVehicleEF	MH	6.17	2.18
tblVehicleEF	MH	1,229.84	1,578.45
tblVehicleEF	MH	59.91	18.98
tblVehicleEF	MH	1.50	1.63
tblVehicleEF	MH	0.90	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0700e-004	1.8800e-004

tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.39	0.11
tblVehicleEF	MHD	0.02	4.0650e-003
tblVehicleEF	MHD	4.2710e-003	2.3930e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	0.34	0.31
tblVehicleEF	MHD	5.31	1.27
tblVehicleEF	MHD	143.80	80.44
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.83
tblVehicleEF	MHD	0.42	0.50
tblVehicleEF	MHD	1.14	1.40
tblVehicleEF	MHD	11.05	1.63
tblVehicleEF	MHD	1.5900e-004	4.7800e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.5200e-004	4.5700e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02

tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.3830e-003	7.6300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5600e-004	1.0700e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.02	3.8640e-003
tblVehicleEF	MHD	4.3360e-003	2.4460e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.24	0.36
tblVehicleEF	MHD	0.35	0.31
tblVehicleEF	MHD	4.99	1.20
tblVehicleEF	MHD	152.31	80.75
tblVehicleEF	MHD	1,192.51	1,110.80
tblVehicleEF	MHD	56.35	10.70
tblVehicleEF	MHD	0.43	0.50
tblVehicleEF	MHD	1.10	1.34
tblVehicleEF	MHD	11.01	1.63
tblVehicleEF	MHD	1.3400e-004	4.0600e-004

tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.2800e-004	3.8900e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.4640e-003	7.6600e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	1.0600e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	0.02	4.3540e-003
tblVehicleEF	MHD	4.2430e-003	2.3680e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.46	0.50
tblVehicleEF	MHD	0.34	0.30

tblVehicleEF	MHD	5.46	1.31
tblVehicleEF	MHD	132.03	80.00
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.88
tblVehicleEF	MHD	0.40	0.51
tblVehicleEF	MHD	1.14	1.39
tblVehicleEF	MHD	11.07	1.64
tblVehicleEF	MHD	1.9400e-004	5.7700e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.8500e-004	5.5200e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2720e-003	7.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5900e-004	1.0800e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	5.3900e-004	3.2400e-004

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	OBUS	0.01	8.7080e-003
tblVehicleEF	OBUS	9.2660e-003	9.7640e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.59
tblVehicleEF	OBUS	0.60	1.09
tblVehicleEF	OBUS	5.69	2.71
tblVehicleEF	OBUS	97.15	83.74
tblVehicleEF	OBUS	1,321.20	1,532.41
tblVehicleEF	OBUS	68.99	20.78
tblVehicleEF	OBUS	0.20	0.32
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.24	0.75
tblVehicleEF	OBUS	1.9000e-005	1.0700e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.8000e-005	1.0300e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.32

tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	9.3900e-004	7.9800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9000e-004	2.0600e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.7890e-003
tblVehicleEF	OBUS	9.4730e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.58
tblVehicleEF	OBUS	0.61	1.12
tblVehicleEF	OBUS	5.32	2.54
tblVehicleEF	OBUS	101.91	82.81
tblVehicleEF	OBUS	1,321.20	1,532.46
tblVehicleEF	OBUS	68.99	20.48
tblVehicleEF	OBUS	0.21	0.30
tblVehicleEF	OBUS	0.81	1.18
tblVehicleEF	OBUS	2.19	0.74
tblVehicleEF	OBUS	1.6000e-005	9.5000e-005
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.5000e-005	9.1000e-005

tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.8400e-004	7.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8300e-004	2.0300e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6110e-003
tblVehicleEF	OBUS	9.1750e-003	9.6490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.60
tblVehicleEF	OBUS	0.60	1.08
tblVehicleEF	OBUS	5.86	2.80
tblVehicleEF	OBUS	90.56	85.02
tblVehicleEF	OBUS	1,321.20	1,532.39

tblVehicleEF	OBUS	68.99	20.92
tblVehicleEF	OBUS	0.20	0.34
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.26	0.76
tblVehicleEF	OBUS	2.3000e-005	1.2400e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	8.7600e-004	8.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.0700e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.39	0.14

tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.4420e-003
tblVehicleEF	SBUS	0.08	2.7370e-003
tblVehicleEF	SBUS	6.51	1.26
tblVehicleEF	SBUS	0.93	0.75
tblVehicleEF	SBUS	7.02	0.43
tblVehicleEF	SBUS	1,202.36	332.94
tblVehicleEF	SBUS	1,104.05	1,097.57
tblVehicleEF	SBUS	42.89	2.06
tblVehicleEF	SBUS	9.97	4.02
tblVehicleEF	SBUS	4.09	7.31
tblVehicleEF	SBUS	14.11	0.63
tblVehicleEF	SBUS	9.4890e-003	5.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	9.0780e-003	4.9200e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.36	0.02

tblVehicleEF	SBUS	0.01	3.1570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5000e-004	2.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.39	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.5710e-003
tblVehicleEF	SBUS	0.07	2.3800e-003
tblVehicleEF	SBUS	6.39	1.21
tblVehicleEF	SBUS	0.95	0.77
tblVehicleEF	SBUS	5.49	0.34
tblVehicleEF	SBUS	1,261.22	344.72
tblVehicleEF	SBUS	1,104.05	1,097.59
tblVehicleEF	SBUS	42.89	1.91
tblVehicleEF	SBUS	10.29	4.13
tblVehicleEF	SBUS	3.94	7.04
tblVehicleEF	SBUS	14.07	0.63
tblVehicleEF	SBUS	7.9990e-003	4.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	7.6530e-003	4.1540e-003

tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	0.77	0.13
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.11	0.13
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.31	0.01
tblVehicleEF	SBUS	0.01	3.2680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2400e-004	1.9000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	1.11	0.18
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.34	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.3810e-003
tblVehicleEF	SBUS	0.08	2.9140e-003
tblVehicleEF	SBUS	6.68	1.32
tblVehicleEF	SBUS	0.92	0.75
tblVehicleEF	SBUS	7.78	0.48
tblVehicleEF	SBUS	1,121.06	316.67

tblVehicleEF	SBUS	1,104.05	1,097.55
tblVehicleEF	SBUS	42.89	2.14
tblVehicleEF	SBUS	9.53	3.87
tblVehicleEF	SBUS	4.07	7.28
tblVehicleEF	SBUS	14.12	0.63
tblVehicleEF	SBUS	0.01	6.2490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	0.01	5.9780e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.38	0.02
tblVehicleEF	SBUS	0.01	3.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6300e-004	2.1000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004

tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.41	0.02
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.16	1.23
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.21
tblVehicleEF	UBUS	6.89	0.40
tblVehicleEF	UBUS	13.92	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2970e-003	1.4100e-004

tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.69	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.04	0.01
tblVehicleEF	UBUS	7.43	38.17
tblVehicleEF	UBUS	6.11	1.06
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	13.93
tblVehicleEF	UBUS	6.64	0.40
tblVehicleEF	UBUS	13.86	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	8.6180e-003	0.02

tblVehicleEF	UBUS	0.58	0.05
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2790e-003	1.3800e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.02
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.63	1.31
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.34
tblVehicleEF	UBUS	6.85	0.40
tblVehicleEF	UBUS	13.94	0.14
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003

tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.66	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.3050e-003	1.4200e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	2.23	5.00
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.72	0.07
tblVehicleTrips	HO_TTP	39.60	39.50
tblVehicleTrips	HS_TTP	18.80	18.90
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	77.00	81.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	38.00	82.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	ST_TR	7.16	6.00

tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	19.24
tblVehicleTrips	ST_TR	158.37	141.10
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	94.36	87.82
tblVehicleTrips	ST_TR	42.04	33.95
tblVehicleTrips	SU_TR	6.07	6.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	19.24
tblVehicleTrips	SU_TR	131.84	141.10
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	72.16	87.82
tblVehicleTrips	SU_TR	20.43	33.95
tblVehicleTrips	WD_TR	6.59	6.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	19.24
tblVehicleTrips	WD_TR	127.15	141.10
tblVehicleTrips	WD_TR	8.17	10.00
tblVehicleTrips	WD_TR	89.95	87.82
tblVehicleTrips	WD_TR	44.32	33.95

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.0798	95.4050	70.4818	0.1966	4.5799	3.2673	7.8472	0.9670	3.0140	3.9811	0.0000	19,670.9013	19,670.9013	4.5028	0.0000	19,783.4717
2022	14.0294	82.7327	68.7494	0.1953	7.3501	2.7696	10.1197	1.6470	2.5559	4.2029	0.0000	19,551.5950	19,551.5950	4.4936	0.0000	19,663.9345
Maximum	**14.0294**	**95.4050**	**70.4818**	**0.1966**	**7.3501**	**3.2673**	**10.1197**	**1.6470**	**3.0140**	**4.2029**	**0.0000**	**19,670.9013**	**19,670.9013**	**4.5028**	**0.0000**	**19,783.4717**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.0798	95.4050	70.4818	0.1966	3.5673	3.2673	6.8345	0.8559	3.0140	3.8699	0.0000	19,670.9013	19,670.9013	4.5028	0.0000	19,783.4717
2022	14.0294	82.7327	68.7494	0.1953	6.3374	2.7696	9.1070	1.5358	2.5559	4.0917	0.0000	19,551.5950	19,551.5950	4.4936	0.0000	19,663.9345
Maximum	**14.0294**	**95.4050**	**70.4818**	**0.1966**	**6.3374**	**3.2673**	**9.1070**	**1.5358**	**3.0140**	**4.0917**	**0.0000**	**19,670.9013**	**19,670.9013**	**4.5028**	**0.0000**	**19,783.4717**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.98**	**0.00**	**11.27**	**8.51**	**0.00**	**2.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	147.0004	2.8991	185.3642	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8546	3,719.3973	2.4227	0.2053	3,841.1558
Energy	0.0963	0.8581	0.6104	5.2500e-003		0.0665	0.0665		0.0665	0.0665		1,050.0863	1,050.0863	0.0201	0.0193	1,056.3264
Mobile	4.4033	6.8589	34.4455	0.0987	10.0075	0.0808	10.0883	2.6702	0.0756	2.7457		10,188.1932	10,188.1932	0.6960		10,205.5924
Total	**151.4999**	**10.6161**	**220.4200**	**0.4261**	**10.0075**	**25.0882**	**35.0957**	**2.6702**	**25.0830**	**27.7531**	**2,610.5427**	**12,347.1342**	**14,957.6768**	**3.1388**	**0.2246**	**15,103.0746**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3075	1.4931	8.3854	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5605	1,805.5605	0.0479	0.0328	1,816.5468
Energy	0.0803	0.7160	0.5118	4.3800e-003		0.0555	0.0555		0.0555	0.0555		875.7269	875.7269	0.0168	0.0161	880.9309
Mobile	4.4033	6.8589	34.4455	0.0987	10.0075	0.0808	10.0883	2.6702	0.0756	2.7457		10,188.1932	10,188.1932	0.6960		10,205.5924
Total	**7.7911**	**9.0680**	**43.3426**	**0.1125**	**10.0075**	**0.2928**	**10.3003**	**2.6702**	**0.2875**	**2.9577**	**0.0000**	**12,869.4806**	**12,869.4806**	**0.7607**	**0.0489**	**12,903.0700**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**94.86**	**14.58**	**80.34**	**73.60**	**0.00**	**98.83**	**70.65**	**0.00**	**98.85**	**89.34**	**100.00**	**-4.23**	**13.96**	**75.77**	**78.23**	**14.57**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/30/2021	5	22	
2	Grading	Grading	9/16/2021	1/31/2022	5	98	
3	Building Construction	Building Construction	11/2/2021	8/31/2022	5	217	
4	Architectural Coating	Architectural Coating	5/22/2022	11/22/2022	5	132	
5	Paving	Paving	10/5/2022	12/5/2022	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 147

Acres of Paving: 0.38

Residential Indoor: 148,400; Residential Outdoor: 49,467; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42

Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Rollers	1	8.00	80	0.38
Grading	Rough Terrain Forklifts	2	8.00	100	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	3	8.00	172	0.42
Building Construction	Paving Equipment	1	8.00	132	0.36
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Paving	Graders	1	8.00	187	0.41
Paving	Off-Highway Trucks	4	8.00	402	0.38
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	203	0.36
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	50.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	129.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4983	0.0000	0.4983	0.0755	0.0000	0.0755			0.0000			0.0000
Off-Road	2.8598	28.2801	23.4293	0.0449		1.3349	1.3349		1.2586	1.2586		4,320.0239	4,320.0239	1.0706		4,346.7889
Total	**2.8598**	**28.2801**	**23.4293**	**0.0449**	**0.4983**	**1.3349**	**1.8332**	**0.0755**	**1.2586**	**1.3341**		**4,320.0239**	**4,320.0239**	**1.0706**		**4,346.7889**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0173	0.5876	0.1515	1.7200e-003	0.0397	1.8200e-003	0.0415	0.0109	1.7400e-003	0.0126		188.8794	188.8794	0.0175		189.3178
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	**0.0879**	**0.6330**	**0.6003**	**3.1000e-003**	**0.1876**	**2.8400e-003**	**0.1904**	**0.0501**	**2.6800e-003**	**0.0528**		**326.4979**	**326.4979**	**0.0215**		**327.0352**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1943	0.0000	0.1943	0.0294	0.0000	0.0294			0.0000			0.0000
Off-Road	2.8598	28.2801	23.4293	0.0449		1.3349	1.3349		1.2586	1.2586	0.0000	4,320.0239	4,320.0239	1.0706		4,346.7889
Total	**2.8598**	**28.2801**	**23.4293**	**0.0449**	**0.1943**	**1.3349**	**1.5292**	**0.0294**	**1.2586**	**1.2880**	**0.0000**	**4,320.0239**	**4,320.0239**	**1.0706**		**4,346.7889**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0173	0.5876	0.1515	1.7200e-003	0.0397	1.8200e-003	0.0415	0.0109	1.7400e-003	0.0126		188.8794	188.8794	0.0175		189.3178
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	**0.0879**	**0.6330**	**0.6003**	**3.1000e-003**	**0.1876**	**2.8400e-003**	**0.1904**	**0.0501**	**2.6800e-003**	**0.0528**		**326.4979**	**326.4979**	**0.0215**		**327.0352**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6602	0.0000	1.6602	0.1823	0.0000	0.1823			0.0000			0.0000
Off-Road	3.9173	44.1100	32.5945	0.0782		1.7273	1.7273		1.5929	1.5929		7,506.1590	7,506.1590	2.3908		7,565.9300
Total	**3.9173**	**44.1100**	**32.5945**	**0.0782**	**1.6602**	**1.7273**	**3.3874**	**0.1823**	**1.5929**	**1.7752**		**7,506.1590**	**7,506.1590**	**2.3908**		**7,565.9300**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4709	15.9611	4.1151	0.0468	1.3013	0.0493	1.3506	0.3503	0.0472	0.3975		5,130.5804	5,130.5804	0.4763		5,142.4887
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1569	0.1009	0.9973	3.0700e-003	0.3286	2.2700e-003	0.3309	0.0872	2.0900e-003	0.0893		305.8190	305.8190	8.7900e-003		306.0387
Total	**0.6278**	**16.0620**	**5.1124**	**0.0499**	**1.6299**	**0.0516**	**1.6815**	**0.4374**	**0.0493**	**0.4867**		**5,436.3995**	**5,436.3995**	**0.4851**		**5,448.5274**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6475	0.0000	0.6475	0.0711	0.0000	0.0711			0.0000			0.0000
Off-Road	3.9173	44.1100	32.5945	0.0782		1.7273	1.7273		1.5929	1.5929	0.0000	7,506.1590	7,506.1590	2.3908		7,565.9300
Total	**3.9173**	**44.1100**	**32.5945**	**0.0782**	**0.6475**	**1.7273**	**2.3748**	**0.0711**	**1.5929**	**1.6640**	**0.0000**	**7,506.1590**	**7,506.1590**	**2.3908**		**7,565.9300**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4709	15.9611	4.1151	0.0468	1.3013	0.0493	1.3506	0.3503	0.0472	0.3975		5,130.5804	5,130.5804	0.4763		5,142.4887
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1569	0.1009	0.9973	3.0700e-003	0.3286	2.2700e-003	0.3309	0.0872	2.0900e-003	0.0893		305.8190	305.8190	8.7900e-003		306.0387
Total	**0.6278**	**16.0620**	**5.1124**	**0.0499**	**1.6299**	**0.0516**	**1.6815**	**0.4374**	**0.0493**	**0.4867**		**5,436.3995**	**5,436.3995**	**0.4851**		**5,448.5274**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6602	0.0000	1.6602	0.1823	0.0000	0.1823			0.0000			0.0000
Off-Road	3.4831	37.0839	31.5540	0.0782		1.4531	1.4531		1.3406	1.3406		7,510.5632	7,510.5632	2.3923		7,570.3698
Total	**3.4831**	**37.0839**	**31.5540**	**0.0782**	**1.6602**	**1.4531**	**3.1132**	**0.1823**	**1.3406**	**1.5229**		**7,510.5632**	**7,510.5632**	**2.3923**		**7,570.3698**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4423	14.5896	4.0791	0.0460	4.0715	0.0418	4.1133	1.0302	0.0400	1.0702		5,062.7560	5,062.7560	0.4710		5,074.5304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113
Total	**0.5910**	**14.6816**	**5.0045**	**0.0490**	**4.4001**	**0.0440**	**4.4441**	**1.1174**	**0.0421**	**1.1594**		**5,357.3662**	**5,357.3662**	**0.4790**		**5,369.3418**

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6475	0.0000	0.6475	0.0711	0.0000	0.0711			0.0000			0.0000
Off-Road	3.4831	37.0839	31.5540	0.0782		1.4531	1.4531		1.3406	1.3406	0.0000	7,510.5632	7,510.5632	2.3923		7,570.3698
Total	**3.4831**	**37.0839**	**31.5540**	**0.0782**	**0.6475**	**1.4531**	**2.1005**	**0.0711**	**1.3406**	**1.4117**	**0.0000**	**7,510.5632**	**7,510.5632**	**2.3923**		**7,570.3698**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4423	14.5896	4.0791	0.0460	4.0715	0.0418	4.1133	1.0302	0.0400	1.0702		5,062.7560	5,062.7560	0.4710		5,074.5304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113
Total	**0.5910**	**14.6816**	**5.0045**	**0.0490**	**4.4001**	**0.0440**	**4.4441**	**1.1174**	**0.0421**	**1.1594**		**5,357.3662**	**5,357.3662**	**0.4790**		**5,369.3418**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9203	31.4546	28.5762	0.0497		1.4735	1.4735		1.3579	1.3579		4,777.0909	4,777.0909	1.5234		4,815.1746
Total	**2.9203**	**31.4546**	**28.5762**	**0.0497**		**1.4735**	**1.4735**		**1.3579**	**1.3579**		**4,777.0909**	**4,777.0909**	**1.5234**		**4,815.1746**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1084	3.4530	0.9824	8.9700e-003	0.2302	7.5700e-003	0.2377	0.0663	7.2300e-003	0.0735		964.9856	964.9856	0.0752		966.8650
Worker	0.5060	0.3254	3.2163	9.9000e-003	1.0597	7.3200e-003	1.0670	0.2811	6.7400e-003	0.2878		986.2664	986.2664	0.0283		986.9748
Total	**0.6144**	**3.7784**	**4.1987**	**0.0189**	**1.2899**	**0.0149**	**1.3048**	**0.3473**	**0.0140**	**0.3613**		**1,951.2520**	**1,951.2520**	**0.1035**		**1,953.8398**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9203	31.4546	28.5762	0.0497		1.4735	1.4735		1.3579	1.3579	0.0000	4,777.0909	4,777.0909	1.5234		4,815.1746
Total	**2.9203**	**31.4546**	**28.5762**	**0.0497**		**1.4735**	**1.4735**		**1.3579**	**1.3579**	**0.0000**	**4,777.0909**	**4,777.0909**	**1.5234**		**4,815.1746**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1084	3.4530	0.9824	8.9700e-003	0.2302	7.5700e-003	0.2377	0.0663	7.2300e-003	0.0735		964.9856	964.9856	0.0752		966.8650
Worker	0.5060	0.3254	3.2163	9.9000e-003	1.0597	7.3200e-003	1.0670	0.2811	6.7400e-003	0.2878		986.2664	986.2664	0.0283		986.9748
Total	**0.6144**	**3.7784**	**4.1987**	**0.0189**	**1.2899**	**0.0149**	**1.3048**	**0.3473**	**0.0140**	**0.3613**		**1,951.2520**	**1,951.2520**	**0.1035**		**1,953.8398**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6202	27.4096	28.2762	0.0497		1.2588	1.2588		1.1604	1.1604		4,777.7987	4,777.7987	1.5236		4,815.8881
Total	**2.6202**	**27.4096**	**28.2762**	**0.0497**		**1.2588**	**1.2588**		**1.1604**	**1.1604**		**4,777.7987**	**4,777.7987**	**1.5236**		**4,815.8881**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1008	3.2608	0.9302	8.8700e-003	0.2302	6.5200e-003	0.2367	0.0663	6.2400e-003	0.0725		955.7489	955.7489	0.0728		957.5683
Worker	0.4795	0.2967	2.9844	9.5300e-003	1.0597	7.1600e-003	1.0669	0.2811	6.6000e-003	0.2877		950.1180	950.1180	0.0259		950.7665
Total	**0.5803**	**3.5575**	**3.9146**	**0.0184**	**1.2899**	**0.0137**	**1.3036**	**0.3473**	**0.0128**	**0.3602**		**1,905.8669**	**1,905.8669**	**0.0987**		**1,908.3348**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6202	27.4096	28.2762	0.0497		1.2588	1.2588		1.1604	1.1604	0.0000	4,777.7986	4,777.7986	1.5236		4,815.8881
Total	**2.6202**	**27.4096**	**28.2762**	**0.0497**		**1.2588**	**1.2588**		**1.1604**	**1.1604**	**0.0000**	**4,777.7986**	**4,777.7986**	**1.5236**		**4,815.8881**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1008	3.2608	0.9302	8.8700e-003	0.2302	6.5200e-003	0.2367	0.0663	6.2400e-003	0.0725		955.7489	955.7489	0.0728		957.5683
Worker	0.4795	0.2967	2.9844	9.5300e-003	1.0597	7.1600e-003	1.0669	0.2811	6.6000e-003	0.2877		950.1180	950.1180	0.0259		950.7665
Total	**0.5803**	**3.5575**	**3.9146**	**0.0184**	**1.2899**	**0.0137**	**1.3036**	**0.3473**	**0.0128**	**0.3602**		**1,905.8669**	**1,905.8669**	**0.0987**		**1,908.3348**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**9.9066**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0966	0.0598	0.6015	1.9200e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3300e-003	0.0580		191.4967	191.4967	5.2300e-003		191.6274
Total	**0.0966**	**0.0598**	**0.6015**	**1.9200e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3300e-003**	**0.0580**		**191.4967**	**191.4967**	**5.2300e-003**		**191.6274**

3.5 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.7020					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**9.9066**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0966	0.0598	0.6015	1.9200e-003	0.2136	1.4400e-003	0.2150	0.0567	1.3300e-003	0.0580		191.4967	191.4967	5.2300e-003		191.6274
Total	**0.0966**	**0.0598**	**0.6015**	**1.9200e-003**	**0.2136**	**1.4400e-003**	**0.2150**	**0.0567**	**1.3300e-003**	**0.0580**		**191.4967**	**191.4967**	**5.2300e-003**		**191.6274**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8809	34.5904	28.2497	0.0879		1.3463	1.3463		1.2426	1.2426		8,443.0988	8,443.0988	2.6924		8,510.4080
Paving	0.0226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.9035**	**34.5904**	**28.2497**	**0.0879**		**1.3463**	**1.3463**		**1.2426**	**1.2426**		**8,443.0988**	**8,443.0988**	**2.6924**		**8,510.4080**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1227	0.0759	0.7635	2.4400e-003	0.2711	1.8300e-003	0.2729	0.0719	1.6900e-003	0.0736		243.0534	243.0534	6.6400e-003		243.2194
Total	**0.1227**	**0.0759**	**0.7635**	**2.4400e-003**	**0.2711**	**1.8300e-003**	**0.2729**	**0.0719**	**1.6900e-003**	**0.0736**		**243.0534**	**243.0534**	**6.6400e-003**		**243.2194**

3.6 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8809	34.5904	28.2497	0.0879		1.3463	1.3463		1.2426	1.2426	0.0000	8,443.0988	8,443.0988	2.6924		8,510.4080
Paving	0.0226					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.9035**	**34.5904**	**28.2497**	**0.0879**		**1.3463**	**1.3463**		**1.2426**	**1.2426**	**0.0000**	**8,443.0988**	**8,443.0988**	**2.6924**		**8,510.4080**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1227	0.0759	0.7635	2.4400e-003	0.2711	1.8300e-003	0.2729	0.0719	1.6900e-003	0.0736		243.0534	243.0534	6.6400e-003		243.2194
Total	**0.1227**	**0.0759**	**0.7635**	**2.4400e-003**	**0.2711**	**1.8300e-003**	**0.2729**	**0.0719**	**1.6900e-003**	**0.0736**		**243.0534**	**243.0534**	**6.6400e-003**		**243.2194**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4033	6.8589	34.4455	0.0987	10.0075	0.0808	10.0883	2.6702	0.0756	2.7457		10,188.1932	10,188.1932	0.6960		10,205.5924
Unmitigated	4.4033	6.8589	34.4455	0.0987	10.0075	0.0808	10.0883	2.6702	0.0756	2.7457		10,188.1932	10,188.1932	0.6960		10,205.5924

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,664,152	1,664,152
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	70.03	70.03	70.03	175,445	175,445
High Turnover (Sit Down Restaurant)	550.29	550.29	550.29	1,274,735	1,274,735
Hotel	300.00	300.00	300.00	603,293	603,293
Quality Restaurant	187.06	187.06	187.06	445,494	445,494
Strip Mall	291.29	291.29	291.29	568,918	568,918
Parking Lot	0.00	0.00	0.00		
Total	1,962.67	1,962.67	1,962.67	4,732,038	4,732,038

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.90	39.50	89	11	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	81	19	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	82	18	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	60	40	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
City Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Enclosed Parking with Elevator	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
High Turnover (Sit Down Restaurant)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Hotel	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Quality Restaurant	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Strip Mall	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0803	0.7160	0.5118	4.3800e-003		0.0555	0.0555		0.0555	0.0555		875.7269	875.7269	0.0168	0.0161	880.9309
NaturalGas Unmitigated	0.0963	0.8581	0.6104	5.2500e-003		0.0665	0.0665		0.0665	0.0665		1,050.0863	1,050.0863	0.0201	0.0193	1,056.3264

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2890.95	0.0312	0.2664	0.1134	1.7000e-003		0.0215	0.0215		0.0215	0.0215		340.1115	340.1115	6.5200e-003	6.2400e-003	342.1327
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	201.236	2.1700e-003	0.0197	0.0166	1.2000e-004		1.5000e-003	1.5000e-003		1.5000e-003	1.5000e-003		23.6749	23.6749	4.5000e-004	4.3000e-004	23.8155
High Turnover (Sit Down Restaurant)	1865.63	0.0201	0.1829	0.1536	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.4855	219.4855	4.2100e-003	4.0200e-003	220.7898
Hotel	2895.95	0.0312	0.2839	0.2385	1.7000e-003		0.0216	0.0216		0.0216	0.0216		340.7002	340.7002	6.5300e-003	6.2500e-003	342.7248
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1019.53	0.0110	0.1000	0.0840	6.0000e-004		7.6000e-003	7.6000e-003		7.6000e-003	7.6000e-003		119.9442	119.9442	2.3000e-003	2.2000e-003	120.6570
Strip Mall	52.4447	5.7000e-004	5.1400e-003	4.3200e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1700	6.1700	1.2000e-004	1.1000e-004	6.2066
Total		**0.0963**	**0.8581**	**0.6104**	**5.2500e-003**		**0.0665**	**0.0665**		**0.0665**	**0.0665**		**1,050.0863**	**1,050.0863**	**0.0201**	**0.0193**	**1,056.3265**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2.34661	0.0253	0.2163	0.0920	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.0720	276.0720	5.2900e-003	5.0600e-003	277.7125
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.153424	1.6500e-003	0.0150	0.0126	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003		18.0499	18.0499	3.5000e-004	3.3000e-004	18.1571
High Turnover (Sit Down Restaurant)	1.75034	0.0189	0.1716	0.1442	1.0300e-003		0.0130	0.0130		0.0130	0.0130		205.9222	205.9222	3.9500e-003	3.7800e-003	207.1459
Hotel	2.19238	0.0236	0.2149	0.1806	1.2900e-003		0.0163	0.0163		0.0163	0.0163		257.9270	257.9270	4.9400e-003	4.7300e-003	259.4598
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.956523	0.0103	0.0938	0.0788	5.6000e-004		7.1300e-003	7.1300e-003		7.1300e-003	7.1300e-003		112.5321	112.5321	2.1600e-003	2.0600e-003	113.2009
Strip Mall	0.0444016	4.8000e-004	4.3500e-003	3.6600e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2237	5.2237	1.0000e-004	1.0000e-004	5.2548
Total		**0.0803**	**0.7160**	**0.5118**	**4.3800e-003**		**0.0555**	**0.0555**		**0.0555**	**0.0555**		**875.7269**	**875.7269**	**0.0168**	**0.0161**	**880.9309**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3075	1.4931	8.3854	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5605	1,805.5605	0.0479	0.0328	1,816.5468
Unmitigated	147.0004	2.8991	185.3642	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8546	3,719.3973	2.4227	0.2053	3,841.1558

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3817					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	143.8571	2.8094	177.5760	0.3217		24.8979	24.8979		24.8979	24.8979	2,610.5427	1,094.8235	3,705.3662	2.4091	0.2053	3,826.7847
Landscaping	0.2366	0.0897	7.7882	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0311	14.0311	0.0136		14.3712
Total	**147.0004**	**2.8991**	**185.3642**	**0.3221**		**24.9409**	**24.9409**		**24.9409**	**24.9409**	**2,610.5427**	**1,108.8546**	**3,719.3973**	**2.4227**	**0.2053**	**3,841.1558**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3817					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1642	1.4034	0.5972	8.9600e-003		0.1135	0.1135		0.1135	0.1135	0.0000	1,791.5294	1,791.5294	0.0343	0.0328	1,802.1756
Landscaping	0.2366	0.0897	7.7882	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0311	14.0311	0.0136		14.3712
Total	**3.3074**	**1.4931**	**8.3854**	**9.3700e-003**		**0.1565**	**0.1565**		**0.1565**	**0.1565**	**0.0000**	**1,805.5605**	**1,805.5605**	**0.0479**	**0.0328**	**1,816.5468**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Fenway Existing Conditions

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High Turnover (Sit Down Restaurant)	5.33	1000sqft	0.12	5,333.00	0
Strip Mall	2.25	1000sqft	0.05	2,249.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Architectural Coating -

Vehicle Trips - based on traffic study; pass-by trips incorporated in trip rates, so set as 0%

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - restaurant is currently unoccupied

Water And Wastewater - restaurant is currently unoccupied

Solid Waste - restaurant is currently unoccupied

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	6.78	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	T24E	8.23	0.00
tblEnergyUse	T24NG	35.92	0.00
tblSolidWaste	SolidWasteGenerationRate	63.43	0.00
tblVehicleEF	HHD	0.59	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.74	6.66
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.37	9.0030e-003
tblVehicleEF	HHD	4,504.81	1,118.02
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10

tblVehicleEF	HHD	15.07	5.75
tblVehicleEF	HHD	1.98	2.66
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.1570e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.0200e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.43	0.45
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.51	0.52
tblVehicleEF	HHD	8.2000e-005	5.0000e-006

tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.56	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.27	6.57
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.17	8.4620e-003
tblVehicleEF	HHD	4,772.44	1,105.76
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.09
tblVehicleEF	HHD	15.55	5.50
tblVehicleEF	HHD	1.91	2.56
tblVehicleEF	HHD	19.51	2.38
tblVehicleEF	HHD	0.01	2.7490e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	9.6380e-003	2.6300e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004

tblVehicleEF	HHD	0.40	0.48
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.49	0.55
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.64	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	2.40	6.80
tblVehicleEF	HHD	1.09	0.48
tblVehicleEF	HHD	3.46	9.2430e-003
tblVehicleEF	HHD	4,135.22	1,134.96
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	14.40	6.09
tblVehicleEF	HHD	1.98	2.65
tblVehicleEF	HHD	19.53	2.38

tblVehicleEF	HHD	0.01	3.7200e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.5590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.46	0.41
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.56	0.48
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006

tblVehicleEF	LDA	6.1170e-003	2.0310e-003
tblVehicleEF	LDA	7.4160e-003	0.05
tblVehicleEF	LDA	0.58	0.53
tblVehicleEF	LDA	1.39	2.07
tblVehicleEF	LDA	248.05	253.20
tblVehicleEF	LDA	54.17	51.49
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	7.5890e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.10	0.20
tblVehicleEF	LDA	2.4840e-003	2.5050e-003
tblVehicleEF	LDA	5.6600e-004	5.1000e-004
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	6.5890e-003	2.2110e-003

tblVehicleEF	LDA	6.4700e-003	0.04
tblVehicleEF	LDA	0.65	0.60
tblVehicleEF	LDA	1.15	1.71
tblVehicleEF	LDA	262.13	267.26
tblVehicleEF	LDA	54.17	50.84
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	8.1610e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.09	0.18
tblVehicleEF	LDA	2.6260e-003	2.6440e-003
tblVehicleEF	LDA	5.6200e-004	5.0300e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDA	6.0150e-003	1.9880e-003
tblVehicleEF	LDA	7.8030e-003	0.05

tblVehicleEF	LDA	0.56	0.52
tblVehicleEF	LDA	1.49	2.22
tblVehicleEF	LDA	245.50	250.66
tblVehicleEF	LDA	54.17	51.77
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.08	0.18
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	7.4640e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.21
tblVehicleEF	LDA	2.4590e-003	2.4790e-003
tblVehicleEF	LDA	5.6800e-004	5.1200e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.12	0.23
tblVehicleEF	LDT1	0.01	5.8260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.15	1.12

tblVehicleEF	LDT1	2.76	2.33
tblVehicleEF	LDT1	318.80	308.27
tblVehicleEF	LDT1	69.57	63.74
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.2010e-003	3.0510e-003
tblVehicleEF	LDT1	7.4400e-004	6.3100e-004
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT1	0.01	6.2810e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.28	1.25
tblVehicleEF	LDT1	2.27	1.92

tblVehicleEF	LDT1	336.12	323.06
tblVehicleEF	LDT1	69.57	62.92
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	3.3760e-003	3.1970e-003
tblVehicleEF	LDT1	7.3600e-004	6.2300e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.18	0.34
tblVehicleEF	LDT1	0.01	5.7180e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	1.13	1.10
tblVehicleEF	LDT1	2.97	2.50
tblVehicleEF	LDT1	315.67	305.60

tblVehicleEF	LDT1	69.57	64.07
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	3.1700e-003	3.0240e-003
tblVehicleEF	LDT1	7.4800e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.22	0.42
tblVehicleEF	LDT2	5.2450e-003	3.5940e-003
tblVehicleEF	LDT2	5.9320e-003	0.07
tblVehicleEF	LDT2	0.65	0.78
tblVehicleEF	LDT2	1.31	2.67
tblVehicleEF	LDT2	352.67	328.12
tblVehicleEF	LDT2	76.85	68.00

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.27
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	3.5310e-003	3.2460e-003
tblVehicleEF	LDT2	7.9000e-004	6.7300e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.09	0.33
tblVehicleEF	LDT2	5.6410e-003	3.8950e-003
tblVehicleEF	LDT2	5.1630e-003	0.06
tblVehicleEF	LDT2	0.72	0.87
tblVehicleEF	LDT2	1.09	2.20
tblVehicleEF	LDT2	372.26	342.39
tblVehicleEF	LDT2	76.85	67.13
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.7270e-003	3.3870e-003
tblVehicleEF	LDT2	7.8600e-004	6.6400e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	5.1590e-003	3.5220e-003
tblVehicleEF	LDT2	6.2490e-003	0.07
tblVehicleEF	LDT2	0.63	0.76
tblVehicleEF	LDT2	1.41	2.86
tblVehicleEF	LDT2	349.13	325.54
tblVehicleEF	LDT2	76.85	68.36
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.28

tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	3.4950e-003	3.2210e-003
tblVehicleEF	LDT2	7.9200e-004	6.7700e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LHD1	4.6610e-003	4.6580e-003
tblVehicleEF	LHD1	0.02	9.0720e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.84
tblVehicleEF	LHD1	2.19	0.96
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.79
tblVehicleEF	LHD1	27.83	10.50

tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.05
tblVehicleEF	LHD1	0.85	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.1900e-004	1.0400e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.29	0.50

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6680e-003
tblVehicleEF	LHD1	0.02	9.2260e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	2.07	0.91
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.82
tblVehicleEF	LHD1	27.83	10.41
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.42	1.01
tblVehicleEF	LHD1	0.81	0.27
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.28	0.48

tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5190e-003
tblVehicleEF	LHD1	3.1700e-004	1.0300e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6540e-003
tblVehicleEF	LHD1	0.02	9.0050e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.83
tblVehicleEF	LHD1	2.25	0.98
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.78
tblVehicleEF	LHD1	27.83	10.54
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.04
tblVehicleEF	LHD1	0.87	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004

tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.2000e-004	1.0400e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.24	0.08
tblVehicleEF	LHD2	3.3670e-003	3.1630e-003
tblVehicleEF	LHD2	7.3190e-003	7.0780e-003
tblVehicleEF	LHD2	6.3840e-003	8.1370e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.64
tblVehicleEF	LHD2	1.07	0.58

tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.02
tblVehicleEF	LHD2	23.94	7.63
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.80	1.03
tblVehicleEF	LHD2	0.44	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1690e-003
tblVehicleEF	LHD2	7.3940e-003	7.1360e-003
tblVehicleEF	LHD2	6.1320e-003	7.8000e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.65
tblVehicleEF	LHD2	1.02	0.55
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.03
tblVehicleEF	LHD2	23.94	7.57
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.99
tblVehicleEF	LHD2	0.42	0.17
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.10	0.11

tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5800e-004	7.5000e-005
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1600e-003
tblVehicleEF	LHD2	7.2860e-003	7.0520e-003
tblVehicleEF	LHD2	6.4980e-003	8.2880e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.55	0.64
tblVehicleEF	LHD2	1.10	0.59
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.01
tblVehicleEF	LHD2	23.94	7.65
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.79	1.02
tblVehicleEF	LHD2	0.45	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.15	20.36
tblVehicleEF	MCY	9.73	8.62
tblVehicleEF	MCY	182.50	220.59
tblVehicleEF	MCY	45.45	60.38

tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.41	2.43
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.10	1.86
tblVehicleEF	MCY	2.2260e-003	2.1830e-003
tblVehicleEF	MCY	6.7500e-004	5.9700e-004
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.99	3.00
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.29	2.02
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	19.19	19.39
tblVehicleEF	MCY	8.77	7.73
tblVehicleEF	MCY	182.50	218.78
tblVehicleEF	MCY	45.45	58.13
tblVehicleEF	MCY	1.04	1.04

tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.34	2.35
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2080e-003	2.1650e-003
tblVehicleEF	MCY	6.5100e-004	5.7500e-004
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.90	2.91
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	20.81	21.03
tblVehicleEF	MCY	10.22	9.08
tblVehicleEF	MCY	182.50	221.81
tblVehicleEF	MCY	45.45	61.49
tblVehicleEF	MCY	1.17	1.17
tblVehicleEF	MCY	0.32	0.27

tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	2.45	2.47
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	2.2370e-003	2.1950e-003
tblVehicleEF	MCY	6.8700e-004	6.0900e-004
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	3.04	3.05
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.43	2.15
tblVehicleEF	MDV	8.8620e-003	4.0850e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.94	0.82
tblVehicleEF	MDV	2.31	2.98
tblVehicleEF	MDV	472.46	396.95
tblVehicleEF	MDV	101.95	81.91
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	1.8890e-003	1.5990e-003

tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.7270e-003	3.9230e-003
tblVehicleEF	MDV	1.0600e-003	8.1100e-004
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.19	0.41
tblVehicleEF	MDV	9.5090e-003	4.4250e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	0.92
tblVehicleEF	MDV	1.92	2.45
tblVehicleEF	MDV	498.02	411.39
tblVehicleEF	MDV	101.95	80.91
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.19	0.29
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003

tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	4.9840e-003	4.0660e-003
tblVehicleEF	MDV	1.0530e-003	8.0100e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	8.7270e-003	4.0050e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.92	0.81
tblVehicleEF	MDV	2.49	3.21
tblVehicleEF	MDV	467.83	394.33
tblVehicleEF	MDV	101.95	82.33
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003

tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	4.6810e-003	3.8980e-003
tblVehicleEF	MDV	1.0630e-003	8.1500e-004
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.20	0.43
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.63	1.44
tblVehicleEF	MH	5.98	2.11
tblVehicleEF	MH	1,229.84	1,578.48
tblVehicleEF	MH	59.91	18.87
tblVehicleEF	MH	1.50	1.64
tblVehicleEF	MH	0.88	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003

tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0300e-004	1.8700e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.16	0.12
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.72	1.48
tblVehicleEF	MH	5.59	1.98
tblVehicleEF	MH	1,229.84	1,578.55
tblVehicleEF	MH	59.91	18.64
tblVehicleEF	MH	1.42	1.56
tblVehicleEF	MH	0.83	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004

tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.33	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9700e-004	1.8400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.60	1.42
tblVehicleEF	MH	6.17	2.18
tblVehicleEF	MH	1,229.84	1,578.45
tblVehicleEF	MH	59.91	18.98
tblVehicleEF	MH	1.50	1.63
tblVehicleEF	MH	0.90	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03

tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0700e-004	1.8800e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.39	0.11
tblVehicleEF	MHD	0.02	4.0650e-003
tblVehicleEF	MHD	4.2710e-003	2.3930e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	0.34	0.31
tblVehicleEF	MHD	5.31	1.27
tblVehicleEF	MHD	143.80	80.44
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.83

tblVehicleEF	MHD	0.42	0.50
tblVehicleEF	MHD	1.14	1.40
tblVehicleEF	MHD	11.05	1.63
tblVehicleEF	MHD	1.5900e-004	4.7800e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.5200e-004	4.5700e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.3830e-003	7.6300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5600e-004	1.0700e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.02	3.8640e-003

tblVehicleEF	MHD	4.3360e-003	2.4460e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.24	0.36
tblVehicleEF	MHD	0.35	0.31
tblVehicleEF	MHD	4.99	1.20
tblVehicleEF	MHD	152.31	80.75
tblVehicleEF	MHD	1,192.51	1,110.80
tblVehicleEF	MHD	56.35	10.70
tblVehicleEF	MHD	0.43	0.50
tblVehicleEF	MHD	1.10	1.34
tblVehicleEF	MHD	11.01	1.63
tblVehicleEF	MHD	1.3400e-004	4.0600e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.2800e-004	3.8900e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.4640e-003	7.6600e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	1.0600e-004

tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	0.02	4.3540e-003
tblVehicleEF	MHD	4.2430e-003	2.3680e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.46	0.50
tblVehicleEF	MHD	0.34	0.30
tblVehicleEF	MHD	5.46	1.31
tblVehicleEF	MHD	132.03	80.00
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.88
tblVehicleEF	MHD	0.40	0.51
tblVehicleEF	MHD	1.14	1.39
tblVehicleEF	MHD	11.07	1.64
tblVehicleEF	MHD	1.9400e-004	5.7700e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.8500e-004	5.5200e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03

tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2720e-003	7.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5900e-004	1.0800e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	OBUS	0.01	8.7080e-003
tblVehicleEF	OBUS	9.2660e-003	9.7640e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.59
tblVehicleEF	OBUS	0.60	1.09
tblVehicleEF	OBUS	5.69	2.71
tblVehicleEF	OBUS	97.15	83.74
tblVehicleEF	OBUS	1,321.20	1,532.41
tblVehicleEF	OBUS	68.99	20.78
tblVehicleEF	OBUS	0.20	0.32
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.24	0.75

tblVehicleEF	OBUS	1.9000e-005	1.0700e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.8000e-005	1.0300e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	9.3900e-004	7.9800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9000e-004	2.0600e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.7890e-003
tblVehicleEF	OBUS	9.4730e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.58

tblVehicleEF	OBUS	0.61	1.12
tblVehicleEF	OBUS	5.32	2.54
tblVehicleEF	OBUS	101.91	82.81
tblVehicleEF	OBUS	1,321.20	1,532.46
tblVehicleEF	OBUS	68.99	20.48
tblVehicleEF	OBUS	0.21	0.30
tblVehicleEF	OBUS	0.81	1.18
tblVehicleEF	OBUS	2.19	0.74
tblVehicleEF	OBUS	1.6000e-005	9.5000e-005
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.5000e-005	9.1000e-005
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.8400e-004	7.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8300e-004	2.0300e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07

tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6110e-003
tblVehicleEF	OBUS	9.1750e-003	9.6490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.60
tblVehicleEF	OBUS	0.60	1.08
tblVehicleEF	OBUS	5.86	2.80
tblVehicleEF	OBUS	90.56	85.02
tblVehicleEF	OBUS	1,321.20	1,532.39
tblVehicleEF	OBUS	68.99	20.92
tblVehicleEF	OBUS	0.20	0.34
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.26	0.76
tblVehicleEF	OBUS	2.3000e-005	1.2400e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.05	0.05

tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	8.7600e-004	8.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.0700e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.4420e-003
tblVehicleEF	SBUS	0.08	2.7370e-003
tblVehicleEF	SBUS	6.51	1.26
tblVehicleEF	SBUS	0.93	0.75
tblVehicleEF	SBUS	7.02	0.43
tblVehicleEF	SBUS	1,202.36	332.94
tblVehicleEF	SBUS	1,104.05	1,097.57
tblVehicleEF	SBUS	42.89	2.06
tblVehicleEF	SBUS	9.97	4.02
tblVehicleEF	SBUS	4.09	7.31
tblVehicleEF	SBUS	14.11	0.63
tblVehicleEF	SBUS	9.4890e-003	5.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04

tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	9.0780e-003	4.9200e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.36	0.02
tblVehicleEF	SBUS	0.01	3.1570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5000e-004	2.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.39	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.5710e-003
tblVehicleEF	SBUS	0.07	2.3800e-003
tblVehicleEF	SBUS	6.39	1.21
tblVehicleEF	SBUS	0.95	0.77

tblVehicleEF	SBUS	5.49	0.34
tblVehicleEF	SBUS	1,261.22	344.72
tblVehicleEF	SBUS	1,104.05	1,097.59
tblVehicleEF	SBUS	42.89	1.91
tblVehicleEF	SBUS	10.29	4.13
tblVehicleEF	SBUS	3.94	7.04
tblVehicleEF	SBUS	14.07	0.63
tblVehicleEF	SBUS	7.9990e-003	4.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	7.6530e-003	4.1540e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	0.77	0.13
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.11	0.13
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.31	0.01
tblVehicleEF	SBUS	0.01	3.2680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2400e-004	1.9000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003

tblVehicleEF	SBUS	1.11	0.18
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.34	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.3810e-003
tblVehicleEF	SBUS	0.08	2.9140e-003
tblVehicleEF	SBUS	6.68	1.32
tblVehicleEF	SBUS	0.92	0.75
tblVehicleEF	SBUS	7.78	0.48
tblVehicleEF	SBUS	1,121.06	316.67
tblVehicleEF	SBUS	1,104.05	1,097.55
tblVehicleEF	SBUS	42.89	2.14
tblVehicleEF	SBUS	9.53	3.87
tblVehicleEF	SBUS	4.07	7.28
tblVehicleEF	SBUS	14.12	0.63
tblVehicleEF	SBUS	0.01	6.2490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	0.01	5.9780e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003

tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.38	0.02
tblVehicleEF	SBUS	0.01	3.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6300e-004	2.1000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.41	0.02
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.16	1.23
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.21
tblVehicleEF	UBUS	6.89	0.40
tblVehicleEF	UBUS	13.92	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004

tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2970e-003	1.4100e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.69	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.04	0.01
tblVehicleEF	UBUS	7.43	38.17
tblVehicleEF	UBUS	6.11	1.06
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	13.93
tblVehicleEF	UBUS	6.64	0.40
tblVehicleEF	UBUS	13.86	0.13
tblVehicleEF	UBUS	0.57	0.07

tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.58	0.05
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2790e-003	1.3800e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.02
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.63	1.31
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.34

tblVehicleEF	UBUS	6.85	0.40
tblVehicleEF	UBUS	13.94	0.14
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.66	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.3050e-003	1.4200e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	2.23	5.00
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.72	0.07
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	37.00	80.00

tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	ST_TR	158.37	140.82
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	131.84	140.82
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	127.15	140.82
tblVehicleTrips	WD_TR	44.32	40.02
tblWater	IndoorWaterUseRate	1,617,834.69	0.00
tblWater	OutdoorWaterUseRate	103,266.04	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.9041	8.9725	7.9060	0.0128	0.8349	0.5231	1.3027	0.4356	0.4813	0.8818	0.0000	1,231.5099	1,231.5099	0.3597	0.0000	1,236.9954
2021	35.3649	8.0935	7.5673	0.0127	0.1479	0.4479	0.5023	0.0392	0.4121	0.4206	0.0000	1,181.9419	1,181.9419	0.3596	0.0000	1,189.5857
Maximum	**35.3649**	**8.9725**	**7.9060**	**0.0128**	**0.8349**	**0.5231**	**1.3027**	**0.4356**	**0.4813**	**0.8818**	**0.0000**	**1,231.5099**	**1,231.5099**	**0.3597**	**0.0000**	**1,236.9954**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.9041	8.9725	7.9060	0.0128	0.8349	0.5231	1.3027	0.4356	0.4813	0.8818	0.0000	1,231.5099	1,231.5099	0.3597	0.0000	1,236.9954
2021	35.3649	8.0935	7.5673	0.0127	0.1479	0.4479	0.5023	0.0392	0.4121	0.4206	0.0000	1,181.9419	1,181.9419	0.3596	0.0000	1,189.5857
Maximum	**35.3649**	**8.9725**	**7.9060**	**0.0128**	**0.8349**	**0.5231**	**1.3027**	**0.4356**	**0.4813**	**0.8818**	**0.0000**	**1,231.5099**	**1,231.5099**	**0.3597**	**0.0000**	**1,236.9954**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Energy	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Mobile	1.7903	2.6397	14.0484	0.0418	4.0509	0.0329	4.0837	1.0808	0.0307	1.1115		4,309.4352	4,309.4352	0.2738		4,316.2794
Total	**2.0009**	**2.6411**	**14.0503**	**0.0418**	**4.0509**	**0.0330**	**4.0838**	**1.0808**	**0.0308**	**1.1116**		**4,311.0534**	**4,311.0534**	**0.2738**	**3.0000e-005**	**4,317.9073**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Energy	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Mobile	1.7903	2.6397	14.0484	0.0418	4.0509	0.0329	4.0837	1.0808	0.0307	1.1115		4,309.4352	4,309.4352	0.2738		4,316.2794
Total	**2.0009**	**2.6411**	**14.0503**	**0.0418**	**4.0509**	**0.0330**	**4.0838**	**1.0808**	**0.0308**	**1.1116**		**4,311.0534**	**4,311.0534**	**0.2738**	**3.0000e-005**	**4,317.9073**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/25/2021	5/31/2021	5	5	
2	Building Construction	Building Construction	12/29/2020	5/17/2021	5	100	
3	Demolition	Demolition	12/10/2020	12/23/2020	5	10	
4	Grading	Grading	12/25/2020	12/28/2020	5	2	
5	Paving	Paving	5/18/2021	5/24/2021	5	5	
6	Site Preparation	Site Preparation	12/24/2020	12/24/2020	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,373; Non-Residential Outdoor: 3,791; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Fenway Existing Conditions - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	35.1426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**35.3615**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.2 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.4600e-003	2.2500e-003	0.0265	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.1444	8.1444	2.3000e-004		8.1502
Total	**3.4600e-003**	**2.2500e-003**	**0.0265**	**8.0000e-005**	**8.2100e-003**	**6.0000e-005**	**8.2700e-003**	**2.1800e-003**	**5.0000e-005**	**2.2300e-003**		**8.1444**	**8.1444**	**2.3000e-004**		**8.1502**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	35.1426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**35.3615**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.2 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.4600e-003	2.2500e-003	0.0265	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.1444	8.1444	2.3000e-004		8.1502
Total	**3.4600e-003**	**2.2500e-003**	**0.0265**	**8.0000e-005**	**8.2100e-003**	**6.0000e-005**	**8.2700e-003**	**2.1800e-003**	**5.0000e-005**	**2.2300e-003**		**8.1444**	**8.1444**	**2.3000e-004**		**8.1502**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.7400e-003	0.1128	0.0287	2.7000e-004	6.7700e-003	5.5000e-004	7.3200e-003	1.9500e-003	5.3000e-004	2.4800e-003		29.4040	29.4040	2.1700e-003		29.4582
Worker	0.0110	7.4200e-003	0.0850	2.5000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.7000e-003		25.2824	25.2824	7.5000e-004		25.3013
Total	**0.0148**	**0.1202**	**0.1138**	**5.2000e-004**	**0.0314**	**7.2000e-004**	**0.0321**	**8.4900e-003**	**6.9000e-004**	**9.1800e-003**		**54.6864**	**54.6864**	**2.9200e-003**		**54.7595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.7400e-003	0.1128	0.0287	2.7000e-004	6.7700e-003	5.5000e-004	7.3200e-003	1.9500e-003	5.3000e-004	2.4800e-003		29.4040	29.4040	2.1700e-003		29.4582
Worker	0.0110	7.4200e-003	0.0850	2.5000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.7000e-003		25.2824	25.2824	7.5000e-004		25.3013
Total	**0.0148**	**0.1202**	**0.1138**	**5.2000e-004**	**0.0314**	**7.2000e-004**	**0.0321**	**8.4900e-003**	**6.9000e-004**	**9.1800e-003**		**54.6864**	**54.6864**	**2.9200e-003**		**54.7595**

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.3 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.0200e-003	0.1018	0.0260	2.7000e-004	6.7700e-003	2.1000e-004	6.9800e-003	1.9500e-003	2.0000e-004	2.1500e-003		29.1352	29.1352	2.0800e-003		29.1872
Worker	0.0104	6.7400e-003	0.0796	2.5000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.6900e-003		24.4332	24.4332	7.0000e-004		24.4507
Total	**0.0134**	**0.1086**	**0.1055**	**5.2000e-004**	**0.0314**	**3.8000e-004**	**0.0318**	**8.4900e-003**	**3.6000e-004**	**8.8400e-003**		**53.5684**	**53.5684**	**2.7800e-003**		**53.6379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.3 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.0200e-003	0.1018	0.0260	2.7000e-004	6.7700e-003	2.1000e-004	6.9800e-003	1.9500e-003	2.0000e-004	2.1500e-003		29.1352	29.1352	2.0800e-003		29.1872
Worker	0.0104	6.7400e-003	0.0796	2.5000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.6900e-003		24.4332	24.4332	7.0000e-004		24.4507
Total	**0.0134**	**0.1086**	**0.1055**	**5.2000e-004**	**0.0314**	**3.8000e-004**	**0.0318**	**8.4900e-003**	**3.6000e-004**	**8.8400e-003**		**53.5684**	**53.5684**	**2.7800e-003**		**53.6379**

3.4 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**		**0.4672**	**0.4672**		**0.4457**	**0.4457**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.4 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	**0.0367**	**0.0247**	**0.2835**	**8.5000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**84.2747**	**84.2747**	**2.5200e-003**		**84.3376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**		**0.4672**	**0.4672**		**0.4457**	**0.4457**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.4 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	**0.0367**	**0.0247**	**0.2835**	**8.5000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**84.2747**	**84.2747**	**2.5200e-003**		**84.3376**

3.5 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**0.7528**	**0.4672**	**1.2200**	**0.4138**	**0.4457**	**0.8595**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.5 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	**0.0367**	**0.0247**	**0.2835**	**8.5000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**84.2747**	**84.2747**	**2.5200e-003**		**84.3376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**0.7528**	**0.4672**	**1.2200**	**0.4138**	**0.4457**	**0.8595**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.5 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	**0.0367**	**0.0247**	**0.2835**	**8.5000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**84.2747**	**84.2747**	**2.5200e-003**		**84.3376**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	**0.0623**	**0.0405**	**0.4774**	**1.4700e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**146.5994**	**146.5994**	**4.1800e-003**		**146.7040**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	**0.0623**	**0.0405**	**0.4774**	**1.4700e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**146.5994**	**146.5994**	**4.1800e-003**		**146.7040**

3.7 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
Total	**0.6853**	**8.4307**	**4.0942**	**9.7400e-003**	**0.5303**	**0.3353**	**0.8656**	**0.0573**	**0.3085**	**0.3658**		**943.4872**	**943.4872**	**0.3051**		**951.1158**

3.7 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0184	0.0124	0.1417	4.2000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.1374	42.1374	1.2600e-003		42.1688
Total	**0.0184**	**0.0124**	**0.1417**	**4.2000e-004**	**0.0411**	**2.9000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**42.1374**	**42.1374**	**1.2600e-003**		**42.1688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
Total	**0.6853**	**8.4307**	**4.0942**	**9.7400e-003**	**0.5303**	**0.3353**	**0.8656**	**0.0573**	**0.3085**	**0.3658**	**0.0000**	**943.4872**	**943.4872**	**0.3051**		**951.1158**

3.7 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0184	0.0124	0.1417	4.2000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.1374	42.1374	1.2600e-003		42.1688
Total	**0.0184**	**0.0124**	**0.1417**	**4.2000e-004**	**0.0411**	**2.9000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**42.1374**	**42.1374**	**1.2600e-003**		**42.1688**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7903	2.6397	14.0484	0.0418	4.0509	0.0329	4.0837	1.0808	0.0307	1.1115		4,309.4352	4,309.4352	0.2738		4,316.2794
Unmitigated	1.7903	2.6397	14.0484	0.0418	4.0509	0.0329	4.0837	1.0808	0.0307	1.1115		4,309.4352	4,309.4352	0.2738		4,316.2794

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	750.99	750.99	750.99	1,739,659	1,739,659
Strip Mall	90.00	90.00	90.00	175,788	175,788
Total	841.00	841.00	841.00	1,915,447	1,915,447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	60	40	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Strip Mall	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
NaturalGas Unmitigated	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	13.7405	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Total		**1.5000e-004**	**1.3500e-003**	**1.1300e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**1.6165**	**1.6165**	**3.0000e-005**	**3.0000e-005**	**1.6261**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0137405	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Total		**1.5000e-004**	**1.3500e-003**	**1.1300e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**1.6165**	**1.6165**	**3.0000e-005**	**3.0000e-005**	**1.6261**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Unmitigated	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0481					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Total	**0.2105**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6600e-003**	**1.6600e-003**	**0.0000**		**1.7700e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0481					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Total	**0.2105**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6600e-003**	**1.6600e-003**	**0.0000**		**1.7700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Fenway Existing Conditions

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High Turnover (Sit Down Restaurant)	5.33	1000sqft	0.12	5,333.00	0
Strip Mall	2.25	1000sqft	0.05	2,249.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Fenway Existing Conditions - San Diego County APCD Air District, Winter

Project Characteristics -

Land Use -

Architectural Coating -

Vehicle Trips - based on traffic study; pass-by trips incorporated in trip rates, so set as 0%

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - restaurant is currently unoccupied

Water And Wastewater - restaurant is currently unoccupied

Solid Waste - restaurant is currently unoccupied

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	6.78	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	T24E	8.23	0.00
tblEnergyUse	T24NG	35.92	0.00
tblSolidWaste	SolidWasteGenerationRate	63.43	0.00
tblVehicleEF	HHD	0.59	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.74	6.66
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.37	9.0030e-003
tblVehicleEF	HHD	4,504.81	1,118.02
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10

tblVehicleEF	HHD	15.07	5.75
tblVehicleEF	HHD	1.98	2.66
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.1570e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.0200e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.43	0.45
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.51	0.52
tblVehicleEF	HHD	8.2000e-005	5.0000e-006

tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.56	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.27	6.57
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.17	8.4620e-003
tblVehicleEF	HHD	4,772.44	1,105.76
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.09
tblVehicleEF	HHD	15.55	5.50
tblVehicleEF	HHD	1.91	2.56
tblVehicleEF	HHD	19.51	2.38
tblVehicleEF	HHD	0.01	2.7490e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	9.6380e-003	2.6300e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004

tblVehicleEF	HHD	0.40	0.48
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.49	0.55
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.64	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	2.40	6.80
tblVehicleEF	HHD	1.09	0.48
tblVehicleEF	HHD	3.46	9.2430e-003
tblVehicleEF	HHD	4,135.22	1,134.96
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	14.40	6.09
tblVehicleEF	HHD	1.98	2.65
tblVehicleEF	HHD	19.53	2.38

tblVehicleEF	HHD	0.01	3.7200e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.5590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.46	0.41
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.56	0.48
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006

tblVehicleEF	LDA	6.1170e-003	2.0310e-003
tblVehicleEF	LDA	7.4160e-003	0.05
tblVehicleEF	LDA	0.58	0.53
tblVehicleEF	LDA	1.39	2.07
tblVehicleEF	LDA	248.05	253.20
tblVehicleEF	LDA	54.17	51.49
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	7.5890e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.10	0.20
tblVehicleEF	LDA	2.4840e-003	2.5050e-003
tblVehicleEF	LDA	5.6600e-004	5.1000e-004
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	6.5890e-003	2.2110e-003

tblVehicleEF	LDA	6.4700e-003	0.04
tblVehicleEF	LDA	0.65	0.60
tblVehicleEF	LDA	1.15	1.71
tblVehicleEF	LDA	262.13	267.26
tblVehicleEF	LDA	54.17	50.84
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	8.1610e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.09	0.18
tblVehicleEF	LDA	2.6260e-003	2.6440e-003
tblVehicleEF	LDA	5.6200e-004	5.0300e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDA	6.0150e-003	1.9880e-003
tblVehicleEF	LDA	7.8030e-003	0.05

tblVehicleEF	LDA	0.56	0.52
tblVehicleEF	LDA	1.49	2.22
tblVehicleEF	LDA	245.50	250.66
tblVehicleEF	LDA	54.17	51.77
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.08	0.18
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	7.4640e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.21
tblVehicleEF	LDA	2.4590e-003	2.4790e-003
tblVehicleEF	LDA	5.6800e-004	5.1200e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.12	0.23
tblVehicleEF	LDT1	0.01	5.8260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.15	1.12

tblVehicleEF	LDT1	2.76	2.33
tblVehicleEF	LDT1	318.80	308.27
tblVehicleEF	LDT1	69.57	63.74
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.2010e-003	3.0510e-003
tblVehicleEF	LDT1	7.4400e-004	6.3100e-004
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT1	0.01	6.2810e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.28	1.25
tblVehicleEF	LDT1	2.27	1.92

tblVehicleEF	LDT1	336.12	323.06
tblVehicleEF	LDT1	69.57	62.92
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	3.3760e-003	3.1970e-003
tblVehicleEF	LDT1	7.3600e-004	6.2300e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.18	0.34
tblVehicleEF	LDT1	0.01	5.7180e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	1.13	1.10
tblVehicleEF	LDT1	2.97	2.50
tblVehicleEF	LDT1	315.67	305.60

tblVehicleEF	LDT1	69.57	64.07
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	3.1700e-003	3.0240e-003
tblVehicleEF	LDT1	7.4800e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.22	0.42
tblVehicleEF	LDT2	5.2450e-003	3.5940e-003
tblVehicleEF	LDT2	5.9320e-003	0.07
tblVehicleEF	LDT2	0.65	0.78
tblVehicleEF	LDT2	1.31	2.67
tblVehicleEF	LDT2	352.67	328.12
tblVehicleEF	LDT2	76.85	68.00

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.27
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	3.5310e-003	3.2460e-003
tblVehicleEF	LDT2	7.9000e-004	6.7300e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.09	0.33
tblVehicleEF	LDT2	5.6410e-003	3.8950e-003
tblVehicleEF	LDT2	5.1630e-003	0.06
tblVehicleEF	LDT2	0.72	0.87
tblVehicleEF	LDT2	1.09	2.20
tblVehicleEF	LDT2	372.26	342.39
tblVehicleEF	LDT2	76.85	67.13
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.7270e-003	3.3870e-003
tblVehicleEF	LDT2	7.8600e-004	6.6400e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	5.1590e-003	3.5220e-003
tblVehicleEF	LDT2	6.2490e-003	0.07
tblVehicleEF	LDT2	0.63	0.76
tblVehicleEF	LDT2	1.41	2.86
tblVehicleEF	LDT2	349.13	325.54
tblVehicleEF	LDT2	76.85	68.36
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.28

tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	3.4950e-003	3.2210e-003
tblVehicleEF	LDT2	7.9200e-004	6.7700e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LHD1	4.6610e-003	4.6580e-003
tblVehicleEF	LHD1	0.02	9.0720e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.84
tblVehicleEF	LHD1	2.19	0.96
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.79
tblVehicleEF	LHD1	27.83	10.50

tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.05
tblVehicleEF	LHD1	0.85	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.1900e-004	1.0400e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.29	0.50

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6680e-003
tblVehicleEF	LHD1	0.02	9.2260e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	2.07	0.91
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.82
tblVehicleEF	LHD1	27.83	10.41
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.42	1.01
tblVehicleEF	LHD1	0.81	0.27
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.28	0.48

tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5190e-003
tblVehicleEF	LHD1	3.1700e-004	1.0300e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6540e-003
tblVehicleEF	LHD1	0.02	9.0050e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.83
tblVehicleEF	LHD1	2.25	0.98
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.78
tblVehicleEF	LHD1	27.83	10.54
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.04
tblVehicleEF	LHD1	0.87	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004

tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.2000e-004	1.0400e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.24	0.08
tblVehicleEF	LHD2	3.3670e-003	3.1630e-003
tblVehicleEF	LHD2	7.3190e-003	7.0780e-003
tblVehicleEF	LHD2	6.3840e-003	8.1370e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.64
tblVehicleEF	LHD2	1.07	0.58

tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.02
tblVehicleEF	LHD2	23.94	7.63
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.80	1.03
tblVehicleEF	LHD2	0.44	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1690e-003
tblVehicleEF	LHD2	7.3940e-003	7.1360e-003
tblVehicleEF	LHD2	6.1320e-003	7.8000e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.65
tblVehicleEF	LHD2	1.02	0.55
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.03
tblVehicleEF	LHD2	23.94	7.57
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.99
tblVehicleEF	LHD2	0.42	0.17
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.10	0.11

tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5800e-004	7.5000e-005
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1600e-003
tblVehicleEF	LHD2	7.2860e-003	7.0520e-003
tblVehicleEF	LHD2	6.4980e-003	8.2880e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.55	0.64
tblVehicleEF	LHD2	1.10	0.59
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.01
tblVehicleEF	LHD2	23.94	7.65
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.79	1.02
tblVehicleEF	LHD2	0.45	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.15	20.36
tblVehicleEF	MCY	9.73	8.62
tblVehicleEF	MCY	182.50	220.59
tblVehicleEF	MCY	45.45	60.38

tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.41	2.43
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.10	1.86
tblVehicleEF	MCY	2.2260e-003	2.1830e-003
tblVehicleEF	MCY	6.7500e-004	5.9700e-004
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.99	3.00
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.29	2.02
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	19.19	19.39
tblVehicleEF	MCY	8.77	7.73
tblVehicleEF	MCY	182.50	218.78
tblVehicleEF	MCY	45.45	58.13
tblVehicleEF	MCY	1.04	1.04

tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.34	2.35
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2080e-003	2.1650e-003
tblVehicleEF	MCY	6.5100e-004	5.7500e-004
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.90	2.91
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	20.81	21.03
tblVehicleEF	MCY	10.22	9.08
tblVehicleEF	MCY	182.50	221.81
tblVehicleEF	MCY	45.45	61.49
tblVehicleEF	MCY	1.17	1.17
tblVehicleEF	MCY	0.32	0.27

tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	2.45	2.47
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	2.2370e-003	2.1950e-003
tblVehicleEF	MCY	6.8700e-004	6.0900e-004
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	3.04	3.05
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.43	2.15
tblVehicleEF	MDV	8.8620e-003	4.0850e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.94	0.82
tblVehicleEF	MDV	2.31	2.98
tblVehicleEF	MDV	472.46	396.95
tblVehicleEF	MDV	101.95	81.91
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	1.8890e-003	1.5990e-003

tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.7270e-003	3.9230e-003
tblVehicleEF	MDV	1.0600e-003	8.1100e-004
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.19	0.41
tblVehicleEF	MDV	9.5090e-003	4.4250e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	0.92
tblVehicleEF	MDV	1.92	2.45
tblVehicleEF	MDV	498.02	411.39
tblVehicleEF	MDV	101.95	80.91
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.19	0.29
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003

tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	4.9840e-003	4.0660e-003
tblVehicleEF	MDV	1.0530e-003	8.0100e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	8.7270e-003	4.0050e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.92	0.81
tblVehicleEF	MDV	2.49	3.21
tblVehicleEF	MDV	467.83	394.33
tblVehicleEF	MDV	101.95	82.33
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003

tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	4.6810e-003	3.8980e-003
tblVehicleEF	MDV	1.0630e-003	8.1500e-004
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.20	0.43
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.63	1.44
tblVehicleEF	MH	5.98	2.11
tblVehicleEF	MH	1,229.84	1,578.48
tblVehicleEF	MH	59.91	18.87
tblVehicleEF	MH	1.50	1.64
tblVehicleEF	MH	0.88	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003

tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0300e-004	1.8700e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.16	0.12
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.72	1.48
tblVehicleEF	MH	5.59	1.98
tblVehicleEF	MH	1,229.84	1,578.55
tblVehicleEF	MH	59.91	18.64
tblVehicleEF	MH	1.42	1.56
tblVehicleEF	MH	0.83	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004

tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.33	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9700e-004	1.8400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.60	1.42
tblVehicleEF	MH	6.17	2.18
tblVehicleEF	MH	1,229.84	1,578.45
tblVehicleEF	MH	59.91	18.98
tblVehicleEF	MH	1.50	1.63
tblVehicleEF	MH	0.90	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03

tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0700e-004	1.8800e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.39	0.11
tblVehicleEF	MHD	0.02	4.0650e-003
tblVehicleEF	MHD	4.2710e-003	2.3930e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	0.34	0.31
tblVehicleEF	MHD	5.31	1.27
tblVehicleEF	MHD	143.80	80.44
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.83

tblVehicleEF	MHD	0.42	0.50
tblVehicleEF	MHD	1.14	1.40
tblVehicleEF	MHD	11.05	1.63
tblVehicleEF	MHD	1.5900e-004	4.7800e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.5200e-004	4.5700e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.3830e-003	7.6300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5600e-004	1.0700e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.02	3.8640e-003

tblVehicleEF	MHD	4.3360e-003	2.4460e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.24	0.36
tblVehicleEF	MHD	0.35	0.31
tblVehicleEF	MHD	4.99	1.20
tblVehicleEF	MHD	152.31	80.75
tblVehicleEF	MHD	1,192.51	1,110.80
tblVehicleEF	MHD	56.35	10.70
tblVehicleEF	MHD	0.43	0.50
tblVehicleEF	MHD	1.10	1.34
tblVehicleEF	MHD	11.01	1.63
tblVehicleEF	MHD	1.3400e-004	4.0600e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.2800e-004	3.8900e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.4640e-003	7.6600e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	1.0600e-004

tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	0.02	4.3540e-003
tblVehicleEF	MHD	4.2430e-003	2.3680e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.46	0.50
tblVehicleEF	MHD	0.34	0.30
tblVehicleEF	MHD	5.46	1.31
tblVehicleEF	MHD	132.03	80.00
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.88
tblVehicleEF	MHD	0.40	0.51
tblVehicleEF	MHD	1.14	1.39
tblVehicleEF	MHD	11.07	1.64
tblVehicleEF	MHD	1.9400e-004	5.7700e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.8500e-004	5.5200e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03

tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2720e-003	7.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5900e-004	1.0800e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	OBUS	0.01	8.7080e-003
tblVehicleEF	OBUS	9.2660e-003	9.7640e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.59
tblVehicleEF	OBUS	0.60	1.09
tblVehicleEF	OBUS	5.69	2.71
tblVehicleEF	OBUS	97.15	83.74
tblVehicleEF	OBUS	1,321.20	1,532.41
tblVehicleEF	OBUS	68.99	20.78
tblVehicleEF	OBUS	0.20	0.32
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.24	0.75

tblVehicleEF	OBUS	1.9000e-005	1.0700e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.8000e-005	1.0300e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	9.3900e-004	7.9800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9000e-004	2.0600e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.7890e-003
tblVehicleEF	OBUS	9.4730e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.58

tblVehicleEF	OBUS	0.61	1.12
tblVehicleEF	OBUS	5.32	2.54
tblVehicleEF	OBUS	101.91	82.81
tblVehicleEF	OBUS	1,321.20	1,532.46
tblVehicleEF	OBUS	68.99	20.48
tblVehicleEF	OBUS	0.21	0.30
tblVehicleEF	OBUS	0.81	1.18
tblVehicleEF	OBUS	2.19	0.74
tblVehicleEF	OBUS	1.6000e-005	9.5000e-005
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.5000e-005	9.1000e-005
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.8400e-004	7.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8300e-004	2.0300e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07

tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6110e-003
tblVehicleEF	OBUS	9.1750e-003	9.6490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.60
tblVehicleEF	OBUS	0.60	1.08
tblVehicleEF	OBUS	5.86	2.80
tblVehicleEF	OBUS	90.56	85.02
tblVehicleEF	OBUS	1,321.20	1,532.39
tblVehicleEF	OBUS	68.99	20.92
tblVehicleEF	OBUS	0.20	0.34
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.26	0.76
tblVehicleEF	OBUS	2.3000e-005	1.2400e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.05	0.05

tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	8.7600e-004	8.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.0700e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.4420e-003
tblVehicleEF	SBUS	0.08	2.7370e-003
tblVehicleEF	SBUS	6.51	1.26
tblVehicleEF	SBUS	0.93	0.75
tblVehicleEF	SBUS	7.02	0.43
tblVehicleEF	SBUS	1,202.36	332.94
tblVehicleEF	SBUS	1,104.05	1,097.57
tblVehicleEF	SBUS	42.89	2.06
tblVehicleEF	SBUS	9.97	4.02
tblVehicleEF	SBUS	4.09	7.31
tblVehicleEF	SBUS	14.11	0.63
tblVehicleEF	SBUS	9.4890e-003	5.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04

tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	9.0780e-003	4.9200e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.36	0.02
tblVehicleEF	SBUS	0.01	3.1570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5000e-004	2.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.39	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.5710e-003
tblVehicleEF	SBUS	0.07	2.3800e-003
tblVehicleEF	SBUS	6.39	1.21
tblVehicleEF	SBUS	0.95	0.77

tblVehicleEF	SBUS	5.49	0.34
tblVehicleEF	SBUS	1,261.22	344.72
tblVehicleEF	SBUS	1,104.05	1,097.59
tblVehicleEF	SBUS	42.89	1.91
tblVehicleEF	SBUS	10.29	4.13
tblVehicleEF	SBUS	3.94	7.04
tblVehicleEF	SBUS	14.07	0.63
tblVehicleEF	SBUS	7.9990e-003	4.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	7.6530e-003	4.1540e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	0.77	0.13
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.11	0.13
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.31	0.01
tblVehicleEF	SBUS	0.01	3.2680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2400e-004	1.9000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003

tblVehicleEF	SBUS	1.11	0.18
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.34	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.3810e-003
tblVehicleEF	SBUS	0.08	2.9140e-003
tblVehicleEF	SBUS	6.68	1.32
tblVehicleEF	SBUS	0.92	0.75
tblVehicleEF	SBUS	7.78	0.48
tblVehicleEF	SBUS	1,121.06	316.67
tblVehicleEF	SBUS	1,104.05	1,097.55
tblVehicleEF	SBUS	42.89	2.14
tblVehicleEF	SBUS	9.53	3.87
tblVehicleEF	SBUS	4.07	7.28
tblVehicleEF	SBUS	14.12	0.63
tblVehicleEF	SBUS	0.01	6.2490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	0.01	5.9780e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003

tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.38	0.02
tblVehicleEF	SBUS	0.01	3.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6300e-004	2.1000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.41	0.02
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.16	1.23
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.21
tblVehicleEF	UBUS	6.89	0.40
tblVehicleEF	UBUS	13.92	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004

tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2970e-003	1.4100e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.69	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.04	0.01
tblVehicleEF	UBUS	7.43	38.17
tblVehicleEF	UBUS	6.11	1.06
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	13.93
tblVehicleEF	UBUS	6.64	0.40
tblVehicleEF	UBUS	13.86	0.13
tblVehicleEF	UBUS	0.57	0.07

tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.58	0.05
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2790e-003	1.3800e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.02
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.63	1.31
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.34

tblVehicleEF	UBUS	6.85	0.40
tblVehicleEF	UBUS	13.94	0.14
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.66	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.3050e-003	1.4200e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	2.23	5.00
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.72	0.07
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	37.00	80.00

tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	ST_TR	158.37	140.82
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	131.84	140.82
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	127.15	140.82
tblVehicleTrips	WD_TR	44.32	40.02
tblWater	IndoorWaterUseRate	1,617,834.69	0.00
tblWater	OutdoorWaterUseRate	103,266.04	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.9089	8.9733	7.8898	0.0128	0.8349	0.5231	1.3027	0.4356	0.4813	0.8818	0.0000	1,226.3484	1,226.3484	0.3598	0.0000	1,231.8305
2021	35.3654	8.0941	7.5386	0.0126	0.1479	0.4479	0.5023	0.0392	0.4121	0.4206	0.0000	1,172.9611	1,172.9611	0.3597	0.0000	1,180.5992
Maximum	**35.3654**	**8.9733**	**7.8898**	**0.0128**	**0.8349**	**0.5231**	**1.3027**	**0.4356**	**0.4813**	**0.8818**	**0.0000**	**1,226.3484**	**1,226.3484**	**0.3598**	**0.0000**	**1,231.8305**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.9089	8.9733	7.8898	0.0128	0.8349	0.5231	1.3027	0.4356	0.4813	0.8818	0.0000	1,226.3484	1,226.3484	0.3598	0.0000	1,231.8305
2021	35.3654	8.0941	7.5386	0.0126	0.1479	0.4479	0.5023	0.0392	0.4121	0.4206	0.0000	1,172.9611	1,172.9611	0.3597	0.0000	1,180.5992
Maximum	**35.3654**	**8.9733**	**7.8898**	**0.0128**	**0.8349**	**0.5231**	**1.3027**	**0.4356**	**0.4813**	**0.8818**	**0.0000**	**1,226.3484**	**1,226.3484**	**0.3598**	**0.0000**	**1,231.8305**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Energy	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Mobile	1.8678	2.8235	14.2067	0.0401	4.0509	0.0329	4.0838	1.0808	0.0308	1.1116		4,132.7339	4,132.7339	0.2874		4,139.9191
Total	**2.0784**	**2.8248**	**14.2086**	**0.0401**	**4.0509**	**0.0330**	**4.0839**	**1.0808**	**0.0309**	**1.1117**		**4,134.3520**	**4,134.3520**	**0.2874**	**3.0000e-005**	**4,141.5470**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Energy	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Mobile	1.8678	2.8235	14.2067	0.0401	4.0509	0.0329	4.0838	1.0808	0.0308	1.1116		4,132.7339	4,132.7339	0.2874		4,139.9191
Total	**2.0784**	**2.8248**	**14.2086**	**0.0401**	**4.0509**	**0.0330**	**4.0839**	**1.0808**	**0.0309**	**1.1117**		**4,134.3520**	**4,134.3520**	**0.2874**	**3.0000e-005**	**4,141.5470**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/25/2021	5/31/2021	5	5	
2	Building Construction	Building Construction	12/29/2020	5/17/2021	5	100	
3	Demolition	Demolition	12/10/2020	12/23/2020	5	10	
4	Grading	Grading	12/25/2020	12/28/2020	5	2	
5	Paving	Paving	5/18/2021	5/24/2021	5	5	
6	Site Preparation	Site Preparation	12/24/2020	12/24/2020	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,373; Non-Residential Outdoor: 3,791; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Fenway Existing Conditions - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	35.1426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**35.3615**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.2 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.9200e-003	2.5200e-003	0.0249	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6455	7.6455	2.2000e-004		7.6510
Total	**3.9200e-003**	**2.5200e-003**	**0.0249**	**8.0000e-005**	**8.2100e-003**	**6.0000e-005**	**8.2700e-003**	**2.1800e-003**	**5.0000e-005**	**2.2300e-003**		**7.6455**	**7.6455**	**2.2000e-004**		**7.6510**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	35.1426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**35.3615**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.2 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.9200e-003	2.5200e-003	0.0249	8.0000e-005	8.2100e-003	6.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6455	7.6455	2.2000e-004		7.6510
Total	**3.9200e-003**	**2.5200e-003**	**0.0249**	**8.0000e-005**	**8.2100e-003**	**6.0000e-005**	**8.2700e-003**	**2.1800e-003**	**5.0000e-005**	**2.2300e-003**		**7.6455**	**7.6455**	**2.2000e-004**		**7.6510**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.9100e-003	0.1127	0.0319	2.7000e-004	6.7700e-003	5.6000e-004	7.3300e-003	1.9500e-003	5.4000e-004	2.4900e-003		28.6462	28.6462	2.3100e-003		28.7039
Worker	0.0125	8.3300e-003	0.0802	2.4000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.7000e-003		23.7340	23.7340	7.1000e-004		23.7518
Total	**0.0164**	**0.1210**	**0.1121**	**5.1000e-004**	**0.0314**	**7.3000e-004**	**0.0322**	**8.4900e-003**	**7.0000e-004**	**9.1900e-003**		**52.3802**	**52.3802**	**3.0200e-003**		**52.4557**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.9100e-003	0.1127	0.0319	2.7000e-004	6.7700e-003	5.6000e-004	7.3300e-003	1.9500e-003	5.4000e-004	2.4900e-003		28.6462	28.6462	2.3100e-003		28.7039
Worker	0.0125	8.3300e-003	0.0802	2.4000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.7000e-003		23.7340	23.7340	7.1000e-004		23.7518
Total	**0.0164**	**0.1210**	**0.1121**	**5.1000e-004**	**0.0314**	**7.3000e-004**	**0.0322**	**8.4900e-003**	**7.0000e-004**	**9.1900e-003**		**52.3802**	**52.3802**	**3.0200e-003**		**52.4557**

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.3 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1900e-003	0.1016	0.0289	2.6000e-004	6.7700e-003	2.2000e-004	6.9900e-003	1.9500e-003	2.1000e-004	2.1600e-003		28.3819	28.3819	2.2100e-003		28.4372
Worker	0.0118	7.5700e-003	0.0748	2.3000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.6900e-003		22.9364	22.9364	6.6000e-004		22.9529
Total	**0.0150**	**0.1091**	**0.1037**	**4.9000e-004**	**0.0314**	**3.9000e-004**	**0.0318**	**8.4900e-003**	**3.7000e-004**	**8.8500e-003**		**51.3184**	**51.3184**	**2.8700e-003**		**51.3901**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.3 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1900e-003	0.1016	0.0289	2.6000e-004	6.7700e-003	2.2000e-004	6.9900e-003	1.9500e-003	2.1000e-004	2.1600e-003		28.3819	28.3819	2.2100e-003		28.4372
Worker	0.0118	7.5700e-003	0.0748	2.3000e-004	0.0246	1.7000e-004	0.0248	6.5400e-003	1.6000e-004	6.6900e-003		22.9364	22.9364	6.6000e-004		22.9529
Total	**0.0150**	**0.1091**	**0.1037**	**4.9000e-004**	**0.0314**	**3.9000e-004**	**0.0318**	**8.4900e-003**	**3.7000e-004**	**8.8500e-003**		**51.3184**	**51.3184**	**2.8700e-003**		**51.3901**

3.4 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**		**0.4672**	**0.4672**		**0.4457**	**0.4457**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.4 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	**0.0416**	**0.0278**	**0.2673**	**7.9000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**79.1132**	**79.1132**	**2.3800e-003**		**79.1727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**		**0.4672**	**0.4672**		**0.4457**	**0.4457**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.4 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	**0.0416**	**0.0278**	**0.2673**	**7.9000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**79.1132**	**79.1132**	**2.3800e-003**		**79.1727**

3.5 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**0.7528**	**0.4672**	**1.2200**	**0.4138**	**0.4457**	**0.8595**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.5 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	**0.0416**	**0.0278**	**0.2673**	**7.9000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**79.1132**	**79.1132**	**2.3800e-003**		**79.1727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**0.7528**	**0.4672**	**1.2200**	**0.4138**	**0.4457**	**0.8595**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.5 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	**0.0416**	**0.0278**	**0.2673**	**7.9000e-004**	**0.0822**	**5.8000e-004**	**0.0827**	**0.0218**	**5.3000e-004**	**0.0223**		**79.1132**	**79.1132**	**2.3800e-003**		**79.1727**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	**0.0706**	**0.0454**	**0.4488**	**1.3800e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**137.6186**	**137.6186**	**3.9500e-003**		**137.7174**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	**0.0706**	**0.0454**	**0.4488**	**1.3800e-003**	**0.1479**	**1.0200e-003**	**0.1489**	**0.0392**	**9.4000e-004**	**0.0402**		**137.6186**	**137.6186**	**3.9500e-003**		**137.7174**

3.7 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
Total	**0.6853**	**8.4307**	**4.0942**	**9.7400e-003**	**0.5303**	**0.3353**	**0.8656**	**0.0573**	**0.3085**	**0.3658**		**943.4872**	**943.4872**	**0.3051**		**951.1158**

3.7 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0208	0.0139	0.1336	4.0000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		39.5566	39.5566	1.1900e-003		39.5864
Total	**0.0208**	**0.0139**	**0.1336**	**4.0000e-004**	**0.0411**	**2.9000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**39.5566**	**39.5566**	**1.1900e-003**		**39.5864**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
Total	**0.6853**	**8.4307**	**4.0942**	**9.7400e-003**	**0.5303**	**0.3353**	**0.8656**	**0.0573**	**0.3085**	**0.3658**	**0.0000**	**943.4872**	**943.4872**	**0.3051**		**951.1158**

3.7 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0208	0.0139	0.1336	4.0000e-004	0.0411	2.9000e-004	0.0414	0.0109	2.7000e-004	0.0112		39.5566	39.5566	1.1900e-003		39.5864
Total	**0.0208**	**0.0139**	**0.1336**	**4.0000e-004**	**0.0411**	**2.9000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**39.5566**	**39.5566**	**1.1900e-003**		**39.5864**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8678	2.8235	14.2067	0.0401	4.0509	0.0329	4.0838	1.0808	0.0308	1.1116		4,132.7339	4,132.7339	0.2874		4,139.9191
Unmitigated	1.8678	2.8235	14.2067	0.0401	4.0509	0.0329	4.0838	1.0808	0.0308	1.1116		4,132.7339	4,132.7339	0.2874		4,139.9191

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	750.99	750.99	750.99	1,739,659	1,739,659
Strip Mall	90.00	90.00	90.00	175,788	175,788
Total	841.00	841.00	841.00	1,915,447	1,915,447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	60	40	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Strip Mall	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
NaturalGas Unmitigated	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	13.7405	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Total		**1.5000e-004**	**1.3500e-003**	**1.1300e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**1.6165**	**1.6165**	**3.0000e-005**	**3.0000e-005**	**1.6261**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0137405	1.5000e-004	1.3500e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6165	1.6165	3.0000e-005	3.0000e-005	1.6261
Total		**1.5000e-004**	**1.3500e-003**	**1.1300e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**1.6165**	**1.6165**	**3.0000e-005**	**3.0000e-005**	**1.6261**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Unmitigated	0.2105	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0481					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Total	**0.2105**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6600e-003**	**1.6600e-003**	**0.0000**		**1.7700e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0481					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6600e-003	1.6600e-003	0.0000		1.7700e-003
Total	**0.2105**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6600e-003**	**1.6600e-003**	**0.0000**		**1.7700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX C-1
BIOLOGICAL RESOURCES ASSESSMENT

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

Technical Memorandum:
TERRESTRIAL BIOLOGICAL RESOURCES

Marea Village Mixed Use Development Project

MBAKERINTL.COM

Technical Memorandum

TO:	City of Encinitas	**DATE:**	July 2021
FROM:	Michael Baker International Ryan Winkleman Senior Biologist Natural Resources and Regulatory Permitting	**SUBJECT:**	Biological Resources Assessment for the Marea Village Mixed Use Development Project

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential impacts to biological resources resulting from the construction and operation of the project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City(refer to Figure 1, Regional Vicinity). The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

The project site is depicted in Section 33 of Township 12 south, Range 4 west, and Section 4 of Township 13 south, Range 4 west on the United States Geological Survey's (USGS) Encinitas, California 7.5-minute quadrangles (refer to Figure 2, Project Vicinity).

The existing Seabluffe residential community of 255-gated townhomes is located directly adjacent to the south and west. Moorgate Road and approximately 18 parking stalls run along the southern boundary of the site. The Pacific Ocean lies further west, approximately 0.14-mile from the site. The Alila Marea Beach Resort is located adjacent to the north of the project site (refer to Figure 3, Project Site). The intersection of La Costa Avenue and North Coast Highway 101 lies approximately 215 feet to the northeast. North Coast Highway 101, a four-lane divided highway with two lanes and a dedicated bike lane in both directions, forms the eastern boundary of the project site. The North County Transit District (NCTD) railroad runs north-south and parallels Highway 101 on the east, approximately 135 feet to the east of the project site at its nearest point.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site is via North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area.

Vehicular access to the site would be provided via a right turn in from the southbound lane of North Coast Highway 101 and a new left turn lane from the northbound North Coast Highway 101. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. It is anticipated there would also be pedestrian access to the site from the property to the north of the project which is connected to the Alila Marea Beach Resort.

Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone overlay. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Limited Visitor-Serving Commercial (N-LVSC) with a Coastal Zone and Residential-30 (R-30) Zone overlay. As part of the City of Encinitas Housing Element Update, Site 1 of the project site was allocated a minimum of 33 residential units if the site is developed at a mixed-use ratio.

Project construction would occur over approximately 15 months. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating.

Methodology

Michael Baker conducted a literature review, database and record searches, and a field survey to characterize existing site conditions and assess the potential for special-status[1] plant and wildlife species to occur on or within the immediate vicinity of the project site that could pose a constraint to future development. Specifically, this report provides a detailed assessment of the suitability of the on-site habitat to support special-status plant and wildlife species that were identified by the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) RareFind 5 (CDFW 2020a), the CNDDB Biogeographic Information and Observation System (BIOS; CDFW 2020b), the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (Online Inventory; CNPS 2020), and other databases as potentially occurring in the vicinity of the project site. Additionally, the relationship of the project site to the San Diego County Multiple Habitat Conservation Program (MHCP), the Draft Encinitas Subarea Plan (SAP), the City of Encinitas Housing Element Update (HEU) Environmental Assessment, the Encinitas General Plan (GP), North Coast Highway 101 Specific Plan (Specific Plan), and the City's Tree Ordinance and Urban Forest Management Program (UFMP) are discussed in this report.

Michael Baker performed a thorough literature review and records search prior to conducting field surveys. A general habitat assessment or field survey was conducted in order to document existing site

[1] As used in this report, "special-status" refers to plant and wildlife species that are Federally-/State-listed, proposed, or candidates; plant species that have been designated a California Rare Plant Rank species by the California Native Plant Society; wildlife species that are designated by the California Department of Fish and Wildlife as Fully Protected, Species of Special Concern, or Watch List species; and State/locally rare vegetation communities.

conditions and determine the potential for special-status plant and wildlife species to occur within the project site and areas generally within 100 feet (survey area).

Literature Review

Literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the survey area. Previous special-status plant and wildlife species occurrence records within the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles were determined through a query of the CNDDB (CDFW 2020a), BIOS (CDFW 2020b), the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC; USFWS 2020a), CNPS Online Inventory (CNPS 2020), and the Calflora Database (Calflora 2020). The current conservation status of species was verified through the Special Animals List provided by the CDFW (CDFW 2020c). In addition, Michael Baker reviewed all publicly available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the survey area to gain an understanding of existing site conditions, confirm previous species observations, and note the extent of any disturbances that have occurred within the survey area that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status species, as well as the following resources:

- *City of Encinitas General Plan* (City of Encinitas 1995);
- *City of Encinitas Urban Forest Management Program* (City of Encinitas 2017);
- *Draft Encinitas Subarea Plan* (City of Encinitas 2001);
- *Draft Environmental Assessment/Program Environmental Impact Report for* At Home in Encinitas*, the City of Encinitas Housing Element Update* (RECON 2016);
- Google Earth Pro Historical Aerial Imagery from 1994 to 2018 (Google, Inc. 2020);
- *North* [San Diego] *County Multiple Habitat Conservation Program* (San Diego Association of Governments 2003);
- Species accounts provided by *Birds of the World* (The Cornell Lab of Ornithology 2020);
- United States Department of Agriculture, Natural Resource Conservation Service's (USDA) *Custom Soil Resource Report for San Diego County Area, California,* (USDA 2020); and
- USFWS Critical Habitat Mapper and Environmental Conservation Online System (USFWS 2020b).

Habitat Assessment

Michael Baker biologists Jeremy Rosenthal and Ashley Spencer conducted a habitat assessment/field survey on September 18, 2020 to confirm existing site conditions within the survey area. There were no limitations to site access and Michael Baker extensively surveyed all natural areas, which have a higher potential to support special-status plant and wildlife species. Vegetation communities occurring within the project site were mapped on an aerial photograph and classified in accordance with the vegetation descriptions provided in *A Manual of California Vegetation* (MCV; Sawyer et al. 2009) and cross referenced with the *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions* (Oberbauer 1996). In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site vegetation communities, and the presence of potentially regulated jurisdictional features were noted. Michael Baker used Geographic Information Systems (GIS) ArcView software to digitize the mapped vegetation communities and then transferred these data onto an aerial photograph to further document existing conditions and quantify

the acreage of each vegetation community. Refer to Table 1 below for a summary of the survey date, time, surveyors, and weather conditions.

Table 1: Survey Date, Time, Surveyors, and Weather Conditions

Date	Time (start / finish)	Surveyors	Weather Conditions	
			Temperature (°F) (start / finish)	Average Wind Speed (mph)
September 18, 2020	0745 / 1045	Jeremy Rosenthal Ashley Spencer	62 sunny / 82 sunny	1

All plant and wildlife species observed, as well as dominant plant species within each vegetation community, were recorded. Plant species observed during the habitat assessment were identified by visual characteristics and morphology in the field to the extent possible while unusual and less familiar plant species were photographed and identified later using taxonomic guides. Plant nomenclature used in this report follows the *Jepson Flora Project* (2018) and scientific names are provided immediately following common names of plant species (first reference only). Wildlife detections were made through aural and visual detection, as well as observation of sign including scat, trails, tracks, burrows, and nests. Field guides used to assist with identification of species during the habitat assessment included *The Sibley Guide to Birds* (Sibley 2014) for birds. Although common names of wildlife species are well standardized, scientific names are provided immediately following common names of wildlife species in this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Union's *Checklist of North American Birds* (Chesser et al. 2019), nomenclature of amphibians and reptiles follows *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding* (Crother 2017), and nomenclature for mammals follows the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

Existing Site Conditions

The project site is currently occupied by an operating restaurant, a small commercial center, and a vacant structure formerly operated as a restaurant, along with various supporting surface parking areas and a small area of previously undeveloped land.

The existing Seabluffe residential community of 255-gated townhomes is located directly adjacent to the south and west. Moorgate Road runs along the southern boundary of the site. The Pacific Ocean lies further west, approximately 0.14 mile from the site. The Alila Marea Beach Resort is located adjacent to the north of the project site. North Coast Highway 101, a four-lane divided highway with two lanes and a dedicated bike lane in both directions, forms the eastern boundary of the project site. The North County Transit District (NCTD) railroad runs north-south and parallels Highway 101 on the east, approximately 135 feet to the east of the project site at its nearest point.

The topography of the project site varies. Developed areas in the southern portion of the site are generally flat; however, approximately 14 percent of the overall site has a slope greater than 25 percent, with some on-site slopes exceeding 40 percent. The site is located at an elevation of approximately 55 to 95 feet above mean sea level. According to the USDA Custom Soil Resource Report for San Diego County Area, California, the project site is underlain by the following soil units: Marina loamy coarse sand, 2 to 9 percent slopes (MIC), and Marina loamy coarse sand, 9 to 30 percent slopes (MIE) (USDA 2020).

The southwestern portion of the site consists of heavily disturbed open space with ruderal vegetation. Ornamental trees have been planted along the access road into the site, as well as along the site's western edge at the border of the former restaurant and the adjacent neighborhood. Additional trees are growing in the median and along the eastern edge of North Coast Highway 101. The southwestern portion of the

site currently consists of an open bare field. Please refer to Attachment B for representative photographs of the survey area taken during the field surveys.

Project Survey Area

Vegetation Communities and Land Cover Types

No natural vegetation communities occur in the survey area, but there are several man-made land uses present. These areas on the survey area consist of disturbed areas, developed areas, and ornamental vegetation . Vegetation classification was based on MCV (Sawyer et al., 2009) and cross-checked with Oberbauer (1996). The vegetation communities and land uses present on-site are depicted on Figure 4, Vegetation Communities and Other Land Uses, and described in further detail below. Additionally, refer to Attachment C for a complete list of plant species observed within the survey area during the field surveys. Table 2 provides the acreages of each vegetation community/land use on-site, with each discussed in detail below.

Table 2. Vegetation Communities/Land Uses within the Project Survey Area

Vegetation Community/ Land Use	Survey Area Acreage	Construction Work Limit Acreage	Property Boundary Acreage
Disturbed	1.82	1.43	1.74
Developed	5.99	2.07	1.34
Ornamental	2.24	0.79	0.71
TOTAL ACREAGE*	**10.05**	**4.29**	**3.79**

* Total acreage may not be equal to the sum or to values stated elsewhere in the report due to rounding.

Disturbed

A total of 1.82 acres of disturbed areas are primarily located on the southwestern and eastern portions of the survey area. An additional isolated area of disturbed land is located on the northern portion of the site. Disturbed areas consist of unpaved areas dominated by non-native vegetation including brome grasses (*Bromus* sp.), short-podded mustard (*Hirschfeldia incana*), puncture vine (*Tribulus terrestris*), Jersey cudweed (*Pseudognaphalium luteoalbum*), and Russian thistle (*Salsola tragus*). Disturbed areas also include areas of bare ground and areas that are subject to moderate human disturbance (adjacent to transportation corridors, subject to vegetation management, etc.).

Developed

A total of 5.99 acres of developed areas are located on the northern and southeastern portions of the survey area. These are generally, but not exclusively, structures and associated asphalt-paved parking areas, and transportation corridors (paved driveways) within the project site. Minimal ornamental vegetation is present within this land cover type.

Ornamental

A total of 2.24 acres of ornamental areas are primarily located on the northern portion of the project site. Ornamental areas are those that are generally landscaped areas vegetated with non-native plant species. Ornamental areas provide minimal habitat for wildlife species. Of particular note, the trees growing throughout this community are also dominated by non-natives, including pines (*Pinus* sp.), eucalyptus (*Eucalyptus* sp.), and queen palms (*Syagrus romanzoffianum*) within the property boundary, with plantings along North Coast Highway 101 dominated by eucalyptus on its east side and pines and strawberry trees (*Arbutus unedo*) in the median.

Wildlife

Disturbed areas and ornamental plant communities provide marginal foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a general discussion of common wildlife species that were detected by Michael Baker during the field surveys or that are expected to occur based on existing site conditions. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field surveys were conducted. Refer to Attachment C for a complete list of wildlife species observed within the survey area during the field surveys.

Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would support populations of fish were observed in the survey area during the field surveys.

Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable breeding habitat for amphibians were observed within the survey area during the field surveys.

Reptiles

Two (2) reptile species were observed in the survey area during the field surveys, Great Basin fence lizard (*Sceloporus occidentalis longipes*) and western side-blotched lizard (*Uta stansburiana elegans*). The survey area consists primarily of disturbed areas, ornamental vegetation, and developed areas and is expected to provide marginal habitat for a limited number of reptilian species that are acclimated to edge or urban environments such as southern alligator lizard (*Elgaria multicarinata*).

Birds

Seventeen (17) bird species were detected during the field surveys, some of which included American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), Cassin's kingbird (*Tyrannus vociferans*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigra*), and mourning dove (*Zenaida macroura*).

Nesting birds are protected pursuant to the Federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFGC).[2] To maintain compliance with the MBTA and CFGC, clearance surveys are typically required prior to any ground disturbance or vegetation removal activities to avoid direct or indirect impacts to active bird nests and/or nesting birds. Consequently, if an active bird nest is destroyed or if project activities result in indirect impacts (e.g., nest abandonment, loss of reproductive effort) to nesting birds, it is considered "take" and is potentially punishable by fines and/or imprisonment. The survey area provides nesting habitat for year-round and seasonal avian residents that could occur in the area. This includes species that nest in shrubs or trees (e.g., house finch, mourning dove) and species that nest on the open ground (e.g., killdeer (*Charadrius vociferus*)). No nests or birds displaying overt nesting behavior were observed.

[2] Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA, as amended (16 U.S.C. § 703 *et seq.*).

Mammals

Mammals were not observed during the field survey, but scat from desert cottontail (*Sylvilagus audubonii*) and coyote were identified on the survey area. The survey area and surrounding habitat provides suitable habitat for a limited number of mammalian species adapted to living in edge or urban environments. Bats occur throughout most of southern California and bats spilling over from Batiquitos Lagoon may use the survey area as foraging habitat. Common bat species that may forage within the survey area include Mexican free-tailed bat (*Tadarida brasiliensis*) and big brown bat (*Eptesicus fuscus*). Michael Baker biologists examined the trees within the survey area that may be disturbed by project activities. Mr. Rosenthal in particular has experience assessing bat roosts and assisting with bat surveys, and no evidence was observed of bats roosting within the trees in the survey area. There are some trees that could potentially serve as roosting habitat, but no guano or sign of use was observed anywhere under or in the immediate vicinity of these areas, indicating there are currently no active roosts within the trees located in the survey area.

Migratory Corridors and Linkages

Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are key features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The survey area is located directly west of North Coast Highway 101, to the south of Batiquitos Lagoon within an area that is surrounded by residential and commercial development. The survey area consists of disturbed areas, ornamental vegetation, and intermixed with commercial land uses that have fragmented the connection between the survey area and surrounding naturally occurring vegetation communities and other natural habitats. The on-site and surrounding development has degraded the on-site vegetation communities and has likely precluded the movement of larger mammals through the survey area due to the lack of suitable habitat and foraging opportunities. Further, elevated noise levels and lighting associated with surrounding land uses and vehicle traffic along North Coast Highway 101 decrease the suitability of the survey area to be used as a wildlife movement corridor.

State and Federal Jurisdictional Areas

There are three agencies that regulate activities within inland streams, wetlands, and riparian areas in California: the U.S. Army Corps of Engineers, the Regional Water Quality Control Board (Regional Board), and the CDFW. However, only the Regional Board and the CDFW regulate said activities in the vicinity of the survey area. Of these two State agencies, the Regional Board regulates discharges to surface waters pursuant to Section 401 of the CWA and Section 13263 of the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated vegetation communities under Section 1600 *et seq.* of the CFGC. In addition, for projects located within the Coastal Zone, the California Coastal Commission (CCC) plans and regulates the use of land and water in the Coastal Zone pursuant to the Coastal Act of 1976. Development projects, which are broadly defined by the California Coastal Act, generally require a coastal development permit from either the CCC or the local government. The City of Encinitas has a certified Local Coastal Program. Where a Local Coastal Program has been certified by the CCC, the local jurisdiction has permit issuance authority for Coastal Development Permits.

Based on a review of aerial photographs, USGS quadrangle maps, and observations made during the 2020 field survey jurisdictional drainage features were not identified in the survey area. Therefore, no formal jurisdictional delineation needs to be conducted prior to project implementation to quantify impacts and determine the proper regulatory approvals that would be needed (i.e., Corps Section 404 permit, Regional Board Section 401 Water Quality Certification, CDFW Section 1602 Lake or Streambed Alteration Agreement, and Coastal Development Permit).

Special-Status Biological Resources

The CNDDB and CNPS Online Inventory were queried for reported locations of special-status plant and wildlife species as well as special-status natural vegetation communities in the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles. The field surveys were conducted to assess the conditions of the habitat(s) within the boundaries of the survey area to determine if the existing vegetation communities, at the time of the field surveys, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. Additionally, the potential for special-status species to occur within the survey area was determined based on the reported locations in the CNDDB and CNPS Online Inventory and the following:

- **Present**: the species was observed or detected within the survey area during the field surveys.
- **High**: Occurrence records (within 20 years) indicate that the species has been known to occur on or within 1 mile of the survey area and the site is within the normal expected range of this species. Intact, suitable habitat preferred by this species occurs within the survey area and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
- **Moderate**: Occurrence records (within 20 years) indicate that the species has been known to occur within 1 mile of the survey area and the site is within the normal expected range of this species. There is suitable habitat within the survey area but the site is ecologically isolated from any local known extant populations or sightings.
- **Low**: Occurrence records (within 20 years) indicate that the species has been known to occur within 5 miles of the survey area, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the survey area.
- **Not Expected**: There are no occurrence records of the species occurring within 5 miles of the survey area, there is no suitable habitat within the survey area, and/or the survey area is outside of the normal expected range for the species.

The literature search identified eighty (80) special-status plant species and fifty-one (51) special-status wildlife species as occurring within the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles. No special-status vegetation communities were identified. Special-status plant and wildlife species were evaluated for their potential to occur within the survey area based on habitat requirements, availability and quality of suitable habitat, and known distributions. Special-status biological resources identified during the literature review as having the potential to occur within the vicinity of the survey area are presented in *Table D-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment D.

Special-Status Plants

Eighty (80) special-status plant species have been recorded in the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles by the CNDDB, IPaC, and CNPS Online Inventory (refer to Attachment D). No special-status plant species were observed during the field surveys. Based on the results of the field surveys and a review of specific habitat preferences, distributions, and elevation ranges, it was determined that the survey area has a low potential to support decumbent

goldenbush (*Isocoma menziesii* var. *decumbens*; California Rare Plant Rank [CRPR] 1B.2); however, the survey was conducted during this species' peak blooming period and was not observed. Therefore, this species is considered to be absent from the survey area All remaining special-status plant species identified by the CNDDB and CNPS databases are not expected to occur within the survey area.

Special-Status Wildlife

Fifty-one (51) special-status wildlife species have been recorded in the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles by the CNDDB and IPaC (refer to Attachment D). Special-status wildlife species were not observed within the survey area during the field surveys. Based on the results of the field surveys and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the survey area has a high foraging and moderate nesting potential to support Cooper's hawk (*Accipiter cooperii*; a CDFW Watch List species), a low potential (foraging and nesting) to support California horned lark (a CDFW Watch List species), a low potential to support yellow warbler (*Setophaga petechia*; a CDFW Species of Special Concern), and a low potential (nesting) to support California least tern (*Sternula antillarum browni*; a State and federally endangered species). All remaining special-status wildlife species identified by the CNDDB and IPaC are not expected to occur within the survey area.

The California least tern nests in the nearby Batiquitos Lagoon, with the closest known nest site located approximately 0.22 mile from the northern edge of the project site on the sandbar southeast of the North Coast Highway 101 bridge. The newly-constructed Alila Marea Beach Resort immediately north of the project site generally blocks the project site from visual impacts on the tern colony, while general ambient activity (particularly traffic along North Coast Highway 101) would mask construction noise. However, in rare circumstances least terns have been known to occupy graded construction sites in proximity to foraging habitat during delays in construction activity. Although not expected to occur on-site under normal circumstances, due to proximity to foraging habitat and the general nesting colony at Batiquitos Lagoon, any prolonged delay in construction between the months of April and September and after the project site has been graded could potentially result in terns investigating the site as a nesting or roosting location.

Special-Status Vegetation Communities

Ten (10) special-status vegetation communities were reported in the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles in the CNDDB, including Maritime Succulent Scrub, San Diego Mesa Claypan Vernal Pool, San Diego Mesa Hardpan Vernal Pool, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Maritime Chaparral, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. No special-status vegetation communities were observed within the survey area during the field surveys.

Environmentally Sensitive Habitat Area (ESHA)

The City of Encinitas lies within the Coastal Zone established under the California Coastal Act. The designated areas within the Coastal Zone are considered to have many special natural and scenic qualities that require protection. The City has a GP that serves as a certified LCP under the CCC, amended on May 15, 1995, and thereby can issue Coastal Development Permits for projects under its jurisdiction. Policies under the GP/LCP determine whether an area is considered environmentally sensitive in order to identify and maintain habitat areas in their natural state as necessary for the preservation of species. The California Coastal Act provides a definition of "Environmentally Sensitive Habitat Area" (ESHA) as:

> *"Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments"* (Section 30107.5).

Additionally, Goal 10 of the City's GP states:

> *"The City will preserve the integrity, function, productivity, and long term viability of environmentally sensitive habitats throughout the City, including kelp-beds, ocean recreational areas, coastal water, beaches, lagoons and their up-lands, riparian areas, coastal strand areas, coastal sage scrub and coastal mixed chaparral habitats."* (Coastal Act/30230/30231/30240)

Overall, three parameters should be used to determine ESHA. First, a geographic area can be designated ESHA due to the presence of individual species of plants or animals or due to the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Third, the area must be easily disturbed or degraded by human activities based on its pristine condition.[3]

The survey area is located within the Coastal Zone in an area that is surrounded by residential and commercial development. The survey area is located directly west of North Coast Highway 101, south of Batiquitos Lagoon, which consists of an undeveloped/disturbed area on the southwest and central portions of the survey area, an unoccupied commercial building and associated parking lot on the northern portion of the survey area, and commercial buildings and associated parking lots located on the southern portion of the survey area.

Based on the September 2020 field survey, the survey area is heavily disturbed, fragmented, and constrained by the adjacent and surrounding development. The vegetation communities present within the survey area have been disturbed and fragmented due to surrounding anthropogenic activities and the existing land uses, reducing the potential for the survey area to provide suitable habitat for special-status biological resources. The existing condition of the survey area is not pristine in character, physically complex, or biologically diverse. Additionally, the survey area does not include the habitat types that the City considers to be ESHA.

The survey area provides limited resources for special-status biological resources and does not provide high value habitat. ESHA are considered valuable based on their "special nature," such as their pristine conditions, ability to support a high diversity of species, or if they support a specific species at the edge of its range. The survey area does not exhibit these qualities, and instead is in a degraded state with a limited variety of native species. While the survey area does contain minimal habitat for special-status species, the existing condition would not currently support the requirements needed for an ESHA.

Critical Habitat

Under the definition used by the Federal Endangered Species Act (FESA), "Critical Habitat" refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the other areas that are occupied are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a Federal nexus, the project proponent may be

[3] John Dixon memo to Ventura Coastal staff regarding ESHA in the Santa Monica Mountains, dated March 25, 2003.

required to provide suitable mitigation. Projects with a Federal nexus may include projects that occur on Federal lands, require Federal permits (e.g., CWA Section 404 permit), or receive any Federal oversight or funding. If there is a Federal nexus, then the Federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the FESA. The survey area is not located within Federally designated Critical Habitat (refer to Figure 5, Critical Habitat). Therefore, consultation with the USFWS under Section 7 of the FESA would not be required for the loss or adverse modification of Critical Habitat.

Local, Regional, and State Plans

The North San Diego County Multiple Habitat Conservation Plan

The North County San Diego MHCP was approved in 2003 under the State of California's Natural Community Conservation Planning (NCCP) program. It encompasses a total area of 112,000 acres within the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. The goal of the MHCP is to conserve approximately 19,000 acres of habitat where approximately 8,800 acres, or 46 percent, are currently in public ownership and contribute toward the habitat preserve system. The MHCP contains guidelines and plans by which natural habitats should be conserved, or where applicable, can be developed. Additionally, the MHCP is intended to act as an overlying permitting tool for projects in the seven cities, all of which are required to have their own subarea plans. Carlsbad, Encinitas, Escondido, Oceanside, and San Marcos submitted draft plans while the MHCP was under public review; as of this writing only Carlsbad's plan has been finalized.

Draft Encinitas Subarea Plan

The City is not part of any NCCP program and did not adopt the regional San Diego County MHCP. The Draft Encinitas SAP was prepared in affiliation with the MHCP in 2001 and has not been adopted. Because the SAP was drafted in concert with the MHCP, the SAP is fully consistent with the requirements of the MHCP and the NCCP Act of 1991; however, because the SAP has not been adopted, applicable provisions of the MHCP are implemented, to the extent practical, when conducting environmental review for development projects in Encinitas. Therefore, analysis of the proposed project should be consistent with the guidelines and plans of the MHCP. The MHCP established several areas where conservation of habitat or species is required. To demonstrate compliance with the MHCP, the project must be outside of these conservation areas or would be required to meet certain mitigation requirements. The project is located outside of any areas that are proposed for habitat conservation or species conservation, including the "unincorporated gnatcatcher core area," an area partially inside and partially outside of the seven-city planning area that will be conserved by the MHCP.

Encinitas North 101 Corridor Specific Plan

The project is located within the Encinitas North 101 Corridor Specific Plan (N101SP). Chapter 9.0, General Plan and Local Coastal Program Compliance, of the N101SP establishes goals and policies related to biological resources in the Specific Plan area. The relevant goals and policies for the project include:

- **Goal 3:** The City will make every effort possible to preserve significant mature trees, vegetation and wildlife habitat within the planning area. (Coastal Act 30240)
    - **Policy 3.1:** Mature trees of community significance cannot be removed without City authorization.
    - **Policy 3.2:** Mature trees shall not be removed or disturbed to provide public right-of-way improvements if such improvements can be deferred, redesigned, or eliminated. This policy is not

meant to conflict with the establishment of riding/hiking trails and other natural resource paths for the public good, or with the preservation of views.

- **Policy 3.3:** The City will examine ways to aesthetically trim street trees and vegetation within the public right-of-way including the possibility of using contract services or City personnel. (Coastal Act/30240/30251)
- **Policy 3.4:** A program shall be developed to trim roots and replace sidewalks and other public facilities which may be damaged by roots. (Coastal Act/30251/30254)
- **Policy 3.5:** A street tree planting program shall be developed and implemented.
- **Policy 3.6:** Future development shall maintain significant mature trees to the extent possible and incorporate them into the design of development projects.

Tree Ordinance and Urban Forest Management Program

Based on the results of an onsite tree survey conducted by the applicant, which was field verified by Michael Baker biologists during the site visit , there are 43 trees (7 different species) within the project boundary. Of these 7 species, only Joshua tree (*Yucca brevifolia*) is native, but because these are out of range and planted on-site less than 0.25 mile from the ocean for ornamental landscaping reasons, they would not be eligible for protection under the California Endangered Species Act and would be considered decorative. The remaining 6 on-site tree species are all non-native. The City's Tree Ordinance and Urban Forest Management Policy requires compliance with the City's UFMP during construction and development. Protected trees include City Trees, Heritage Trees, and trees that are predesignated to be preserved. City Trees are those within the City's public rights-of-way, parks, or other public places and is maintained by the City. Heritage Trees means a tree of community significance located in the City on public or private property designated by the City in accordance with the following criteria: that is one of the oldest and largest of its species; is of unique form or species; has historic significance due to an association with an historic building, site, street, person or event; or is a defining landmark or significant outstanding feature of a neighborhood. The designation of a Heritage Tree on private property requires the written consent of the private property owner in a form deemed sufficient by the City Attorney. No Heritage Trees or mature trees of community significance have been identified on the proposed project site. In accordance with General Plan Policy 3.6, the proposed project would be required to maintain significant mature trees to the extent possible and incorporate them into the design of development projects.

According to the Arborist Report, there are 47 trees within the project boundary that have at a minimum of an 8-inch diameter tree trunk (12 inches combined trunk diameter for multi-stemmed trees). While the palm trees were found to be in fair to good condition, these trees are not considered as a high value, rare, or possess Heritage Tree status. The other trees on-site are in poor to very poor condition and are not high value, rare, or possess Heritage Tree status. Refer to Appendix C-2 for information on the location and condition of the individual trees on-site.

All existing City trees identified on the project site and some ornamental trees within the center median of the Highway 101 ROW are proposed to be removed as part of project implementation except for four existing median trees that would be retained. As such, the project must comply with the requirements set forth in the City's UFMP. As none of the trees on-site are protected, a tree removal permit is not required. However, removal of City Trees within the ROW would require an accompanying certified arborist report. Based on the mapping provided by the City of Encinitas Tree Tracker, the trees within the project boundary are not considered to be protected trees, although the North Coast Highway 101 ROW appears to contain a number of City Trees (City of Encinitas 2021).

An arborist report and a tree replacement plan for project activities requiring removal of trees within the City ROW is required to be prepared by the applicant in compliance with the City's Tree Ordinance and submitted to the City for approval and issuance of a required tree removal permit. In accordance with the City's Tree Ordinance, any City Trees that are removed by the project would require a minimum 1:1 replacement tree of a type, size, and location to be determined by the City-approved arborist. As shown in Figure 5A, Conceptual Landscape Plan, the project would plant approximately 124 trees which exceeds the minimum 1:1 replacement ratio.

Nesting Birds

The survey area and surrounding vegetation communities provide suitable foraging and nesting habitat for a variety of year-round and seasonal avian residents as well as migrating songbirds that could occur in the area. As required by the adopted EA for projects covered under the 2019 Housing Element Update per City Council Resolution 2019-19, prior to the issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the new zone program, wherein the City has determined the presence of mature trees and/or native vegetation suitable for nesting birds in the future, shall require a preconstruction survey to determine the presence of active bird nests if vegetation clearing is proposed during the typical bird breeding season (January 15– September 15). The nesting bird survey shall be performed by a qualified biologist within one week prior to the start of vegetation clearing or construction activities. No direct impacts shall occur to any nesting birds or their eggs, chicks, or nests. If an active nest is located, nest avoidance measures would be required in accordance with the MBTA and CFGC. As such, the proposed project would be required to comply with these requirements as a condition of project approval.

Because the project would be required to conduct a preconstruction survey to determine the presence of active bird nests and avoid direct impacts to active nest during construction, potential impacts to general nesting birds would be less than significant.

Separate from this requirement, California least terns are resident in southern California from typically the first week of April to the second week of September. Although rare, this species has been known to occupy cleared lots, including construction sites, in close proximity to foraging habitat. Because this project site is located within 0.25 mile of a known nesting site in Batiquitos Lagoon, although terns would not be expected under current existing conditions there is the potential that terns may investigate the project site as a nesting or roosting location once the site has been graded if there is inadequate human activity on the site. Therefore, it is recommended that the project implement mitigation measure **BIO-1**.

BIO-1: Preconstruction Survey and Monitoring for California Least Tern

If the project begins construction during the least tern season (roughly April 1 to September 15), a qualified biologist with expertise monitoring least terns shall conduct a preconstruction presence/absence survey for least terns on the project site and shall monitor the project site at least twice weekly between April 1 and September 15 to verify that least terns are not flying to or over the site during the day or roosting on the site at night. If it is determined that least terns are repeatedly flying over the site during construction hours or landing on the site outside of construction hours, an additional survey may be required and additional avoidance measures (e.g. changing construction hours, staging equipment throughout the site) may be implemented to deter terns from landing on the site and ensure the project's impacts on least terns remain less than significant. If California least terns occupy and nest on the site, construction within at least 500 feet or a suitable distance as determined by the qualified least tern biologist will need to be delayed until any tern nests have gone to completion and the young have fledged and are no longer dependent on the project site for roosting.

With implementation of mitigation measure **BIO-1**, impacts to nesting least terns would be less than significant.

Conclusions and Recommendations

Vegetation and land uses within the survey area consist of disturbed areas, ornamental vegetation, and developed areas. No special-status plant species were observed during the field surveys. Based on the results of the habitat assessment and a review of specific habitat preferences, distributions, and elevation ranges, it was determined that the survey area has a low potential to support decumbent goldenbush (CRPR 1B.2); however, the survey was conducted during this species' peak blooming period and was not observed. Therefore, this species is considered to be absent from the survey area. All remaining special-status plant species identified by the CNDDB and CNPS databases are not expected to occur within the survey area.

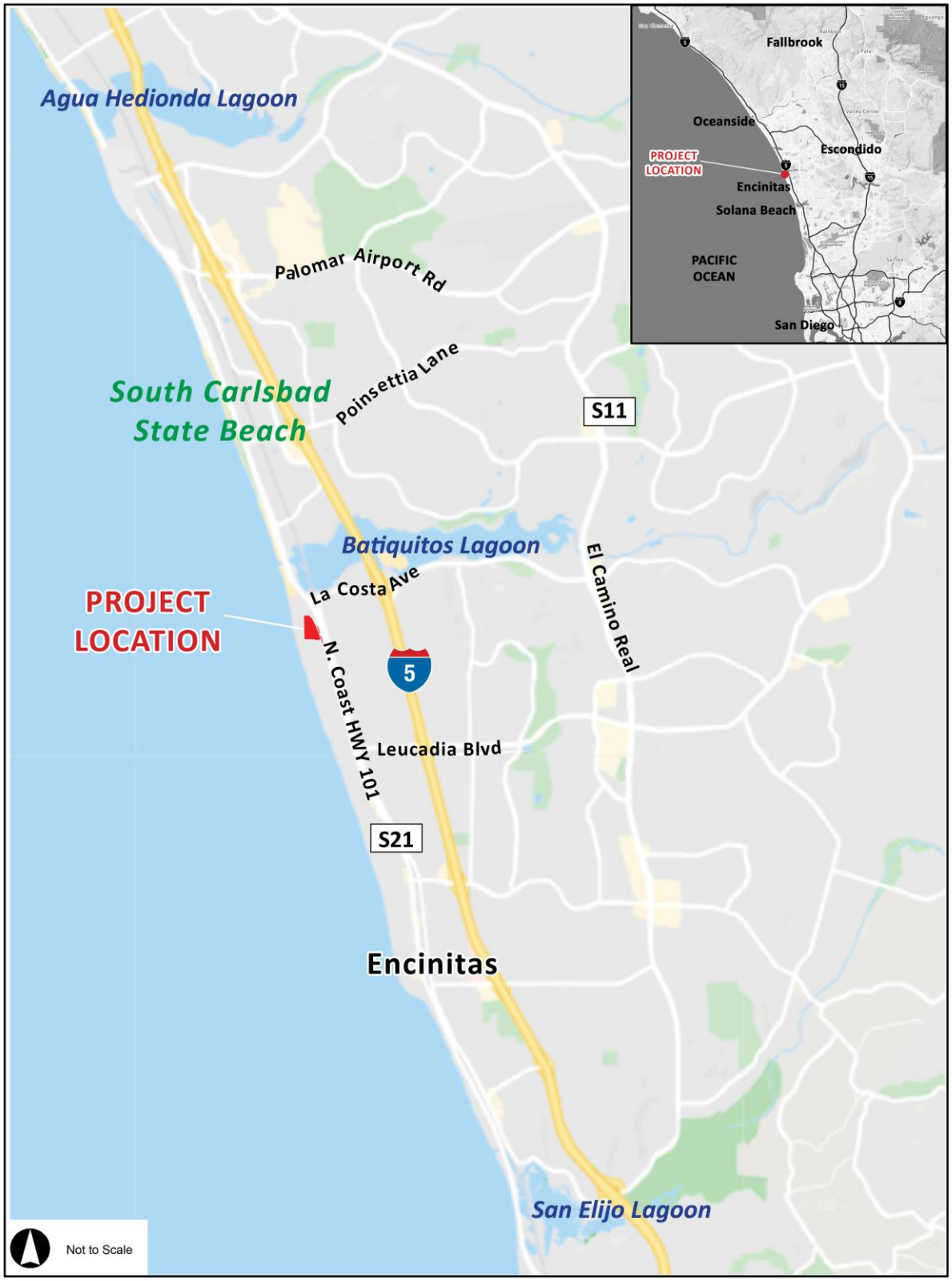
The City's Tree Ordinance and Urban Forest Management Policy requires compliance with the City's UFMP during construction and development. Protected trees include City Trees, Heritage Trees, and trees that are predesignated to be preserved. City Trees are those within the City's public rights-of-way, parks, or other public places and is maintained by the City. A tree removal permit from the City is required if a project prunes or removes a protected tree. Removal of City Trees within the ROW would also require an accompanying certified arborist report. As described in Impact 3.3-5, the project does not contain Heritage Trees or other protected trees on-site.

The survey area and vicinity provide suitable foraging and nesting habitat for a variety of year-round and seasonal avian residents that could occur in the area. If project-related activities are to be initiated during the nesting season (January 1 to September 15), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist within one week prior to the start of any vegetation removal or ground disturbing activities.

Special-status wildlife species were not observed during the field survey. Based on the results of the habitat assessment and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the survey area has a high foraging and moderate nesting potential to support Cooper's hawk, a low (nesting and foraging) potential to support California horned lark, a low (nesting and foraging) potential to support yellow warbler, and a low potential (nesting) to support California least tern. Cooper's hawk, California horned lark, and yellow warbler do not require focused surveys, and a nesting bird clearance survey would be adequate to determine presence. On rare occasions least terns may occupy graded construction sites near foraging habitat. If the project cannot avoid grading the site between April 1 and September 15, a qualified biologist shall conduct a presence/absence survey prior to the start of grading, and shall monitor the site at least twice weekly for sign of any least terns flying over or landing on the site either during or after daily construction hours in accordance with mitigation measures **BIO-1**. If any of these species, or any other species protected by the CFGC or MBTA, is actively nesting on the project site, implementation of nest avoidance measures would be required and would ensure compliance with state and federal laws protecting nesting birds as well as compliance with CEQA. All remaining special-status wildlife species identified by the CNDDB and IPaC databases are not expected to occur within the survey area.

Michael Baker
INTERNATIONAL

Attachment A:
Project Figures



Michael Baker INTERNATIONAL

File: 180066Exhibits.indd
Source:Google Maps, 2021

MAREA VILLAGE MIXED USE DEVELOPMENT

FIGURE 1. REGIONAL/LOCAL VICINITY MAP

This page intentionally left blank

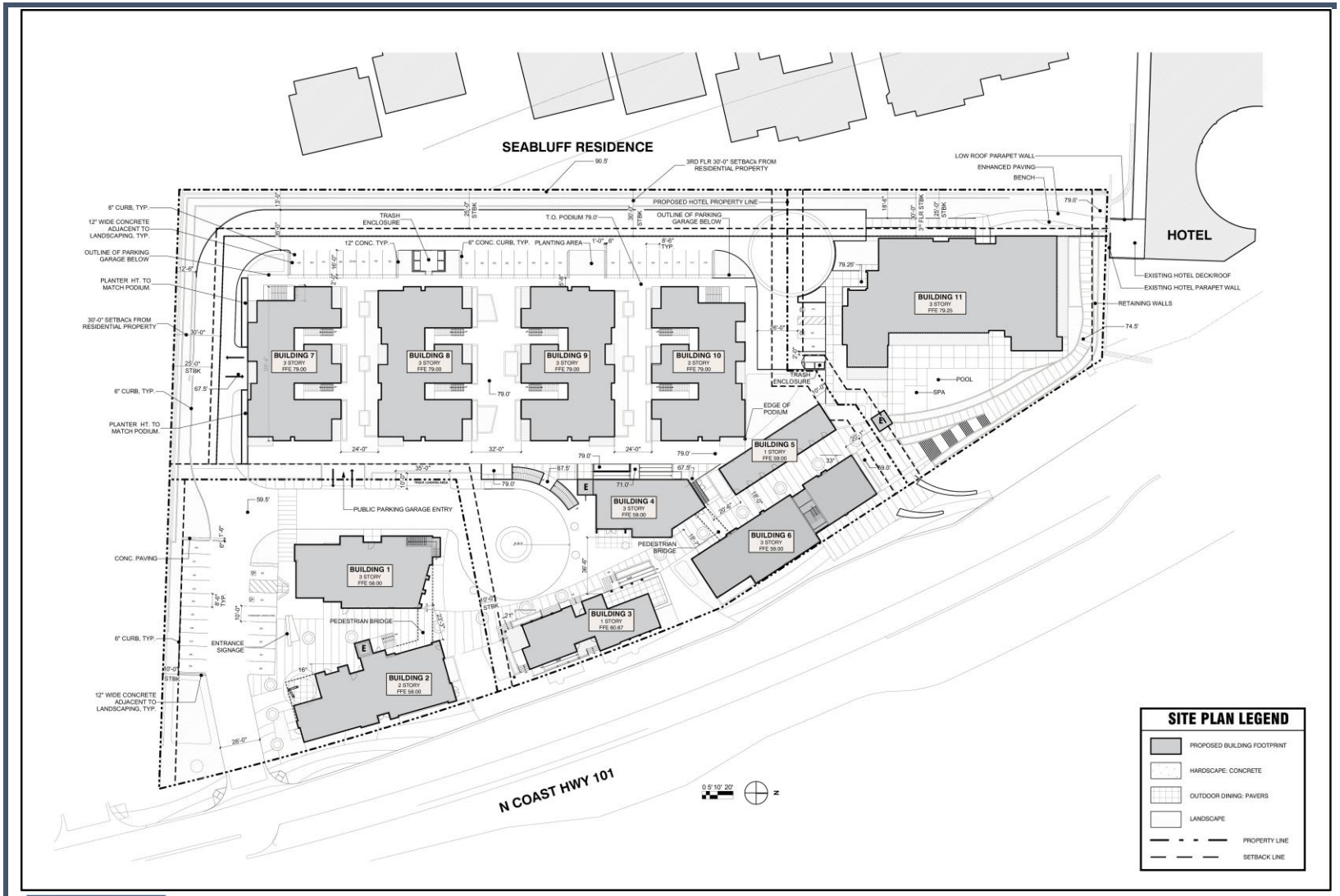
Michael Baker INTERNATIONAL

File: 180066Exhibits.indd
Source: Google Earth, accessed January 2021

MAREA VILLAGE MIXED USE DEVELOPMENT

FIGURE 2. AERIAL PHOTOGRAPH

This page intentionally left blank.



Michael Baker INTERNATIONAL

File: 180066Exhibits.indd
Source: Stephen Dalton Architects, May 2021

MAREA VILLAGE MIXED USE DEVELOPMENT

FIGURE 3. SITE PLAN

Michael Baker
INTERNATIONAL

Attachment B:
Site Photographs

Photograph 1: Standing in the northern portion of the survey area, facing south. Portions of the project site consist of asphalt paved areas and structures, increasing the level of disturbance present.

Photograph 2: Standing in the western portion of the survey area, facing northwest. This is representative of the ornamental landscaped areas within the project site.

Photograph 3: Standing in the southeastern portion of the survey area, facing north. Portions of the project site consist of asphalt paved areas and structures, increasing the level of disturbance present.

Photograph 4: Standing in the southwestern portion of the survey area, facing north. This is representative of the disturbed vegetation areas within the project site.

Photograph 5: Standing in the western portion of the survey area, facing east. The structures on the southeastern portion of the project site are visible in the background.

Photograph 6: A photograph of active construction associated with a commercial development to the adjoining north of the project site.

Photograph 7: Photograph of North Coast Highway 101 to the adjoining east of the project site, facing north.

Michael Baker
INTERNATIONAL

Attachment C:
Plant and Wildlife Species Observed List

Table C-1: Plant and Wildlife Species Observed List

*Scientific Name**	Common Name	Cal-IPC Rating**	Special-Status Rank
Plants			
*Acacia retinodes**	everblooming acacia		
*Acacia pycnantha**	golden wattle		
Acmispon glaber	deerweed		
*Agave americana**	American century plant		
*Amaranthus albus**	tumbleweed		
*Aptenia cordifolia**	heart-leaved ice-plant		
*Arbutus unedo**	strawberry tree		
*Avena barbata**	slender wild oat	Moderate	
Baccharis pilularis	coyote brush		
Bougainvillea sp.*	bougainvillea		
*Brassica nigra**	black mustard	Moderate	
*Bromus diandrus**	ripgut brome	Moderate	
*Bromus hordeaceus**	soft chess	Limited	
*Bromus madritensis**	red brome		
Camissoniopsis cheiranthifolia	beach evening-primrose		
*Carpobrotus edulis**	ice-plant	High	
*Chenopodium album**	lamb's quarters		
*Cercis siliquastrum**	Judas tree		
Gilia capitata	bluehead gilia		
Cistus incanus	hairy rockrose		
*Crassula ovata**	jade plant		
Croton californicus	California croton		
*Cupaniopsis anacardioides**	carrotwood		
*Cycas revoluta**	sago palm		
Encelia californica	bush sunflower		
Encelia farinosa	brittlebush		
Epilobium brachycarpum	tall annual willowherb		
*Erigeron bonariensis**	flax-leaved horseweed		
Erigeron canadensis	Canada horseweed		
Eriogonum fasciculatum	California buckwheat		
Eschscholzia californica	California poppy		
Eucalyptus sp.*	eucalyptus		
Euphorbia albomarginata	rattlesnake sandmat		
*Euphorbia maculata**	spotted spurge		
*Euphorbia tirucalli**	firestick		
*Festuca myuros**	rattail sixweeks fescue	Moderate	
Ficus sp.*	rubberplant		
Fraxinus sp.	ash		
Hirschfeldia incana *	short podded mustard	Moderate	
Isocoma menziesii	goldenbush		
*Juniperus chinensis**	Chinese juniper		
Laennecia coulteri	Coulter's horseweed		
*Limonium perezii**	canarian sea lavender		

Table C-1: Plant and Wildlife Species Observed List

*Scientific Name**	Common Name	Cal-IPC Rating**	Special-Status Rank
*Melilotus indicus**	annual yellow sweetclover		
*Pachysandra terminalis**	Japanese pachysandra		
*Pennisetum setaceum**	crimson fountaingrass	Moderate	
*Philodendron bipinnatifidum**	selloum		
*Phoenix roebelenii**	pygmy date palm		
*Pinus sp.**	pine		
*Polygonum aviculare**	prostrate knotweed		
*Polypogon monspeliensis**	rabbitsfoot grass	Limited	
*Portulacaria afra**	elephant bush		
*Pseudognaphalium luteoalbum**	Jersey cudweed		
*Pyracantha sp.**	firethorn		
Quercus agrifolia	coast live oak		
*Raphanus sativus**	jointed charlock	Limited	
Rhus integrifolia	lemonade berry		
*Rosmarinus officinalis**	rosemary		
*Salsola tragus**	Russian thistle		
Stipa lepida	foothill needlegrass		
*Stipa miliacea**	smilo grass		
*Strelitzia nicolai**	giant white bird of paradise		
*Strelitzia reginae**	bird of paradise		
Solanum douglasii	Douglas' nightshade		
*Solanum lycopersicum**	tomato		
*Syagrus romanzoffiana**	queen palm		
*Tecoma capensis**	cape honeysuckle		
*Tribulus terrestris**	puncture vine		
*Washingtonia robusta**	Mexican fan palm	Moderate	
Reptiles			
Sceloporus occidentalis longipes	Great Basin fence lizard		
Uta stansburiana elegans	western side-blotched lizard		
Birds			
Calypte anna	Anna's hummingbird		
Corvus brachyrhynchos	American crow		
Haemorhous mexicanus	house finch		
Leiothlypis celata	orange-crowned warbler		
Melospiza melodia	song sparrow		
Melozone crissalis	California towhee		
Mimus polyglottos	northern mockingbird		
Passer domesticus	house sparrow		
Sayornis nigricans	black phoebe		
Selasphorus sasin	Allen's hummingbird		
Spinus psaltria	lesser goldfinch		
*Sturnus vulgaris**	European starling		
Troglodytes aedon	house wren		
Thryomanes bewickii	Bewick's wren		

Table C-1: Plant and Wildlife Species Observed List

Scientific Name*	**Common Name**	**Cal-IPC Rating****	**Special-Status Rank**
Tyrannus vociferans	Cassin's kingbird		
Zenaida macroura	mourning dove		
Mammals			
Canis latrans	coyote (scat)		
Sylvilagus audubonii	desert cottontail (scat)		

* Non-native wildlife species

** California Invasive Plant Council (Cal-IPC) Ratings

High — These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate — These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited — These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent.

Michael Baker
INTERNATIONAL

Attachment D:
Potentially Occurring Special-Status Biological Resources

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES					
Accipiter cooperii Cooper's hawk	WL G5 S4	Yearlong resident of California. Generally, found in forested areas up to 3,000 feet above mean sea level (amsl) in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees (25 to 50 feet high) for nesting. Prefers pines, oaks, Douglas-firs, beeches, spruces for nesting. Common in open areas during nesting season.	Yes	No	**High (Foraging)** **Moderate (Nesting)** Suitable foraging habitat is present for this widespread species, and the proximity to natural habitat and residential areas with open grass likely increases the prey base. Additionally, the larger trees present on the site can be adequate for nesting, providing the suitable foliage cover that this species prefers. Although the nearest documented nesting occurrence in the CNDDB (Occurrence Number 86) for this species is 13.0 miles to the northeast of the project site in 2003 (CNDDB 2020), there are a large number of eBird records of this species in the general project vicinity, some of which may represent local residents (eBird 2020).
Agelaius tricolor tricolored blackbird	ST SSC G2G3 S1S2	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate freshwater marsh dominated by cattails (*Typha* spp.), willows (*Salix* spp.), and bulrushes (*Schoenoplectus* spp.), and either flooded or thorny/spiny vegetation and suitable foraging space providing adequate insect prey.	No	No	**Not Expected** The project site does not contain marshy or agricultural habitat for nesting and the on-site habitat is not expected to be suitable for foraging.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution	Covered by MHCP	Observed On-site	Potential to Occur
Aimophila ruficeps canescens southern California rufous-crowned sparrow	WL G5T3 S3	Yearlong resident that is typically found between 3,000 and 6,000 feet amsl. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	**Not Expected** The project site does not contain coastal sage scrub or chaparral, which this species is obligate to.
Anniella stebbinsii southern California legless lizard	SSC G3 S3	Locally abundant specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. A large protected population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport.	No	No	**Not Expected** The project side does not contain sandy dunes or sandy washes and alluvial fans.
Antrozous pallidus pallid bat	SSC G5 S3	Locally common species locally common in the Great Basin, Mojave, and Sonoran deserts (specifically Sonoran life zone) and grasslands throughout the western U.S. Also occurs in shrublands, woodlands, and forests from sea level to 8,000 feet above mean sea level (amsl). Prefers rocky outcrops, cliffs, and crevices for roosting with access to open habitats for foraging. May also roost in caves, mines, bridges, barns, porches, and bat boxes, and even on the ground under burlap sacks, stone piles, rags, baseboards, and rocks.	No	No	**Not Expected** The project site does not contain suitable foraging or roosting habitat for this species.
Arizona elegans occidentalis California glossy snake	SSC G5T2 S2	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	No	**Not Expected** The project site does not contain arid scrub, rocky washes, grasslands, or chaparral habitats
Artemisiospiza belli belli Bell's sage sparrow	WL G5T2T3 S3	This species has a wide, but sparse distribution in western Riverside County, specifically within the "Riverside lowlands, San Jacinto Foothills, Santa Ana Mountains, and Desert Transition Bioregions. Yearlong resident on the coastal side of southern California mountains. Breeds in coastal sage scrub and chaparral habitats from February to August. They require semi-open habitats with evenly spaced shrubs one to two meters high. Occurs in chaparral dominated by fairly dense stands of chamise (*Adenostoma fasciculatum*).	Yes	No	**Not Expected** The project site does not contain coastal sage scrub or chaparral, which this species is obligate to.
Aspidoscelis hyperythra orange-throated whiptail	WL G5 S2S3	Uncommon to fairly common over much of its range in Orange, Riverside, and San Diego counties. Also occurs in southwestern San Bernardino County near Colton. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	**Not Expected** The project site does not contain loose washes, streamsides, rocky hillsides or coastal chaparral.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Aspidoscelis tigris stejnegeri coastal whiptail	SSC G5T5 S3	This subspecies is found in coastal southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges, and north into Ventura County. Ranges south into Baja California. Found in a variety of ecosystems, primarily hot and dry open areas with sparse vegetation in chaparral, woodland, and riparian areas. Associated with rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations.	No	No	**Not Expected** The project site does not contain chaparral, woodland, or riparian areas.
Bombus crotchii Crotch bumble bee	CSE G3G4 S1S2	Found from coastal California east to the Sierra-Cascade crest and south into Mexico. Primarily occurs in California, including the Mediterranean region, Pacific coast, western desert, great valley, and adjacent foothills through most of southwestern California. Has also been recorded in Baja California, Baja California Sur, and in southwest Nevada. Inhabits open grassland and scrub habitats. Primarily nests underground. Food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	No	No	**Not Expected** The project site does not include suitable habitat or food plant genera for this species.
Branchinecta lynchi vernal pool fairy shrimp	FT G3 S3	Endemic to California and only found in vernal pools. Vernal pool habitats form in depressions above an impervious substrate layer, or claypan/duripan. This species does not occur in riverine, marine, or other permanent bodies of water. When the temporary pools dry, offspring persist in suspended development as desiccation-resistant embryos (commonly called cysts) in the pool substrate until the return of winter rains and appropriate temperatures allow some of the cysts to hatch.	No	No	**Not Expected** The project side does not contain vernal pools.
Branchinecta sandiegonensis San Diego fairy shrimp	FE G2 S2	Endemic to southern California and restricted to vernal pools and other non-vegetated temporary basins in coastal southern California and northwestern Baja California, Mexico. Found in small, shallow vernal pools (2-12 inches) deep with a temperature range of (50-68 °F). They are occasionally found in ditches and road ruts that support suitable conditions.	Yes	No	**Not Expected** The project side does not contain vernal pools.
Buteo swainsoni Swainson's hawk	ST G5 S3	Spring and late summer migrant throughout most of southern California outside of a very restricted breeding range (primarily the Antelope Valley in Los Angeles County). Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	No	No	**Not Expected** This species has been extirpated as a breeding bird in San Diego County since 1933 and there is no suitable nesting or foraging habitat within the project site. The species may fly over the site but would not land in it.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution	Covered by MHCP	Observed On-site	Potential to Occur
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	SSC G5T3Q S3	The yearlong resident coastal population (*C.b. sandiegensis*) has a very limited range, extending from extreme northwestern Baja California north through the coastal lowlands of San Diego County and apparently into southern Orange County. Restricted to thickets of cholla (*Cylindropuntia prolifera*) or prickly-pear cacti (*Opuntia littoralis, O. oricola*) tall enough to support and protect the birds' nests. Typically, habitat consists of coastal sage scrub at elevations below 1,500 feet amsl.	Yes	No	**Not Expected** The project site does not contain coastal sage scrub or cactus scrub, which this species is obligate to.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	SSC G5T3T4 S3S4	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Habitat types include coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	Yes	No	**Not Expected** The project site is not one of the known locations where this species occurs, and does not contain any suitable habitat to support it.
Charadrius alexandrinus nivosus western snowy plover	FT SSC G3T3 S2S3	Occurs on sandy beaches, salt pond levees and along the shores of large alkali lakes. Breeding generally occurs above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Nests typically occur in flat, open areas with sandy or saline substrates; vegetation and driftwood are usually sparse or absent.	Yes	No	**Not Expected** The project site does not contain mudflats, beach habitat, or any aquatic habitat at all.
Choeronycteris mexicana Mexican long-tongued bat	SSC G4 S1	Occasionally found in San Diego County, which is on the periphery of their range. Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves, and in and around buildings.	No	No	**Not Expected** The project site does not contain suitable habitat or foraging plants to support it.
Circus hudsonius northern harrier	SSC G5 S3	Yearlong resident of California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded area. In general, it prefers saltwater marshes, wet meadows, sloughs, and bogs for nesting and foraging. Nests on the ground in shrubby vegetation or patches of dense vegetation, usually at the marsh edge.	No	No	**Not Expected** Harriers may be present in Batiquitos Lagoon but due to the small project size, unnatural habitats, and surrounding disturbance they would not be expected to occur within the project site.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Corynorhinus townsendii Townsend's big-eared bat	SSC G3G4 S2	Now considered uncommon in California. Details of its distribution are not well known. This species is found in all but subalpine and alpine habitats and may be found at any season throughout its range. Most abundant in mesic habitats. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting.	No	No	**Not Expected** The project site does not contain subalpine or alpine habitats. Additionally, the nearest documented occurrence (Occurrence Number 290) for this species in the CNDDB is 8.0 miles to the northeast of the project site in 1930 (CNDDB, 2020).
Crotalus ruber red-diamond rattlesnake	SSC G4 S3	Found in southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California. It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet amsl), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, boulders associated coastal sage scrub, oak/pine woodlands, and desert slope scrub associations; however, chamise and red shank (*Adenostoma sparsifolium*) associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	No	**Not Expected** The project site does not contain coastal sage scrub, chaparral, or oak woodlands, which this species is obligate to.
Dipodomys stephensi Stephens' kangaroo rat	FE ST G2 S2	Occur in arid and semi-arid habitats of open grassland or sparse shrublands with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil in areas with <30 percent slope.	Yes	No	**Not Expected** The project site is not one of the known locations where this species occurs, and does not contain any suitable habitat to support it.
Elanus leucurus white-tailed kite	FP G5 S3S4	Yearlong resident along the coastal ranges and valleys of California. Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole (*Microtus californicus*). Nests in tall (20 to 50 feet) coast live oaks (*Quercus agrifolia*).	No	No	**Not Expected** The project site does not contain any typical nesting habitat (usually oak woodlands or riparian adjacent to open habitat). Unlikely to forage on the site given the small size and adjacent development on all sides.
Empidonax traillii extimus southwestern willow flycatcher	FE SE G5T2 S1	Uncommon summer resident in southern California primarily found in lower elevation riparian habitats occurring along streams or in meadows. The structure of suitable breeding habitat typically consists of a dense mid-story and understory and can also include a dense canopy. Nest sites are generally located near surface water or saturated soils. The presence of surface water, swampy conditions, standing or flowing water under the riparian canopy are preferred.	Yes	No	**Not Expected** The project site does not contain any riparian habitat or habitat that would be expected to attract this species.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution	Covered by MHCP	Observed On-site	Potential to Occur
Emys marmorata western pond turtle	SSC G3G4 S3	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet amsl.	Yes	No	**Not Expected** The project site does not contain any aquatic habitat and is too isolated from any suitable habitat to provide any nesting potential.
Eremophila alpestris actia California horned lark	WL G5T4Q S4	Yearlong resident of California. This subspecies is typically found in coastal regions. Breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands. Nests on the open ground.	No	No	**Low (Nesting and Foraging)** The project site contains marginal nesting and foraging habitat in the mowed field along its southern end, and this is a commonly-occurring species at Batiquitos Lagoon according to eBird records (eBird 2020).
Eucyclogobius newberryi tidewater goby	FE SSC G3 S3	Found in brackish water within shallow lagoons and lower stream reaches and need fairly still but not stagnant water and high oxygen levels. Distributed along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River.	No	No	**Not Expected** The project site has zero connectivity to the ocean and has no aquatic habitat.
Eumops perotis californicus western mastiff bat	SSC G5T4 S3S4	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	**Not Expected** There is no roosting habitat present within the project site, and the site is so small that foraging is unlikely.
Icteria virens yellow-breasted chat	SSC G5 S3	Summer resident of California. Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Breeding habitat within southern California primarily consists of dense, wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Found at elevations ranging from 820 to 2,625 feet amsl.	Yes	No	**Not Expected** The project site does not contain riparian habitat or riparian scrub.
Lasiurus xanthinus western yellow bat	SSC G5 S3	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	No	**Not Expected** The project site does not contain foothill riparian, desert wash, or palm oasis habitats.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Laterallus jamaicensis coturniculus California black rail	ST FP G3G4T1 S1	Suitable habitat generally includes salt marshes, freshwater marshes, and wet meadows. Typical associated vegetation includes pickle weed (*Salicornia virginica*), in salt marshes and bulrush (*Scirpus* spp.) in less saline habitats.	No	No	**Not Expected** This species has been extirpated from all of southern California except in the southeastern corner of the region around El Centro.
Leptonycteris yerbabuenae lesser long-nosed bat	D SSC G4 S1	Typically found only in arid habitats such as desert grasslands and desert scrub. During the day roosts in caves and mines, and at night roosts in caves, mines, rock crevices, trees and shrubs, and in abandoned buildings. Mostly forages on columnar cacti.	No	No	**Not Expected** This species does not natively occur in coastal habitats and the single record for the area is accidental.
Lepus californicus bennettii San Diego black-tailed jackrabbit	SSC G5T3T4 S3S4	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.	Yes	No	**Not Expected** The area surrounding the project site is too developed and no suitable scrub habitat is present.
Neotoma lepida intermedia San Diego desert woodrat	SSC G5T3T4 S3S4	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Woodrats often are associated with cholla cactus which they use for water and dens or boulders and boulder piles. The most common natural habitats for records are chaparral, coastal sage scrub (including RSS and Diegan coastal sage scrub) and grassland.	No	No	**Not Expected** The area surrounding the project site is too developed and no suitable scrub or woodland habitat is present.
Nyctinomops femorosaccus pocketed free-tailed bat	SSC G4 S3	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree (*Yucca brevifolia*) woodland, and palm oasis habitats. Prefers rocky desert areas with high cliffs or rock outcrops, which are used as roosting sites.	No	No	**Not Expected** This species occurs in desert habitats. There is no roosting habitat within the project site.
Passerculus sandwichensis beldingi Belding's savannah sparrow	SE G5T3 S3	Found year round in coastal salt marsh habitats of southern California. Ecologically associated with dense pickleweed for nesting.	Yes	No	**Not Expected** The project site does not contain any saltmarsh habitat, which this subspecies is obligate to.
Perognathus longimembris pacificus Pacific pocket mouse	FE SSC G5T1 S1	One of sixteen currently recognized subspecies of little pocket mouse (*Perognathus longimembris*), which is a widespread species that is distributed throughout arid regions of the western U.S. extending into northern part of Baja California peninsula and west central Sonora, Mexico. Pacific pocket mouse is associated with fine grain, sandy substrates in coastal strand, coastal dunes, river alluvium and coastal sage scrub habitats within 2.5 miles of the ocean in southern California.	Yes	No	**Not Expected** The project site is not one of the known locations where this species occurs, and does not contain any suitable habitat to support it.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Phrynosoma blainvillii coast horned lizard	SSC G3G4 S4	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g. fire, floods, unimproved roads, grazing lands, and fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	**Not Expected** The project site does not contain any coastal sage scrub, chaparral, woodland, or riparian habitat.
Plegadis chihi white-faced ibis	WL G5 S3S4	Locally rare resident/migrant in southern California. Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland.	Yes	No	**Not Expected** The project site does not contain open water or wetlands.
Plestiodon skiltonianus interparietalis Coronada skink	WL G5T5 S2S3	Found in inland southern California south through the north Pacific coast region of northern Baja California. Occurs in grassland, woodlands, pine forests and chaparral habitats, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Can also be found in areas away from water.	No	No	**Not Expected** The project site does not contain grasslands, woodlands, pine forests, or chaparral habitats.
Polioptila californica californica coastal California gnatcatcher	FT SSC G4G5T2Q S2	Yearlong resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet amsl in coastal regions and below 1,500 feet amsl inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	**Not Expected** The project site does not contain any coastal sage scrub or any connectivity to coastal sage scrub, which this species is obligate to.
Rallus obsoletus levipes light-footed Ridgway's rail	FE SE FP G5T1T2 S1	Nesting habitat in southern California includes tall, dense California cordgrass (*Spartina foliosa*) in the low littoral zone, wrack deposits in the low marsh zone, and hummocks of high marsh within the low marsh zone.	Yes	No	**Not Expected** The project site does not contain any nesting or foraging habitat.
Riparia riparia bank swallow	ST G5 S2	Neotropical migrant found in riparian and other lowland habitats in California, west of the deserts. The species does not breed in southern California. During the summer, the species is restricted to riverbanks, creeks, seashores, and lakes with vertical banks, bluffs, and cliffs with fine-textured or sandy soils nearby for nesting.	No	No	**Not Expected** Extirpated as a breeding bird in all of southern California. The project site does not contain any foraging habitat.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Salvadora hexalepis virgultea coast patch-nosed snake	SSC G5T4 S2S3	Occurs in brushy vegetation including coastal scrub and chaparral from the coast to the mountains. Takes refuge in existing small mammal burrows.	No	No	**Not Expected** The project site does not contain any coastal sage scrub or chaparral habitat.
Setophaga petechia yellow warbler	SSC G5 S3S4	Yearlong resident along the southern coast of California with the remainder of the State being occupied during the summer. The species also winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, California sycamores, or alders (*Alnus* spp.) or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	No	**Low (Nesting and Foraging)** Conifer and eucalyptus nesting habitat is present on the site but this species is generally a rare breeder in non-riparian habitat. This species has a low potential to forage in the on-site trees, which are all ornamental or otherwise exotic. However, the nearest documented nesting occurrence in the CNDDB (Occurrence Number 82) for this species is 6.5 miles to the north of the project site in 2003 (CNDDB 2020).
Spea hammondii western spadefoot	SSC G3 S3	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain American bullfrogs (*Lithobates catesbeianus*), predatory fish, or crayfish are necessary for breeding. Estivates in upland habitats adjacent to potential breeding sites in burrows approximating 3 feet in depth.	Yes	No	**Not Expected** The project site does not contain suitable habitat for this species.
Sternula antillarum browni California least tern	FE SE FP G4T2T3Q S2	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates, including sand beaches, alkali flats, landfills, or paved areas. Prefers broad, level expanses of open sandy or gravelly beach, dredge spoil, and other open shoreline areas, and broad river valley sandbars.	Yes	No	**Not Expected** The project site does not contain suitable habitat for this species.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution	Covered by MHCP	Observed On-site	Potential to Occur
Streptocephalus woottoni Riverside fairy shrimp	FE G1G2 S1S2	Restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions. Basins that support Riverside fairy shrimp are typically dry a portion of the year, but usually are filled by late fall, winter, or spring rains, and may persist through May. Endemic to western Riverside, Orange, and San Diego Counties in tectonic swales/earth slump basins in grassland and coastal sage scrub. In Riverside County, the species been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils. All known habitat lies within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation.	Yes	No	**Not Expected** The project site does not contain vernal pools.
Taxidea taxus American badger	SSC G5 S3	Occupies a wide variety of habitats including dry, open grassland, sagebrush, and woodland habitats. Require dry, friable, often sandy soil to dig burrows for cover, food storage, and giving birth. Occasionally found in riparian zones and open chaparral with less than 50% plant cover.	No	No	**Not Expected** The area surrounding the project site is too developed and no suitable habitat is present.
Thamnophis hammondii two-striped gartersnake	SSC G4 S3S4	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet amsl.	No	No	**Not Expected** The project site does not contain any aquatic habitat.
***Thamnophis sirtalis* pop. 1** south coast gartersnake	SSC G5T1T2 S1S2	Utilizes a wide variety of habitats - forests, mixed woodlands, grassland, chaparral, farmlands, often near ponds, marshes, or streams.	No	No	**Not Expected** The project site does not contain suitable habitat for this species.
Vireo bellii pusillus least Bell's vireo	FE SE SSC G5T2 S2	Summer resident in southern California. Breeding habitat generally consists of dense, low, shrubby vegetation in riparian areas, and mesquite brushlands, often near water in arid regions. Early successional cottonwood-willow riparian groves are preferred for nesting. The most critical structural component of nesting habitat in California is a dense shrub layer that is 2 to 10 feet (0.6 to 3.0 meters) above ground. The presence of water, including ponded surface water or moist soil conditions, may also be a key component for nesting habitat.	Yes	No	**Not Expected** The project site does not contain any riparian habitat or suitable nesting habitat.
SPECIAL-STATUS PLANT SPECIES					
Abronia maritima red sand-verbena	4.2 G4 S3?	Perennial herb. Occurs within coastal dunes. Found at elevations ranging from 0 to 328 feet amsl. Blooming period is from February through December.	No	No	**Not Expected** The project site does not contain any coastal dune habitat.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Acanthomintha ilicifolia San Diego thorn-mint	CE FT 1B.1 G1 S1	Annual herb. Occurs in clay soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Found at elevations ranging from 0 to 330 feet amsl. Blooming period is from April through June.	Yes	No	**Not Expected** The project site does not contain chaparral, coastal scrub, or valley and foothill grassland habitat.
Acmispon prostrates Nuttall's acmispon	1B1 G1G2 S1	Annual herb. Occurs in sandy soils within coastal dunes and coastal scrub (sandy). Found at elevations ranging from 0 to 35 feet amsl. Blooming period is from March through July.	No	No	**Not Expected** The project site does not contain any coastal dune or coastal scrub habitat.
Adolphia californica California adolphia	2B.1 G3 S2	Perennial deciduous shrub. Found in clay soils within chaparral, coastal scrub, and valley and foothill grasslands. Found at elevations ranging from 30 to 2,430 feet amsl. Blooming period is from December through May.	No	No	**Not Expected** The project site does not contain chaparral, coastal scrub, or valley and foothill grassland habitat
Ambrosia pumila San Diego ambrosia	FE 1B.1 G1 S1	Perennial rhizomatous herb. Occurs on sandy loam or clay soils (often in disturbed areas) and sometimes alkaline soils. Habitats include chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Found at elevations ranging from 66 to 1,362 feet amsl. Blooming period is from April through October.	Yes (b)	No	**Not Expected** The project site does not contain chaparral, coastal scrub, valley and foothill grassland, and vernal pools.
Arctostaphylos glandulosa* ssp. *crassifolia Del Mar manzanita	FE 1B.1 G5T2 S2	Perennial evergreen shrub. Found in chaparral habitats (maritime, sandy). Found at elevations ranging from 0 to 1,198 feet amsl. Blooming period is from December through June.	Yes	No	**Not Expected** The project site does not contain chaparral habitat.
Artemisia palmeri San Diego sagewort	4.2 G3? S3?	Perennial deciduous herb. Found on sandy, mesic soils within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats. Found at elevations ranging from 49 to 3,002 feet amsl. Blooming period is from (February) May through September.	No	No	**Not Expected** The project site does not contain chaparral, coastal scrub, riparian forest, riparian scrub, or riparian woodland habitats.
Asplenium vespertinum western spleenwort	4.2 G4 S4	Perennial rhizomatous herb. Found on rocky soils within chaparral, cismontane woodland, and coastal scrub habitat. Found at elevations ranging from 591 to 3,281 feet amsl. Blooming period is from February through June.	No	No	**Not Expected** The project site does not contain rocky soils within chaparral, cismontane woodland, or coastal scrub habitat.
Atriplex coulteri Coulter's saltbush	1B.2 G3 S1S2	Perennial herb. Generally associated with alkaline or clay soils that occur in grasslands and coastal bluff habitats. Found at elevations ranging from 30 to 1,440 feet amsl. Blooming period is from March through October.	No	No	**Not Expected** The project site does not contain alkaline or clay soils or grasslands and coastal bluff habitats.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution	Covered by MHCP	Observed On-site	Potential to Occur
Atriplex pacifica south coast saltscale	1B.2 G4 S2	Annual herb. Occurs on alkaline soils in coastal scrub, coastal bluff, and playas. Found at elevations ranging from 3 to 1,640 feet amsl. Blooming period is from March through October.	No	No	**Not Expected** The project site does not contain coastal scrub, coastal bluff, or playas.
Atriplex parishii Parish's brittlescale	1B.1 G1G2 S1	Annual herb. Usually found on drying alkali flats with fine soils in vernal pools, chenopod scrub, wet meadows, and playas. Found at elevations ranging from 15 to 4,660 feet amsl. Blooming period is from June through October.	No	No	**Not Expected** The project site does not contain vernal pools, chenopod scrub, wet meadows, or playas.
Baccharis vanessae Encinitas baccharis	FT CE 1B.1 G1 S1	Perennial deciduous shrub. Occurs in sandstone soils within chaparral (maritime) and cismontane woodland. Found at elevations ranging from 195 to 2,360 feet amsl. Blooming period is August and from October through November.	Yes	No	**Not Expected** Sandstone soils are not present within the project site.
Bloomeria clevelandii San Diego goldenstar	1B.1 G2 S2	Perennial bulbiferous herb. Occurs in clay soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Found at elevations ranging from 160 to 1,525 feet amsl. Blooming period is from April through May.	No	No	**Not Expected** The project site does not contain clay soils associated with chaparral, coastal scrub, valley and foothills grasslands, or vernal pool habitats.
Brodiaea filifolia thread-leaved brodiaea	FT FE 1B.1 G2 S2	Perennial bulbiferous herb. Often found on clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Found at elevations ranging from 82 to 3,675 feet amsl. Blooming period is from March through June.	Yes (c)	No	**Not Expected** The project site does not contain chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, or vernal pool habitats.
Brodiaea orcuttii Orcutt's brodiaea	1B.1 G2 S2	Perennial bulbiferous herb. Occurs on mesic, clay soils within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Found at elevations ranging from 98 to 5,551 feet amsl. Blooming period is from May through July.	Yes	No	**Not Expected** The project site is outside of the known elevation range for this species.
Camissoniopsis lewisii Lewis' evening-primrose	3 G4 S4	Annual herb. Occurs on sandy or clay soils coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrubland, and valley/foothill grassland habitats. Found at elevations ranging from 0 to 984 feet amsl. Blooming period is from March through May (June).	No	No	**Not Expected** The project site does not contain bluff scrub, cismontane woodland, coastal dunes, coastal scrubland, or valley/foothill grassland habitats.
Ceanothus verrucosus wart-stemmed ceanothus	2B.2 G2 S2?	Perennial evergreen shrub. Found in chaparral habitats at elevations ranging from 0 to 1,245 feet amsl. Blooming period is from December through May.	Yes	No	**Not Expected** The project site does not contain chaparral habitat.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Centromadia parryi* ssp. *australis southern tarplant	1B.1 G3T2 S2	Annual herb. Occurs in marshes and swamps (margins), valley and foothill grassland (vernally mesic), and vernal pools. Found at elevations ranging from 0 to 1,575 feet amsl. Blooming period is from May through November.	No	No	**Not Expected** The project site does not contain marshes and swamps, or valley and foothill grasslands.
Centromadia pungens* ssp. *laevis smooth tarplant	1B.1 G3G4T2 S2	Annual herb. Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley/foothill grassland habitats. Found at elevations from 0 to 2,100 feet amsl. Blooming period is from April through September.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Chaenactis glabriuscula* var. *orcuttiana Orcutt's pincushion	1B.1 G5T1T2 S1	Annual herb. Occurs on coastal bluff scrub (sandy) and coastal dunes. Found at elevations ranging from 0 to 328 feet amsl. Blooming period is from January through August.	No	No	**Not Expected** The project site does not contain coastal bluff scrub (sandy) or coastal dune habitats.
Chamaebatia australis southern mountain misery	4.2 G4 S4	Perennial evergreen shrub. Found in chaparral (gabbroic or metavolcanic) habitats at elevations ranging from 980 to 3345 feet amsl. Blooming period is from November through May.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Chorizanthe orcuttiana Orcutt's spineflower	FE CE 1B1 G1 S1	Annual herb. Occurs in closed-cone coniferous forest, chaparral (maritime), coastal scrub, and sandy openings. Found at elevations ranging from 5 to 410 feet amsl. Blooming period is from March through May.	Yes	No	**Not Expected** The project site does not contain closed-cone coniferous forest, chaparral (maritime), coastal scrub, or sandy areas.
Chorizanthe polygonoides* var. *longispina long-spined spineflower	1B.2 G5T3 S3	Annual herb. Occurs on clay soils within chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Found at elevations ranging from 98 to 5,020 feet amsl. Blooming period is from April through July.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Cistanthe maritima seaside cistanthe	4.2 G3G4 S3	Annual herb. Blooms March through June. Occurs in sandy sites within coastal bluff scrub, coastal scrub, and valley and foothill grassland. Known elevations range from 50 to 590 feet amsl.	No	No	**Not Expected** The project site does not contain closed-cone coniferous forest, chaparral (maritime), coastal scrub, or valley and foothill grassland habitats.
Clarkia delicata delicate clarkia	1B.2 G3 S3	Annual herb. Often occurs on gabbro soils within cismontane woodland and chaparral. Found at elevations ranging from 310 to 5900 feet amsl. Blooming period is from April through June.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Comarostaphylis diversifolia* ssp. *diversifolia summer holly	1B.2 G3T2 S2	Perennial evergreen shrub. Often in mixed chaparral and cismontane woodland, sometimes in post-burn areas. Known elevations range from 130 to 1,835 feet amsl. Blooming period is from April through June.	Yes	No	**Not Expected** The project site is outside of the known elevation range for this species.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Convolvulus simulans small-flowered morning-glory	4.2 G4 S4	Annual herb. Found on wet clay and serpentine ridges within chaparral, coastal scrub, and valley and foothill grassland. Found at elevations ranging from 100 to 2,820 feet amsl. Blooming period is from March to July.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Corethrogyne filaginifolisa var. incana San Diego sand aster	1B.1 G4T1Q S1	Perennial herb. Found in coastal bluff scrub, chaparral, and coastal scrub. Found at elevations ranging from 5 to 375 feet amsl. Blooming period is from June through September.	No	No	**Not expected** The project site does not contain coastal bluff scrub, chaparral, or coastal scrub habitat.
Corethrogyne filaginifolisa var. linifolia Del Mar Mesa sand aster	1B.1 G4T1Q S1	Perennial herb. Found in coastal bluff scrub, chaparral (maritime, openings), coastal scrub. Found at elevations ranging from 65 to 900 feet amsl. Blooming period occurs in May, July, August, and September.	Yes	No	**Not Expected** The project site does not contain coastal bluff scrub, chaparral (maritime, openings), or coastal scrub.
Cryptantha wigginsii Wiggins' cryptantha	1B.2 G2 S1	Annual herb. Found in clay soils within coastal scrub habitat. Found at elevations ranging from 100 to 350 feet amsl. Blooming period is from February through June.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Deinandra paniculata paniculate tarplant	4.2 G4 S4	Annual herb. Occurs in coastal scrub, vernal pools, and valley/foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet amsl. Blooming period is (March) April through November (December).	No	No	**Not Expected** The project site does not contain coastal scrub, vernal pools, or valley/foothill grassland habitats.
Dichondra occidentalis western dichondra	4.2 G3G4 S3S4	Perennial rhizomatous herb. Occurs on sandy loam, clay, and rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Found at elevations ranging from 130 to 1640 feet amsl. Blooming period is from March through July.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Dudleya blochmaniae* ssp. *blochmaniae Blochman's dudleya	1B.1 G3T2 S2	Perennial herb. Occurs on rocky, often clay or serpentinite soils within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 16 to 1,476 feet amsl. Blooming period is from April through June.	Yes	No	**Not Expected** Clay and serpentine soils are not present within the project site.
Dudleya variegate variegated dudleya	1B.2 G2 S2	Perennial herb. Occurs in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools. Found at elevations ranging from 5 to 1905 feet amsl. Blooming period is from April through June.	Yes	No	**Not Expected** The project site does not contain chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools
Dudleya viscida sticky dudleya	1B.2 G2 S2	Perennial herb. Often occurs on rocky soils in coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 33 to 1,804 feet amsl. Blooming period is from May through June.	Yes	No	**Not Expected** Rocky soils are not present within the project site.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Ericameria palmeri* var. *palmeri Palmer's goldenbush	1B.1 G4T2? S2	Perennial evergreen shrub. Occurs in mesic soils in chaparral and coastal scrub. Found at elevations ranging from 95 to 1,970 feet amsl. Blooming period is from September through November.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Eryngium aristulatum* var. *parishii San Diego button-celery	FE SE 1B.1 G5T1 S1	Annual/perennial herb. Found on mesic soils within coastal scrub, valley and foothill grassland, and vernal pool habitats. Found at elevations ranging from 66 to 2,034 feet amsl. Blooming period is from April through June.	Yes	No	**Not Expected** The project site does not contain mesic soils or coast scrub, valley and foothill grassland, and vernal pool habitats.
Erysimum ammophilum sand-loving wallflower	1B.2 G2 S2	Perennial herb. Found on Sandy openings within chaparral (maritime), coastal dunes, and coastal scrub. Fount at elevations ranging from 0 to 195 feet amsl. Blooming period is February through June.	No	No	**Not Expected** The project site does not contain sandy opening associated with chaparral (maritime), coastal dunes, or coastal scrub habitats.
Erythranthe diffusa Palomar monkeyflower	4.3 G4 S3	Annual herb. Grows on sandy or gravelly soils within chaparral and lower montane coniferous forest. Found at elevations ranging from 4,003 to 6,004 feet amsl. Blooming period is from April through June.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Euphorbia misera cliff spurge	2B.2 G5 S2	Perennial shrub. Often occurs on rocky soils in coastal bluff scrub, chaparral, coastal scrub, and Mojavean desert scrub habitats. Found at elevations ranging from 33 to 1,640 feet amsl. Blooming period is from December through August (October).	Yes	No	**Not Expected** The project site does not contain rocky soils associated with bluff scrub, chaparral, coastal scrub, and Mojavean desert scrub habitats.
Ferocactus viridescens San Diego barrel cactus	2B.1 G3? S2S3	Perennial stem succulent. Often occurs in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Found at elevations ranging from 5 to 1,475 feet asml. Blooming period is from May through June.	Yes	No	**Not Expected** The project site does not contain chaparral, coastal scrub, valley and foothill grassland, or vernal pool habitats.
Harpagonella palmeri Palmer's grapplinghook	4.2 G4 S3	Annual herb. Occurs on clay soils within open grassy areas within chaparral, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 66 to 3,133 feet amsl. Blooming period is from March through May.	No	No	**Not Expected** Clay soils are not present within the project site.
Hazardia orcuttii Orcutt's hazardia	CT 1B.1 G1 S1	Perennial evergreen shrub. Occurs in clay soils within chaparral (maritime) and coastal scrub. Found at elevations ranging from 260 to 280 feet amsl. Blooming period is from August through October.	Yes	No	**Not Expected** The project site is outside of the known elevation range for this species.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Heterotheca sessiliflora* ssp. *Sessiliflora beach goldenaster	1B.1 G5T2T3 S1	Perennial herb. Occurs within chaparral (coastal), coastal dunes, and coastal scrub. Found at elevations ranging from 0 to 4,020 feet asml. Blooming period is from March through December.	No	No	**Not Expected** The project site does not contain chaparral (coastal), coastal dunes, or coastal scrub habitat.
Holocarpha virgata ssp. elongata curving tarplant	4.2 G5T3 S3	Annual herb. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 197 to 3,609 feet amsl. Blooming period is from May through November.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Hordeum intercedens vernal barley	3.2 G3G4 S3S4	Annual herb. Habitat includes coastal dunes, coastal scrub, vernal pools, and valley/foothill grassland. Found at elevations ranging from 16 to 3,281 feet amsl. Blooming period is from March through June.	No	No	**Not Expected** The project site does not contain coastal dunes, coastal scrub, vernal pools, or valley/foothill grassland habitats.
Horkelia truncate Ramona horkelia	1B.3 G3 S3	Perennial herb. Occurs in clay soils within chaparral and cismontane woodlands. Found at elevations ranging from 1,310 to 4,265 feet amls. Blooming period is from March through June.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Isocoma menziesii* var. *decumbens decumbent goldenbush	1B.2 G3G5T2T3 S2	Perennial shrub. Found on sandy soils within coastal scrub and chaparral, as well as disturbed sites. Found at elevations ranging from 65 to 1640 feet amsl. Blooming period is from April through November. Blooming period is from April through November.	No	No	**Low** The project site does not contain coastal sage scrub or chaparral, however, the project site contains disturbed areas and is within the known elevation range for this species. The nearest documented occurrence (Occurrence Number 6) for this species in the CNDDB is 4.5 mile to the south of the project site in 2018 (CNDDB 2020).
Iva hayesiana San Diego marsh-elder	2B.2 G3 S2	Perennial herb. Found in Marshes and swamps, and Playas. Found at elevations ranging from 30 to 1,640 feet amsl. Blooming period is from April to October.	Yes	No	**Not Expected** The project site does not contain marshes, swamps, or playa habitat.
Juncus acutus* ssp. *leopoldii southwestern spiny rush	4.2 G5T5 S4	Perennial rhizomatous herb. Occurs within coastal dunes (mesic), meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt). Found at elevations ranging from 9 to 2,955 feet amsl. Blooming period is (March) May through June.	No	No	**Not Expected** The project site does not contain coastal dunes (mesic), meadows and seeps (alkaline seeps), Or marshes and swamps (coastal salt).
Lasthenia glabrata* ssp. *coulteri Coulter's goldfields	1B.1 G4T2 S2	Annual herb. Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet amsl. Blooming period is from February to June.	No	No	**Not Expected** The project site does not contain playas, vernal pools, or coastal salt marshes.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Lepidium virginicum* var. *robinsonii Robinson's pepper-grass	4.3 G5T3 S3	Annual herb. Occurs in dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 66 to 4,396 feet amsl. Blooming period is from January through July.	No	No	**Not Expected** The project site does not contain chaparral or coastal sage scrub habitat.
Leptosyne maritima sea dahlia	2B.2 G2 S1S2	Perennial herb. Occurs in Coastal bluff scrub and Coastal scrub. Found at elevations ranging from 15 to 490 feet amsl. Blooming period is from March through May.	No	No	**Not Expected** The project site does not contain coastal bluff scrub or coastal scrub habitat.
Lycium californicum California box-thorn	4.2 G4 S4	Perennial shrub. Blooms March through August. Found within coastal bluff scrub and coastal scrub. Known elevations range from 0 to 525 feet amsl. Blooming period is (December) March, June, July, and August.	No	No	**Not Expected** The project site does not contain coastal bluff scrub or coastal scrub habitat.
Microseris douglasii* ssp. *platycarpha small-flowered microseris	4.2 G4T4 S4	Annual herb. Occurs in alkaline soil in river bottoms in cismontane woodland, valley and foothill grassland, coastal scrub, and vernal pools. Found at elevations ranging from 50 to 3510 feet amsl. Blooming period is from March through May.	No	No	**Not Expected** The project site does not contain rivers within cismontane woodland, valley and foothill grassland, coastal scrub, or vernal pools.
Monardella hypoleuca* ssp. *lanata felt-leaved monardella	1B.2 G4T3 S3	Perennial rhizomatous herb. Occurs in sandy soils within the understory of mixed chaparral, chamise chaparral, and southern oak woodland. Found at elevations ranging from 984 to 5200 feet amsl. Blooming period is from June through August.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Myosurus minimus* ssp. *apus little mousetail	3.1 G5T2Q S2	Annual herb. Occurs on valley and foothill grassland and vernal pools (alkaline). Found at elevations ranging from 66 to 2,100 feet amsl. Blooming period is from March through June.	Yes	No	**Not Expected** The project site does not contain foothill grasslands or vernal pools (alkaline).
Nama stenocarpa mud nama	2B.2 G4G5 S1S2	Annual/perennial herb. Found in marshes and swamps (lake margins, riverbanks). Grows in elevation ranging from 16 to 1,640 feet amsl. Blooming period is from January through July.	No	No	**Not Expected** The project site does not contain marshes or swamps.
Navarretia fossalis spreading navarretia	FE 1B.1 G2 S2	Annual herb. Habitats include chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. Grows in elevation ranging from 98 to 2,149 feet amsl. Blooming period is from April through June.	Yes (b)	No	**Not Expected** The project site is outside of the known elevation range for this species.
Nemacaulis denudata* var. *denudata coast woolly-heads	1B.2 G3G4T2 S2	Annual herb. Found in coastal dunes. Known elevations range from 0 to 35 feet amsl. Blooming period is from April through September.	No	No	**Not Expected** The project site does not contain coastal dunes.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Special-Status Rank***	**Habitat Preferences and Distribution**	**Covered by MHCP**	**Observed On-site**	**Potential to Occur**
Orcuttia californica California Orcutt grass	FE SE 1B.1 G1 S1	Annual herb. Restricted to vernal pool habitats. Found at elevations ranging from 49 to 2,165 feet amsl. Blooming period is from April through August.	Yes	No	**Not Expected** The project site does not contain vernal pools.
Orobanche parishii* ssp. *brachyloba short-lobed broomrape	4.2 G4?T4 S3	A parasitic perennial herb. Found in sandy soils within Coastal bluff scrub, Coastal dunes, and Coastal scrub. Found at elevations ranging from 5 to 1,000 feet amsl. Blooming period is from April through October.	No	No	**Not Expected** The project site does not contain coastal bluff scrub, coastal dunes, or coastal scrub.
Pentachaeta aurea* ssp. *aurea golden-rayed pentachaeta	4.2 G4T3 S3	Annual herb. Found in Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland, and Valley and foothill grasslands. Found at elevations ranging from 260 to 6,070 feet amsl. Blooming period is from March through July.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Phacelia ramosissima* var. *austrolitoralis south coast branching phacelia	3.2 G5?T3Q S3	Perennial herb. Found on sandy, sometimes rocky site within chaparral, coastal scrub, coastal dunes, and coastal salt marsh. Found at elevations ranging from 15 to 980 feet amsl. Blooming period is from March through August.	No	No	**Not Expected** The project site does not contain chaparral, coastal scrub, coastal dunes, or coastal salt marsh habitat.
Pinus torreyana* ssp. *torreyana Torrey pine	1B.2 G1T1 S1	Perennial evergreen tree. Found in sandstone soils within closed-cone coniferous forest and chaparral. Found at elevations ranging from 95 to 525 feet amsl.	Yes	No	**Not Expected** The project site is outside of the known elevation range for this species.
Pogogyne abramsii San Diego mesa mint	FE CE 1B.1 G1T1 S1	Annual herb. Occurs in vernal pools. Found at elevations ranging from 295 feet to 655 feet amsl. Blooming period is from March through July.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Psilocarphus brevissimus* var. *multiflorus **delta woolly marbles**	4.2 G4T3 S3	Annual herb. Occurs in vernal pools. Found at elevations ranging from 30 to 1,640 feet amsl. Blooming period is from May through June.	No	No	**Not Expected** The project site does not contain vernal pools.
Quercus dumosa Nuttall's scrub oak	1B.1 G3 S3	Perennial evergreen shrub. Generally occurs on sandy soils near the coast, and sometimes clay loam. Found in closed-cone coniferous forest, chaparral, and coastal scrub. Found at elevations ranging from 50 to 4030 feet amsl. Blooming period is from February through March.	Yes	No	**Not Expected** The project site does not contain coniferous forest, chaparral, or coastal scrub.

Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution	Covered by MHCP	Observed On-site	Potential to Occur
Quercus engelmannii Engelmann oak	4.2 G4T3 S3	Perennial deciduous tree. Occurs in chaparral, cismontane woodland, riparian woodland, and valley/foothill grassland. Found at elevations ranging from 160 to 4,275 feet amsl. Blooming period is from March through June.	Yes	No	**Not Expected** The project site is outside of the known elevation range for this species.
Salvia munzii Munz's safe	2B.2 G2 S2	Perennial evergreen shrub. Occurs in chaparral and coastal scrub. Found at elevations ranging from 375 to 3,495 feet amsl. Blooming period is from February through April.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Selaginella cinerascens ashy spike-moss	4.1 G3G4 S3	Rhizomatous fern. Occurs in chaparral and coastal scrub. Found at elevations ranging from 30 to 2100 feet amsl.	No	No	**Not Expected** The project site does not contain chaparral or coastal scrub.
Stemodia durantifolia purple stemodia	2B.1 G5 S2	Perennial herb. Occurs on sandy soils and mesic sites within Sonoran Desert scrub. Found at elevations ranging from 591 to 984 feet amsl. Blooms the months of (January), April, June, August, September, October, and December.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.
Spita diegoensis San Diego County needle grass	2B.1 G5 S2	Perennial herb. Found in sandy soils within Sonoran desert scrub. Found at elevations ranging from 30 to 2,625 feet amsl. Blooms in January, April, June, and August to October, and in December.	No	No	**Not Expected** The project site does not contain Sonoran desert scrub.
Suaeda esteroa estuary seablite	1B.2 G3 S2	Perennial herb. Found on clay, silt, and sand substrates in coastal salt marshes and swamps. Known elevations range from 0 to 395 feet amsl. Blooms June through October (sometimes May through January).	No	No	**Not Expected** The project site does not contain coastal salt marshes or swamps.
Tetracoccus dioicus Parry's tetracoccus	1B.2 G2G3 S2	Perennial deciduous shrub. Occurs in chaparral and coastal scrub habitats. Found at elevations ranging from 541 to 3,281 feet amsl. Blooming period is from April through May.	Yes	No	**Not Expected** The project site is outside of the known elevation range for this species.
Viguiera laciniate San Diego County viguiera	4.3 G4 S4	Perennial shrub. Found in chaparral and coastal scrub. Found at elevations ranging from 195 to 2,460 feet amsl. Blooming period is from February to June and sometimes through August.	No	No	**Not Expected** The project site is outside of the known elevation range for this species.

* **U.S. Fish and Wildlife Service (USFWS)**

FE Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.

FT Threatened – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

California Department of Fish and Wildlife (CDFW)

SE Endangered – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

ST Threatened – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required under the California Endangered Species Act.

FP Fully Protected – any native species or subspecies of bird, mammal, fish, amphibian, or reptile that were determined by the State of California to be rare or face possible extinction.

SSC Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria:

- is extirpated from California or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed.
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

WL Watch List - taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

California Native Plant Society (CNPS) California Rare Plant Rank

1B Plants rare, threatened, or endangered in California and elsewhere.

2B Plants rare, threatened, or endangered in California but more common elsewhere.

4 Plants of limited distribution – Watch List.

Threat Ranks

.1 Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).

.2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).

.3 Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Infraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#). Adding a ? to a rank expresses uncertainty about the rank.

G1/T1 Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2/T2 Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

G3/T3 Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

G4/T4 Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5 Secure – Common; widespread and abundant.

S1 Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.

S2 Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or State.

S3 Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

Michael Baker
INTERNATIONAL

Attachment E:
References

Bradley, D.R., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.C., Jones, C., Schmidly, D.J., Stangl Jr., F.B., Van Den Bussche, R.A., and B. Würsig. 2014. Revised Checklist of North American Mammals North of Mexico, 2014. Occasional Papers of the Museum of Texas Tech University. 327. 1-27.

Calflora: Information on California plants for education, research and conservation. [web application]. 2020. Berkeley, California: The Calflora Database [a non-profit organization]. Accessed online at: https://www.calflora.org/.

California Department of Fish and Wildlife (CDFW). 2020a. RareFind 5, California Natural Diversity Data Base, California. Data base report on threatened, endangered, rare or otherwise sensitive species and communities for the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas California* 7.5-minute quadrangles.

California Department of Fish and Wildlife (CDFW). 2020b. Biogeographic Information and Observation System, California Natural Diversity Data Base, California. Data base report on threatened, endangered, rare or otherwise sensitive species and communities for the USGS *San Marcos, San Luis Rey, Rancho Santa Fe, and Encinitas, California* 7.5-minute quadrangles.

California Department of Fish and Wildlife (CDFW). 2020c. Special Animals List. November 2020.

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Accessed online at: http://www.rareplants.cnps.org/.

Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker. 2019. Check-list of North American Birds (online). American Ornithological Society. Accessed online at: http://checklist.aou.org/taxa.

City of Encinitas. 1995. *City of Encinitas General Plan.*

City of Encinitas. 2001. *Draft Encinitas Subarea Plan.*

City of Encinitas. 2017. *Urban Forest Management Program.*

City of Encinitas. 2021. City of Encinitas Tree Tracker. Accessed online at: https://encinitas.maps.arcgis.com/apps/webappviewer/index.html?id=946f2afa672740409f354cee636a5dae.

Crother, B. I. (ed.). 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding pp. 1–102. SSAR Herpetological Circular 43.

eBird. 2017. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Accessed online at: http://www.ebird.org.

Google, Inc. 2020. Google Earth Pro Imagery Version 7.3.3.7786. Build date 07/21/2020. Aerial Image dated October, 2017.

Jepson Flora Project (eds.). 2018. Jepson eFlora. Accessed online at: http://ucjeps.berkeley.edu/eflora/.

Oberbauer, T., 1996. *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions*, San Diego Association of Governments, San Diego, CA.

RECON. 2016. *Draft Environmental Assessment/Program Environmental Impact Report for* At Home in Encinitas, *the City of Encinitas Housing Element Update*. Encinitas, California. Prepared for the City of Encinitas.

Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation (Second Edition)*. California Native Plant Society, Sacramento, California, USA.

Sibley, D.A. 2014. *The Sibley Guide to Birds, Second Edition*. Alfred A. Knopf, Inc., New York, New York.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2020. *Custom Soil Resource Report for Antelope Valley Area, California.* Accessed online at: http://websoilsurvey.nrcs.usda.gov/app/.

U.S. Fish and Wildlife Service. 2020a. ECOS Environmental Conservation Online System: Information for Planning and Consultation (IPaC). Accessed online at: https://ecos.fws.gov/ipac/

U.S. Fish and Wildlife Service. 2020b. ECOS Environmental Conservation Online System: Threatened and Endangered Species Active Critical Habitat Report. Accessed online at: https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

U.S. Geological Survey. 1974. *Encinitas, California* 7.5-Minute Topographic Quadrangle Map.

U.S. Geological Survey. 1974. *Rancho Santa Fe, California* 7.5-Minute Topographic Quadrangle Map.

U.S. Geological Survey. 1974. *San Luis Rey, California* 7.5-Minute Topographic Quadrangle Map.

U.S. Geological Survey. 1974. *San Marcos, California* 7.5-Minute Topographic Quadrangle Map.

APPENDIX C-2
ARBORIST REPORT

THIS PAGE INTENTIONALLY LEFT BLANK

the forestry group
TREE CARE SERVICES

PO Box 6764
San Diego, California 92166
Tel: 619.823.8414
E-mail: jeffthefforestrygroup.com

April 16th, 2021

Michael Peltz
MW Peltz + Associates, Inc
143 S. Cedros avenue Suite B104
Solana Beach, Ca. 92075

RE: Fenway N Hwy 101 Mixed Use Project

Dear Michael,

The following is in response to my April 16th, 2021 site inspection of the Fenway N Highway 101 Mixed Use Project. This inspection was performed at your request to review the on-site trees at this location and document the species and their condition.

Assignment

Perform physical inventory, collecting tree locations and arboricultural attributes for each tree over 8 inches trunk diameter (12 inches combined trunk diameter for multi-stemmed trees) within the project boundaries. Prepare tree inventory spreadsheet with corresponding map with tree locations. Prepare arborist report with observations and opinions.

Observations

The site consists of a small one-story retail location with a taco shop on the south end of the project. It is in operation and the property is maintained. The north end of the project consists of a closed restaurant with open space around it. It looks to have been closed for some time and no maintenance has been performed on either the restaurant building or the surrounding property.

There are a total of 47 trees within the site location. The south end of the project with the open and operating businesses has a mixture of Queen and Pygmy date palms which are in fair to good condition. North of this location separated by a dirt parking lot has a

mixture of poorly maintained and some trees that have been topped for utility line clearance.

Going up the driveway to the closed restaurant are pine and eucalyptus trees that have not been maintained and are in poor to very poor condition. Around the restaurant are some Queen palms, one King palm and one Pindo palm that are in poor condition. Between the parking area are some large Acacia shrubs, some Giant Bird of Paradise, and one Ficus tree. All are in poor condition except for the Ficus tree which is in fair condition. On the front slope of the project are more eucalyptus and pine trees which are in poor condition.

In front of the project, in the center median of the North Highway 101, are 2 Western Red bud trees in fair to poor condition, 1 Torrey pine in good condition, 1 Coast live oak in poor condition, 1 Monterey Cypress in good condition, and 3 Marina Strawberry trees in good condition.

Opinions and Recommendations

The palm trees around the existing and open businesses, while in fair to good condition, are not high value, rare, or possess heritage tree status. They are easily replaced, and I see no reason to protect in place. Boxing and re-locating is a possibility that could be explored if desired.

The other trees around the property are in poor to very poor condition and are not high value, rare, or possess heritage tree status. None of the trees are worth preserving in place, or worth boxing and re-locating.

Attached is a site map with the numbered tree locations with representative photographs.

If you have any questions regarding this report, please contact me at 619.540.0171 or jeff@theforestrygroup.com

Sincerely,

Jeff Cloud
ASCA Registered Consulting Arborist #605
ISA Certified Arborist #WE-6283A
ISA Tree Risk Assessment Qualified
Qualified Applicator License #145463

Fenway N Hwy 101 Mixed Use Project
North Coast Hwy
Leucadia, 92024
Tree Identification and Current State of Health
April 16th, 2021

Tree #	Tree Species	Height	DBH (Diameter at Breast Height)	Health Rating (Good/Fair/Poor/Dead)	Observations
1	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Regular maintanance
2	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Regular maintanance
3	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Regular maintanance
4	Pygmy Date Palm (*Phoenix roebellini*)	1-15'	6-12"	Fair	Regular maintanance
5	Pygmy Date Palm (*Phoenix roebellini*)	1-15'	6-12"	Fair	Regular maintanance
6	Pygmy Date Palm (*Phoenix roebellini*)	1-15'	6-12"	Fair	Regular maintanance
7	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Regular maintanance
8	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Regular maintanance
9	Pygmy Date Palm (*Phoenix roebellini)*	1-15'	6-12"	Fair	Regular maintanance
10	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Regular maintanance
11	Pine species (*Pinus spp.*)	30-45'	12-18"	Poor	Deferred maintanance, poor stucture
12	Pine species (*Pinus spp.)*	30-45'	12-18"	Poor	Deferred maintanance, poor stucture
13	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
14	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
15	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
16	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
17	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
18	Pine species (*Pinus spp.*)	30-45'	18-24"	Poor	Deferred maintanance, poor stucture
19	Pine species (*Pinus spp.*)	30-45'	18-24"	Poor	Deferred maintanance, poor stucture
20	Pine species (*Pinus spp.*)	30-45'	18-24"	Poor	Deferred maintanance, poor stucture
21	Pine species (*Pinus spp.*)	30-45'	18-24"	Poor	Deferred maintanance, poor stucture
22	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
23	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
24	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
25	Eucalyptus species (*Eucalyptus spp.*)	45-60'	18-24"	Poor	Deferred maintanance, poor stucture
26	Pine species (*Pinus spp.*)	30-45'	18-24"	Poor	Deferred maintanance, poor stucture
27	Pindo Palm (*Butia capitata*)	1-15'	12-18"	Fair	Deferred maintanance, poor stucture
28	Queen Palm (*Syagrus romanzoffianum*)	45-60'	12-18"	Fair	Deferred maintanance, poor stucture
29	Queen Palm (*Syagrus romanzoffianum*)	15-30'	12-18"	Dead	Deferred maintanance, poor stucture
30	Queen Palm (*Syagrus romanzoffianum*)	15-30'	12-18"	Poor	Deferred maintanance, poor stucture
31	Queen Palm (*Syagrus romanzoffianum*)	15-30'	12-18"	Poor	Deferred maintanance, poor stucture
32	King Palm (*Archontophoenix cunninghamiana*)	15-30'	12-18"	Poor	Deferred maintanance, poor stucture
33	Queen Palm (*Syagrus romanzoffianum*)	1-15'	12-18"	Poor	Deferred maintanance, poor stucture
34	Giant Bird of Paradise (*Strelitzia nicolai*)	1-15'	6-12"	Poor	Deferred maintanance, poor stucture
35	Queen Palm (*Syagrus romanzoffianum*)	1-15'	6-12"	Poor	Deferred maintanance, poor stucture
36	Queen Palm (*Syagrus romanzoffianum*)	1-15'	6-12"	Poor	Deferred maintanance, poor stucture
37	Queen Palm (*Syagrus romanzoffianum*)	1-15'	6-12"	Poor	Deferred maintanance, poor stucture
38	Giant Bird of Paradise (*Strelitzia nicolai*)	1-15'	6-12"	Poor	Deferred maintanance, poor stucture
39	Rusty Leaf Fig (*Ficus rubiginosa*)	15-30'	12-18"	Fair	Deferred maintanance, poor stucture
40	Pine species (*Pinus spp.*)	15-30'	12-18"	Poor	Deferred maintanance, poor stucture
41	Pine species (*Pinus spp.*)	1-15'	6-12"	Fair	Deferred maintanance, poor stucture
42	Eucalyptus species (*Eucalyptus spp.*)	30-45'	18-24"	Fair	Deferred maintanance, poor stucture
43	Eucalyptus species (*Eucalyptus spp.*)	30-45'	18-24"	Fair	Deferred maintanance, poor stucture
44	Spanish Dagger (*Yucca gloriosa*)	1-15'	12-18"	Fair	Deferred maintanance, poor stucture
45	Eucalyptus species (*Eucalyptus spp.*)	30-45'	18-24"	Fair	Deferred maintanance, poor stucture
46	Eucalyptus species (*Eucalyptus spp.*)	15-30'	12-18"	Fair	Deferred maintanance, poor stucture
47	Eucalyptus species (*Eucalyptus spp.*)	15-30'	12-18"	Fair	Deferred maintanance, poor stucture
48	Western Redbud (*Cercis occidentalis*)	1-15'	1-6"	Fair	Regular maintanance
48	Western Redbud (*Cercis occidentalis*)	1-15'	1-6"	Fair	Regular maintanance
50	Coast Live Oak (*Quercus agrifolia*)	1-15'	6-12"	Good	Regular maintanance
51	Monterey Cypress (*Cupressus macrocarpa*)	15-30'	6-12"	Good	Regular maintanance
52	Torrey Pine (*Pinus torreyana*)	15-30'	6-12"	Good	Regular maintanance
53	Marina Strawberry (*Arbutus 'Marina'*)	15-30'	6-12"	Good	Regular maintanance
54	Marina Strawberry (*Arbutus 'Marina'*)	15-30'	6-12"	Good	Regular maintanance
55	Marina Strawberry (*Arbutus 'Marina'*)	15-30'	6-12"	Good	Regular maintanance

Fenway N Hwy 101 Mixed Use Project Inventory

Tree Quantity: 55

Proposal Value: $0

April 28, 2021

Proposal #: 240362

Tree Care Service Address/Location
Fenway N Hwy 101 Mixed Use Project
143 S. Cedros Ave Suite B104
Solana Beach, California 92075
Michael Peltz
mpeltz@mwpeltz.com
tel:858.481.0888

The Forestry Group, Inc.
PO Box 6764
San Diego, California 92166
Jeff Cloud
ISA Certified Arborist #WE-6283A
Registered Consulting Arborist #605
ISA Tree Risk Assessment Qualified
Qualified Applicators License #145463
Jeff@theforestrygroup.com
tel:619-540-0171

	Species	Qty	Height	DBH	Service	Price
	Pygmy Date Palm	4	1'-15'	7"-12"		$0
	Eucalyptus Species	9	46'-60'	19"-24"		$0
	Pine Species	7	31'-45'	19"-24"		$0
	Pindo Palm	1	1'-15'	13"-18"		$0
	Queen Palm	7	46'-60'	13"-18"		$0
	Queen Palm	3	16'-30'	13"-18"		$0
	King Palm	1	16'-30'	7"-12"		$0
	Queen Palm	4	1'-15'	13"-18"		$0
	Giant Bird Of Paradise	2	1'-15'	13"-18"		$0
	Rusty Fig	1	16'-30'	7"-12"		$0
	Pine Species	1	16'-30'	13"-18"		$0
	Pine Species	1	1'-15'	1"-6"		$0
	Spanish Dagger	1	1'-15'	7"-12"		$0
	Eucalyptus Species	3	31'-45'	19"-24"		$0
	Eucalyptus Species	2	16'-30'	7"-12"		$0
	Western Redbud	2	1'-15'	1"-6"		$0
	Coast Live Oak	1	1'-15'	1"-6"		$0
	Monterey Cypress	1	16'-30'	7"-12"		$0
	Torrey Pine	1	16'-30'	7"-12"		$0
	Marina Strawberry Tree	3	16'-30'	7"-12"		$0
					Total	**$0**

the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

Legend (55)

- Queen Palm (14)
- Eucalyptus Speci... (14)
- Pine Species (9)
- Pygmy Date Palm (4)
- Marina Strawberr... (3)
- Western Redbud (2)
- Giant Bird Of Pa... (2)
- Torrey Pine (1)
- Spanish Dagger (1)
- Rusty Fig (1)
- Pindo Palm (1)
- Monterey Cypress (1)
- King Palm (1)
- Coast Live Oak (1)

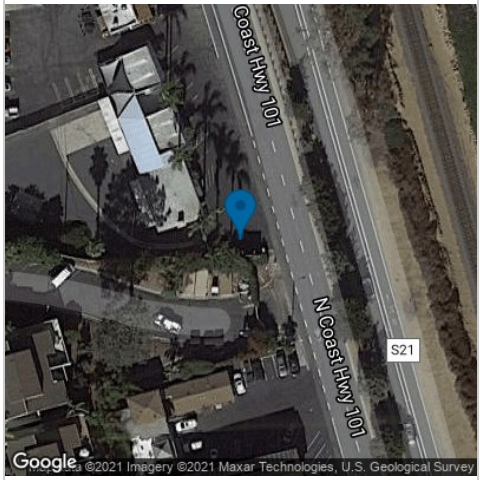
the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

Fenway N Hwy 101 Mixed Use Project Inventory

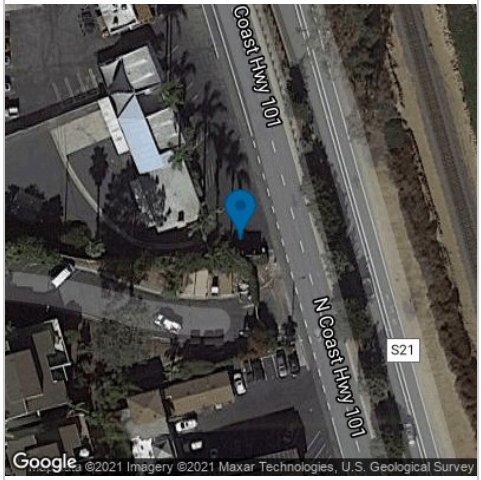
April 12, 2021

Syagrus romanzoffiana ID# 1
Queen Palm
Height: 46'-60' DBH: 13"-18"
Health: 60% - Fair



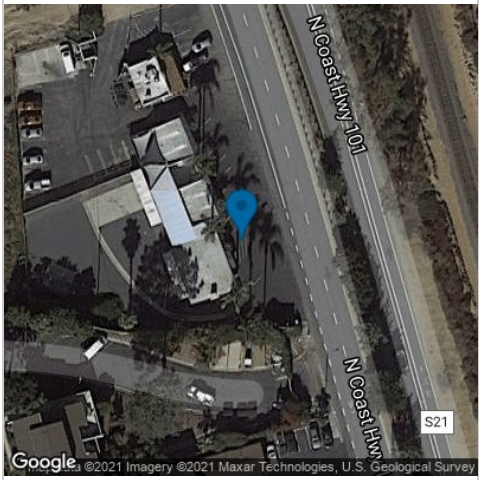
April 12, 2021

Syagrus romanzoffiana ID# 1
Queen Palm
Height: 46'-60' DBH: 13"-18"
Health: 60% - Fair



April 12, 2021

Phoenix roebelenii ID# 4
Pygmy Date Palm
Height: 1'-15' DBH: 7"-12"
Health: 60% - Fair



the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

Fenway N Hwy 101 Mixed Use Project Inventory

April 12, 2021

Phoenix roebelenii ID# 4
Pygmy Date Palm
Height: 1'-15' DBH: 7"-12"
Health: 60% - Fair

April 12, 2021

Pinus spp. ID# 11
Pine Species
Height: 31'-45' DBH: 19"-24"
Health: 40% - Poor

April 12, 2021

Eucalyptus spp. ID# 13
Eucalyptus Species
Height: 46'-60' DBH: 19"-24"
Health: 40% - Poor

the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

Fenway N Hwy 101 Mixed Use Project Inventory

April 12, 2021

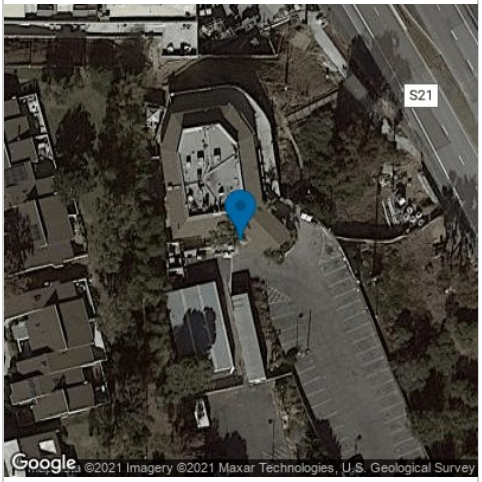
Eucalyptus spp. ID# 13
Eucalyptus Species
Height: 46'-60' DBH: 19"-24"
Health: 40% - Poor

April 12, 2021

Butia capitata ID# 27
Pindo Palm
Height: 1'-15' DBH: 13"-18"
Health: 60% - Fair

April 12, 2021

Syagrus romanzoffiana ID# 29
Queen Palm
Height: 16'-30' DBH: 13"-18"
Health: 0% - Dead



the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

Fenway N Hwy 101 Mixed Use Project Inventory

April 12, 2021

Archontophoenix cunningh… ID# 32
King Palm
Height: 16'-30' DBH: 7"-12"
Health: 40% - Poor

April 12, 2021

Strelitzia nicolai ID# 34
Giant Bird Of Paradise
Height: 1'-15' DBH: 13"-18"
Health: 40% - Poor

April 12, 2021

Ficus rubiginosa ID# 39
Rusty Fig
Height: 16'-30' DBH: 7"-12"
Health: 60% - Fair

the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

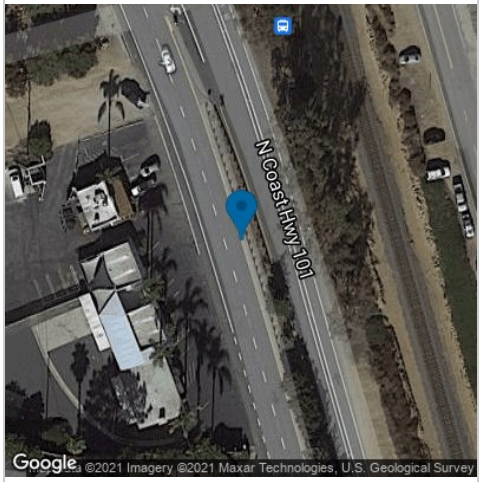
Fenway N Hwy 101 Mixed Use Project Inventory

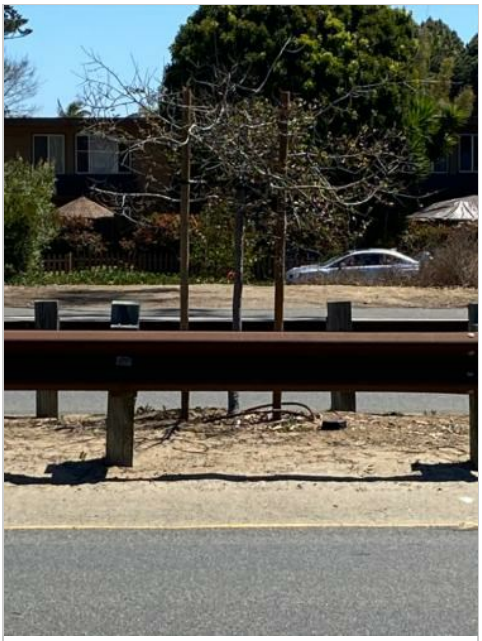
April 12, 2021

Yucca gloriosa ID# 44
Spanish Dagger
Height: 1'-15' DBH: 7"-12"
Health: 60% - Fair

April 28, 2021

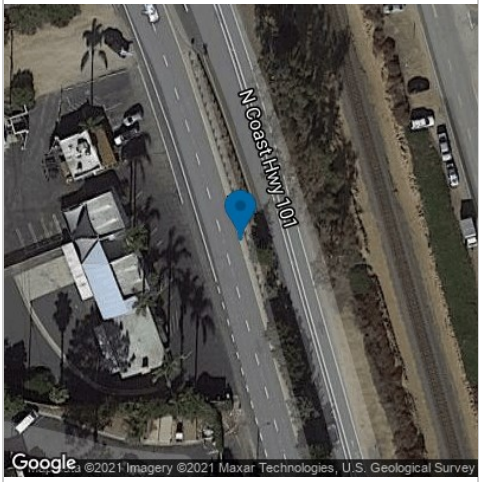
Cercis occidentalis ID# 48
Western Redbud
Height: 1'-15' DBH: 1"-6"
Health: 60% - Fair





April 28, 2021

Quercus agrifolia ID# 50
Coast Live Oak
Height: 1'-15' DBH: 1"-6"
Health: 20% - Critical



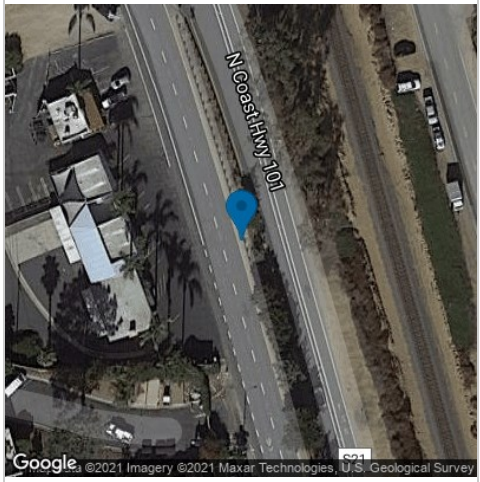
the forestry group
TREE CARE SERVICES

Fenway N Hwy 101 Mixed Use Project

Fenway N Hwy 101 Mixed Use Project Inventory

April 28, 2021

Hesperocyparis macrocarpa ID# 51
Monterey Cypress
Height: 16'-30' DBH: 7"-12"
Health: 60% - Fair

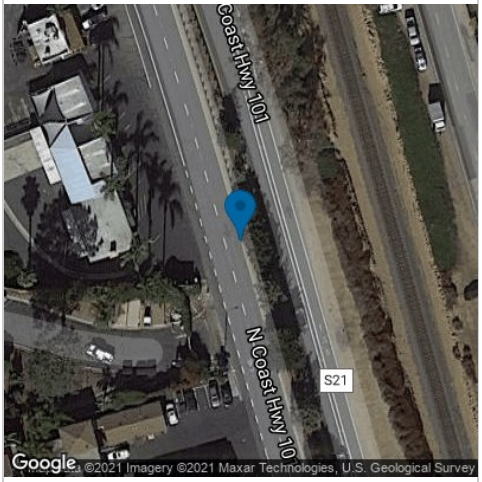


April 28, 2021

Pinus torreyana ID# 52
Torrey Pine
Height: 16'-30' DBH: 7"-12"
Health: 80% - Good

April 28, 2021

Arbutus cv. Marina ID# 53
Marina Strawberry Tree
Height: 16'-30' DBH: 7"-12"
Health: 80% - Good



Terms and Conditions for Tree Care Services

1. **Performance by Company:**

   Work crews shall arrive at the job site unannounced unless otherwise noted herein. The Company shall attempt to meet all performance dates, but shall not be liable for damages due to delays from inclement weather or other causes beyond our control.

2. **Workmanship:**

   All work will be performed in a professional manner by experienced personnel outfitted with the appropriate tools and equipment to complete the job properly. Unless otherwise indicated herein, The Company will remove wood, brush and debris incidental to the work.

3. **Insurance:**

   The Company is insured for liability resulting from injury to persons or property, and all its employees are covered by Workers Compensation Insurance.

4. **Ownership:**

   The customer warrants that all trees, plant material and property upon which work is to be performed are either owned by him/her or that permission for the work has been obtained from the owner.

   The Company is to be held harmless from all claims for damages resulting from the customer's failure to obtain such permission.

5. **Limitations:**

   The customer must identify all non- public utilities. The Company assumes no responsibility for the location of or damage to underground utilities not clearly marked by the customer prior to commencement of site services. Stump grinding and removals as proposed will occur where public utilities allow.

6. **Terms of Payment:**

   All accounts are net payable upon receipt of invoice. A service charge of 1.5% will be added to accounts not fully paid 30 days subsequent to the invoice date. If outside assistance is used to collect the account, the customer is responsible for all costs associated with the collection, including, but not limited to, attorney fees and court costs.

Customer

	April 28, 2021
Signature	Date
Michael Peltz	April 28, 2021
Printed Name	Date

Tree Care Service Provider

Jeff Cloud	April 28, 2021
Signature	Date
Jeff Cloud	April 28, 2021
Printed Name	Date

ISA Certified Arborist #WE-6283A
Registered Consulting Arborist #605
ISA Tree Risk Assessment Qualified
Qualified Applicators License #145463

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX D-1
PHASE I CULTURAL RESOURCES IDENTIFICATION TECHNICAL MEMORANDUM

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

Technical Memorandum:
PHASE 1 CULTURAL RESOURCES IDENTIFICATION

Marea Village Mixed Use Development Project

MBAKERINTL.COM

Michael Baker INTERNATIONAL

We Make a Difference

Technical Memorandum

TO:	City of Encinitas	**DATE:**	May 2021
FROM:	Michael Baker International	**SUBJECT:**	Phase 1 Cultural Resources Identification for the Marea Village Mixed Use Development Project

Nicholas F. Hearth, MA, RPA
Principal Investigator/Senior Archaeologist

Chris Wendt, MA
Architectural Historian

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential historical resources and/or archaeological resources impacts as a result of the project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres, see **Attachment 1**.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site is via North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. Vehicular access to the site would be provided via a right turn in from the southbound lane of North Coast Highway 101 and a new left turn lane from the northbound North Coast Highway 101. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. It is anticipated there would also be pedestrian access to the site from the property to the north of the project which is the site of a hotel that is currently under construction. The hotel is anticipated to be operational prior to the project.

Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone overlay. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Limited Visitor-Serving Commercial (N-LVSC) with a Coastal Zone and Residential-30 (R-30) Zone overlay. As part of the City of Encinitas Housing Element Update, Site 1 of the project site was allocated a minimum of 33 residential units if the site is developed at a mixed-use ratio.

Project construction would occur over approximately 15 months. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating. The maximum extent of ground disturbance and project activities associated with demolition, site preparation, and construction are within the horizontal limits of the project. The vertical depth of ground disturbance is estimated to be at least 10 feet.

METHODOLOGY

Michael Baker International staff completed a records search at the South Coastal Information Center (SCIC), a literature and map review, historical society consultation, and a survey to determine whether the project could result in significant impacts to historical resources and/or archaeological resources as defined by CEQA, Section 15064.5. Identification methods, results, and recommendations are summarized below; figures are provided in **Attachment 1**.

CULTURAL RESOURCES IDENTIFICATION RESULTS

The results of the SCIC records search, literature and map review, field survey, historical society consultation, and historical map review, and California Register evaluations are presented below.

South Coastal Information Center Records Search

SCIC staff conducted a records search (File No. 2761) on September 11, 2020. The SCIC, as part of the California Historical Resources Information System at Sand Diego State University, an affiliate of the California Office of Historic Preservation (OHP), is the official state repository of cultural resources records and reports for San Diego County. As part of the records search, the following federal and California inventories were reviewed:

- California Inventory of Historic Resources
- California Points of Historical Interest
- California Historical Landmarks

- Archaeological Determinations of Eligibility including the National Register of Historic Places (National Register), National Historic Landmarks, California Register of Historical Resources (California Register), California Historical Landmarks, and California Points of Historical Interest.
- Built Environment Resources Database

The search of these inventories revealed no cultural resources within the project site though three are located within the one-half mile search area.

Resource #	Resource Type	Description	Distance and Direction
P-37-009589/ CA-SDI-009589	Prehistoric Habitation Site	Flaked stone, fire affected rock, and shell scatter. Testing revealed no buried prehistoric cultural deposit.	0.26 miles NW
P-37-026508/ CA-SDI-017404	Prehistoric Habitation Site	Fire affected rock features and scatters of charcoal and shell. Unevaluated.	0.04 miles W
P-37-037812/ CA-SDI-022520	Prehistoric Habitation Site	Flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for NRHP/CRHR.	0.44 miles NE

Four cultural resources studies have been completed in the project location and an additional 24 have been completed within the search area, as identified below. The reports overlapping the current subject site did not document any cultural resources in the current project.

Rpt. #	Author	Date	Title	In Project?
SD-00020	Davis, McMillan and Dayle Cheever	1990	*A Cultural Resource Survey of the Southern Pacific Hotel Property, Encinitas, California*	Yes
SD-00671	Gallegos, Dennis, Dayle Cheever, and Stephan Van Wormer	1986	*A Cultural Resource Overview for the Encinitas Planning Area, Encinitas, California*	No
SD-00879	Fink, Gary R.	1973	*Archaeological Survey of the Proposed Sea Bluffe Beach Access*	No
SD-00886	Fink, Gary R.	1973	*Archaeological Survey of the Batiquitos Ocean Beach Access*	No
SD-01012	Gallegos, Dennis and Carolyn Kyle	1988	*Cultural Resource Survey for the Costa Brava Resort Hotel City of Encinitas, California*	Yes
SD-01638	Woodward, Jim and George Stammerjohan	1985	*Resource Inventory Cultural Resources San Diego Coast State Beaches*	No
SD-01981	Smith, Brian F. and James R. Moriarty III	1985	*The Archaeological Excavations of Cultural Resources at the Batiquitos Pointe and Batiquitos Bluffs Projects, Sites W-84, W-88, W-95, W-97, and W-2551*	No
SD-01984	WESTEC Services, Inc.	1980	*Regional Historic Preservation Study*	No

Rpt. #	Author	Date	Title	In Project?
SD-03028	Smith, Brian F.	1995	*Results of An Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System*	No
SD-04111	Seeman, Larry	1982	*Draft Environmental Impact Report Revised Parks and Recreation Element, Carlsbad, California*	No
SD-04226	Mccorkle-Apple, Rebecca	1994	*Historic Property Survey Report for Widening La Costa Avenue Overcrossing*	No
SD-04745	Van Bueren, Thad	1988	*Arch. Assessment for the Batiquitos Lagoon Enhancement Project. San Diego County*	No
SD-04952	RECON	1985	*Draft Environmental Impact Report for the Batiquitos Lagoon Educational Park Master Plan EIR 84-3*	No
SD-06629	Rosen, Martin	1999	*Historic Property Survey Report Oceanside To San Diego-Rail to Trail*	No
SD-09361	Byrd, Brian F. and Collin O'Neill	2002	*Archaeological Survey Report for the Phase I Archaeological Survey along Interstate 5 San Diego County, CA.*	No
SD-09571	Guerrero, Monica C. and Dennis R. Gallegos	2003	*City of Carlsbad Water and Sewer Master Plans Cultural Resource Background Study, City of Carlsbad, California*	No
SD-10004	Aislin-Kay, Marnie	2004	*Cultural Resource Record Search and Site Visit Results for Cingular Communications Facility Candidate (Cabo Grill), 1950 North Coast Highway, Encinitas, San Diego County, California.*	Yes
SD-10372	Heritage Architecture & Planning	2006	*The Dolman House, 1657 Volcan Avenue, Encinitas, California, Historic American Buildings Survey Level III Documentation*	No
SD-11774	Robbins-Wade, Mary	2006	*Archaeological Survey Report, Encinitas Grade-Separated Pedestrian Crossings, Encinitas, San Diego County, California*	No
SD-12017	Gallegos, Dennis R., Monica Guerrero, Steven Van Wormer, and Susan Walter	2004	*Cultural Resource Survey and Evaluation for the Astor Gardens Project Encinitas, California*	No
SD-12401	Pierson, Larry J.	2008	*Historical Architectural Evaluation of the Structure at 1521 Neptune Avenue in Encinitas, California 92024*	No
SD-12543	Bonner, Wayne And Sarah Williams	2008	*Cultural Resource Records Search Results and Site Visit for T-Mobile USA Candidate Sd07108a (Cabo Grill R.O.W.) At 1967-1/2 North Highway 101, Encinitas, San Diego County, California*	No
SD-13488	York, Andrew L. and John Hildebrand	2011	*Cultural Resources Investigation in Support of Consultation for the Regional Beach Sand II Project San Diego County, California*	No

Rpt. #	Author	Date	Title	In Project?
SD-16271	Fulton, Phil	2014	*Cultural Resource Assessment Class III Inventory Verizon Wireless Services 101 La Costa Facility City of Encinitas, San Diego County, California*	No
SD-16769	Smith, Brian F.	2016	*Preliminary Results: A Cultural Resources Survey for the La Costa 45 Project City of Encinitas, California*	No
SD-17634	Davis, Nichole Jordan	2017	*Archaeological Testing and Research Design for the Weston Subdivision Project, City of Encinitas, San Diego County, California*	No
SD-17635	Zinn, Timothy G.	2017	*Findings of National Register Eligibility and Assessment of Integrity of the Weston Farm for the Weston Subdivision Project, Encinitas, San Diego County, California*	No
SD-18575	Keeler, Dustin and Sherri Gust	2014	*Cultural Constraints for the Batiquitos Lagoon Double-Track Project, Cities of Carlsbad And Encinitas, San Diego County, California*	Yes

Literature and Map Review

The project area is first depicted in an1875 plat map for the Township 12 South, Range 4 West (BLO 1875). No potential resources are depicted within the project area at this early date nor on historic aerials until1947 when three identical buildings at 1900 North Coast Highway appear in the project area (UCSB 1932, 1939, 1947, 1953; USGS 1893, 1948, 1949). Prior to this the property is depicted vacant and appears to have been developed agriculturally as farmland (UCSB 1932, 1939). By 1953, an additional rectangular building is depicted by 1953 (UCSB 1953). By 1975, an additional rectangular auxiliary building is displayed (UCSB 1975). Both auxiliary buildings are no longer extant by 1990 (Historicaerials.com 1990).

The project is located with the Southern California/Northern Baja Coast ecoregion that includes coastal and alluvial plains, marine terraces, and low hills. Coastal sage scrub and chaparral vegetation communities with many endemic species were once widespread before overgrazing, clearance for agriculture, and urbanization occurred. The region includes nearly level to gently sloping dissected marine terraces, and a narrow strip of beach and dune sand along the coast from Newport Beach south into Mexico's Baja California. The ecoregion is modified greatly by oceanic influence. Soil temperatures are thermic and soil moisture regime is xeric (Griffith et al. 2016). Soils within the project are mapped as Marina Series loamy coarse sand with between two and thirty percent slope (NRCS 2001, 2020).

Human occupation of the San Diego coast has spanned at least the last 10,000 years (Gallegos 20107). The first substantial human occupation along the San Diego County coastline were composed of small bands of hunter-gatherers occupying large territories and living in temporary encampments (Rogers 1929). These people were lithic tool generalists using scraper-planes, choppers, flake tools, and ground stone tools. These sites have dated to between about 8,500 and 3,500 BP (Sutton and Gardner 2010; Warren 1968). Though time, mortar and pestle use, which likely indicates the rise of acorn processing, as well as an increase in terrestrial animal remains becomes abundant. The introduction of the bow-and arrow technology likely was a defining characteristic by about 1,500 years ago (Koerper et al. 1996:277).

At the beginning of the historic period, the project location was within the approximate boundary between the ancestral territory of the Luiseno and Ipai (aka. the Northern Diegueno subgroup of the

Kumeyaay) (Heizer 1978:ix; Heizer and Whipple 1971:Map 1; Kroeber 1976). The Luiseño are Cupan speakers historically related to Mission San Luis Rey. The Luiseño spoke a dialect of the Cupan group of the Takic language family (Bean and Shipek 1978). This language was part of the larger Uto-Aztecan language stock which migrated south from the southern San Joaquin Valley or the Great Basin. The Luiseño lived in sedentary and independent villages, each with specific subsistence territories encompassing hunting, food gathering, and fishing areas. (Bean and Shipek 1978).

Linguistically, the Kumeyaay were distinct from the Takic speakers, such as the Luiseno, in northern San Diego County as well as the Yuman speakers west of the Colorado River (Luomala 1978). Groups of Kumeyaay lived in semi-permanent settlements, known as rancherias. Settlements were chosen based on access to water, good drainage, boulder outcrops, or other natural protections from the elements and ambush, as well as ecological diversity (Luomala 1978).

Field Survey

Michael Baker cultural resources staff conducted an archaeological and built environment survey on October 1, 2020. The goal of the survey was to identify all historic built environment resources, and prehistoric/historic period archaeological resources within the surface of the project boundaries. Pedestrian survey transects were spaced 5 meters (m) apart. An Apple IPhone 6S with the GoogleEarth and Theodolite Apps, and field map were used to locate the Project boundary and to record the location of identified cultural resources. Resources were documented on State of California Department of Parks and Recreation (DPR) 523 series forms with photographs taken on a Fuji Finepix XP140 16 MP digital camera and Theodolite App. Ground surface visibility varied by level of development and vegetation cover. The northern portion of the project area is an active construction site, while the southwestern portion is largely undeveloped. The southeastern is completely built-out.

Two cultural resources were discovered, see **Attachments 2** and **3**. The first is a historic built environment resource consisting of four buildings at 1900 PCH Hwy 101. The four buildings, from south to north, consist of an unreinforced masonry building constructed circa 1950, two single-story Commercial Modern-style buildings constructed circa 1943, and lastly a Mission Revival, single-story, commercial building constructed circa 1943.

The second resource was a small, diffuse scatter of four prehistoric artifacts (FEN-001). These include one fine-grained volcanic primary flake; one granite/quartz fire-cracked rock, one granite flake fragment, and one Santiago Peak Metavolcanic (SPM) formation hammerstone. Vegetation consists mainly of ruderal grasses, and other non-native plant species. The surface of the site has been impacted by off-road vehicle traffic, ongoing construction, past agricultural disking, and rodent burrows. These disturbances are likely shallow. The soil of the terrace is classified by the NRCS (2001, 2020) as Marina series sandy loam, 9 to 30 percent slopes.

Native American Heritage Commission Sacred Lands File Search

On September 4, 2020, Michael Baker International sent a letter describing the project to the Native American Heritage Commission (NAHC) and requesting a Sacred Lands File search, see **Attachment 4**. Also requested were the names of Native American Tribes and individual who might have information or concerns about the project location. The NAHC responded on September 22, 2020, informing Michael Baker International that a search of the Sacred Lands File provided negative results and provided contact information for 20 individuals and Tribes. On December 16, 2020, 19 of the 20 Tribes were contacted to inform them about the project and to request information about Tribal knowledge and concerns about the project. The last tribe, San Luis Rey Band of Mission Indians, will receive formal notification of the project under AB52 consultation. Tribal Consultation is on-going and will be detailed in future reporting.

Historical Society Consultation

On September 8, 2020, Michael Baker International sent a letter and figures depicting the project area via email to the Encinitas Historical Society. The letters requested any information or concerns regarding historic properties within the project area. No response was received, see **Attachment 5**.

California Register Evaluations

The historic context statement and California Register evaluations for 1900 North Coast Highway 101 is located in the DPR forms in **Attachment 2**. The resource is recommended ineligible for listing in the California Register based on lack of association with a historic context.

Summary of Findings and Recommendations

The SCIC records search, literature review, historical society consultation, historical map review and survey identified two cultural resources within the project site.

The historic built environment resource consisting of four buildings at 1900 PCH Hwy 101 meets the age requirement for evaluation to the California Register. The property is recommended ineligible for listing in the California Register under Criteria 1, 2, 3, and 4 because it lacks association with a historic context, see **Attachment 2**. Additionally, the resource was evaluated in accordance with Section 15064.5(a)(2)–(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code, and it is not a historical resource for the purposes of CEQA. As a result of this evaluation, no additional recommendations are necessary for the four buildings at 1900 PCH Hwy 101 and the project has no adverse effects to this property.

The prehistoric archaeology site (FEN-001), see **Attachment 3**, is located upon a minimally disturbed terrace with a soil classified by the NRCS (2001, 2020) as Marina series sandy loam, 9 to 30 percent slopes. This soil series has been shown to have buried cultural deposits at a site in the vicinity (Davis 2017). Due to the presence of surface artifacts and the likely intact soil beneath the shallow surface disturbance, the site is recommended to undergo a Phase II Archaeological Evaluation with a research design.

Due to existing disturbance, the northern and southeastern portions of the project area have low potential to disturb prehistoric cultural resources. The southwestern, undeveloped, portion of the project area has a moderate to high potential to disturb prehistoric cultural resources. If the project changes, additional cultural resource measures may be necessary.

If avoidance is not possible for archaeological site FEN-001 that is recommended to be potential historical resources per CEQA, Phase II archaeological site testing should be undertaken. The primary goals of the Phase II include identifying the vertical and horizontal boundaries, nature, and physical condition of the site. This will allow for a formal determination of eligibility for the CRHR. Tasks to be included in the Phase II include the following:

- Research Design
- Native American Consultation
- Intensive Survey, Excavation, and Mapping
- Laboratory Analysis (e.g. lithics analysis, faunal analysis, paleoethnobotany, radiocarbon dating, etc.) to be determined.

- Technical Report
- Curation of Archaeological Material

If a site is determined eligible for the CRHR mitigation in the form of Phase III archaeological data recovery will be necessary prior to any ground disturbance at that site.

PREPARER QUALIFICATIONS

This memo was prepared by Michael Baker International Principal Investigator/Senior Archaeologist Nicholas F. Hearth, and Architectural Historian Chris Wendt.

Mr. Hearth has worked as an archaeologist in cultural resource management since 2002. He meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology. He received his BA in anthropology in 2003 from the University of Massachusetts, Amherst, and his MA in anthropology in 2006 from the University of California, Riverside. Mr. Hearth has worked in California, New Mexico, and multiple states both in the Midwest and New England. Mr. Hearth is well versed in applying Section 106 of the NHPA, NEPA, and CEQA on a variety of projects across many market sectors. He has completed projects in all phases of archaeology: Phase I Pedestrian and Shovel Test Surveys, Extended Phase I Survey, Buried Site Testing, Archaeological Sensitivity Assessments, Phase II Testing and Evaluations, Phase III Data Recovery, and Phase IV Monitoring. His project responsibilities include overseeing archaeological, historical, and paleontological studies, directing all phases of archaeological field and laboratory work, and ensuring that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

Mr. Wendt conducts National Register, California Register, and various local register evaluations for projects subject to CEQA and Section 106 of the National Historic Preservation Act. For these evaluations, he conducts a variety of tasks including field survey and photograph documentation of historic-era resources, property research, writing architectural descriptions, and developing historic statements. He is deeply entrenched in issues of local history teaching and has served as the visitor services and volunteer coordinator for the Los Angeles Museum of the Holocaust and Museum of Sonoma County. He also worked with the Petaluma Historical Museum and Library and Cotati Museum and Historical Society where he conducted archival research and aided in the identification of historical resources. He is a Secretary of the Interior Professionally Qualified historian and architectural historian.

REFERENCES

Bean, Lowell J. and Florence C. Shipek. 1978. "Luiseño." In *California*. Washington, DC: Smithsonian Institution.

BLO (Bureau of Land Office). 1873. Accessed December 5, 2020. https://glorecords.blm.gov/ConvertedImages/Plat_290844_1.PDF

Davis, Nichole Jordan. 2017. *Archaeological Testing and Research Design for the Weston Subdivision Project, City of Encinitas, San Diego County, California*. Carlsbad. Michael Baker International.

Gallegos, Dennis R. 2017. *First People: A Revised Chronology for San Diego County*. San Diego: StorySeekers.

Griffith, Glenn E., James M. Omernik, David W. Smith, Terry D. Cook, Ed Tallyn, Kendra Moseley, and Colleen B. Johnson. 2016. *Ecoregions of California* map, 1:1,100,000. Washington DC: USGS.

Historicaerials.com. 1990. Aerial photograph of 1900 North Coast Highway 101. Accessed multiple, https://www.historicaerials.com/.

. 1995. Aerial photograph of 1900 North Coast Highway 101. Accessed multiple, https://www.historicaerials.com/.

Heizer, Robert F. (ed.) 1978. *California*. Washington DC: Smithsonian Institution.

Heizer, Robert F. and M. A. Whipple, eds. 1971. *The California Indians: A Source Book*. Berkeley: University of California Press.

Koerper, Henry C., Adella B. Schroth, Roger D. Mason, and Mark L. Peterson. 1996. "Arrow Projectile Point Types as Temporal Types: Evidence from Orange County, California." *Journal of California and Great Basin Anthropology* 18 (2): 258-283.

Kroeber, Alfred L. 1976. *Handbook of the Indians of California*. Reprinted. New York: Dover Publications, Inc.

Luomala, Katherine. 1978. "Tipai and Ipai". In *California*. Washington DC: Smithsonian Institution.

NRCS (Natural Resource Conservation Service). 2001. "Marina Series Soil Description." Accessed November 29. https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MARINA.html.

_____2020. Soil Mapping. Accessed November 29. https://websoilsurvey.nrcs.usda.gov/.

Rogers, Malcom J. 1929. "The Stone Art of the San Dieguito Plateau." *American Anthropologist* 31 (3): 456-467.

Sutton, Mark Q. and Jill K. Gardner. 2010. "Reconceptualizing the Encinitas Tradition of Southern California." *Pacific Coast Archaeological Society Quarterly* 42 (4): 1-64.

USGS (US Geological Survey). 1893. *Oceanside, Calif*. 1:24,000 scale topographic quadrangle. Reston, VA: US Department of the Interior.

———1948 (Photo revised 1955). *Encinitas, Calif*. 1:24,000 scale topographic quadrangle. Reston, VA: US Department of the Interior.

———1949. *Encinitas, Calif*. 1:24,000 scale topographic quadrangle. Reston, VA: US Department of the Interior.

UCSB (University of California Santa Barbara). 1932. Aerial photograph C-1980. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-1980

———1939. Aerial photograph C-5750. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-5750

———1947. Aerial photograph GS-CP. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=GS-CP

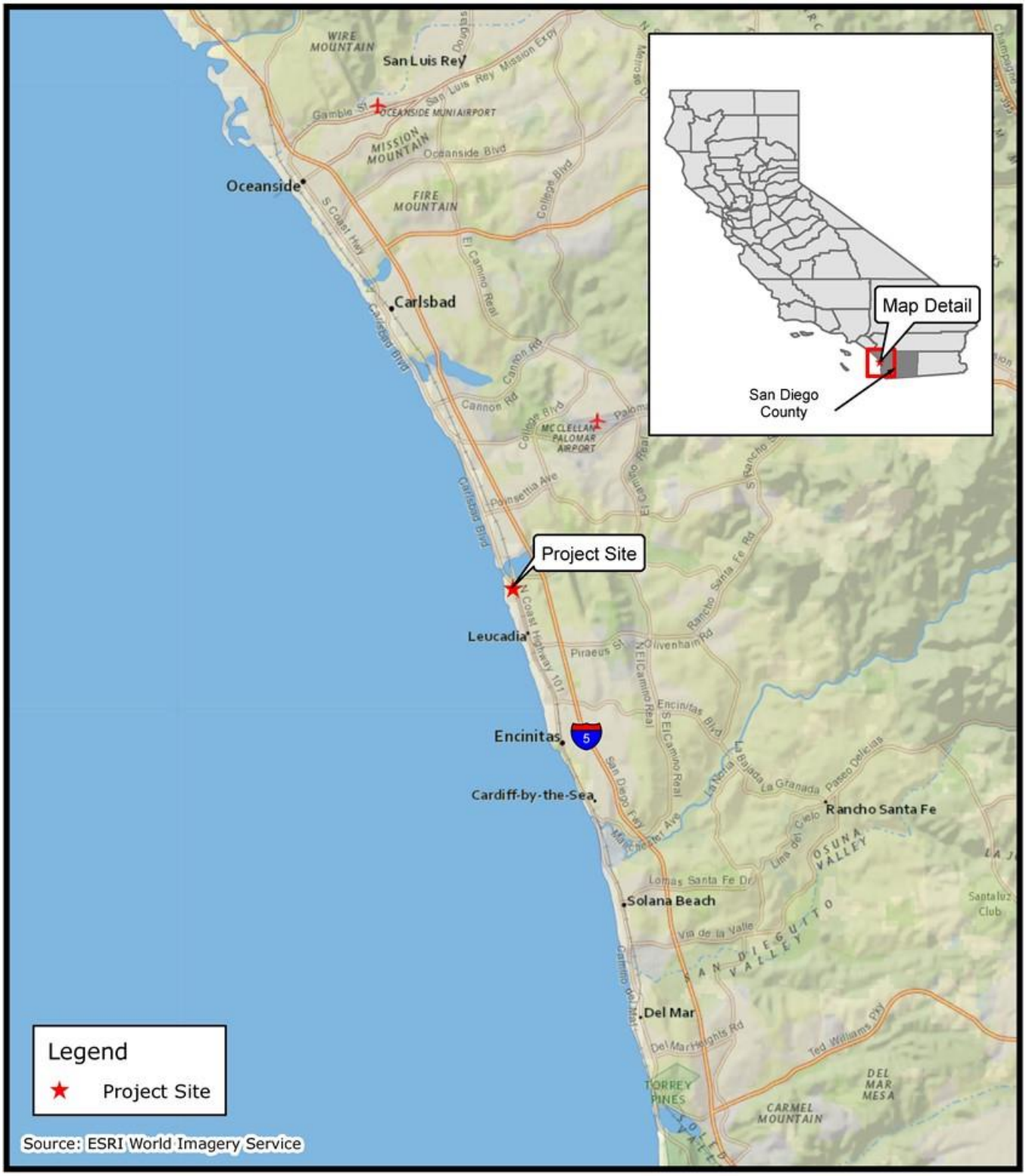
———1953. Aerial photograph AXN-1953. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AXN-1953

———1975. Aerial photograph TG-7500. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=TG-7500

Warren, Claude N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In *Archaic Prehistory in the Western United States*. Portales: Eastern New Mexico University.

Michael Baker
INTERNATIONAL

Attachment 1:
Figures



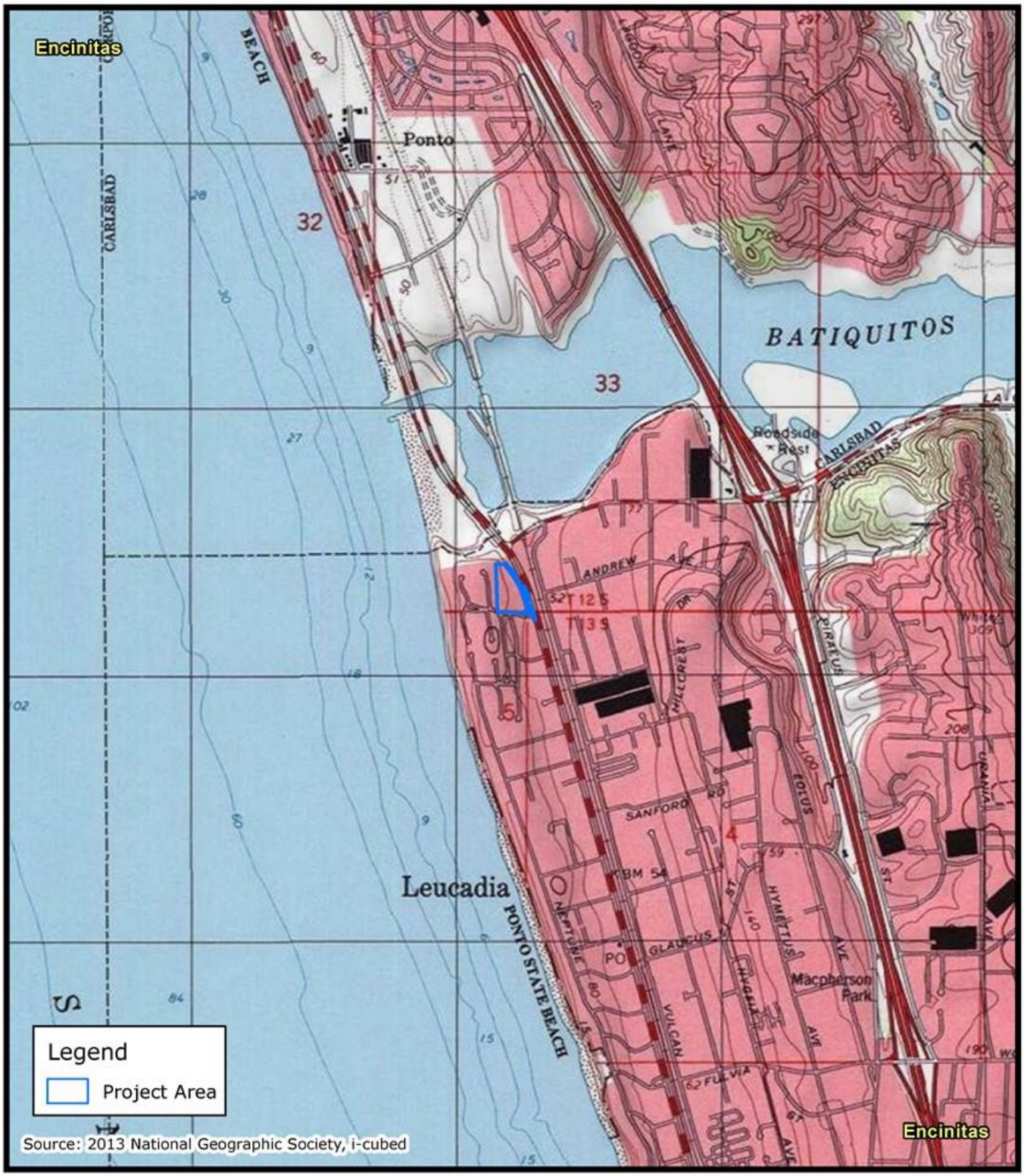
N
W E
S

0 2 4 Miles

FIGURE 1

Regional Location Map

Michael Baker INTERNATIONAL



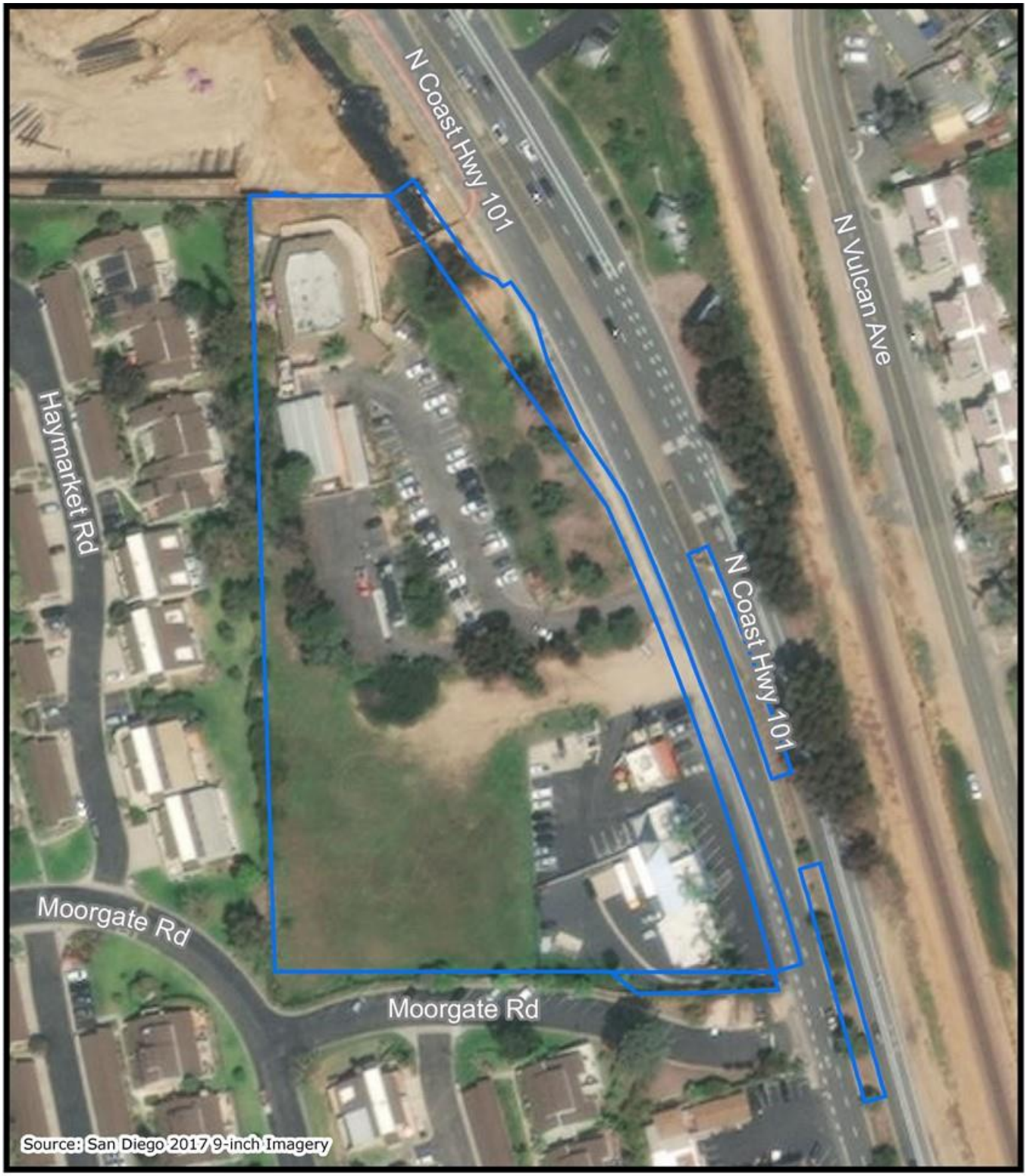
N
W E
S

0 1,000 2,000 Feet

FIGURE 2

Project Location Map

Michael Baker INTERNATIONAL



N
W E
S

0 100 200 Feet

FIGURE 3

Project Aerial

Michael Baker
INTERNATIONAL

Michael Baker
INTERNATIONAL

Attachment 2

Public

Department of Parks and Recreation 523 Forms

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI # Trinomial NRHP Status Code 6Z
Other Listings Review Code Reviewer Date	

 ***Resource Name or #:** 1900 North Coast Highway 101

P1. Other Identifier: N/A

***P2. Location:** ☒ **Unrestricted**

***a. County** San Diego **and**

***b. USGS 7.5' Quad** *Encinitas, Calif.* **Date** 1949 **T** 12S; **R** 4W ; SE ¼ **of** SW ¼ of **Sec** 33 S.B.B.M

c. Address: 1900 North Coast Highway 101 City: Encinitas Zip: 92024

d. UTM: Zone: 11N, 471254 **mE/** 3660266 **mN** (NAD 83)

e. Other Locational Data: The resource is in San Diego County, Assessor's Parcel Number (APN) 216-041-06. From the center of Encinitas, CA, at the corner of West K Street and Highway 101, continue north on Highway 101 for 3.2 miles. Turn left at 1900 North Coast Highway 101 and travel approximately 17 yards to 1900 North Coast Highway 101.

***P3a. Description:** There are four buildings located at 1900 North Coast Highway 101, designated A, B, C, and D from south to north. Building A is a single-story, Commercial Modern-style building constructed circa 1950. The unreinforced masonry building is rectangular in plan; it rests upon a concrete slab foundation. The exterior is clad with painted brick and covered by a flat roof. The symmetrical front entrance (east façade) displays a replacement, aluminum-frame glass door, flanked by two aluminum picture windows. Buildings B and C are single-story Commercial Modern-style buildings constructed circa 1943. The unreinforced masonry buildings are rectangular in plan, exhibit replacement stucco wall cladding, and have flat roofs. On each building, prominent, fixed, canvas awnings stretch the length of the east façade and wrap halfway around the north and south façades. The asymmetrical front entrance (east façade) of each building displays a replacement, aluminum-frame glass door and replacement, aluminum-framed, multi-pane picture windows with non-operative shutters. Building D is a Mission Revival, single-story, commercial building constructed circa 1943. The unreinforced masonry building is rectangular in plan. It sits upon a concrete slab foundation. The exterior is clad in non-original stucco. The symmetrical front entrance (east façade) has two entrance doors, one of which may be original to the building. The door located on the south end of the east façade is a slab and glass door with horizontal panes. The second door is situated on the north side of the building and features a replacement aluminum frame and glass door. Two multi-paned picture windows are centered between the doors (the southern window may be in its original steel frame). The front entrance (east façade) has a full-length porch. Five square posts rest upon a poured concrete foundation and support the shed roof, clad with terra cotta roof tiles. The building's flat roof is clad with rolled asphalt, and is topped with Mission-style parapet.

***P3b. Resource Attributes:** HP6. 1-3 Story Commercial Building

***P4. Resources Present:** ☒ Building

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: View of buildings A, B, C, D (left to right) located at 1900 North Coast Highway 101, facing northwest. See additional photos on Continuation sheets.

P6. Date Constructed/Age and Source: ☒ Historic

Circa 1943 (UCSB 1939, 1947) & circa 1950 (UCSB 1947, 1953)

***P7. Owner and Address:**

Encinitas Beach Land Venture I, LLC, 674 Via De la Valle, Suite 310, Solano Beach, CA 92075

***P8. Recorded by:**

Hearth, Nicholas and Chris Wendt, Michael Baker International, Inc., 9755 Clairemont Mesa Boulevard, Ste. 100, San Diego, CA 92124

***P9. Date Recorded**: October 7, 2020

***P10. Survey Type:** Intensive

***P11. Report Citation**: Hearth, Nicholas and Chris Wendt. 2020. "Cultural Resources Identification Study for the Fenway 101 Project, San Diego County, California." San Diego, CA: Michael Baker International.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: None
B2. Common Name: Roberto's Mexican /Surfer's Point Resort / California Music Studios
B3. Original Use: Commercial
B4. Present Use: Commercial
***B5. Architectural Style:** Commercial Modern and Mission Revival
***B6. Construction History:** Buildings B, C, and D were constructed circa 1943 and display replacement doors, windows, and wall-cladding installed at an unknown date. Buildings B and C display replacement porch awnings and shutters installed at an unknown date. Building A was constructed circa 1950 and displays a replacement front door and windows installed at an unknown time. By 1995, Building D displays a red-tile patio roof and replacement stucco walls (County of San Diego 2020; Historicaerials.com 2020; UCSB 1947, 1953, 1975).
***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** N/A

B9a. Architect: Unknown **b. Builder:** Unknown
***B10. Significance: Theme** N/A **Area:** Encinitas
Period of Significance: 1943-1950 **Property Type:** Commercial **Applicable Criteria:** N/A

Encinitas's Growth
Nathan Eaton and Hector McKinnon with his wife arrived in 1875 and are thought to be the earliest Euromerican settlers to what is now the City of Encinitas. What would later become the City of Encinitas in 1986 was originally made up of four separate unincorporated communities, Old Encinitas, Leucadia to the north, Cardiff-by-the Sea to the south, and Olivenhain to the east. These communities experienced minimal initial growth before 1875 and the area remained sparsely settled even after the arrival of the California Southern Railroad in 1881. By 1883, only eleven people inhabited the area and a combination grocery store and ticket office located by the railroad tracks was the only amenity. A devastating flood in 1884 washed out the rail line to San Diego and two months passed before the tracks and trestles were rebuilt. In 1885, the California Southern Railroad dispatched Thomas Rattan to the area to locate a site for a permanent train station and to lay out a street grid for the community. John Pitcher joined Rattan's development efforts a year later and the two spurred growth that by 1887, an entire block had been developed on the west side of First Street (Murray and Hosseini 2016: 3). *See continuation sheets.*

B11. Additional Resource Attributes: N/A

***B12. References:** See continuation sheet.

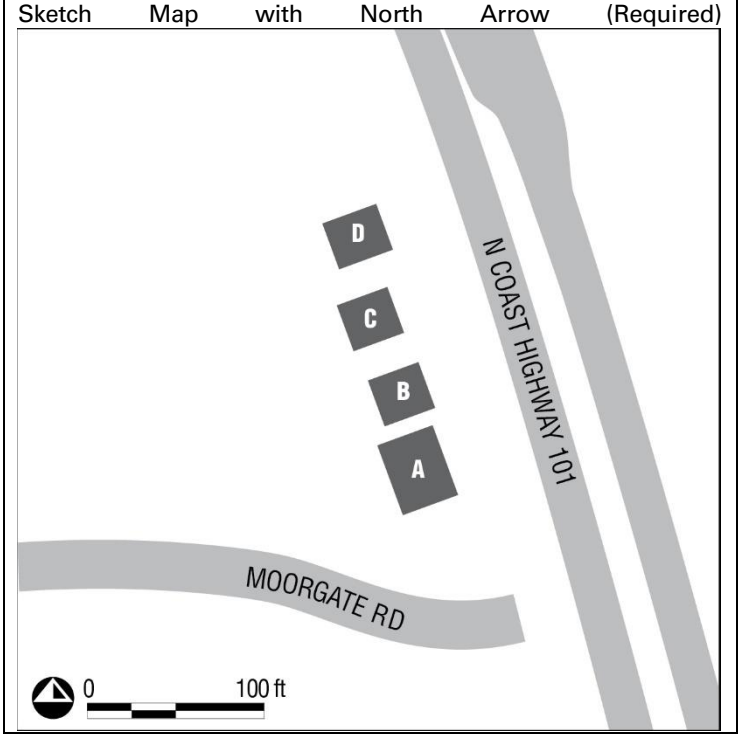
B13. Remarks: N/A

***B14. Evaluator:** Chris Wendt, Architectural Historian, Michael Baker International, 2729 Prospect Park Drive, #220, Rancho Cordova, CA 95670

***Date of Evaluation:** October 7, 2020

(This space reserved for official comments)

Sketch Map with North Arrow (Required)



LOCATION MAP

Primary #
HRI#
Trinomial

***Resource Name or #** 1900 North Coast Highway 101

***Map Name:** *Encinitas, Calif.* ***Scale:** 1:24,000 ***Date of map:** 1997

***B10. Significance (continued):**

Encinitas and the surrounding coastal communities experienced a period of growth in the first half of the twentieth century with the founding of the San Dieguito Water District in 1923, which assured the area of a dependable water supply and helped spur agricultural development in the initial decades of the 20th century. Additionally, the construction of the Pacific Coast Highway 101 in 1913, which followed the path of the railroad, increased traffic, and spurred economic growth in the area (Leucadia-Encinitas Town Council 2020; Murray and Hosseini 2016: 24).

Flowers, especially poinsettias, and avocados emerged as the primary crops in the area and by the late 1920s, approximately 400 acres of land were dedicated to flower and bulb farming alone. Cattle ranching was also an important industry during this period and both farming and ranching would remain important to the community well into the twentieth century. This agricultural expansion resulted in a land boom in the 1920s, many acres of land were subdivided, and development opportunities arose within the coastal communities. This period of growth in the 1920s is evidenced by the construction of La Paloma Theatre (1928) on First Street by Aubrey Austin and the two boathouses on Third Street by Miles Kellogg (Murray and Hosseini 2016: 24).

After the stock market crash in October 1929, development in Encinitas and the surrounding communities stalled with only a few developments being realized in the area during the Great Depression, including San Dieguito High School (now San Dieguito Academy) in 1936 and the Self-Realization Fellowship Temple in 1938. Furthermore, the effects of rationing during World War II greatly impacted Encinitas and the surrounding communities. The flower industry, in particular, was affected by the shortage of fertilizer, gasoline, and tires. Although there were no permanent military installations or facilities in Encinitas, a few small structures were constructed, including a ballistic emplacement and several bunkers, along the coast (Arballo 2007; Encinitas Temple 2020; Murray and Hosseini 2016: 24).

Following World War II, development gradually expanded east along First Street. The outlying areas remained mostly rural and was dominated by ranching and agriculture. Prior to the end of the war, in 1945, many designated Encinitas as the "Flower Growing Capital of the World" due to the fields of poinsettias and camellias. Citrus and avocados, among other crops, added to the area's attraction and agricultural economy (Murray and Hosseini 2016: 25). Encinitas Boulevard, the main thoroughfare, was paved in the mid-1950s; however, the area remained unaffected by further change until the 1960s with the construction of Interstate 5. The 1960s also saw a period of growth and new residential and commercial development, including the Vulcan Shopping Center in 1960. The community continued to expand through the 1970s and 1980s and in October 1986 the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain, and Leucadia officially incorporated and became The City of Encinitas. (Murray and Hosseini 2016: 25).

Development of Leucadia

1900 North Coast Highway 101 is the Leucadia area. Little is known about the early period of Leucadia; one story holds that a small group of English spiritualists settled in the area, but another version maintains that Tom Fitch, a promoter from Nevada, came to the area to sell land through the Leucadia Land and Town Company. Regardless, the name Leucadia, meaning "sheltered place" Although little is known about the early period of Leucadia, Nathan Eaton is believed to be the earliest Euromerican settler in the area, having set up a homestead just south of the Batiquitos Lagoon where he farmed and kept bees. The neighborhood of Leucadia is located in the northernmost part of what is now Encinitas and was established in the late 1870s. In the 1880s, the Leucadia Land and Town Company was established. (City of Encinitas 1997: 7-2).

In 1881, the California Southern rail line was constructed through Leucadia, bringing railroad worker James Benjamin among others to the area. Elliott is credited with planting the cypress and eucalyptus trees that define the current 101 corridor of Leucadia. Elliott settled in the area after his termination from the railroad and joined Fitch in the promotion of the Leucadia Land and Town Company. In 1888, surveyor O.N. Sanford was commissioned to plat Leucadia into five-acre tracts. During this period Leucadia was also known as Merle, after Merle Scott, son of early Leucadia pioneer, E.B. Scott, who is believed to have planted the first eucalyptus trees in the area overlooking the Bataquitos lagoon (City of Encinitas 1997: 7-2, 7-3).

Tourism Development

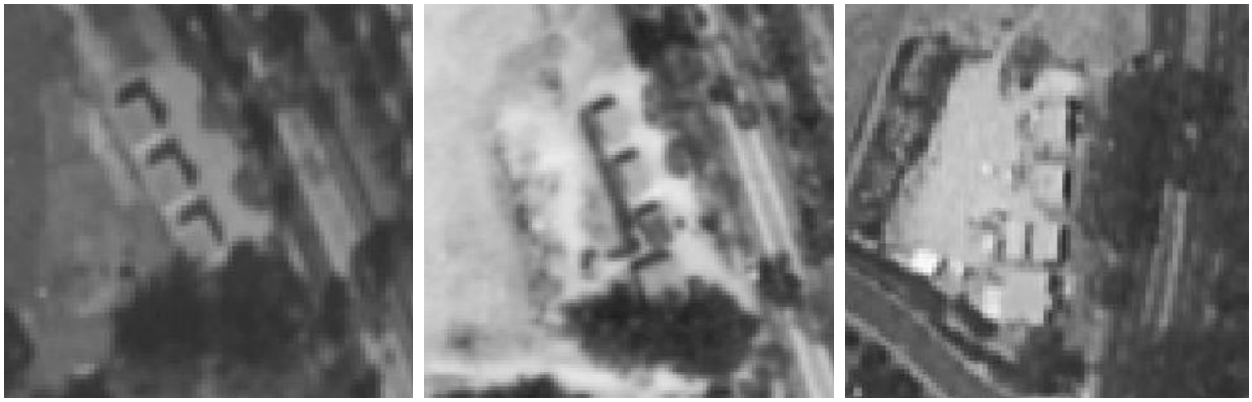
The increasing use of the automobile, coupled with the California climate, brought growth and tourism into Leucadia and the greater Encinitas area in the 1920s and 1930s. Highway 101 connecting Los Angeles to San Diego was the main thoroughfare in the area and the eucalyptus and cypress trees provided shaded roadside strips for travelers along the route. Services such as gas stations, restaurants, lodging, produce booths, and tourist camps sprouted up along the highway and helped the area endure the hardships of the depression. By the end of the 1920s, tourism had become an integral part of the North Highway 101 corridor (City of Encinitas 1997: 7-2).

Hotels catering to business clientele near rail stations had long offered accommodations, but with the advent of the family automobile came the inception of auto campgrounds and motels. Many businesses built tourist camps in city parks and vacant lands. However, these use of campgrounds declined due maintenance issues, leading to the rise in motor-court cabins and motels accommodations. The motel building type consisted of a string of rooms rather than the individual cabins of motor courts. Motels ultimately were more economical to build and maximize available space while cutting down on construction costs. During the mid to late 1950s, the buildings located at 1900 North Coast Highway 101 were used as a roadside motel, which aimed to attracted tourists to the Leucadia area along the North 101 corridor (Newspapers.com 2020a, 2020b; City of Encinitas 1997: 7-2).

*** B10. Significance (continued):**

Property Specific Research

Buildings B, C, and D located at 1900 North Coast Highway 101 were constructed circa 1943. A 1932 aerial photograph depicts the property vacant but by 1939 the property appears to have been developed agriculturally as farmland. A 1947 aerial photograph depicts the property with three identical rectangular buildings now designated as buildings B, C, and D. By 1953, building A is depicted on the property just south of building B as well as a small, square outbuilding west of building B. By 1975, an additional rectangular auxiliary building is displayed west of building B between the original building and the outbuilding. Both auxiliary buildings are no longer extant (UCSB 1932, 1939, 1947, 1953, 1975).



Left: 1947 aerial photograph of 1900 North Coast Highway 101. (UCSB 1947)
Center: 1953 aerial photograph of 1900 North Coast Highway 101. (UCSB 1953)
Right: 1975 aerial photograph of 1900 North Coast Highway 101. (UCSB 1975)

The below table identifies known businesses located on the 1900 North Coast Highway 101 property based on the San Dieguito City directory and newspaper research (Ancestry.com 2020; Newspapers.com 2020a, 2020b, 2020d, 2020e, 2020f, 2020g).

Date	Business
1955-1960	White Motel
1981	Cricket's Mini Crafts
1990	Alfonso's Taco Shop
1989-2002	Handy Equipment Rentals
Present	California Music Studios
Present	Surfer's Point Resort
Present	Roberto's Mexican Food

Roberto's Mexican Food

Roberto's Mexican Food, located in Building D presently, was founded in 1964 in San Ysidro by Roberto Robledo. The company has grown steadily since its founding and currently boasts seven locations throughout San Diego County (Roberto's Mexican Food 2020). Research failed to identify additional information relating to any of the above-mentioned businesses (Ancestry.com 2020; CDNC 2020; City of Encinitas 1997; Murray and Hosseini 2016; Newspapers.com 2020a, 2020b, 2020c, 2020d, 2020e, 2020f).

Architect/Builder

The original building permit was not found online with the Building Division Permit Search. No information regarding the original architect and/or builder research could be identified (County of San Diego 2020).

***B10. Significance (continued):**

Commercial Modern and Mission Revival Architecture (ca. 1890–1920)

California is considered the birthplace of the Mission Revival style and the state hosts many prominent examples. The earliest were constructed in the 1890s, but by 1900 the style was spreading eastward and being popularized by fashionable architects and national builder's magazines. Even Sears Roebuck and Co. sold plans for a "Mission type" called the Alhambra in the late 1910s. Although the style was most predominant in California and the American southwest, scattered examples can be found throughout the country's suburbs, mostly dating from 1905 to 1920 (McAlester 2018: 511-512).

The Mission Revival style has been described at the "California counterpart" to the Georgian-inspired Colonial Revival popularized in the northeast states. Rather than copy the Spanish colonial past, California architects reached back to the state's Hispanic heritage for inspiration and several began advocating for the style in the late eighteenth century. Such advocacy resulted in the construction of the large, Mission Revival style California Building at the 1893 World's Columbian Exposition, which garnered acclaim and admiration from the public. The Mission Revival style rose to further prominence when the Santa Fe and Southern Pacific railways adopted the style for stations and resort hotels throughout the southwest (McAlester 2018: 511-512).

Mission Revival character-defining features include:

- Mission-shaped dormer or roof parapet,
- Commonly displays red roof tile,
- Widely overhanging eaves that are usually open,
- Porch roofs supported by large, square piers, commonly arched above, and
- Smooth exterior surface

Architecturally, building D at 1900 North Coast Highway 101 displays Mission Revival-style design features, including a flat roof with Mission-style parapet, red-tile porch roof, and smooth stucco wall cladding. The exterior alterations, which define the Mission Revival style, are not original to the building and therefore Building D does not hold its historical integrity as an example of the Mission Revival style.

Commercial Modern (1945-1975)

The Commercial Modern style refers to more common commercial buildings which utilize Modernist design principles. The Commercial Modern style adapted the primary tenets of Miesian architecture, a term used to describe buildings designed in the character of the glass and steel buildings pioneered by modern architects like Mies van der Rohe. These buildings typically feature wide expanses of glass set within steel frames, often on a base of steel or concrete columns. The modular steel structure systems could be adapted to fit the many commercial applications that required open expanses of glass for display. Commercial Modern buildings do not rely much, if any, on decoration, instead differing in the clean lines created by the steel and glass structure. Decoration usually takes the form of large signs and/or letters that communicate the type of business displayed directly on the building itself, and/or in large freestanding signs along the road to attract passing motorists (Whiffen and Koeper 1990: 347).

Commercial Modern character-defining features include:

- Horizontal, angular massing,
- Flat or low-pitched roof,
- Extensive use of glass, commonly set within flush-mounted steel or aluminum frames,
- Large commercial advertising mounted directly to the building,
- Large, freestanding advertising signs located prominently along the road, and
- Use of modern cladding material, such as porcelain, enamel, ceramic tile, Roman brick, prismatic glass, and glass block

Architecturally, buildings A, B, and C at 1900 North Coast Highway 101 display very minor Commercial Modern elements—flat roof and commercial advertising mounted to the buildings.

California Register Evaluations

Criterion 1 – 1900 North Coast Highway 101 was developed circa 1943 and 1950 as commercial buildings along the 101 corridor in Encinitas. Research failed to suggest that the property played an important role in neighborhood development, and as such, the resource does not appear to be associated with a significant event or theme in local, state, or national history and does not appear to be eligible for listing in the California Register under Criterion 1.

Criterion 2 – Research failed to identify information regarding significant individuals associated with the property. Therefore, the property does not appear associated with persons significant in our past and does not appear eligible for listing in the California Register under Criterion 2.

***B10. Significance (continued):**

Criterion 3 – Buildings A, B, and C are minor examples of the Commercial Modern style but do not embody the distinctive characteristics of a type, period, and method of construction, are not the works of a master, and do not display high artistic value. Building D is a minor example of the Mission Revival style and better examples of the style are located throughout the area. Additionally, the character defining details of the style are not original to the design of the building. Building D does not display high artistic value nor is the building a work of a master. Therefore, the property does not appear eligible for listing in the California Register under Criterion 3.

Criterion 4 – The property is not likely to yield valuable information which will contribute to our understanding of human history because the property is not and never was the principal source of important information pertaining to subjects such as mid-twentieth century commercial architecture. Therefore, the property does not appear eligible for listing in the California Register under Criterion 4.

In conclusion, 1900 North Coast Highway 101 appears ineligible for listing in the California Register under Criteria 1, 2, 3, and 4 because it lacks association with a historic context. Additionally, the resource was evaluated in accordance with Section 15064.5(a)(2)–(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code, and it is not a historical resource for the purposes of CEQA.

***B12. References:**

Ancestry.com. 2020. "San Dieguito, California City Directory – 1957." Accessed multiple, https://www.ancestry.com/imageviewer/collections/2469/images/3677728?treeid=&personid=&hintid=&queryId=569c3a2c18477789adf51c07d0fc97d5&usePUB=true&_phsrc=CgF869&_phstart=successSource&usePUBJs=true&pId=1167336872.

Arballo, Bill. 2007. "Mustangs Celebrate 70th Anniversary." *The Coast News*. August 24. Accessed October 14, 2020, https://web.archive.org/web/20071018231024/http://www.thecoastnews.com/articles/3294/.

CDNC (California Digital Newspaper Collection). 2020. Electronic database search for "White Motel", "Alfonso's Taco Shop", "California Music Studios", "Cricket's Mini Crafts", "Handy Equipment Rentals", "Roberto's Mexican Food", "Surfer's Point Resort", "White Motel", "1900 N Coast Highway", https://cdnc.ucr.edu/, accessed multiple.

City of Encinitas. 1997. *Encinitas North 101 Corridor Specific Plan Encinitas, California.* Amendment to the City of Encinitas's General Plan. Prepared for the City's Planning Division. /,

County of San Diego. 2020. Building Division Online Permits. Accessed multiple, https://www.sandiegocounty.gov/content/sdc/pds/OnlinePermits.html.

Encinitas Temple. 2020. *About Encinitas Temple*. Accessed multiple, http://encinitastemple.org/about/.

Historicaerials.com. 2020. 1995 Historic and contemporary aerial views of APN 216-041-06. Accessed multiple, https://www.historicaerials.com/.

Leucadia-Encinitas Town Council. 2020. *History of Leucadia*. Accessed multiple, https://leucadiatowncouncil.org/history/.

McAlester, Virginia Savage. 2018. *A Field Guide to American Houses*. New York: Alfred A. Knopf.

Murray and Hosseini. 2016. *Historical Resource Evaluation Report: La Paloma Theatre 471 South Coast Highway 101 Encinitas, California 92024*. Prepared for Encinitas 101 by Dudek.

Newspapers.com. 2020a. "House and Income." *Weekly Times-Advocate*. September 16, 1955. Accessed multiple (login required), https://www.newspapers.com/image/567878045/?terms=%22White%2BMotel%22%2B%22Leucadia%22.

_____. 2020b. "Hear Ye! Speculators and Operators." *The Los Angeles Times*. September 4, 1960. Accessed multiple (login required), https://www.newspapers.com/image/380855776/?terms=%22White%2BMotel%22%2B%22Leucadia%22.

_____. 2020c. "List of Unreinforced Masonry Buildings in North County." *North County Times*. October 23, 1999. Accessed multiple (login required), https://www.newspapers.com/image/577282499/?terms=%221900%2BN%2BHighway%2B101%22.

_____. 2020d. "Driver/Yard Person." *North County Times*. February 12, 2002. Accessed multiple (login required), https://www.newspapers.com/image/577941902/?terms=%221900%2BN%2BHighway%2B101%22.

_____. 2020e. "Handy Equipment Rentals." *North County Times*. November 18, 1989. Accessed multiple (login required), https://www.newspapers.com/image/572168487/?terms=%221900%2BN%2BHighway%2B101%22.

_____. 2020f. "*Businesses, Sales Licenses in County*." *Times-Advocate*. August 6, 1981. Accessed multiple (login required), https://www.newspapers.com/image/570515813/?terms=%221900%2BN%2BHighway%2B101%22.

***B12. References (continued):**

_____. 2020g. "News Brief: Men wearing pantyhose masks rob local taco shop." *North County Blade-Citizen*. October 10, 1990. Accessed multiple (login required), https://www.newspapers.com/image/572466624/?terms=%221900%2BN%2BHighway%2B101%22.

Roberto's Mexican Food. 2020. *About Us*. Accessed multiple , https://www.robertos-sd.com/about-us.html.

UCSB (University of California Santa Barbara). 1932. Aerial photograph C-1980. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-1980

———1939. Aerial photograph C-5750. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-5750

———1947. Aerial photograph GS-CP. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=GS-CP

———1953. Aerial photograph AXN-1953. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AXN-1953

———1975. Aerial photograph TG-7500. Accessed multiple, https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=TG-7500

Whiffen, Marcus and Frederick Koeper. 1990. *American Architecture Volume 2: 1860-1976*. Cambridge, MA: The MIT Press.

P5a. Photographs:

Photo 1. View northwest of Building A at 1900 North Coast Highway 101.

P5a. Photographs (continued):

Photo 2. View southwest of Building A at 1900 North Coast Highway 101.

Photo 3. View northwest of Building B at 1900 North Coast Highway 101.

P5a. Photographs (continued):

Photo 4. View southwest of Building B at 1900 North Coast Highway 101.

Photo 5. View southwest of Building C at 1900 North Coast Highway 101.

P5a. Photographs (continued):

Photo 6. View northwest of Building D at 1900 North Coast Highway 101.

Photo 7. View west of Building D at 1900 North Coast Highway 101.

Michael Baker
INTERNATIONAL

Attachment 3

CONFIDENTIAL

Public Department of Parks and Recreation 523 Forms

Michael Baker
INTERNATIONAL

Attachment 3 has been redacted from this technical report.

Michael Baker
INTERNATIONAL

Attachment 4

Native American Heritage Commission Sacred Lands File Search and Native American Tribal Scoping

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Fenway Hwy 101 Mixed Use Project

County: San Diego

USGS Quadrangle Name: Encinitas

Township: 12S Range: 4W Section(s): SE 1/4, SW/14 sec. 33

Company/Firm/Agency: Michael Baker International

Contact Person: Chris Wendt

Street Address: 2729 Prospect Park Drive #220

City: Rancho Cordova Zip: 95670

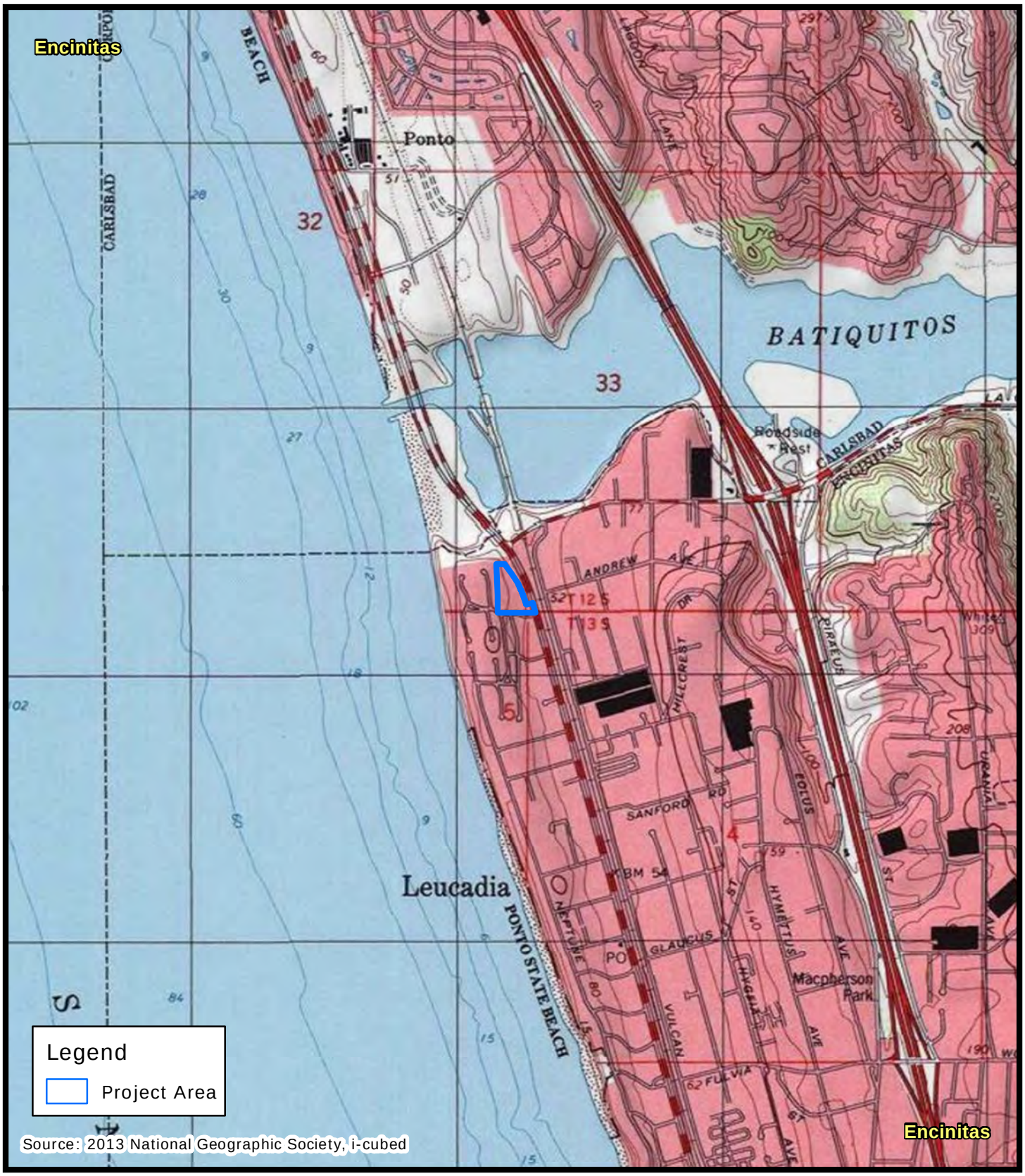
Phone: (707) 787-7488

Fax: N/A

Email: chris.wendt@mbakerintl.com

Project Description:

Demolition of 3 buildings and redevelopment of the site with residential and commercial mixed-use.



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
[**Vacant**]

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 22, 2020

Chris Wendt
Michael Baker International

Via Email to: chris.wendt@mbakerintl.com

Re: Fenway Hwy 101 Mixed Use Project, San Diego County

Dear Mr. Wendt:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Diego County
9/22/2020

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road — Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
cloyd@barona-nsn.gov

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 — Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
4054 Willows Road — Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
wmicklin@leaningrock.net

Ewiiaapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road — Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
michaelg@leaningrock.net

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
cjlinton73@aol.com

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Inaja-Cosmit Band of Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. — Diegueno
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village
Erica Pinto, Chairperson
P.O. Box 612 — Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Jamul Indian Village
Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 — Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 — Kwaaymii
Pine Valley, CA, 91962 — Diegueno
Phone: (619) 709 - 4207

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road — Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

La Posta Band of Diegueno Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road — Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fenway Hwy 101 Mixed Use Project, San Diego County.

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

San Pasqual Band of Diegueno Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

San Pasqual Band of Diegueno Mission Indians
Allen Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

Sycuan Band of the Kumeyaay Nation
Kristie Orosco, Kumeyaay Resource Specialist
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 6917

Sycuan Band of the Kumeyaay Nation
Cody Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

Viejas Band of Kumeyaay Indians
John Christman, Chairperson
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

Viejas Band of Kumeyaay Indians
Ernest Pingleton, Tribal Historic Officer, Resource Management
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 659 - 2314
epingleton@viejas-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fenway Hwy 101 Mixed Use Project, San Diego County.

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 $0.00 $0.00 $0.00

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Ernie Orozco
Kwaayppay Resource Specialist
Tyrown Band of the Kumeyaay Nation
1 Kwaayppay Court
El Cajon, CA 92019

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Rosa Olvera, Chairperson
Inaja Council Band of Indians
2005 S. Escondido Blvd
Escondido, CA 92025

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Victor Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA, 92070

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Ernest Pingleton, Tribal Historic Officer
Resource Management
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Robert Pinto, Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, CA, 91901

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Edward Romero, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Angela Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA, 91905

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

John Christman, Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Christman,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

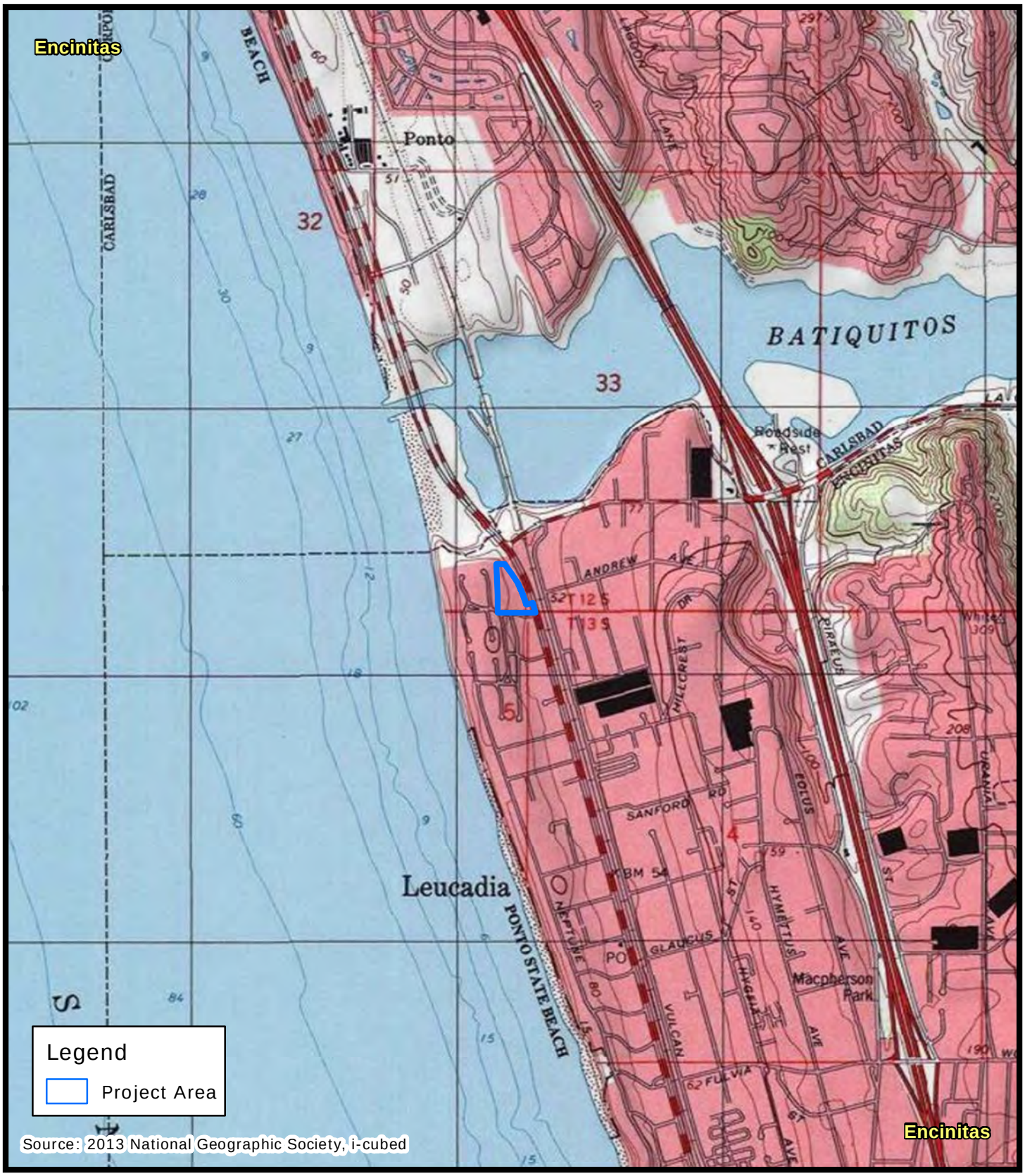
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Lisa Cumper, Tribal Historic Preservation Officer
Jamul Indian Village
P.O. Box 612
Jamul, CA, 91935

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Cumper,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

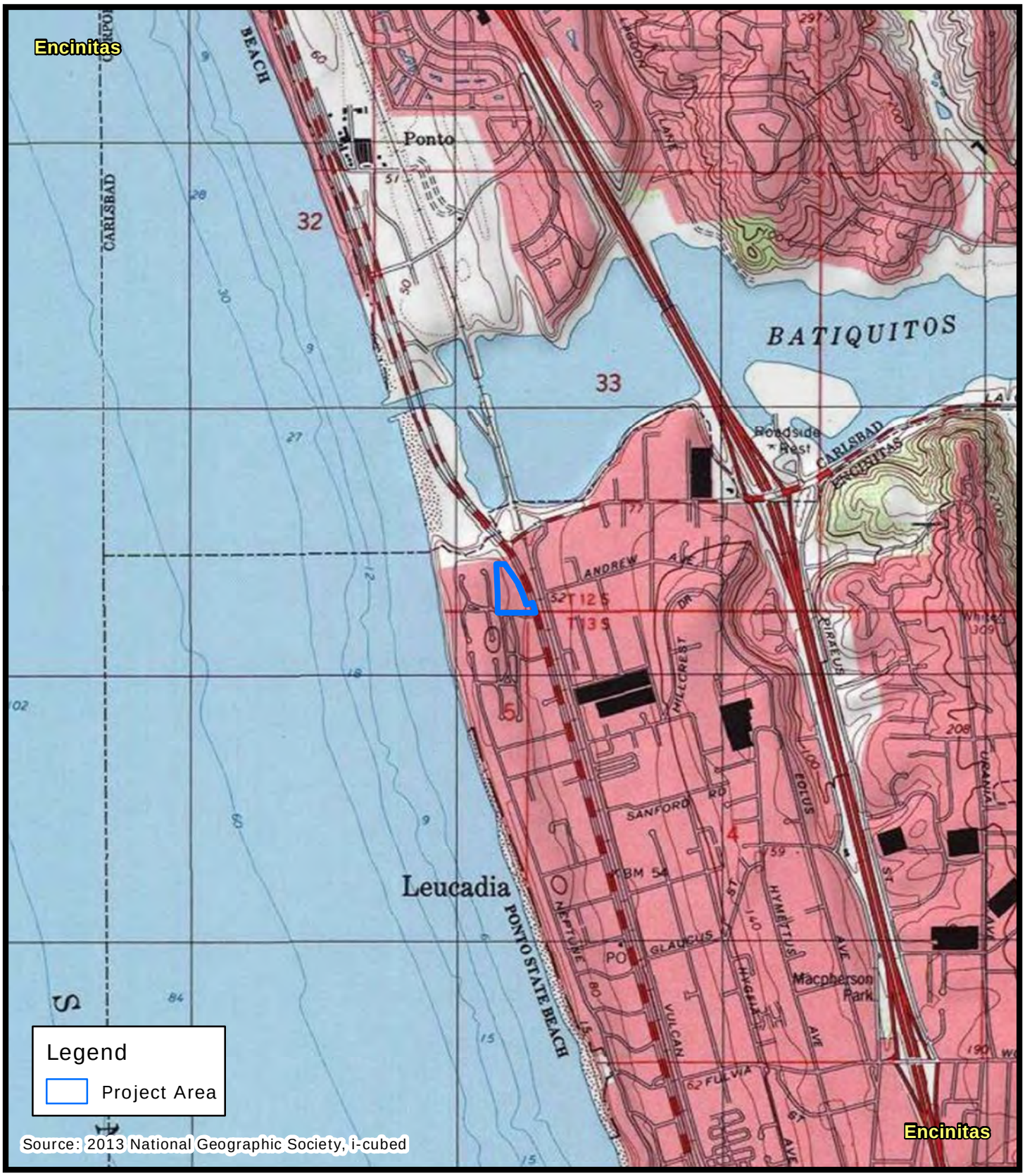
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA, 91935

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Pinto,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

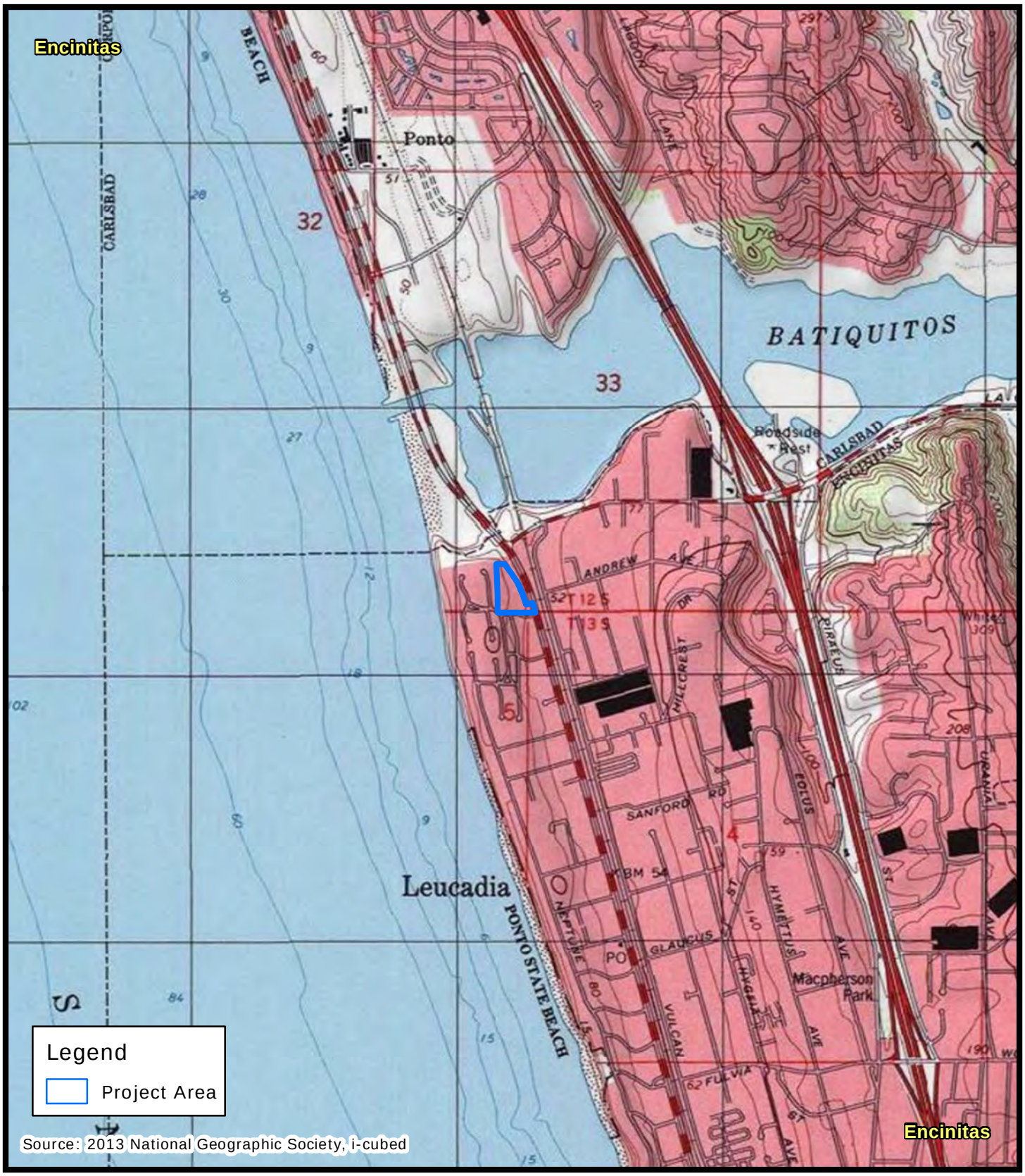
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

John Flores, Environmental Coordinator
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA, 92082

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Flores,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

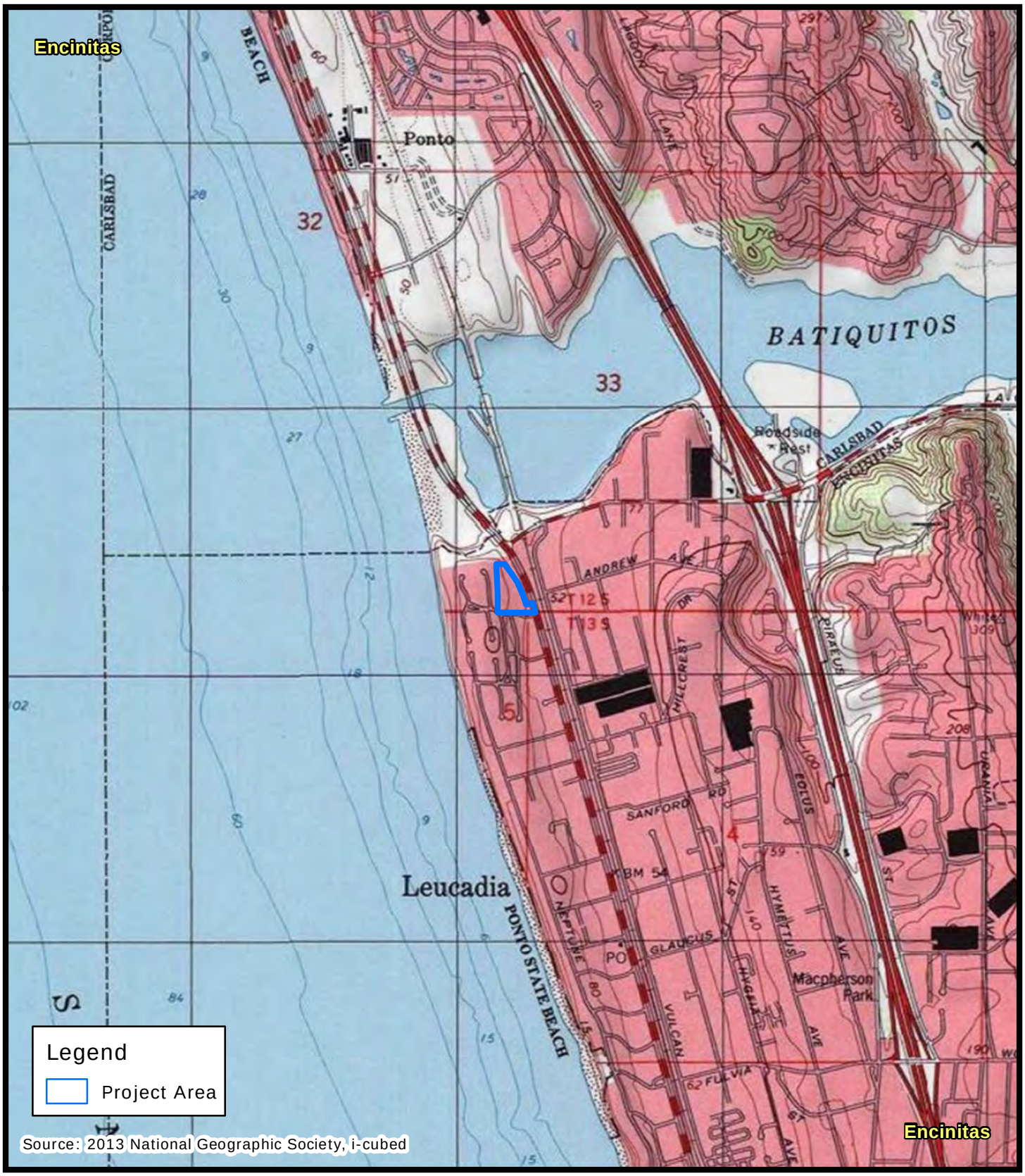
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Michael Garcia, Vice Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Garcia,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

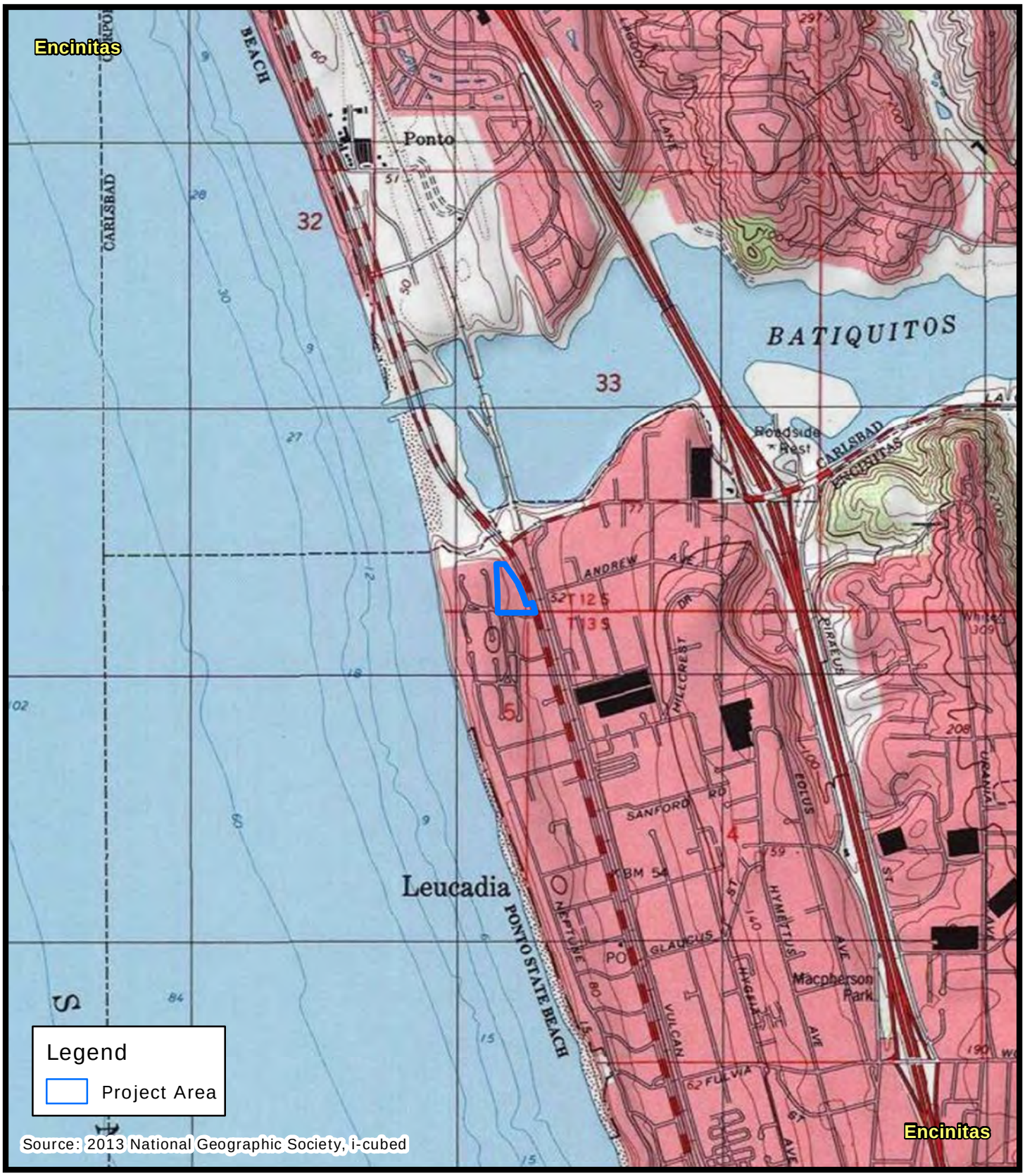
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Ralph Goff, Chairperson
Campo Band of Diegueno
Mission Indians
36190 Church Road, Suite 1
Campo, CA, 91906

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Goff,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile

of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

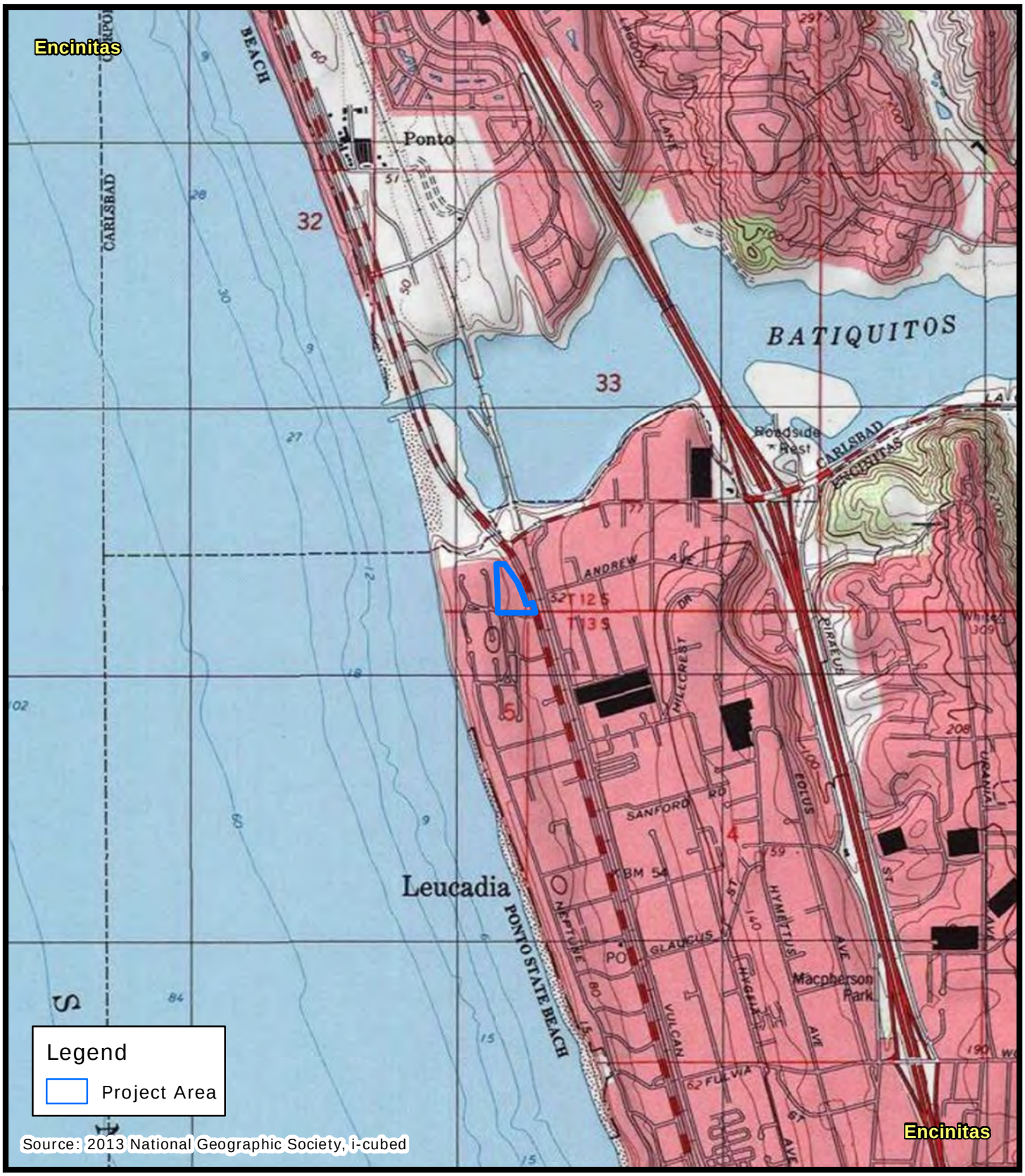
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Allen Lawson, Chairperson
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA, 92082

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Lawson,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

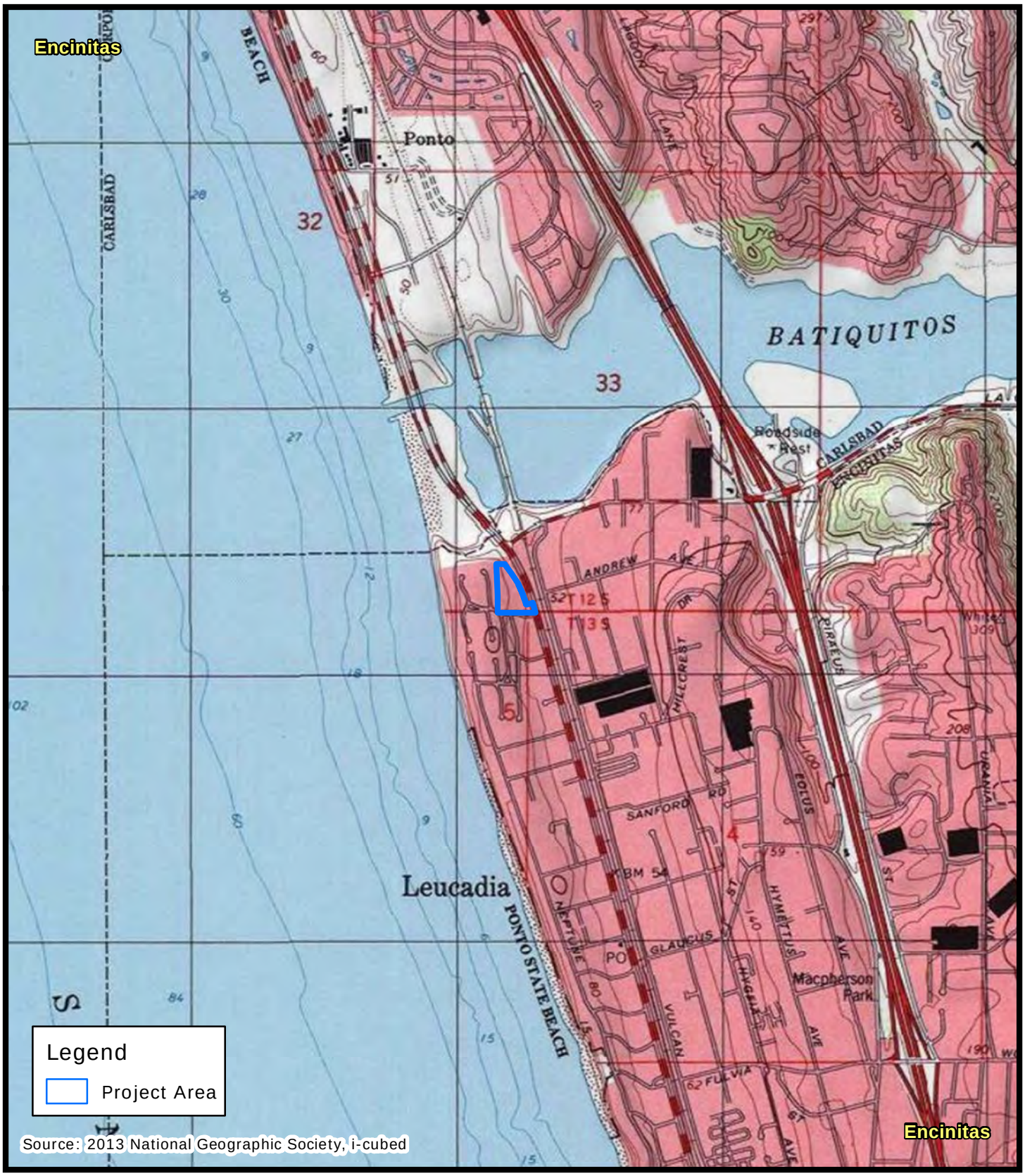
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Clint Linton, Director of Cultural Resources
Iipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, CA, 92070

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Linton,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

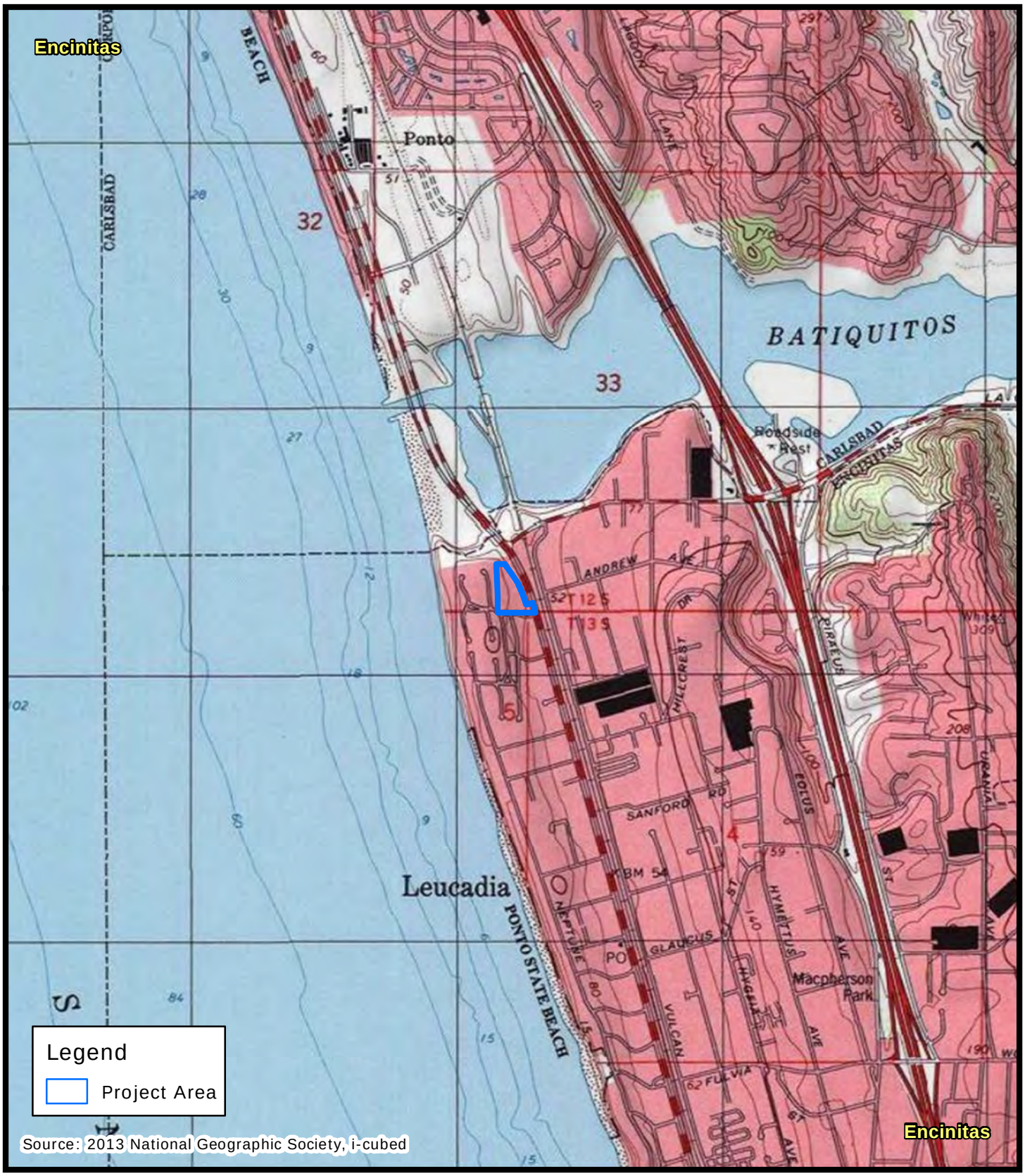
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Michael Linton, Chairperson
Mesa Grande Band of Diegueno Mission Indians
P.O Box 270
Santa Ysabel, CA, 92070

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Linton,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

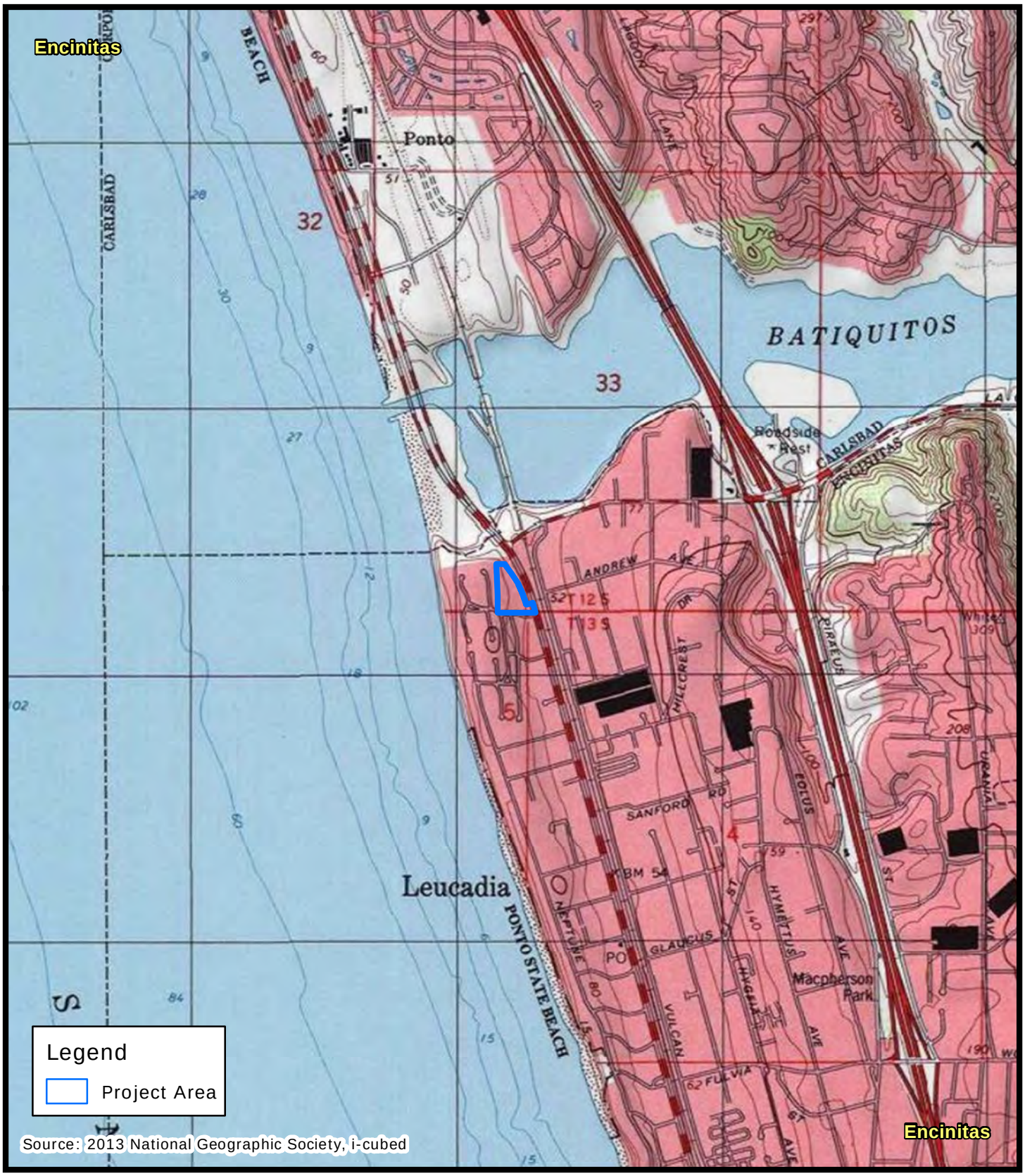
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA, 91962

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Lucas,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

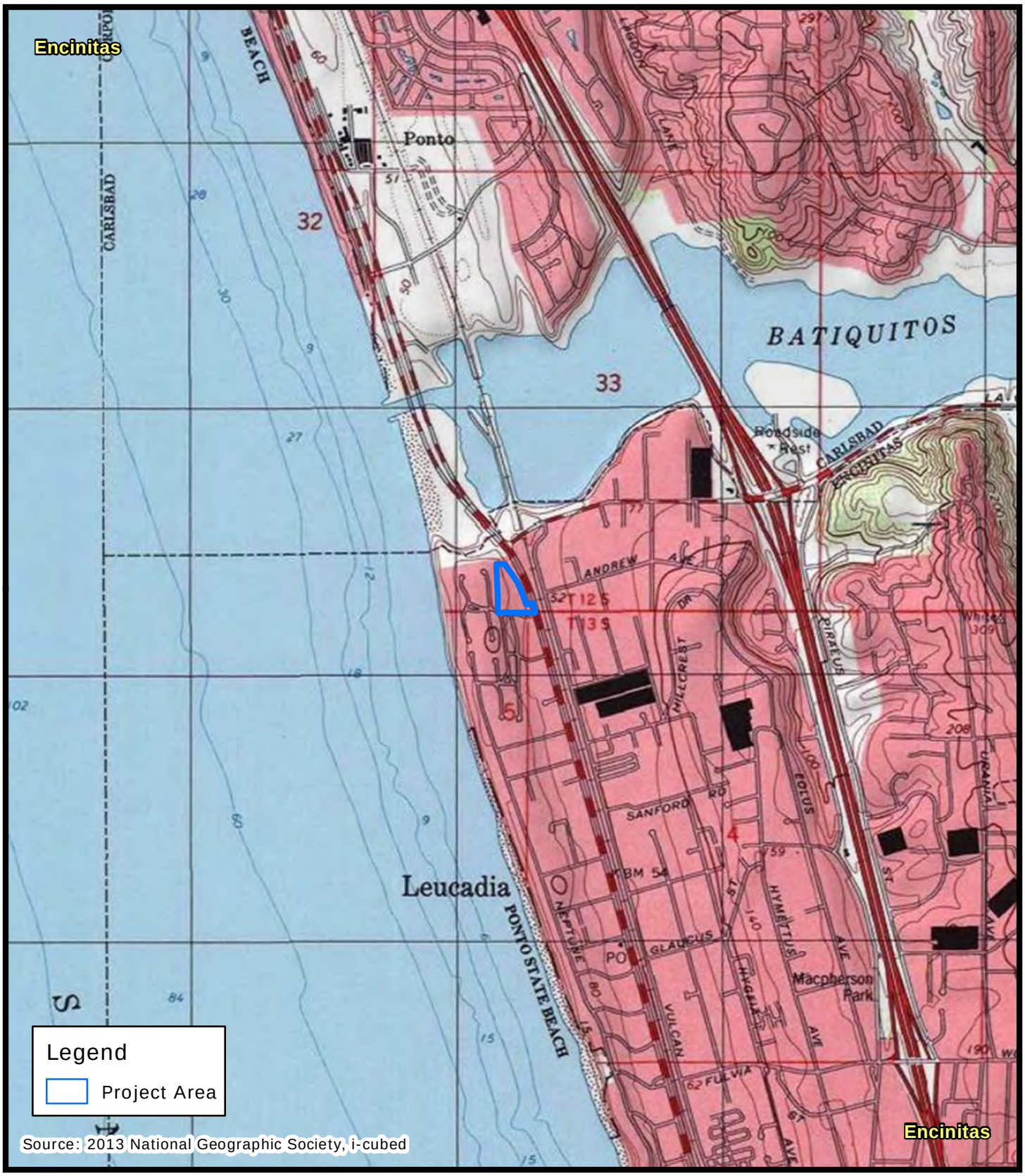
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Cody Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA, 92019

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Cody Martinez,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

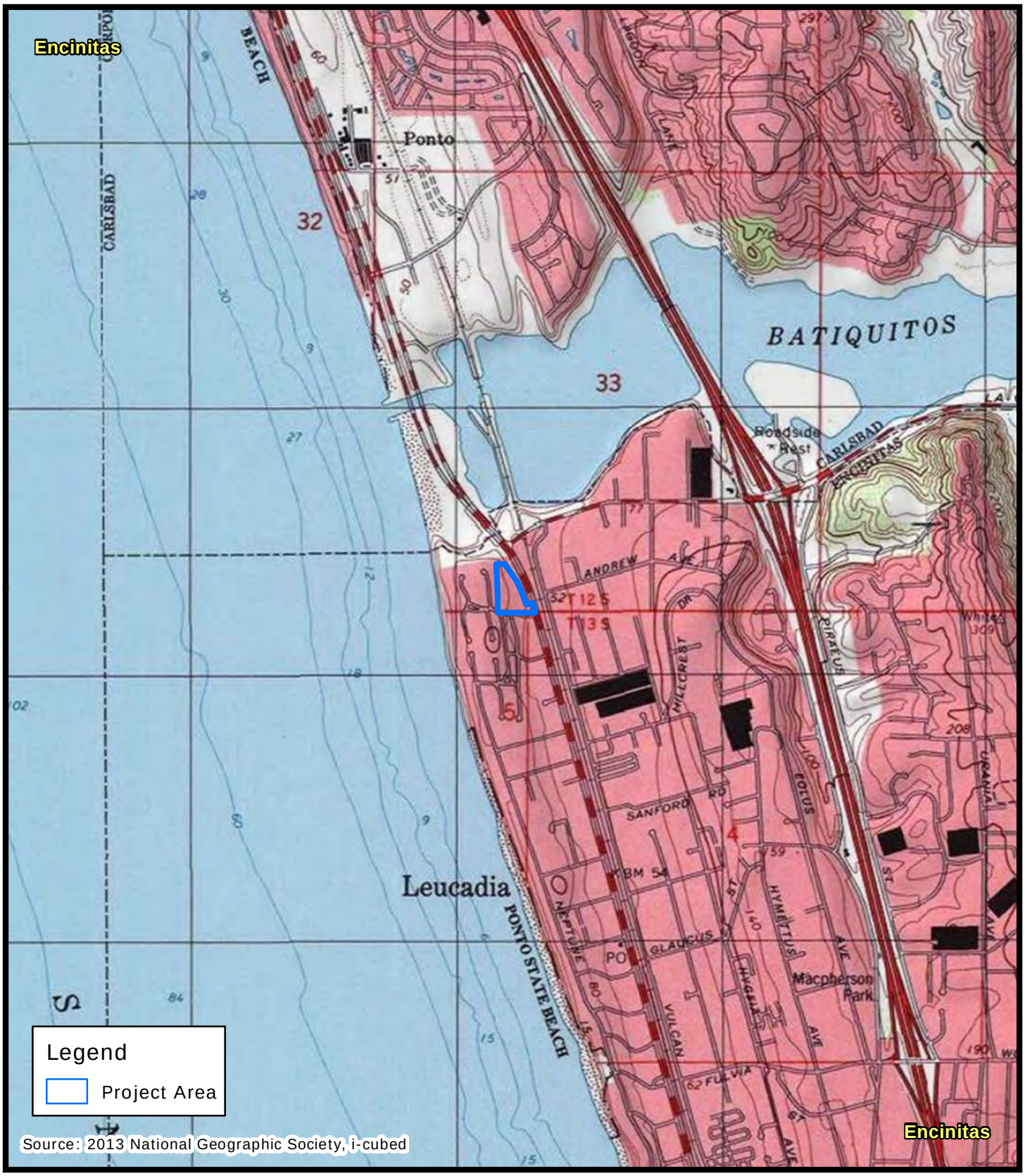
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Miller,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

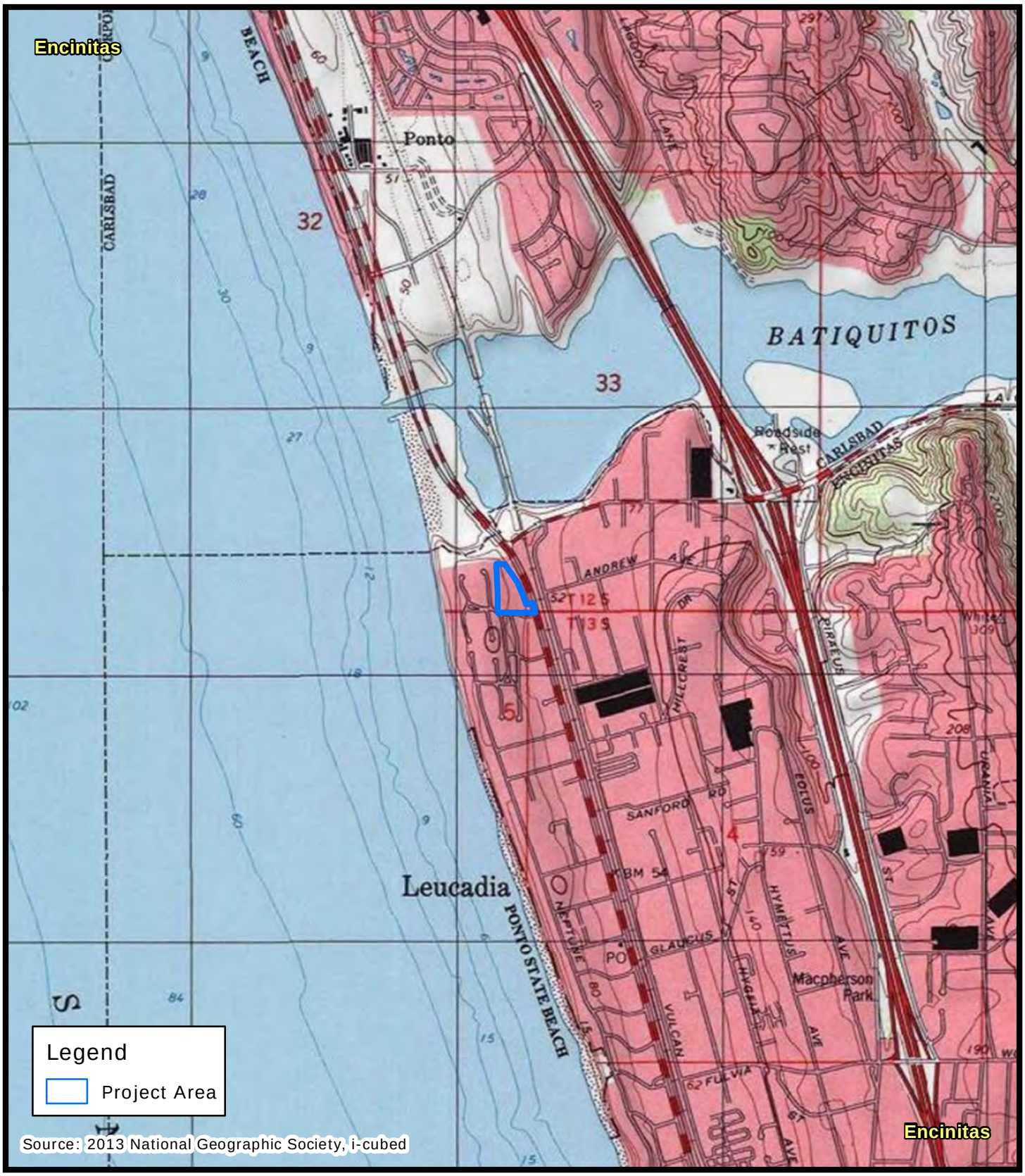
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Kristie Orosco, Kumeyaay Resource Specialist
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA, 92019

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Orosco,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

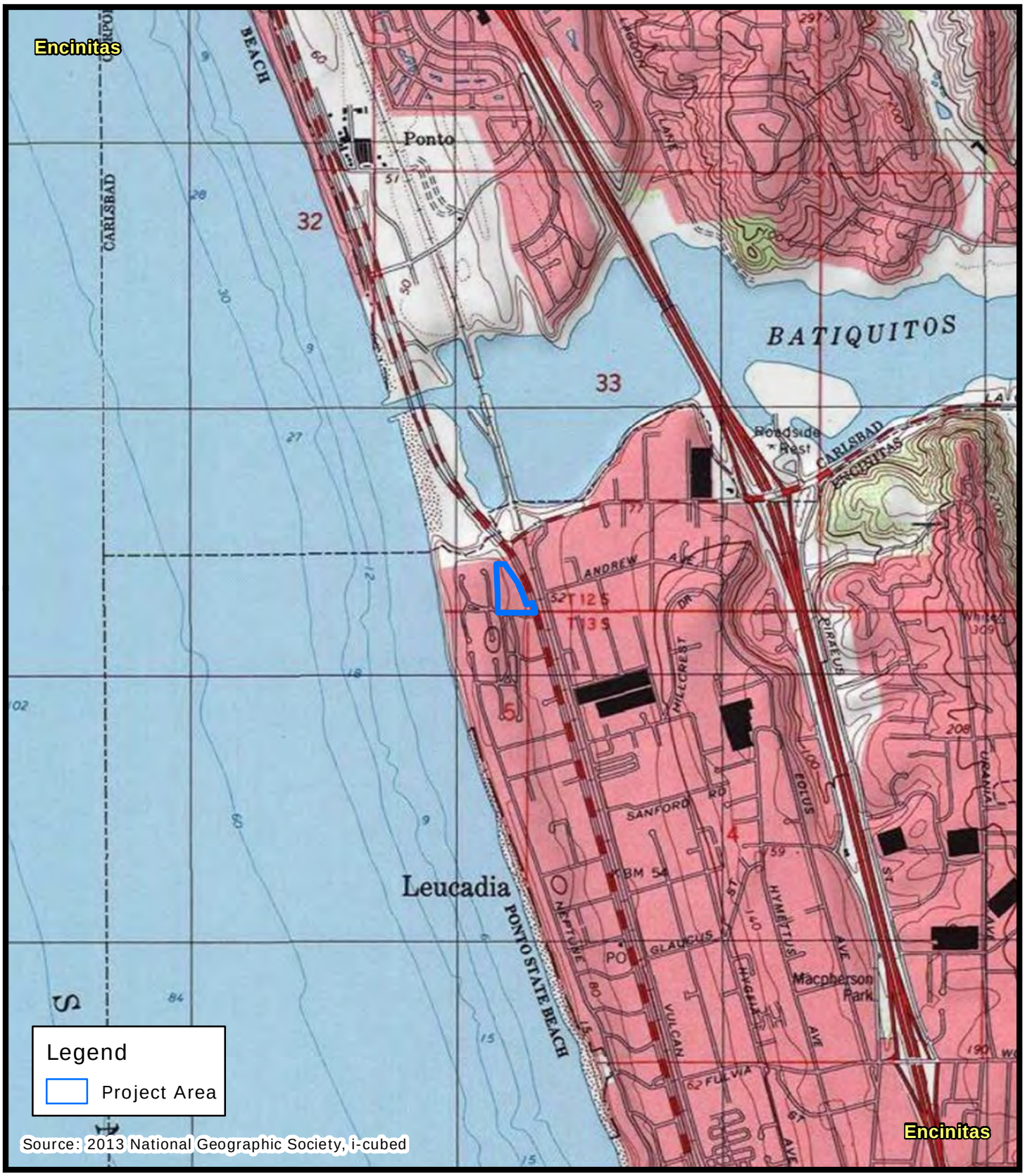
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Rebecca Osuna, Chairperson
Inaja-Cosmit Band of Indians
2005 S. Escondido Blvd.
Escondido, CA, 92025

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Osuna,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

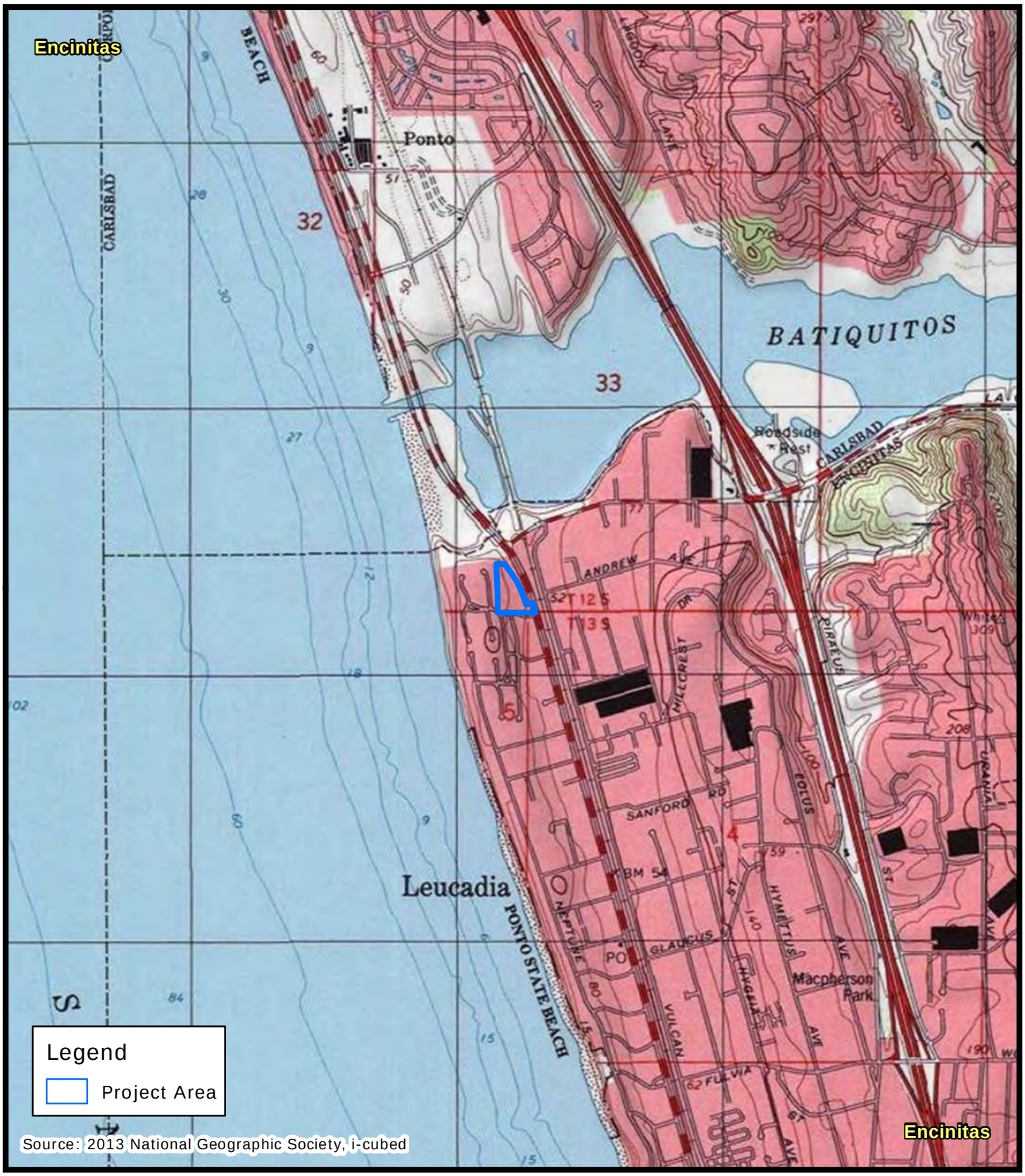
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Parada,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

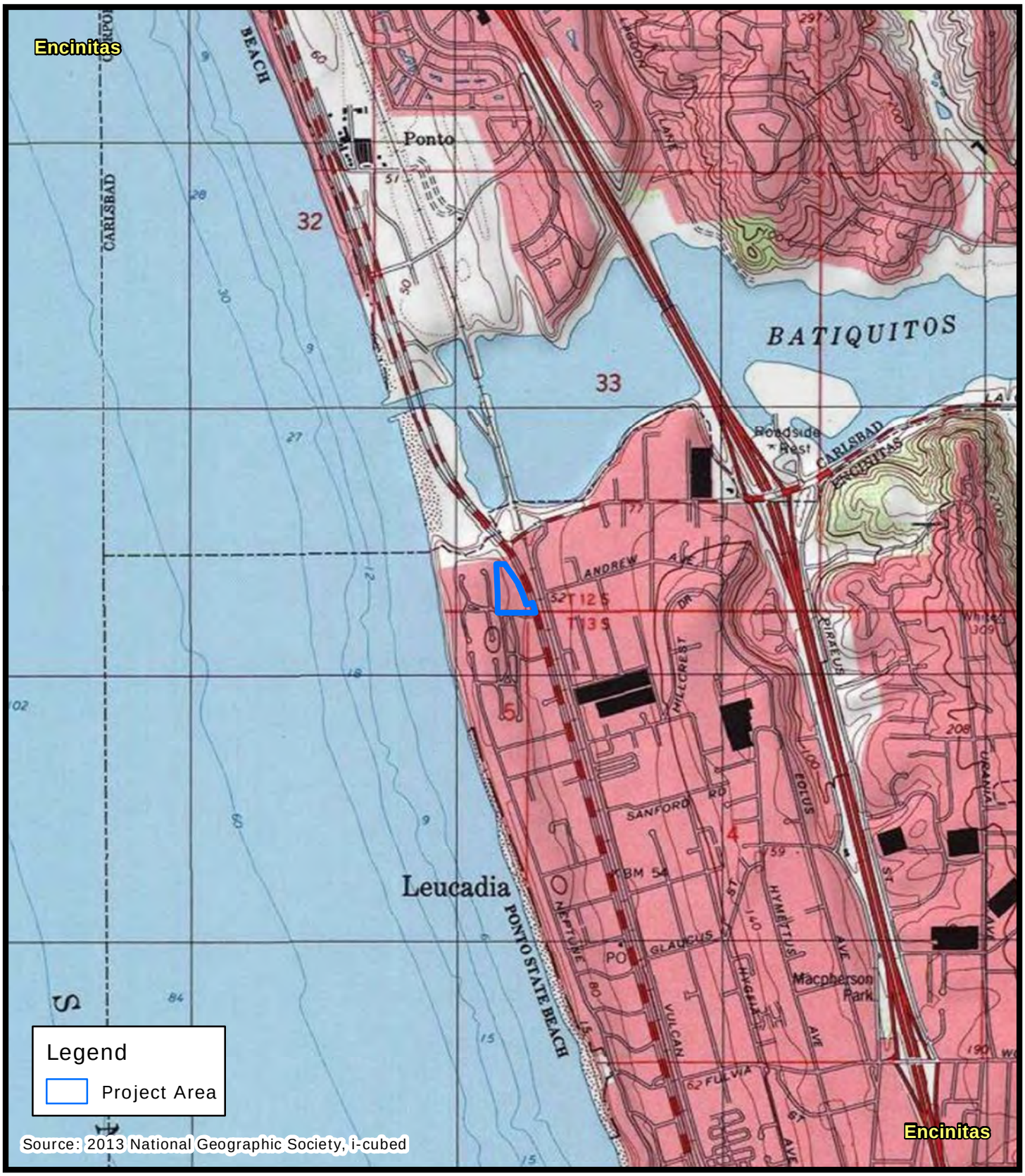
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA, 92070

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Perez,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

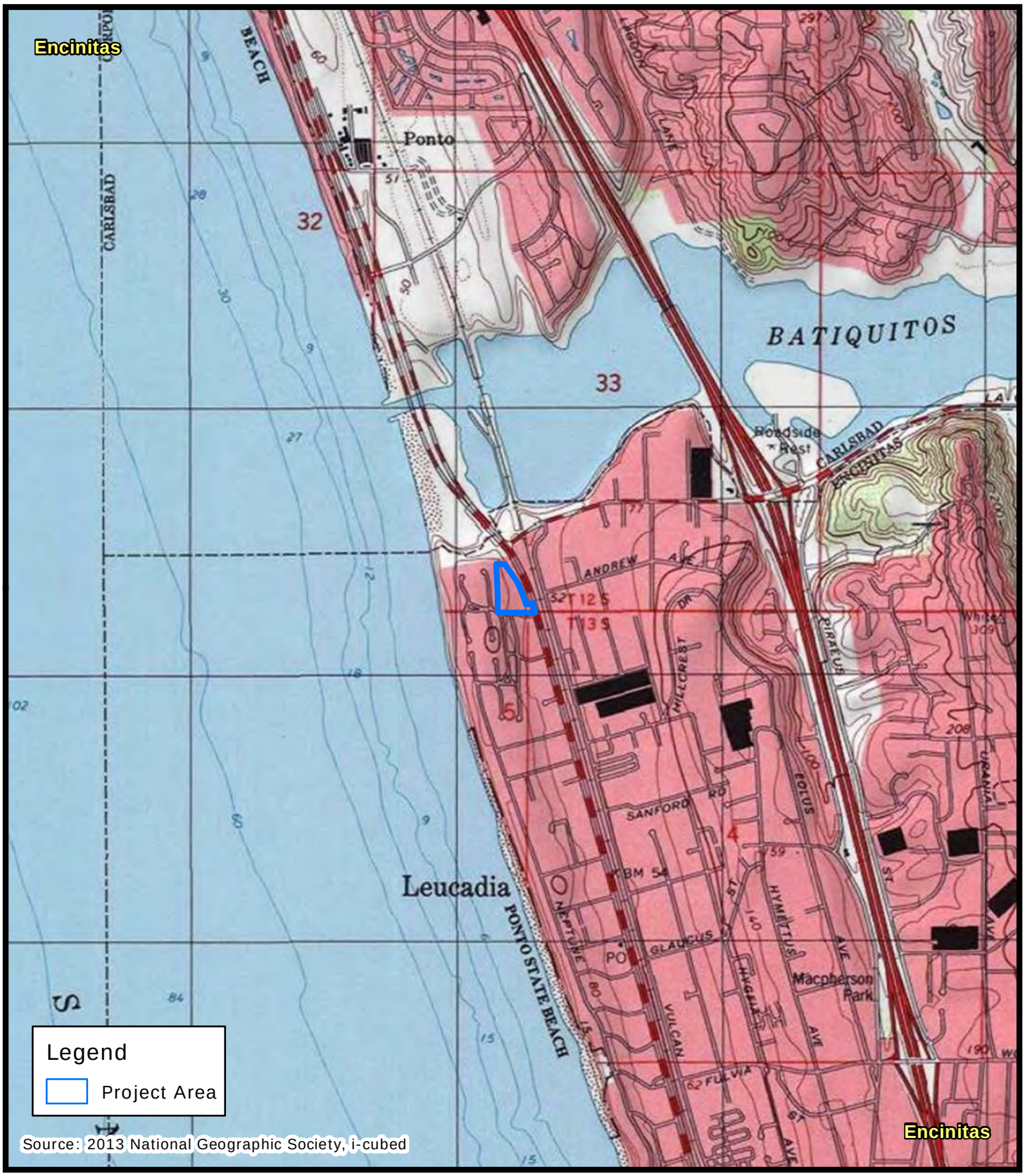
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Ernest Pingleton, Tribal Historic Officer, Resource Management
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Pingleton,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

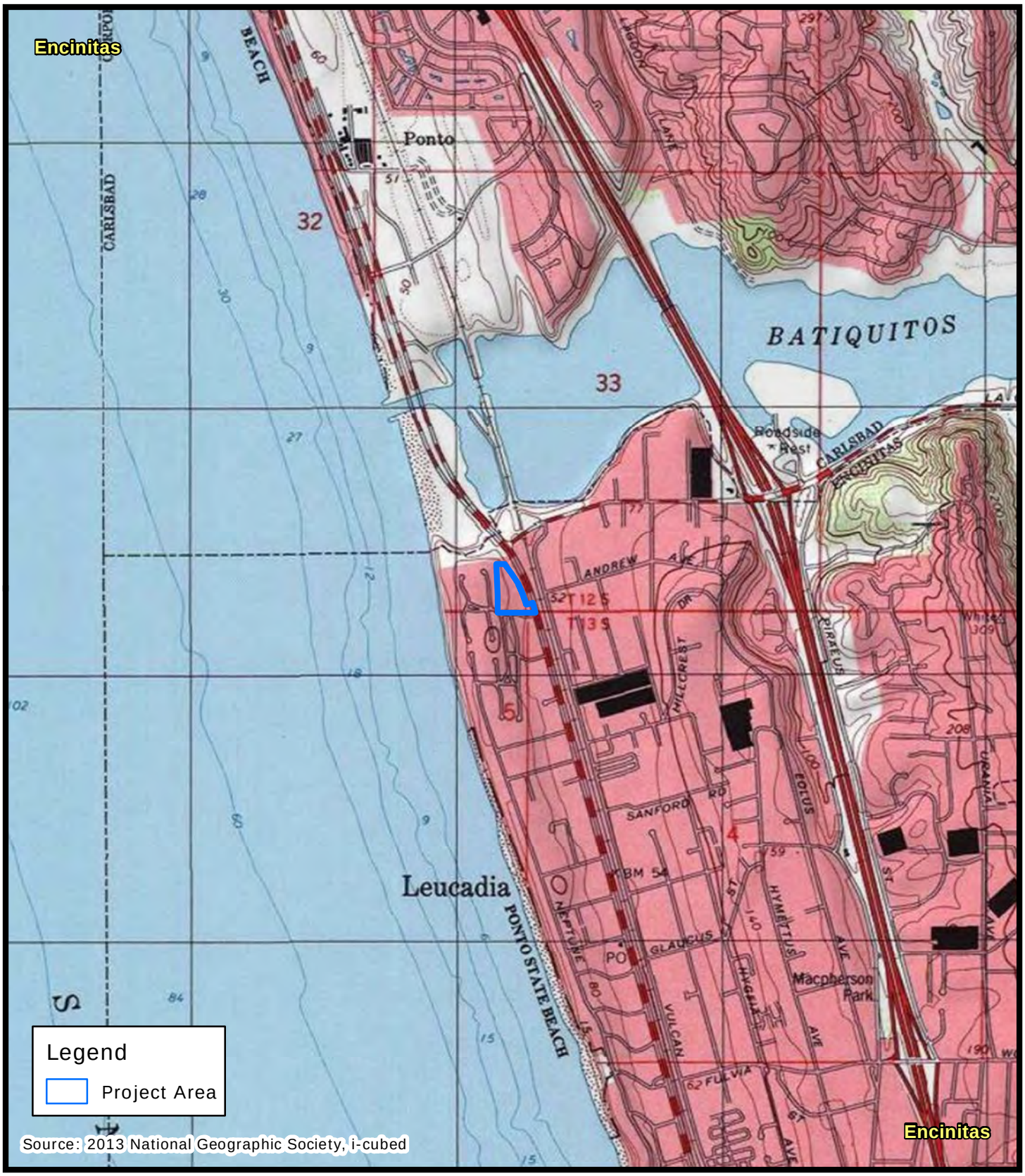
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Robert Pinto, Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Pinto,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

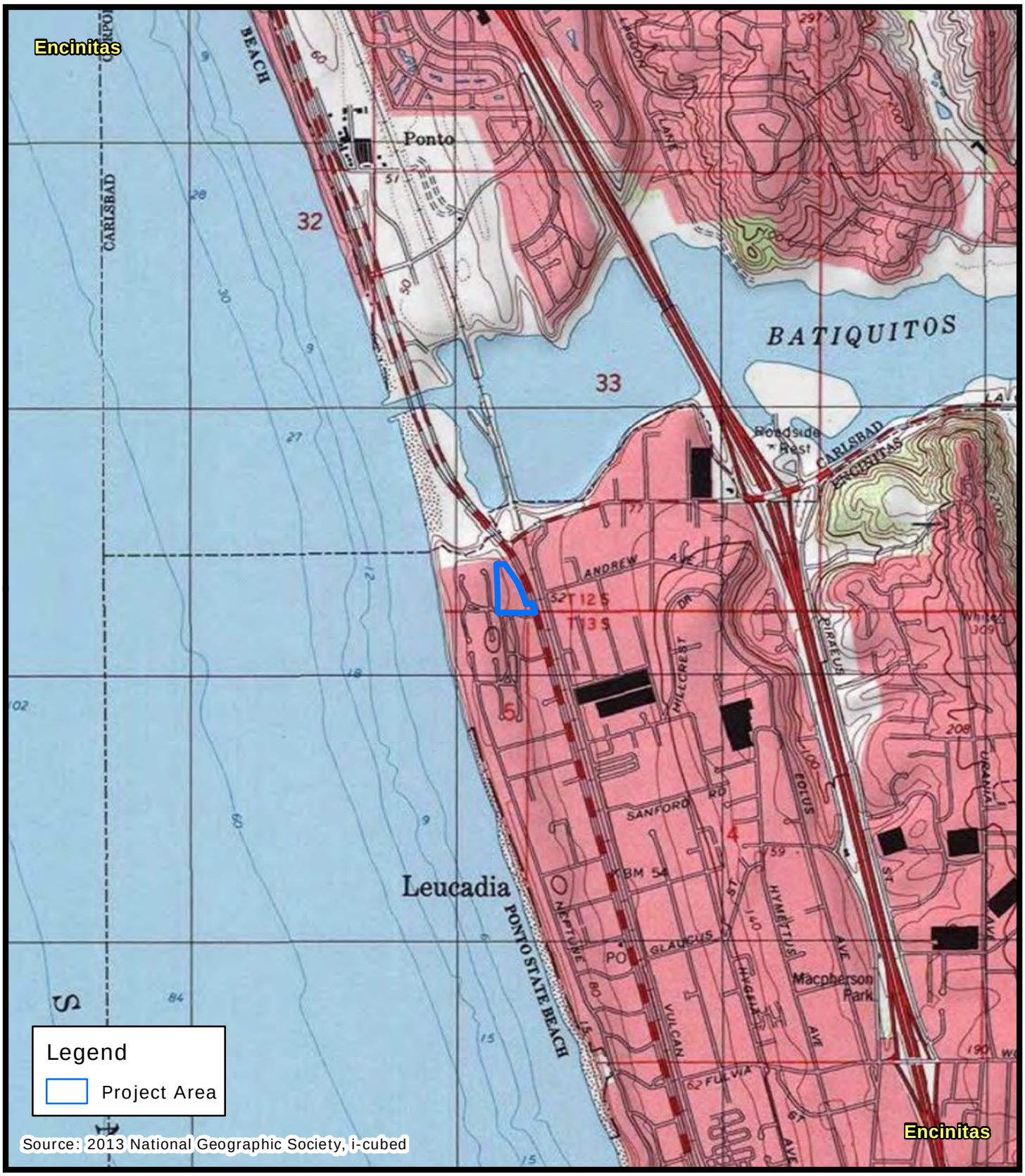
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Edwin Romero, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Romero,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

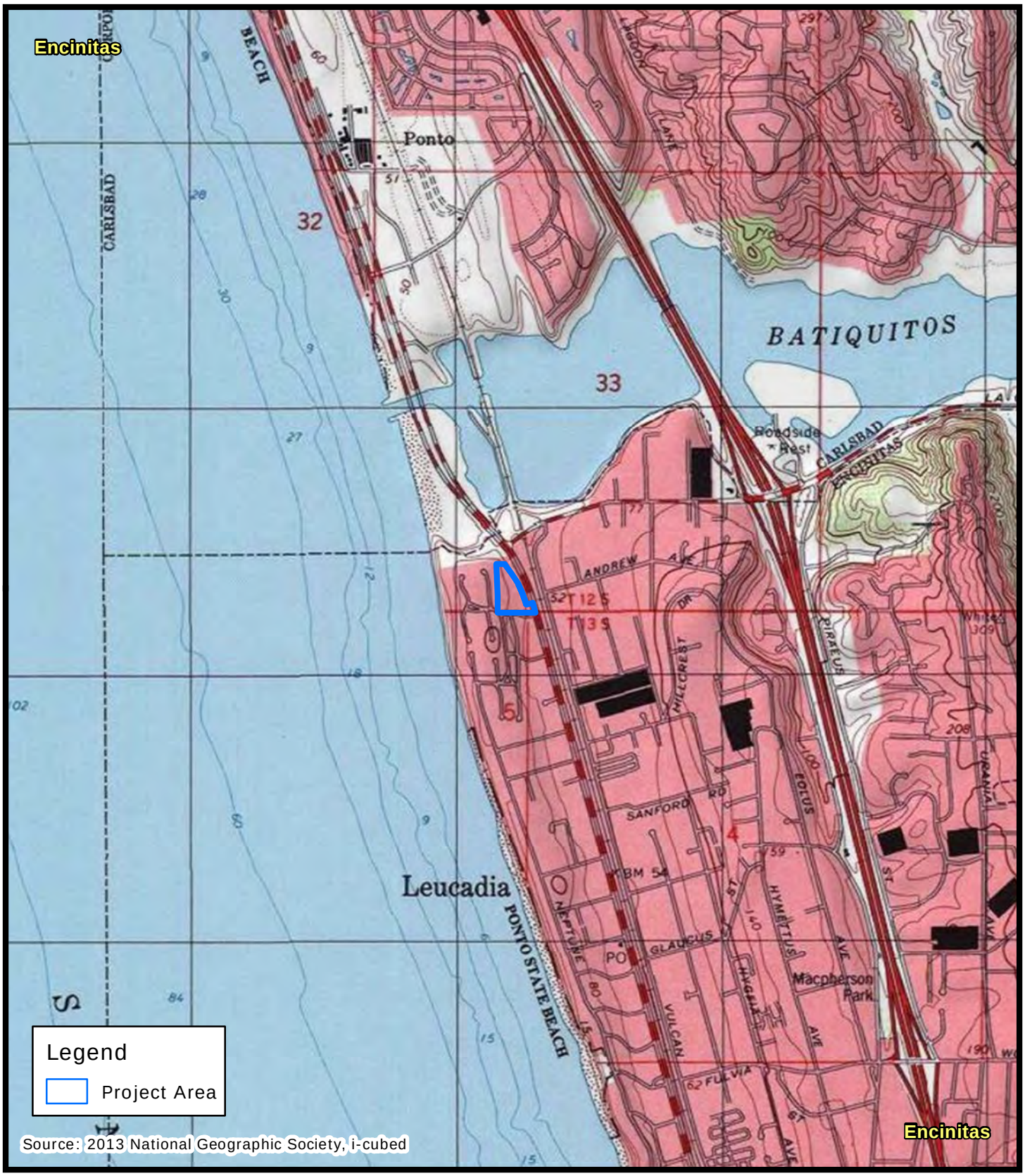
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Angela Elliott Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA, 91905

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Santos,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

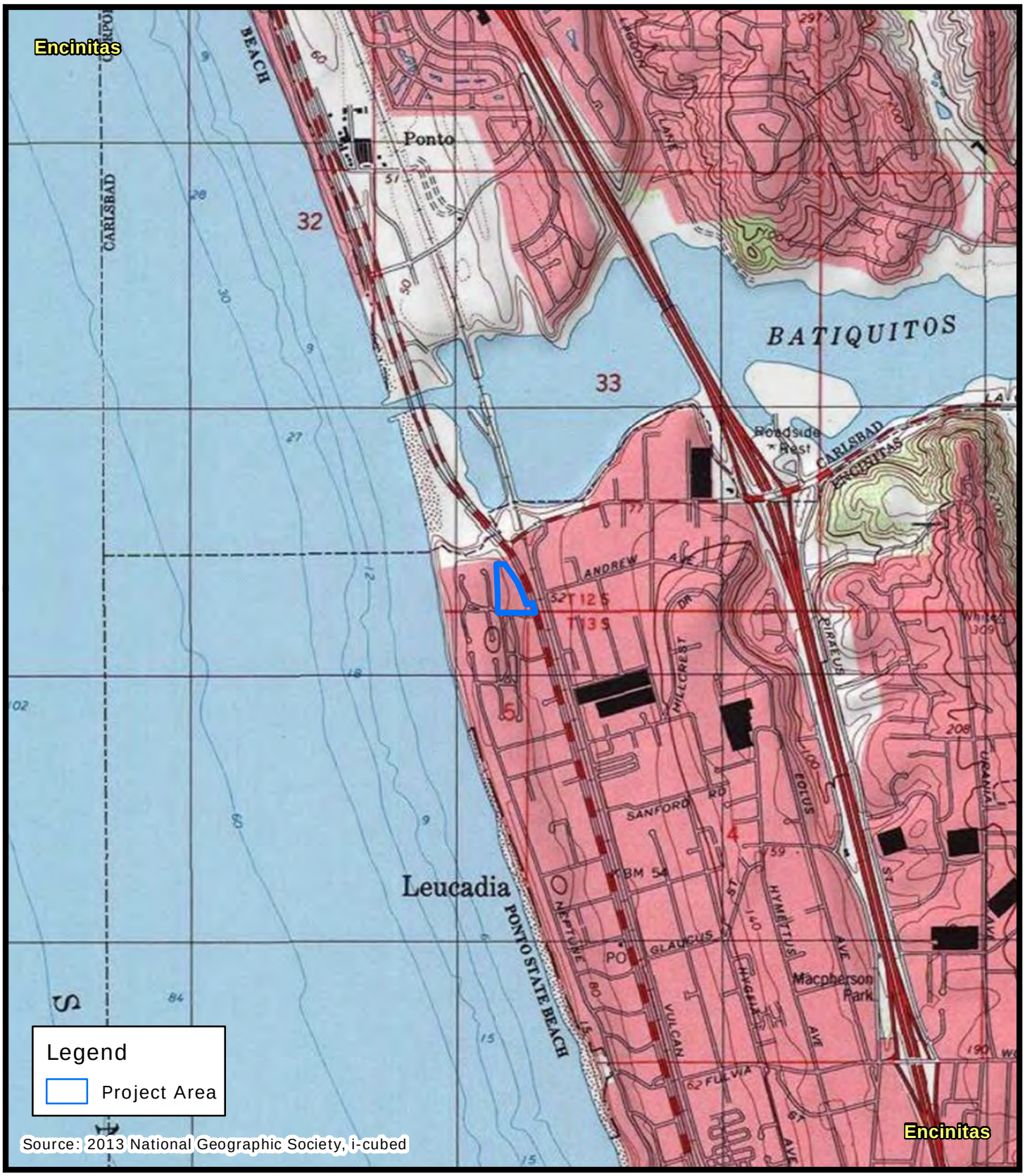
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

Michael Baker
INTERNATIONAL

Attachment 5

Historical Society Consultation

September 8, 2020

ENCINITAS HISTORICAL SOCIETY
390 West F Street
Encinitas, CA 92024

RE: CULTURAL RESOURCES IDENTIFICATION REPORT FOR THE FENWAY HIGHWAY 101 PROJECT, ENCINITAS, SAN DIEGO COUNTY, CALIFORNIA

To Whom It May Concern:

Michael Baker International is conducting a cultural resources investigation for the above-referenced project. The project is located along the North Coast Highway 101 directly north of Moorgate Road at 1900 Highway 101 North, as depicted on the accompanying figures (see **Attachment 1**).

The project proposes the demolition of three buildings, an operating restaurant, a commercial center, and an abandoned building formerly occupied by a restaurant located at 1900 Highway 101 North (Assessor Parcel Number [APN]: 216-041-06, 216-041-20, 216-041-21). Subsequently, a mixed-use development consisting of 94 apartments, 30 hotel rooms, 16,177 square feet retail uses will be developed on the site. The proposed project includes a subterranean parking garage, walking paseo, pedestrian plaza, and outdoor seating area. Of the 94 proposed residential units, 75 would be rented at market rate and 19 would be affordable units dedicated to low-income qualifying residents.

Please notify us if your organization has any information or concerns about historical resources on the project site. This is not a request for research; it is solely a request for public input related to any concerns that the Encinitas Historical Society may have. If you have any questions, please contact me at your earliest convenience at chris.wendt@mbakerintl.com or (707) 787-7488.

Sincerely,

Chris Wendt

Chris Wendt
Architectural Historian

Attachments:
Attachment 1 - Figures

N
W E
S

0 1,000 2,000 Feet

FIGURE 2

Project Location Map

Michael Baker INTERNATIONAL

N
W E
S

0 100 200 Feet

FIGURE 3

Area of Potential Effects

Michael Baker
INTERNATIONAL

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX D-2
PHASE II ARCHAEOLOGICAL RESEARCH, DESIGN, AND SITE TESTING, AND EVALUATION TECHNICAL REPORT

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

CONFIDENTIAL Technical Report: PHASE II ARCHAEOLOGICAL RESEARCH DESIGN, SITE TESTING, AND EVALUATION

Marea Village Mixed Use Development Project
City of Encinitas, San Diego County, California

Prepared for:
City of Encinitas
Land Development/Planning
505 S. Vulcan Avenue
Encinitas, CA 92024

Prepared by:
Michael Baker International
5050 Avenida Encinas, Suite 260
Carlsbad, California 92008

Table of Contents

Management Summary **1**

1.0 Introduction **3**
Project Location and Description 3
Preparers' Qualifications 4
State Regulatory Framework 4

2.0 Setting **5**
Natural Setting 5
Paleoenvironments 6
Soils 7
Ecology-Biota 8
Culture Setting 8
Ethnographic Setting 10
Background Research 12

3.0 Research Design **16**
Chronology 17
Settlement Patterns 18
Site Structure and Function 19
Subsistence Practices 19
Site Formation Processes 20

4.0 Methods **21**
Supplemental Pedestrian Survey, Mapping, and Surface Collection 21
Shovel Test Pits and Auger Holes 21
Laboratory Methods 21

5.0 Study Results **22**
Surface Collection and Mapping 22
Shovel Test Pits And Auger Holes 23
Soils 23
Lithic Artifact Identification 23

6.0 Analysis **25**
Chronology 25
Settlement Patterns 26
Site Structure and Function 27
Subsistence Practices 27
Site Formation Processes 28

7.0 California Register Evaluation **28**

8.0 Conclusions **29**
Recommendations 29

9.0 References Cited **31**

Appendices

Appendix A: Figures

Appendix B: Project Plans with Site FEN-001 as Overlay CONFIDENTIAL

Appendix C: Native American Scoping

Appendix D: Site Photographs CONFIDENTIAL

Appendix E: DPR 523 Records (Update) CONFIDENTIAL

Appendix F: Surface Collection and Shovel Test Pit Data

List of Tables

Table 1: Cultural Resources within the Records Search 12
Table 2: Cultural Resource Reports within the Records Search 12
Table 3. Flaked Lithic Artifacts by Rock Materials by Depth 24
Table 4. FAR and Ground/Battered and Other Lithic Artifacts by Rock Materials by Depth 24

MANAGEMENT SUMMARY

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City.

In September 2020, Michael Baker International prepared a *Phase I Cultural Resources Identification Technical Memorandum for the Marea Village Mixed Use Development Project* (Hearth and Wendt 2021). As part of the Phase I Investigation, Michael Baker International completed a South Coastal Information Center (SCIC) search, a literature and map review, historical society consultation, and a built environment and archaeological resources survey. In the study, one built environment resource, 1900 North Coast Highway 101, was evaluated and recommended ineligible for inclusion in the California Register of Historical Resources (California Register) under Criteria 1, 2, 3, and 4 because it lacks association with a historic context. One archaeological resource, FEN-001, was also identified. FEN-001 includes a flake, flake fragment, fire affected rock, and one hammerstone located on the edge of a dune terrace above the Batiquitos Lagoon and adjacent to the Pacific Ocean.

This Phase II archeological research design, testing and evaluation technical report documents the methods and results of the California Register evaluation of FEN-001 and includes a prehistoric and environmental context, background research, SCIC search, Native American scoping, research design, updated DPR 523 forms, and summary and recommendations. FEN-001 is recommended not eligible for listing in the California Register under Criterion 4 because it lacks information potential. It is not a historical resource, and therefore, the project will not impact historical resources as defined by CEQA Section 15064.5(a) or unique archaeological resources as defined by Public Resources Code (PRC) Section 21083.2(g).

Resource Name and Number	Eligibility to the California Register	Historical/ Archaeological Resource for the Purposes of CEQA	Project Activities	Recommendations
FEN-001	No	No	Destruction	Cultural Resources Monitoring Program Monitoring Report and/or Evaluation Report Identification of Human Remains

If the project area boundaries or the level of planned disturbance within the project area changes, the changes will need to be reviewed by a qualified archaeologist and the recommendations herein may be subject to change. There is still the potential for the discovery of unknown archaeological deposits during earth-moving activities and there is still the potential for significant impacts to cultural deposits, if discovered. This impact could be considered potentially significant. Additional recommendations include:

Cultural Resources Monitoring Program. A Cultural Resource Mitigation Monitoring Program shall be conducted to provide for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the proposed project. The monitoring shall consist of the full-time presence of a qualified archaeologist and a traditionally and

culturally affiliated (TCA) Native American monitor (San Luis Rey Band of Mission Indians) shall be retained to monitor all ground-disturbing activities associated with project construction, including vegetation removal, clearing, grading, trenching, excavation, or other activities that may disturb original (pre-project) ground, including the placement of imported fill materials and related roadway improvements (i.e., for access).

- The requirement for cultural resource mitigation monitoring shall be noted on all applicable construction documents, including demolition plans, grading plans, etc.
- The qualified archaeologist and TCA Native American monitor shall attend all applicable pre-construction meetings with the Contractor and/or associated Subcontractors.
- The qualified archaeologist shall maintain ongoing collaborative consultation with the TCA Native American monitor during all ground disturbing or altering activities, as identified above.
- The qualified archaeologist and/or TCA Native American monitor may halt ground disturbing activities if archaeological artifact deposits or cultural features are discovered. In general, ground disturbing activities shall be directed away from these deposits for a short time to allow a determination of potential significance, the subject of which shall be determined by the qualified archaeologist and the TCA Native American monitor, in consultation with the San Luis Rey Band of Mission Indians ("San Luis Rey Band"). Ground disturbing activities shall not resume until the qualified archaeologist, in consultation with the TCA Native American monitor, deems the cultural resource or feature has been appropriately documented and/or protected. At the qualified archaeologist's discretion, the location of ground disturbing activities may be relocated elsewhere on the project site to avoid further disturbance of cultural resources.
- The avoidance and protection of discovered unknown and significant cultural resources and/or unique archaeological resources is the preferable mitigation for the proposed project. If avoidance is not feasible a Data Recovery Plan may be authorized by the City as the lead agency under CEQA. If a data recovery is required, then the San Luis Rey Band shall be notified and consulted in drafting and finalizing any such recovery plan.
- The qualified archaeologist and/or TCA Native American monitor may also halt ground disturbing activities around known archaeological artifact deposits or cultural features if, in their respective opinions, there is the possibility that they could be damaged or destroyed.
- The landowner shall relinquish ownership of all tribal cultural resources collected during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the San Luis Rey Band for respectful and dignified treatment and disposition, including reburial, in accordance with the Tribe's cultural and spiritual traditions. All cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission per California Public Resources Code Section 5097.98.

Prepare Monitoring Report and/or Evaluation Report. Prior to the release of the Grading Bond, a Monitoring Report and/or Evaluation Report, which describes the results, analysis and conclusions of the cultural resource mitigation monitoring efforts (such as, but not limited to, the Research Design and Data Recovery Program) shall be submitted by the qualified archaeologist, along with the TCA Native American monitor's notes and comments, to the City's Development Services Director for approval.

Identification of Human Remains. As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the qualified archaeologist and/or the TCA Native American monitor) shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the qualified archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by state law, the Coroner would determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. If Native American remains are discovered, the remains shall be kept in situ ("in place"), or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of the TCA Native American monitor.

1.0 INTRODUCTION

Project Location and Description

The proposed Marea Village Mixed-Use Development Project (project) is located at 1900 and 1950 North Coast Highway 101 in the City of Encinitas (City), California, in coastal San Diego County; see Appendix A: Figure 1. Specifically, the project is located in Section 33, Township 12 South, Range 4 West; (San Bernardino Baseline and Meridian) as shown on the USGS *Encinitas, Calif*. 7.5' quadrangles; see Appendix A: Figure 2. The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site is via North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site; see Appendix A: Figure 3.

The project proposes to demolish the existing buildings on the property and construct a mixed-use development consisting of 94 for-lease apartments, a 30-room boutique resort hotel, and 18,261 square feet (SF) of mixed-use commercial; see Appendix A: Figure 4. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. Vehicular access to the site would be provided via a right turn in from the southbound lane of North Coast Highway 101 and a new left turn lane from the northbound North Coast Highway 101. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. It is anticipated there would also be pedestrian access to the site from the property to the north of the project which is the site of a hotel that is currently under construction. The hotel is anticipated to be operational prior to the project.

For the project, APNs 216-041-20 and 216-041-21 are collectively referred to as "Site 1," and have a physical address of 1950 North Highway 101. This parcel is undeveloped. In contrast, APN 216-041-06 is referred to as "Site 2," and has a physical address of 1900 North Highway 101 and is developed with four extant structures previously evaluated and recommended to not be eligible for listing in the California Register of Historical Resources (California Register) (Hearth and Wendt 2021). Also, during the pedestrian survey, a previously unrecorded prehistoric archaeological site FEN-001 was discovered in the project; see Appendix B: Figure 5.

Preparers' Qualifications

Mr. Hearth has worked as an archaeologist in cultural resource management since 2002. He meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology. He received his BA in anthropology in 2003 from the University of Massachusetts, Amherst, and his MA in anthropology in 2006 from the University of California, Riverside. Mr. Hearth has worked in California, New Mexico, and multiple states both in the Midwest and New England. Mr. Hearth is well versed in applying Section 106 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) on a variety of projects across many market sectors. He has completed projects in all phases of archaeology: Phase I Pedestrian and Shovel Test Surveys, Extended Phase I Survey, Buried Site Testing, Archaeological Sensitivity Assessments, Phase II Testing and Evaluations, Phase III Data Recovery, and Phase IV Monitoring. His project responsibilities include overseeing archaeological, historical, and paleontological studies, directing all phases of archaeological field and laboratory work, and ensuring that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

State Regulatory Framework

The California Environmental Quality Act of 1970 (CEQA) is legislation that requires a lead agency to evaluate if a proposed project would have a significant adverse effect on the environment, including historical resources. CEQA Guidelines pertaining to historical resources (Section 15064.5(b)(1)) state, "A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

California Register of Historic Resources

The California Register is the state-maintained list of cultural resources found to be historically significant. The California Register is maintained by the California Department of Parks and Recreation. The California Register has four major criteria that a cultural resource must meet to be eligible for inclusion on the list:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history.

To be considered eligible for the California Register, a historical resource should also possess integrity as defined as the ability of a historical resource to convey its significance. All cultural resources must be

evaluated under the four criteria for CEQA. A few generalities may be made about this process. Prehistoric archaeological sites are generally only evaluated only under Criteria 4. As a general rule, buried cultural deposits can have data potential but importance of those data will need to be considered during the evaluation.

Furthermore, CEQA requires the lead agency to consider whether or not a project will significantly affect unique archaeological resources that may be ineligible for listing in the California Register and to avoid these unique archaeological resources when possible or mitigate any effects to less than significant levels (PRC Section 21083.2). As stated by CEQA, a unique archaeological resource means an archaeological artifact, object, or site that clearly demonstrates with a high probability that it meets, without merely adding to the current body of knowledge, any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4).) However, if a non-unique archaeological resource qualifies as a tribal cultural resource (TCR) (PRC Sections 21074(c), 21083.2(h)), further consideration of significant impacts is required.

In addition, excavation must be stopped whenever human remains are uncovered, and the county coroner must be called in to assess the remains (Section 15064.5[e] of the CEQA Guidelines). If the county coroner determines that the remains are those of a Native American, the Native American Heritage Commission (NAHC) must be contacted within 24 hours, and the provisions for treating or disposition of the remains and any associated grave goods as described in Section 15064.5 of the CEQA Guidelines must be followed.

2.0 SETTING

The setting of the project, composed of environmental, archaeological, and ethnographic backgrounds, contextualizes the findings of the current study. Factors of the natural setting include the geomorphology, water accessibility, climate, ecology, and broad patterns of soil development. The prehistoric, ethnographic, and historical settings form the backdrop to human occupation of the project. Each of the contextual elements to this study are considered below.

Natural Setting

California is divided into 11 geomorphic provinces, each naturally defined by unique geologic and geomorphic characteristics. The project area is in the Peninsular Ranges Geomorphic Province, which extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California. The width varies from approximately 30 to 100 miles wide. The Peninsular Ranges are distinguished by northwest-trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are the remnants of large igneous bodies that were emplaced approximately 180 million years ago (DeCourten 2010). The Peninsular Ranges are bound to the east by the Colorado Desert and extend north to the San Bernardino – Riverside County line (Norris and Webb 1976), west into the submarine continental shelf, and south to the California state line.

Rugged mountainous terrain on the east of the province are composed mostly of Mesozoic igneous and metamorphic rocks. This topography is compared to the relatively low-lying coastal terraces to the west of the province underlain by late Cretaceous-age, Tertiary-age, and Quaternary-age sedimentary units. Most of the coastal region of San Diego is underlain by sedimentary units. The subject site is located within the coastal plain section of the Peninsular Range Geomorphic Province, which consists of subdued landforms underlain by sedimentary bedrock. Specifically, the site is located in an area underlain by Pleistocene marine and marine terrace deposits atop Eocene Marine deposits (Rogers 1965).

The geologic units underlying the project area consist of Quaternary-age Old Paralic Deposits. The nearest geotechnical boring undertaken for the project indicates that within the site Old Paralic Deposits (Qop) consisting of fine- to medium-grained sandstone with trace silt which is orange-brown in color (B-8; Nova Services Inc. 2020). No fill was noted within this borehole.

Paleoenvironments

The paleoenvironment section follows previous work by ASM Affiliates (2006), though limited updates have been included to bring in recent paleoclimatic research. Studies have gradually sketched in several elements of the region's late Pleistocene and Holocene paleoenvironments, including changes in the coastline, alluviation, climate, and vegetation.

Sea level rise during the late Pleistocene and early Holocene pushed the shoreline several kilometers inland from the last glacial maximum at the end of the Pleistocene. The eastward movement of the shoreline certainly inundated or destroyed most late Pleistocene and early Holocene near-coast archaeological sites. Rocky headlands were created, and the lower courses of rivers and creeks were drowned as estuaries. Through the middle and late Holocene, the rate of further marine transgression progressively slowed, and lower-energy coastal environments evolved as sandy beaches replacing rocky headlands. Estuaries and bays were converted into lagoons, as sand barriers partially cut them off from the ocean and made their waters only intermittently brackish. The progressive accumulation of sediment within the lagoons made them shallower and therefore more subject to abrupt changes in salinity. Such environmental changes strongly affected the amounts and kinds of marine and littoral resources that were available to prehistoric people.

The trajectories for environmental changes within the drainages likely varied according to such factors as the size of the bays, estuaries, or lagoons; the amount of fresh water feeding into and potentially flushing them; and the amount of sediment available to fill in the lagoons or to close them off from the open ocean. The formation of extensive sandy beaches seems to have been initiated in the north, near Dana Point in southern Orange County, and to have spread progressively southward toward La Jolla within the Oceanside littoral cell (Inman 1983). This suggests the existence of a north-to-south sequence in lagoon evolution. The best-reported case so far is Batiquitos Lagoon, where paleoenvironmental and archaeological studies have documented the closure of the lagoon and extensive sedimentation between about 3,500 and 1,000 years ago (Gallegos 1985; Masters 1983; Miller 1966). This episode was associated with a sharp decline in the prehistoric human use of the area.

Research in the patterns in paleoclimatic variation of western North America and coastal San Diego County continues. Early research in Holocene climates in western North America indicates a gradual warming and drying trend through the early Holocene, reaching a peak in the middle Holocene, and subsequently becoming irregularly somewhat cooler (Antevs 1948). However, more complex patterns of warm/cool and wet/dry climatic shifts have usually been reported in regions where more detailed investigations have been undertaken (Kirby et al. 2019; Moratto, King, and Woolfenden 1978). The effects of long-term temperature changes in western San Diego County were probably muted by the region's coastal setting.

Nonetheless, a shift in the North Pacific winter storm pattern either farther to the north, bypassing San Diego, or to the south, bringing in greater precipitation, could have had important consequences within this semi-arid setting. The Medieval Climatic Anomaly, an extended period of drought between about AD 800 and 1350, has been credited with important influences on human settlement in California, at least in environments like San Clemente Island (Jones et al. 1999; Yatsko 2002).

If paleoclimatic variability was limited, it is also likely that natural changes in the region's vegetation were not drastic. Recent investigations in northern San Diego County have included pollen studies on lower Las Flores Creek (Anderson and Byrd 1998). Those studies suggest the presence between about 9,000 and 4,000 years ago of species that were adapted to a somewhat wetter climate, subsequently stabilizing to a more familiar mosaic of coastal sage scrub, chaparral, and grassland by about 2,600 years ago.

Soils

Soils are important in archaeology as they can indicate the degree of integral condition of the soil (natural versus disturbed) and consequently, the integrity of the site. Soils within the project follow a typical "A-B-C" soil horizon sequence from top to bottom. Typically, an "A" soil horizon(s) is at the surface and consist of the active soil growth horizon due to natural processes of microorganisms, as well as insect, arachnid, plant, and animal activity within the mineral soil constituent material. Consequently, these bioturbation processes deposit organic matter within "A" horizons. "A" horizons within the project consist of undisturbed A horizons or plow zone(s) (Ap), singularly or stratigraphically arranged. Ideally, cultural materials within A soils would likely retain physical integrity whereas those cultural materials found within Ap soils would likely have a high degree of disturbance that would need to be determined on a case-by-case basis.

Subsurface "B" soil horizons are similarly constituted of the mineral material components but do not have or have very little of the active soil growth within them. Instead, rainwater moves various minerals, chemical compounds, clays, and oxides through the mineral material of the A horizon by a process called illuviation or leaching and deposits these within the "B" horizons. "B" horizons can also be active in terms of soil growth, but this growth does not have the in situ organic growth processes characterized in the "A" horizon(s). Multiple "B" horizons can exist within the column within a soil column. "B" horizons which contain cultural material are likely to be intact.

Subsurface "C" soil horizons are generally classified as the mineral parent material from which other soils grow, but the horizon itself lacks pedological development. "C" horizons generally are thought of as bedrock though mineral materials deposited though alluviation or other means are considered to be "C" horizons. "C" horizon(s) are generally of minimal archaeological sensitivity as no cultural activity would logically be present within it.

Soils within the project are mapped as Marina Series loamy coarse sand with between 2 and 30 percent slope (NRCS 2001, 2020). Soils of the Marina Series have been previously recorded to be composed of three A horizons. The first two A horizons are grayish-brown and brown-colored loamy sand consisting of two plow zones to approximately 12 inches beneath the surface followed by a natural A horizon from the bottom of the Ap to approximately 27 inches. These three A horizons are followed by two B horizons consisting of light brown loamy and light loamy sand down to 50 inches. Lastly, the soil parent material of the Series, the C horizon, represented by Old Paralic Deposits (Qop), starts at this depth and the NRCS (2001) recorded the series to be light brown to pink sand.

Ecology-Biota

The project is broadly located within the Southern California/Northern Baja Coast biotic region. It includes coastal and alluvial plains, marine terraces, and some low hills. Plants were once dominated by the Coastal Sage Scrub and Chaparral vegetation communities before overgrazing, clearance for agriculture, and massive urbanization. Specifically, plant species within the Coastal Sage Scrub community include chamise, white sage, black sage, California buckwheat, golden yarrow, and coastal cholla. The Chaparral vegetation community includes ceanothus, manzanita, scrub oak, and mountain-mahogany. Coast live oak, canyon live oak, poison oak, and California black walnut also occur.

Specifically, the project is located within the Diegan Coastal Terraces ecoregion and includes nearly level to gently sloping dissected marine terraces, and narrow strips of beach and dune sand along the coast from Newport Beach in the north, all the way south to Mexico's Baja California. The ecoregion is modified greatly by oceanic influence. Coastal sage scrub, with maritime succulent, Diegan coastal sage scrub, and chaparral, dominates plant communities. California sagebrush, California buckwheat, black sage, ceanothus, coast live oak, and annual grasslands can also occur. A few vernal pools remain due to widespread urban and suburban development (Griffith et al. 2016).

Culture Setting

Archaeological investigations have documented human occupations on the San Diego coast that spanned at least the last 10,000 years (Gallegos 2017). A variety of different chronological divisions and sets of terms have been used to sort the evidence into temporal, behavioral, and geographical units, but the present discussion is framed in terms of five main divisions (see also Moratto 1984): an early period bridging the latest Pleistocene to early Holocene, prior to about 6000 BC; a middle Holocene period, stretching between about 6000 and 2000 BC; and a late Holocene period, between about 2000 BC and AD 1769. After this, an ethnographic period represents conditions just prior to and during European contact. The historic period since AD 1769 was previously documented (Hearth and Wendt 2021).

The Late Pleistocene/Early Holocene

The earliest well-documented material culture pattern in San Diego County has come to be known as the San Dieguito Complex. Dates for the San Dieguito component at the C. W. Harris Site begin at 9030 ±350 radiocarbon years before the present (calibrated to a two-sigma range of 9235–7382 BC). The San Dieguito pattern might be a Paleoindian phenomenon, characterized by high mobility and an emphasis on big game hunting (Willey and Phillips 1958), like other Late Pleistocene groups such as Clovis (Davis and Shutler 1969; Sutton 2019), as well as Lake Mohave, Scraper Maker, or Western Pluvial Lakes Tradition. Others would classify San Dieguito as an early Archaic stage phenomenon, involving a more diversified and plant-oriented adaptation. Remains that have been considered to be characteristic of San Dieguito components include large stemmed projectile points (Lake Mohave and Silver Lake forms), crescents, heavy unifacial tools (scraper planes), focused use of the local volcanic or metavolcanic rock for flaking, infrequent milling tools, and little emphasis on shellfish harvesting.

Long-standing disagreements have concerned the identification of which archaeological components should be classified as San Dieguito, and consequently how the complex should be dated and interpreted. Malcolm J. Rogers (1929a, 1966), largely working before absolute dating had been invented, assigned numerous site components in western San Diego County to the San Dieguito complex, apparently primarily on the basis of the presence of large bifacially and unifacially flaked stone tools.

Roger's broad definitions of San Dieguito haven't been without detractors. Warren and his collaborators generally adopted a more restricted view (Warren 1966, 1967, 1968, 1985, 1987; Warren and True 1961). They accepted the C. W. Harris Site and a few other sites as containing true San Dieguito components but not the broad sweeps of San Dieguito occupation identified by Rogers. Furthermore, they rejected that site components had assemblage characteristics more similar to middle Holocene patterns, though stratigraphic dating potentially indicated that they could be early as the San Dieguito components. Still other investigators have called into question the validity of San Dieguito as a category, suggesting that San Dieguito-like components were only functionally specialized activity sets, rather than evidence of distinct chronological or ethnic units (Bull 1983, 1987; Ezell 1983, 1987; Gallegos 1987a, 2017; Hanna 1983). The cultural complex of San Dieguito is an issue of ongoing research interest (Sutton and Gardner 2010).

The Middle Holocene

The most conspicuous age of prehistoric sites in the central San Diego coastal plain are middle Holocene sites (ca. 6000 to 2000 BC). Like San Dieguito, these sites go by various cultural names, complexes, and horizons, including Archaic, La Jolla, Millingstone, Littoral, Shell Midden, Encinitas, Campbell, and Pauma. Regardless of nomenclature, characteristics of this period are coastal shell middens, the widespread adaptation of ground stone tool technology, simple flaked stone assemblages, and inhumation funerary treatment.

The local middle Holocene pattern is notable for its continuity with the early Holocene and conservative evolution of tool forms and food processing technology, when compared with contemporaneous patterns in the Santa Barbara coast and the Mojave Desert. Several proposals have been made to subdivide the period locally into two or three separate chronological units (e.g., Harding 1951; Moriarty 1966; Rogers 1945) based upon rates of occurrence of certain artifact styles. However, firm criteria for such distinctions have not been identified, and even the general directions of change are uncertain. For example, the extent to which there was an evolution toward a maritime rather than strictly a littoral adaptation, at least in the San Diego Bay area, has also been debated (Gallegos and Kyle 1988).

Various relationships have been proposed between coastal manifestations and the sparser inland San Diego County sites dating from this period, which are sometimes labeled Inland La Jolla, Pauma, or Campbell. Possible interpretations are that coastal and inland sites were produced by the movements of members of a single population, on a seasonal or episodic basis; by separate but related populations that were economically complementary to each other; or by ethnically distinct groups, with inland and some coastal components reflecting intrusions of people from the eastern deserts (True 1958, 1980; Warren 1968).

The Late Holocene

The late Holocene spans a period of apparently accelerated change in the region's prehistoric cultures. The first half of the period is not well documented but appears to represent a continuation of the middle Holocene patterns. The second half of the late Holocene includes patterns known by such labels as Late Prehistoric, Late Archaic, Shoshonean, Yuman, San Luis Rey, and Cuyamaca. Hallmarks of the later period include the mortar and pestle, ceramics, small arrow-size points, and human cremation. The chronologies for the introduction or innovation of these traits are only imprecisely known; they may well have arisen at separate times, over a period spanning as much as 1,500 years.

Archaeological sites that are assignable to the second half of the late Holocene appear to be much more numerous than earlier sites in most of the inland portions of San Diego County (Christenson 1989; Jones

1992:21). A few late period coastal village locations have been identified archaeologically, but the central coast between Oceanside and Del Mar seems to have played a less important role during this period than it had during the preceding period, probably at least in part because of natural changes in the coastal environment (Gallegos 1992; Masters and Gallegos 1997). In northern San Diego County, late period shell middens are common and characteristically contain a high proportion of bean clam (*Donax gouldii*) shells, but *Donax* middens are uncommon south of Carlsbad (Laylander and Saunders 1993). Only limited success has been achieved in attempts to distinguish between the archaeological residues that were produced by the linguistically unrelated but culturally similar Luiseño and Ipai/Kumeyaay groups (Pigniolo 2004; True 1966).

Ethnographic Setting

The project area spans territories that are attributed ethnographically to the Luiseño in the north and to the Ipai/Kumeyaay (Diegueño) in the south. The boundary on the coast between the two groups has been variously estimated as falling between Agua Hedionda and Batiquitos Lagoons (Kroeber 1976:590) or at Agua Hedionda Lagoon (Bean and Shipek 1978:551; Luomala 1978:593).

Luiseño

The Luiseño are Cupan speakers historically related to Mission San Luis Rey. The Luiseño spoke a dialect of the Cupan group of the Takic language family (Bean and Shipek 1978). This language was part of the larger Uto-Aztecan language stock which migrated south from the southern San Joaquin Valley or the Great Basin. The Luiseño homeland is present-day Orange and northern San Diego Counties, the region south of the Aliso Creek drainage, east into the Santa Ana Mountains and the Temecula Valley, west of the Palomar Mountains and the San Marcos Valley, and south along the coast to the San Marcos Creek drainage (Kroeber 1976:Plate 57). There are six bands of Luiseño people today.

The Luiseño lived in sedentary and independent village groups, each with specific subsistence territories encompassing hunting, food gathering, and fishing areas. Villages were usually located in valley basins, along creeks and streams adjacent to mountain ranges where water was available and where the villages would be protected from environmental conditions and potential enemies. Most inland populations had access to fishing and food gathering sites on the coast (Bean and Shipek 1978). There was some indication of seasonal movement from major villages to smaller camps and hamlets.

Villages were organized around an inherited chief (*nó·t*) who exerted sole control over the economy, religious rituals, and territorial matters within the village (Bean and Shipek 1978:555). Villages consisted of partially subterranean residential structures made of brush or reeds, ramadas, partially subterranean sweat lodges, and a ceremonial structure (*wámkiš*). The chief at times would consult with an assistant chief, a council of elders, and shamans on matters of religious practices and on environmental conditions affecting village life. Larger villages may have had complex behavioral and political structures due to their territorial size and economic control, while the political complexities of smaller villages were limited by their territorial size (Strong 1929; Bean and Shipek 1978:555).

The Luiseño, like other coastal Native American tribes, exploited a wide variety of plants and animals. The Luiseño were heavily dependent on acorns as well as other seeds and plants and a variety of large and small game inland and marine mammal, fish, and shellfish along the coast. Acorns encompassed as much 50 percent of the Luiseño diet (White 1963). Acorns provided a reliable and abundant food source that was high in calories and could be easily stored for future use. Hunting activities were conducted both on an individual basis and/or organized into group activities, depending on seasonal factors and the game hunted. Tool technologies were organized around food collection, storage, and preparation strategies,

which was reflected in the type, size, and quantity of food items gathered. Material culture included a variety of ground stone implements (manos, metates, mortar, pestles, etc.), brownware ceramics, basketry, decorative shell objects and jewelry, bone fish hooks, bone tools, and lithic tools (arrow projectile points, drills, scrapers, etc.). The Luiseño traded coastal goods inland to interior tribes.

The Luiseño today occupy some areas of their ancestral homelands, including the Pechanga, Pala, and Soboba Reservations. The six contemporary bands recognized by the US government are the La Jolla, Pala, Pauma, Pechanga, Rincon, and Soboba Bands of Luiseño Indians. A seventh group, the San Luis Rey Band of Mission Indians, is not formally recognized by the US government.

Kumeyaay

The project is adjacent to the traditional boundaries of the Kumeyaay peoples, also referred to as Diegueño (Kroeber 1976:Plate 57). The Kumeyaay spoke the Yuman language family of the Hokan stock (Luomala 1978). Linguistically, the Kumeyaay were especially distinct from the Yuman speakers west of the Colorado River and the Takic speakers in northern San Diego County (Luomala 1978). Based on differences in dialects, the Kumeyaay have been divided into two groups: the Ipai to the north and the Tipai to the south. The project area belongs to the territory ascribed to the Ipai.

Historically, tribal boundaries were not established definitively and were considered to be fluid, due to either sociopolitical features or a lack of reliable data. Generally, the Kumeyaay territory was bound by the San Luis River to the north, the Sand Hills in Imperial County to the east, Todo Santos Bay in Ensenada, Mexico, to the south, and the Pacific Ocean to the west (Luomala 1978).

Groups of Kumeyaay lived in semi-permanent settlements, known as rancherias. The Kumeyaay were organized into bands, each an autonomous tribelet with its own clan chief and at least one assistant chief (Luomala 1978). The position of chief was hereditary. Chiefs dictated ceremonies, directed large communal hunts and harvests, admonished people on behavior, and advised on marriages.

Settlements were chosen based on access to water, good drainage, boulder outcrops or other natural protections from the elements and ambush, and ecological diversity. During seasonal ceremonies and harvesting times, band members would congregate into a large settlement and later disperse into smaller, scattered settlements (Luomala 1978). A band's seasonal travel followed a vertical pattern, in that bands would move from canyon and valley bottoms to higher mountain slopes depending on the ripening of important plants (Luomala 1978). Agave was harvested in spring and cactus fruits in June. In summer months, in the mountains, wild seed and fruits ripened; in the inland areas, mesquite pods ripened. The fall was when acorns were harvested and processed. Hunting was done by the men, while women and girls harvested and processed a variety of plant materials. Food was stored for the winter months when bands congregated into larger settlements on the valley and canyon bottoms (Luomala 1978). The Kumeyaay were master basket weavers and potters.

Today the Kumeyaay consist of 13 federally recognized tribes: Campo Band of the Kumeyaay Nation, Viejas Band of Kumeyaay Indians, Barona Band of Mission Indians, San Pasqual Band of Indians, Inaja Cosmit Indian Reservation, Capitan Grande Indian Reservation, Santa Ysabel Band of Diegueño Indians (aka Iipay Nation of Santa Ysabel), Ewiiaapaayp Band of Kumeyaay Indians (aka Cuyapaipe), Manzanita Indian Reservation, La Posta Indian Reservation, Jamul Indian Village A Kumeyaay Nation, Mesa Grande Indian Reservation, and Sycuan Band of the Kumeyaay Nation. The Sycuan Band is the closest reservation to the project area, located 8.5 miles to the east.

Background Research

Background research consisted of a records search, a map search, literature review of regional archaeological reports, and informal Native American scoping.

South Coastal Information Center Records Search

SCIC staff conducted a records search (File No. 2761) on September 11, 2020. The SCIC, as part of the California Historical Resources Information System at San Diego State University, an affiliate of the California Office of Historic Preservation (OHP), is the official state repository of cultural resources records and reports for San Diego County. As part of the records search, the following federal and California inventories were reviewed:

- California Inventory of Historic Resources
- California Points of Historical Interest
- California Historical Landmarks
- Archaeological Determinations of Eligibility for San Diego County including the National Register of Historic Places (National Register), National Historic Landmarks, California Register, California Historical Landmarks, and California Points of Historical Interest
- Built Environment Resources Database for San Diego County

The search of these inventories revealed no cultural resources within the project site, though three are located within the one-half mile search area.

Table 1: Cultural Resources within the Records Search

Resource #	Resource Type	Description	Distance and Direction
P-37-009589/ CA-SDI-009589	Prehistoric Habitation Site	Flaked stone, fire affected rock (FAR), and shell scatter. Testing revealed no buried prehistoric cultural deposit.	0.26 miles NW
P-37-026508/ CA-SDI-017404	Prehistoric Habitation Site	FAR features and scatters of charcoal and shell. Unevaluated.	0.04 miles W
P-37-037812/ CA-SDI-022520	Prehistoric Habitation Site	Flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for National Register/California Register.	0.44 miles NE

Four cultural resources studies have been completed in the project location and an additional 24 have been completed within the search area, as identified below. The reports overlapping the current subject site did not document any cultural resources in the current project.

Table 2: Cultural Resource Reports within the Records Search

Rpt. #	Author	Date	Title	In Project?
SD-00020	Davis, McMillan and Dayle Cheever	1990	*A Cultural Resource Survey of the Southern Pacific Hotel Property, Encinitas, California*	Yes
SD-00671	Gallegos, Dennis, Dayle Cheever, and Stephan Van Wormer	1986	*A Cultural Resource Overview for the Encinitas Planning Area, Encinitas, California*	No
SD-00879	Fink, Gary R.	1973	*Archaeological Survey of the Proposed Sea Bluffe Beach Access*	No

Table 2, continued

Rpt. #	Author	Date	Title	In Project?
SD-00886	Fink, Gary R.	1973	*Archaeological Survey of the Batiquitos Ocean Beach Access*	No
SD-01012	Gallegos, Dennis and Carolyn Kyle	1988	*Cultural Resource Survey for the Costa Brava Resort Hotel, City of Encinitas, California*	Yes
SD-01638	Woodward, Jim and George Stammerjohan	1985	*Resource Inventory Cultural Resources San Diego Coast State Beaches*	No
SD-01981	Smith, Brian F. and James R. Moriarty III	1985	*The Archaeological Excavations of Cultural Resources at the Batiquitos Pointe and Batiquitos Bluffs Projects, Sites W-84, W-88, W-95, W-97, and W-2551*	No
SD-01984	WESTEC Services, Inc.	1980	*Regional Historic Preservation Study*	No
SD-03028	Smith, Brian F.	1995	*Results of An Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System*	No
SD-04111	Seeman, Larry	1982	*Draft Environmental Impact Report Revised Parks and Recreation Element, Carlsbad, California*	No
SD-04226	Mccorkle-Apple, Rebecca	1994	*Historic Property Survey Report for Widening La Costa Avenue Overcrossing*	No
SD-04745	Van Bueren, Thad	1988	*Arch. Assessment for the Batiquitos Lagoon Enhancement Project, San Diego County*	No
SD-04952	RECON	1985	*Draft Environmental Impact Report for the Batiquitos Lagoon Educational Park Master Plan EIR 84-3*	No
SD-06629	Rosen, Martin	1999	*Historic Property Survey Report Oceanside To San Diego-Rail to Trail*	No
SD-09361	Byrd, Brian F. and Collin O'Neill	2002	*Archaeological Survey Report for the Phase I Archaeological Survey along Interstate 5, San Diego County, CA*	No
SD-09571	Guerrero, Monica C. and Dennis R. Gallegos	2003	*City of Carlsbad Water and Sewer Master Plans Cultural Resource Background Study, City of Carlsbad, California*	No
SD-10004	Aislin-Kay, Marnie	2004	*Cultural Resource Record Search and Site Visit Results for Cingular Communications Facility Candidate (Cabo Grill), 1950 North Coast Highway, Encinitas, San Diego County, California*	Yes
SD-10372	Heritage Architecture & Planning	2006	*The Dolman House, 1657 Volcan Avenue, Encinitas, California, Historic American Buildings Survey Level III Documentation*	No
SD-11774	Robbins-Wade, Mary	2006	*Archaeological Survey Report, Encinitas Grade-Separated Pedestrian Crossings, Encinitas, San Diego County, California*	No
SD-12017	Gallegos, Dennis R., Monica Guerrero, Steven Van Wormer, and Susan Walter	2004	*Cultural Resource Survey and Evaluation for the Astor Gardens Project Encinitas, California*	No
SD-12401	Pierson, Larry J.	2008	*Historical Architectural Evaluation of the Structure at 1521 Neptune Avenue in Encinitas, California 92024*	No
SD-12543	Bonner, Wayne and Sarah Williams	2008	*Cultural Resource Records Search Results and Site Visit for T-Mobile USA Candidate Sd07108a (Cabo Grill R.O.W.) At 1967-1/2 North Highway 101, Encinitas, San Diego County, California*	No

Table 2, continued

Rpt. #	Author	Date	Title	In Project?
SD-13488	York, Andrew L. and John Hildebrand	2011	*Cultural Resources Investigation in Support of Consultation for the Regional Beach Sand II Project, San Diego County, California*	No
SD-16271	Fulton, Phil	2014	*Cultural Resource Assessment Class III Inventory Verizon Wireless Services 101 La Costa Facility City of Encinitas, San Diego County, California*	No
SD-16769	Smith, Brian F.	2016	*Preliminary Results: A Cultural Resources Survey for the La Costa 45 Project, City of Encinitas, California*	No
SD-17634	Davis, Nichole Jordan	2017	*Archaeological Testing and Research Design for the Weston Subdivision Project, City of Encinitas, San Diego County, California*	No
SD-17635	Zinn, Timothy G.	2017	*Findings of National Register Eligibility and Assessment of Integrity of the Weston Farm for the Weston Subdivision Project, Encinitas, San Diego County, California*	No
SD-18575	Keeler, Dustin and Sherri Gust	2014	*Cultural Constraints for the Batiquitos Lagoon Double-Track Project, Cities of Carlsbad and Encinitas, San Diego County, California*	Yes

Map and Aerial Search

The project area is first depicted in an1875 plat map for the Township 12 South, Range 4 West (BLO 1875). No potential resources are depicted within the project area at this early date nor on historical aerials until 1947 when three identical buildings at 1900 North Coast Highway appear in the eastern portion of the project area (UCSB 1932, 1939, 1947, 1953; USGS 1893, 1948, 1949). Prior to this the project area is depicted as vacant and appears to have been developed agriculturally as farmland (UCSB 1932, 1939). By 1953, an additional rectangular building had been added near the three buildings in the eastern portion of the project area (UCSB 1953). By 1975, an additional rectangular auxiliary building is displayed (UCSB 1975) nearby. Both auxiliary buildings were no longer extant by 1990 (Historicaerials.com 1990). The portion of the project area where site FEN-001 was discovered remained undeveloped throughout the twentieth century.

Regional Archaeological Investigations

The archaeological character of coastal San Diego County was recognized in the nineteenth century through the excavation of shell middens. However, significant scientific investigation of shell middens began with Malcolm J. Rogers of the San Diego Museum of Man between 1918 and 1945. Rogers documented the presence of numerous archaeological sites throughout western San Diego County, and he recognized several chronologically distinct categories of sites, whose relationships he attempted to unravel.

As part of a 1929 project under the auspices of the Smithsonian Institution, Rogers completed limited excavations at coastal sites between Mission Bay on the south and Buena Vista Lagoon on the north. Rogers never prepared a full report of the 1929 excavations though his field notes, site records, and documentation titled “Preliminary Report of Archaeological Work on Pacific Coast Shell-Middens during 1929” are on file at the Museum of Man (Rogers 1929b). The 1929 work presumably influenced Rogers’s early attempts to formulate the relative chronological placements and define the characteristics of the La Jolla (Littoral, Shell Midden), San Dieguito (Scraper Maker), and Yuman cultural complexes (Rogers 1929a, 1945).

After Rogers, several other investigators attempted to clarify some of the issues that had been raised by his pioneering work. Mabel Harding (1951) addressed the concept of the La Jolla complex through excavations at a site in Sorrento Valley. William J. Wallace (1955) developed a general chronology for coastal Southern California, assigning the local La Jolla complex components to a wider Millingstone Horizon. Clement W. Meighan and his student, D. L. True, conducted studies in inland areas of northern San Diego County that had relevance to the interpretation of coastal components as well (Meighan 1954; True 1958).

A number of sites along coastal San Diego County occurred in the late 1950s and early 1960s. Particularly notable were investigations at Batiquitos Lagoon by Warren and others of the UCLA Archaeological Survey in 1960–1961 (Crabtree, Warren, and True 1963; Warren, Warren, and Eudey 1961; Warren, Warren, and Chandonet 1961). Warren, True, and Eudey (1961) also made comparisons, primarily on the basis of survey data, among sites in several portions of western San Diego County. Excavation of burial sites in the community of La Jolla did much to define the characteristics of the La Jolla complex (Moriarty, Shumway, and Warren 1959; Shumway, Hubbs, and Moriarty 1961). James R. Moriarty III (1966, 1967) excavated an early Holocene component at Agua Hedionda Lagoon. Wallace (1960) surveyed sites within the Buena Vista watershed.

The most recent upsurge of archaeological work dates from the 1970s, when environmental laws began requiring consideration of the effects of development projects on cultural resources. Numerous large and small archaeological projects have been conducted near the central San Diego County coast ever since. Such issues as the chronology of coastal occupations and changes in local prehistoric lifeways continue to be debated and tested against the growing body of scientific archaeological evidence (e.g., Gallegos 1987b; Laylander 1993).

Sacred Land Files Search and Native American Scoping

As part of identification efforts, on September 4, 2020, Michael Baker International sent a letter describing the project to the NAHC and requesting a Sacred Lands File search; see Appendix C. Also requested were the names of Native American tribes and individuals who might have information or concerns about the project area. The NAHC responded on September 22, 2020, informing Michael Baker International that a search of the Sacred Lands File was negative and provided contact information for 20 individuals and tribes.

On December 16, 2020, the tribes provided by the NAHC were contacted for informal scoping to inform them about the project and to request information about tribal knowledge and concerns about the project. Follow-up phone calls and emails were undertaken for scoping between January 15, 2021, and January 20, 2021, with each tribe. The results are summarized below:

- Inaja-Cosmit Band of Indians: Rebecca Osuna, Chairperson, responded that the tribe had no questions/concerns as the project location is far from their homelands.
- Viejas Band of Kumeyaay Indians: Ernest Pingleton, Tribal Historic Officer, indicated that the tribe has reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the proposed project. The tribe requested that a Kumeyaay cultural monitor be on-site for ground-disturbing activities and to inform them of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains. The City indicated that the Phase II report will be available for review by the Tribe and that the City will coordinate if Viejas cultural monitors are needed.

- Barona Group of the Capitan Grande: Edwin Romero, retired Chairperson, did not respond. On behalf of the current Chairperson, Ray Welch, the Tribal Attorney, Art Bruce responded that the area generally is sensitive for cultural sites and requested consultation under Assembly Bill (AB) 52 with the City.

No response has been received from the following:

- Campo Band of Diegueno Mission Indians, Ralph Goff, Chairperson
- Jamul Indian Village, Erica Pinto, Chairperson, and Lisa Cumper, Tribal Historic Preservation Officer
- Ewiiaapaayp Band of Kumeyaa Indians, Michael Garcia, Vice Chairperson
- Ewiiaapaayp Band of Kumeyaay Indians, Robert Pinto, Chairperson
- Iipay Nation of Santa Ysabel, Virgil Perez, Chairperson, and Clint Linton, Director of Cultural Resources
- Kwaaymii Laguna Band of Mission Indians, Carmen Lucas
- La Posta Band of Diegueno Mission Indians, Gwendolyn Parada, Chairperson, and Javaughn Miller and James Hill, Tribal Administrators
- Manzanita Band of Kumeyaay Nation, Angela Elliott Santos, Chairperson
- Mesa Grande Band of Diegueno Mission Indians, Michael Linton, Chairperson
- San Pasqual Band of Diegueno Mission Indians, Allen Lawson, Chairperson, Steven Cope, Chairperson, and John Flores, Environmental Coordinator
- Sycuan Band of the Kumeyaay Nation, Cody Martinez, Chairperson, and Kristie Orosco, Kumeyaay Resource Specialist
- Viejas Band of Kumeyaay Indians, John Christman, Chairperson

Consultation with Native American tribes is ongoing for this project. The final consultation log will be appended to the environmental document completed for the project.

The San Luis Rey Band of Mission Indians will receive formal notification of the project under AB 52 consultation in accordance with City procedures.

3.0 RESEARCH DESIGN

The Phase II archaeological testing program addresses both management and research objectives. The primary goal of the testing and evaluation plan is to gather data necessary to evaluate the scientific importance of the site within the project area. This research design considers the potential contribution that the site may make to the resolution of regional issues in prehistory as they pertain to the Southern California Bight and San Diego County.

General research goals pertinent to site assessment include determination of the extent and integrity of cultural deposits, age, site and feature function, subsistence and technological strategies, and settlement organization. This research design is proposed within the cultural setting and frames the methods in the

fieldwork and laboratory analysis. The following research design follows those research domains outlined by Hearth and Duke (2021).

Chronology

Chronology has remained enigmatic in Southern California (Koerper et al. 1996:101) due to a host of factors, including destruction and looting of sites and the conservative progression of different tool forms through time. Significant data also would include the recovery of the datable items from meaningful contexts. These contexts would include similar stratigraphic positions with artifacts of relatively dated style, archaeological features (e.g., hot-rock cooking ovens or human remains), or with changing patterns in resource use (e.g., genera of exploited marine shellfish, such as *Mytilus* and *Donax*).

Archaeologists answer questions of chronology through two basic techniques: relative and absolute dating. Relative dating is a technique that relies upon distinctive types of artifacts that vary through time as seen in distinct stratigraphic sequences. It is based upon the assumption that "if one assemblage contains rigorously defined artifact types of known or presumed age, another assemblage that contains the same types of similar age" (Flenniken and Wilke 1989:149). Relative dating is useful because dates may be inferred with future discoveries of certain artifact styles. In Southern California projectile points (Justice 2002; Koerper and Drover 1983; Koerper et al. 1996), other stone tool forms (Erlandson, Braje, and Snitker 2008; Sutton 2019), beads (Groza et al. 2011; King 1990), and ceramics (Griset 1996) are common artifacts widely used in relative dating.

Absolute dating is the identification of an item's age in a fixed number of years before present. Absolute dating of archaeological material was not possible until the recognition of the regular decay of a radioactive isotope of carbon (C) and the invention of a method to measure this decay. The basic premise is that organisms such as animals or plants stop absorbing the nonradioactive form of carbon (12C) and the radioactive form of carbon (14C) upon death; 14C decays at a regular rate whereas the stable form, 12C, will not decay. The ratio of 14C to 12C therefore can indicate the age since 14C was last absorbed by the organism. Common biological items recovered at archaeological sites that can contain measurable amounts of 14C include faunal bone and shell, and charred plant remains. Other types of absolute dating methods include obsidian hydration rind dating and optical stimulated luminescence.

Research Questions

1. When was the site first occupied and when was it abandoned?
2. Are multiple time periods of occupation present at the site?
3. Can it be dated by both absolute and relative means?

Data Requirements

One objective of the testing is to acquire artifacts with known relative dates such as pottery (Griset 1996), projectile points (Justice 2002), lithic source materials (Pigniolo 1996), or beads (Groza et al. 2011; King 1990). The recovery of cultural material that is datable in an absolute sense, i.e., a certain number of years ago within a given margin of error, is also a primary goal of site evaluation efforts. Certain types of features that contain carbonized plant and animal material (ecofacts) are specifically sought after for absolute dating. Datable materials from meaningful archaeological contexts will be prioritized over disturbed or within natural soil horizons.

Settlement Patterns

Prehistoric settlement is fundamental to archaeology as the presence or absence of prehistoric material culture determines if a site or sites are present. However, settlement is more complicated than presence versus absence because to understand settlement patterns is to understand the repeated use of locales within a region, with a specific arrangement of various natural resources and cultural factors. The repeated use of certain locales creates patterns of use by prehistoric inhabitants which, with careful understanding of many variables, a system of spatially ordered land use may develop. This patterned distribution may depend on the subsistence base of a given group and their relations with neighbors, local environmental variables, historical factors, and cultural practices such as food acquisition (Hester, Shafer, and Feder 1997). Broadly, identification and analysis of the factors affecting individual sites' locations within a region are called settlement systems (Willey 1953; Kelly 1985). Settlement systems incorporate data from almost every other research domain in an attempt to ascertain and define all connections within that system.

In the coastal areas of prehistoric Southern California, archaeologists generally assume that the occupants were collectors of rich marine resources. They may have had some degree of seasonal migration inland within a specific territory of seasonally available resources. How this migration occurred, the timing, the periodicity, and other factors that determined how and when people moved from one area to the next are critical to reconstruction of prehistoric life-ways. Determining the season or seasons of occupation helps determine the broader patterns of mobility.

Regional mobility and settlement can be studied by examination of the distribution of identifiable sources of lithic material. Sourcing studies (either chemical or visual) of lithic raw materials can be used to study settlement patterns, such as the Lusardi Formation (metavolcanic) in the Poway region of San Diego County. This visually distinctive material has been used to model patterns of direct acquisition, transport, and mobility by ancient peoples in San Diego County (Pigniolo 2009).

Research Questions

1. How does the site fit within known regional settlement patterns?
2. Does the site represent a specialized processing camp and if so, can it be connected to a known base camp or village?
3. Why was the location of the site chosen over other locations?
4. What season or seasons of year was the site occupied?
5. If the site was occupied during an occupation hiatus of the Batiquitos Lagoon area (Gallegos 1985; Masters 1983; Miller 1966), why was this location chosen?

Data Requirements

Similar cultural components such as features or artifact classes that have been previously identified as indicators of settlement patterns will need to be present for intersite comparison. Mapping of natural features such as water and toolstone geologic sources needs to be undertaken. Data such as macrobotanical, vertebrate, and invertebrate remains, which could indicate seasonality of occupation, are considered against similar data from sites elsewhere.

Site Structure and Function

Site structure and function examines the intrasite spatial context horizontally and vertically, to pattern other data of activities, such as subsistence, within the site. Structure and function are assessed by identifying site size and the patterns of different features and artifact densities within the site. For example, by discovering and acquiring initial data from hot-rock cooking oven features across the site, it should be possible to develop ideas concerning site function and the patterned use of space within the site. Patterns of archaeological data may be used to identify patterns of social behavior if other factors such as site formation processes are considered.

Research Questions

1. What are the site's vertical and horizontal boundaries?
2. Do classes of artifacts vary by density or frequency across the site, vertically and horizontally?
3. Are different types of features present at the site and how are the features spatially distributed?
4. Do activity areas vary by temporal indicators such as might be expected with reoccupation of the site?

Data Requirements

Accuracy of the spatial (horizontal and vertical) arrangements of the materials remains within the site are paramount. Horizontal arrangements showing shovel test pits, surface discoveries, site boundaries, and natural features will all be necessary. Vertical relationships between soils, artifacts, and features will need to be recorded in the field.

Subsistence Practices

Subsistence-based research in Southern California divides into two categories: faunal and botanical. Plant subsistence-focused archaeology in Southern California has revolved around the role that acorns played in the inland areas (Basgall 2004; Baumhoff 1963; Kroeber 1976), marine resources on the coast (Byrd 1998; Noah 1998; Warren 1968), and the processing of seeds and grasses (Reddy 1999) on the ubiquitous milling features found upon bedrock outcrops throughout much of the landscape.

Research Questions

1. Are there food remains at the site?
2. Do food remains at the site indicate a diversified subsistence pattern or singular resource processing location such as a single species of a marine resource?
3. Do subsistence practices change through time?
4. Did the absolute and relative frequencies of marine shellfish genera (particularly *Chione*, *Argopecten*, *Ostrea*, *Mytilus*, and *Donax*) within archaeological middens shift in ways that are patterned and interpretable?
5. Are there discernible patterns of change in the exploitation of other elements of the biota such as fish or marine mammals?
6. Do the marine resources or ecofacts indicate seasonality of occupation?

7. Are food preparation features such as hot-rock cooking ovens or midden soil deposits present? If so, which features and what foods?

Data Requirements

The presence of the appropriate kinds of faunal residues will be necessary to answer the above research questions. The residues may need to be contexts that can be placed within a relative or absolute chronology. An effort is also made to use all cultural materials related to food acquisition and processing, such as bone, shell, and macrobotanicals to determine subsistence practices at the site. Excavation will need to utilize fine mesh screening (1/8 inch) to aid in the retention of these small ecofacts and possible food remains.

Site Formation Processes

Site formation processes are those that modify the patterns of evidence for different activities within the site (Wood and Johnson 1978). Various natural and post-depositional cultural processes can transform cultural material or the spatial patterning of that material. These changes can be to the form, spatial relationships between, and quantity of artifacts, ecofacts, and features. Problematically, these post-depositional processes will create patterns in the archaeological record that are unrelated to past human behavior from the time of the site's occupation (Schiffer 1987:11).

Site formation processes are varied. For example, wind and water erosion can cause deflationary soil environments so multiple time periods can be combined into a single surface. Other site formation processes, such as bioturbation from burrowing animals (Bocek 1986; Erlandson 1984) or plants (Wood and Johnson 1978:328-333), prehistoric recycling behavior by later occupants (Flenniken and Wilke 1989; Wilke and Flenniken 1991), and modern artifact collecting (Hart and Chilton 2014; Langenwalter and Brock 1985:Appendix C), can all obscure, homogenize, or destroy what were stratigraphically or horizontally distinct deposits. The goal of the current study is to identify intact stratigraphy, artifact assemblages, and features at the site that retain the data necessary to discuss site formation processes.

Research Questions

1. What is the soil deposition/erosion environment of the site?
2. Are there stratigraphic relationships that can be used for chronological purposes?
3. To what degree and how, if any, have bioturbation, artifact collecting, or modern activities affected site formation, including vertical and horizontal artifact and feature patterning?

Data Requirements

Data collected in the field will focus on natural and cultural forces shaping the site. Paramount in understanding the soil formation processes and depositional environment are soil horizon profiling, and color and texture analysis throughout the excavation. These data when combined with known soils mapping of the area advance understanding of how archaeological sites become buried and how soil formation processes continue to affect archaeological sites after burial. Other factors include processes of rodent burrowing and plant disturbance, so recordation of these natural processes occur throughout plan and profile drawing.

4.0 METHODS

The objectives of the Phase II program is divided into fieldwork and laboratory work. The primary objectives of both were to define the horizontal and vertical extent of each site, gauge the physical condition of the site, and recover sufficient information from the site to evaluate whether the portion of the site that will be impacted by the project contributes to the California Register eligibility of the site. To address these objectives, the field program focused on recording information necessary to identify site structure and estimate the types and densities of data classes at the site as well as, if possible, locating datable site components. By working within the goals identified by the testing treatment program, significant information contained at the site would be maximized.

Fieldwork at the site was conducted using standard archaeological techniques. These techniques provided the data used to assess resource significance. The methods for the Phase II testing program are discussed in detail below. All fieldwork work was conducted on December 1 and 2, 2020. Project overview photographs were taken; see Appendix D.

Supplemental Pedestrian Survey, Mapping, and Surface Collection

Michael Baker International Principal Investigator/Senior Archaeologist Nicholas F. Hearth MA, RPA, Field Technician Marcel Young, BA, and San Luis Rey Band of Mission Indians monitor Jessica Alexander conducted an intensive, 3-meter pedestrian field survey of the project area. The purpose of the supplemental survey was to further determine the horizontal extent of the site. The location of each artifact was recorded with a pin flag and given a unique number, building upon the previous survey efforts at the site (Hearth 2020). Each find was recorded with a Trible Geo XH submeter accurate GPS. Artifacts were bagged, tagged, and assigned a unique number.

Shovel Test Pits and Auger Holes

Six Shovel Test Pits (STPs) were hand-excavated to establish the approximate overall horizontal boundaries and depth of the site; see Appendix D. STPs were 50 centimeters square and excavated in arbitrary 10-centimeter levels by shovel, trowel, dustpan, and dig bar with a goal depth of 100 centimeters beneath surface (cm bs) or two culturally sterile levels, whichever was encountered first. If cultural deposits extended past this depth, excavation continued by hand with a 3.75-inch diameter sand auger. STP and auger forms were kept by the Senior Archaeologist. All excavated sediments were screened through a 1/8-inch wire mesh. Upon completion of excavating an STP, a sidewall was profiled. Information recorded during profiling included soil texture, depths of stratigraphic changes, soil color, and disturbances. A sample of the STPs sidewalls were photographed. All excavated locations were backfilled and the soil was compacted to minimize settling. Any artifacts recovered during excavation were bagged and tagged with pertinent provenience information. The bag log and STP forms were maintained by the Senior Archaeologist.

Laboratory Methods

All materials (67 artifacts and ecofacts) underwent laboratory processing and analysis. Upon arrival at the lab, the paperwork was cross-checked for consistency against all artifacts for data recordation consistency. The GPS data was downloaded and sent to Michael Baker International geographic information system specialists for processing and map creation.

The artifacts were cleaned as appropriate. The lithic (stone) artifacts were washed. The shell and bone artifacts were gently dry brushed unless damage to identifying characters would occur. After artifacts

were cleaned and dried, they were recounted and weighed on a Tree HRB20001 electronic balance. These data were recorded on Excel spreadsheets for tabulation. No attempt to identify species of the shell and bone artifacts was possible due to the high degree of fragmentation and weathering, which destroyed the characteristics necessary to complete the identification of different species of shellfish; see Appendix D for artifact photos.

Material identifications were made using a comparative collection of lithic material types, many of which are locally found within San Diego County. Low power magnification included the use of a Bausch and Lomb 14x magnification Hastings Triplet hand lens and a desk lamp with 3x magnification lens. The type collection includes 20 potential stone sources:

Igneous

- Andesite
- Basalt
- Granite
- Various sources, obsidians
- Various sources, Quartz

Metamorphic/Metavolcanic

- Bedford Canyon Formation
- Grimes Canyon Fused Shale
- Lusardi Formation*
- "Jasper" – Adelanto Region
- Various Sources, Santiago Peak Formation*
- Piedre de Lumbre*
- Rainbow Rock/ Wonderstone

Sedimentary

- Chert (Hoopaugh Site, CA-ORA-507)
- Arkosic Sandstone
- Chalcedony
- Franciscan Formation Chert
- Various Sources, Monterey Formation Chert
- Petrified Wood
- Tosawi Opalite
- Jasper (Ft. Irwin area)

Lithic tools were identified by macroscopic and low-power magnification with the same lenses used in the material. Flaked lithic artifacts were identified through standard archaeological methods such as recognition of the technological parameters that define flakes, flake cores and tools (Patten 1999, Whittaker 1994; Yohe 2002). Groundstone tools were identified by grinding, abrasion, and polish that would not be from natural means. Cultural grinding creates areas of greater polish and abrasion on the high spots on the topography of the tool (Adams 2014). This differential polish between high and low spots on an artifact was identified both by touch and visually. Ground stone tools can also be flaked and pecked during manufacture, both of which can be identified (Schneider 1996; Schneider, Lerch, and Smith 1995).

5.0 STUDY RESULTS

Surface Collection and Mapping

The site had a limited number of visible surface artifacts, as previously recorded (Hearth 2020). These include one fine-grained volcanic primary flake (Artifact 1); one granite/quartz FAR (Artifact 2); one granite flake fragment (Artifact 3); and one Santiago Peak Metavolcanic formation hammerstone (Artifact 4). On December 1, 2020, Principal Investigator/Senior Archaeologist Nicholas Hearth, Field Technician Marcel Young, and Native American monitor Jessica Alexander conducted an intensive survey of the entire site at 3-meter intervals to locate any additional artifacts for mapping and/or collection purposes. The granite flake (Artifact 3) and the Santiago Peak Formation Hammerstone (Artifact 4) could not be relocated. No additional artifacts were identified during the Phase II resurvey.

Two artifacts were collected (Artifacts 1 and 2) from the initial survey. These artifacts were bagged, given a field number, logged, and collected. Their locations were marked with labeled pin flags and their Universal Trans Mercator coordinates taken with a Trimble GeoXH GPS. Artifact 1 is a fine-grained volcanic

flake. Artifact 2 is a granite FAR which was collected for analysis to determine if it was also a ground stone artifact fragment.

Shovel Test Pits and Auger Holes

Six STPs were plotted and their positions recorded with a Trimble Geo XH GPS; see Appendix E. The STPs were then excavated to varying depths below the surface; see Appendix F. STPs 1, 2, and 6 were excavated to 100 cm, STP 3 to 60 cm, STP 4 to 50 cm, and STP 5 to 90 cm. STPs 1 and 2 each had 40 cm of augering in the bottom of the STP due to the presence of cultural material down to 100 cm. All soils were screened through 1/8-inch wire mesh. In total, 67 artifacts and ecofacts were recovered for an average of 11.2 items per STP. In total 1,250 liters of soil were excavated and screened. Artifact density was low with 0.054 artifacts per liter of soil. In other words, on average, 18.7 liters of soil were screened per artifact. This is a low artifact/ecofact density compared to the significant portions of sites in the area, such as CA-SDI-17928 (Davis 2017).

Flakes, flake fragments, and shatter were the most frequent (n=35) followed by 30 ecofacts (consisting of 27 shell fragments and 3 bone/teeth fragments). FAR (n=2) and items such as hammerstones (n=1) and ground stone artifact fragments (n=1) that had been recycled and used as FAR were present in low frequency. Multiple item categories only had one item represented, including a possible flake tool made from the Topaz Mountain reduction strategy (Flenniken and Spencer 2001; Ludwig 2005), a battered/ground stone tool, a flake core fragment, and a possible water boiling stone/tarring pebble. Due to the depth of cultural material in STPs 1 and 2, a 3.75-inch hand auger was used to continue the excavation down to a total of 140 cm bs in the bottom of these STPs. As with the STPs, all soils were screened with 1/8-inch mesh. No cultural material was discovered in the auger holes. Tabular data for the STPs by level are presented in Appendix F.

Soils

All six STPs were located in what has been mapped as Marina Series coarse sandy loam (NRCS 2020). Soils within the STPs were largely consistent, excepting minor variation in color, texture and depths of soil horizons. Gravel content was virtually none. One minor difference of the field data to the expected soil horizon information was the lack of an observable plow zone or zones. No distinctive cultural lenses, such as middens, were encountered in the STPs, such as have been observed at CA-SDI-17928 (Davis 2017). In general, disturbance from rodent burrows was moderate with less than half of any 10-cm level disturbed by rodent activity.

Lithic Artifact Identification

In laboratory analysis, the type material collection was referenced to compare lithic sources collected by the author from documented sources against the artifacts collected from the surface and in the STPs. For ease of analysis, two broad behavioral categories were developed. The first was for flaked stone. This included flakes, flake fragments, shatter, flake tools, and flake cores. The second was a combination of ground and battered stone tools and hammerstones, of which all had been or likely had been recycled as FAR. FAR is used as hot-rock cooking features or stones that likely had been brought to the site and only used in cooking.

Flaked Stone Artifacts

All flaked stone artifacts (n=38) were examined for the potential identification of the formation identification of the stone; see Table 3. The identification of the different stone sources/materials used in

flake stone technology did not show a clear preference for one source over another. Non-specific source volcanic artifacts (n=11, 26.3%), quartz/quartzite (n=8, 21.1%), Santiago Peak Metavolcanic (n=7, 18.4%), and basalt and other fine-grained volcanics (FGV) (n=6, 15.8%) occur in similar rates. Lusardi Formation, granite, and Bedford Canyon Formation metavolcanic all occurred in low frequencies. Due to the low number of overall flaked stone artifacts, no meaningful measurements such as statistical significance were attempted.

Table 3. Flaked Lithic Artifacts by Rock Materials by Depth

	Quartz/ Quartzite	Basalt/ FGV	Santiago Peak	Lusardi	Granite	Bedford Canyon	Vol. UNID
Surface							1
0-10 cm							
10-20 cm		1	1				1
20-30 cm	2	1	1		1		
30-40 cm		1					1
40-50 cm						1	3
50-60 cm			2	1		1	1
60-70 cm	2	3					1
70-80 cm	3					1	1
80-90 cm	1		2		1		
90-100 cm			1				2
Total	*8*	*6*	*7*	*1*	*2*	*3*	*11*
%	*21.1%*	*15.8%*	*18.4%*	*2.6%*	*5.3%*	*7.9%*	*26.3%*

A few flaked stone artifacts deserve mention. These include the possible Topaz Mountain reduction strategy seen in the flake tool recovered from STP 1, in the 60-70 cm bs level; see Appendix F. Topaz Mountain reduction strategy is a simple, but elegant, reduction strategy by which backed flake tools can be created through reduction of a single-platform flake core. Its occurrence is widespread, occurring from the western Mojave Desert (Hintzman and Garfinkel 2011) and the Coachella Valley (Ludwig 2005) (Flenniken and Spencer 2001) to the Baja Regions of southern San Diego and Imperial Counties (Ludwig 2005). The flake core from STP 6, 10-20 cm bs (see Appendix F) was very minimally reduced and likely represents very little flaking after initial assaying by the prehistoric knapper. The minimal number of flaked stone tools is consistent with the interpretation that occupation of the site would likely be low intensity and short term.

FAR and Ground/Battered Stone Artifacts

The second broad category included FAR and the various ground stone and hammerstones that had been recycled into FAR. Recycling of tool fragments as components of FAR features is a widespread occurrence during the prehistory of Southern California, but is not well documented in the archaeological literature (author's observation). All ground stone and FAR artifacts (n=8) were examined for the potential identification of the formation or source of the stone; see Table 4. The identification of the different stone sources/materials used in ground stone and FAR technology showed a preference for the use of granite over other lithic materials, but due to the low number of overall artifacts in this category, no meaningful measurements such as statistical significance were attempted.

Table 4. FAR and Ground/Battered and Other Lithic Artifacts by Rock Materials by Depth

Table 4, continued

	Quartz/ Quartzite	Granite	Bedford Canyon	Vol. UNID
Surface		1		
0-10 cm		1		
10-20 cm	1			
20-30 cm		1	1	1
30-40 cm				
40-50 cm				
50-60 cm				
60-70 cm				1
70-80 cm		1		
80-90 cm				
90-100 cm		1		
Total	*1*	*5*	*1*	*2*
%	*11.1%*	*55.6%*	*11.1%*	*22.2%*

The granite ground stone tool fragment recovered from STP1, in the 20-30 level, likely was a mano; see Appendix F. It showed no sign of additional modification except that which would result from minimal to moderate use before breaking by use or as a piece of rock in an earth oven. The possible tarring/boiling pebble from STP 1, from 70-80 cm bs, is of quartz; see Appendix F. The identification of this item as a possible cooking/tarring pebble is based upon its shape and the near lack of any similar gravel in the sandy matrix of the terrace where the site is located. This indicates that it was likely brought to the site during prehistory. From STP 2 in the 90-100 cm bs level, a granite battered stone/hammerstone that likely had been recycled as FAR, was discovered; see Appendix F. STP 5 had two hammerstones, one from 0-10 cm bs, the second from 60-70 cm bs. The material of the more shallowly discovered hammerstone was granite whereas the more deeply buried hammerstone was only broadly identifiable as volcanic (igneous) in origin; see Appendix F.

6.0 ANALYSIS

Overall, FEN-001 consists of a sparse and diffuse assemblage of shell and bone ecofacts and lithic artifacts consisting of flaking debris, and few tools such as a flake tool, hammerstones, ground stone, and FAR. No features such as hot-rock cooking ovens or midden, or dense deposits of cultural material such as knapping stations, were discovered. Also lacking are chronologically distinct artifact types which could more specifically define a chronologically distinct age within the broadly defined prehistoric period. The site has been minimally impacted through a combination of rodent burrowing, agriculture, present-day use as parking lot, and water erosion.

Research domains focus on organizing regionally important information into a series of related ideas in the archaeological record. As described above, these combine what is known and the data gaps in the archaeological record for FEN-001. As the domains represent different elements of human behavior, they frequently overlap. The five research domains proposed for this project are chronology, settlement patterns, site structure and function, subsistence practices, and site formation processes.

Chronology

1. When was the site first occupied and when was it abandoned?

   a. The site is distinctively prehistoric in its character though its period(s) of occupation could not be defined due to a lack of singular contexts to date, such as archaeological features containing ecofacts such as carbonized wood, shell or bone. Artifacts potentially dated through stylistic seriation were also not recovered.

2. Are multiple time periods of occupation present at the site?
   a. This is unknown. The artifact assemblage is too sparse to indicate any datable materials through relative or stylistic means, such as with shell beads, pottery, or projectile points. No chronologically distinct deposits are present such as culturally sterile strata above and below materially distinct assemblages.

3. Can it be dated by both absolute and relative means?
   a. No. It cannot be dated through relative means. The faunal ecofacts (bone and shell) could be individually dated with absolute means, but as these do not come from archaeological features, such as subsurface roasting pits, dating would not be data from secure archaeological contexts. Also, absolute dating was not undertaken due to the low to moderate mixing of the ecofacts from within the soil profile from rodent burrowing.

Settlement Patterns

1. How does the site fit within known regional settlement patterns?
   a. The site likely represents a minimally occupied campsite with minimal food preparation (FAR and ecofacts) and stone knapping (flaked-stone artifacts and hammerstones). The sparse artifact assemblage is consistent with the interpretation that it was sparsely or infrequently used by mobile foragers.

2. Does the site represent a specialized processing camp and if so, can it be connected to a known base camp or village?
   a. No, the activities that occurred at the camp likely were common in that they involved the preparation of food and knapping of stone. The low artifact density and lack of midden deposits indicates that occupation duration was likely minimal. The connection of FEN-001 to a base camp or village is not possible due to the lack of chronologically distinct artifact forms or datable ecofacts that could indicated the possibility of synchronic occupation between sites.

3. Why was the location of the site chosen over other locations?
   a. The location was likely chosen due to the close proximity of Batiquitos Lagoon, the Pacific Ocean and what would have been excellent visibility in a near-complete 360 degree aspect.

4. What season or seasons of year was the site occupied?
   a. Seasonality of occupation is unknown from the present data. No data was recovered that could indicate the time of year the site was occupied. An archaeological feature such as buried rock oven could have contained these data, but no such feature was discovered.

5. If the site was occupied during an occupation hiatus of the Batiquitos Lagoon area (Gallegos 1985; Masters 1983; Miller 1966), why was this location chosen?
   a. Current data about FEN-001 does not indicate when the site was occupied and consequently, the question of hiatus cannot be answered.

Site Structure and Function

1. What are the site's vertical and horizontal boundaries?
    a. The east–west boundary is relatively well understood due to the decrease in artifact density in the eastern STPs and the western boundary formed by modern landscaping and development. The north to south boundary is less understood as STPS 5 and 6 had enough artifacts that the north-south boundary of the site is currently unknown.
2. Do classes of artifacts vary by density or frequency across the site, vertically and horizontally?
    a. Generally no. The overall artifact and ecofact density was low, so small changes in frequency can mistakenly appear to become meaningful archaeological data. Due to soil mixing, likely from rodent burrows, artifacts tend to be located between 40-50 cm beneath the surface.
3. Are different types of features present at the site and how are the features spatially distributed?
    a. No archaeological features such as subsurface cooking features or midden soil deposits are currently known.
4. Do activity areas vary by temporal indicators such as might be expected with reoccupation of the site?
    a. No.

Subsistence Practices

1. Are there food remains at the site?
    a. Yes, highly fragmented shells and a single calcined bone was recovered. The soils did not have characteristics of being midden such as a dark color, the staining of clean surfaces, or a greasy/oily texture.
2. Do food remains at the site indicate a diversified subsistence pattern or singular resource processing location such as a species of a marine resource?
    a. The predominance of highly fragmented shell resources indicates that the site likely focused on the processing of shellfish.
3. Do subsistence practices change through time?
    a. Due to soil mixing from rodent activity and the lack of datable archaeological features, no diachronic approaches to examining subsistence practices were possible.
4. Did the absolute and relative frequencies of marine shellfish genera (particularly *Chione*, *Argopecten*, *Ostrea*, *Mytilus*, and *Donax*) within archaeological middens shift in ways that are patterned and interpretable?
    a. No, as the overall fragmentary and weathered nature of the shell ecofacts prevented identification of genera.
5. Are there discernible patterns of change in the exploitation of other elements of the biota such as fish or marine mammals?
    a. Except for three calcined bone fragments and a tooth fragment, no other faunal remains were recovered.
6. Do the marine resources or ecofacts indicate seasonality of occupation?

a. No data were identified to indicate seasonality, such as features that might contain pollens or starches from season-specific plants or ecofacts from migratory animals.

7. Are food preparation features such as hot-rock cooking ovens or midden soil deposits present? If so, which features and what foods?

   a. No food preparation features such as hot-rock cooking ovens or midden soil deposits were present. The use of hot-rock cooking ovens is implied by the presence of FAR at the site, but ovens such as these can be taken apart during removal of the food after cooking, thereby potentially destroying the possibility of finding intact archaeological features (Thoms 2003). Also, the low artifact density indicates the possibility of short occupation of the site. Repeated, long-term occupation is generally required to make midden soils.

Site Formation Processes

1. What is the soil deposition/erosion environment of the site?

   a. The soil deposition environment likely was as a Holocene-age dune deposit. Dune deposits during formation and before stabilization can be both accumulating and erosional soil environments. Once stabilized, soil movement is minimized. Surficial and shallow disturbances to the soil would include the historical use of the lot for agriculture as seen in historical period photos (UCSB 1932, 1939), the ongoing use of the location of the site as a parking lot which has resulted in vegetation loss, and subsequent erosion.

2. Are there stratigraphic relationships that can be used for chronological purposes?

   a. No. No archaeological differentiation between different natural strata could be made. These strata could be either through differences in material culture assemblages or through distinct strata that indicate changes in soil depositional environments. Neither case was present.

3. To what degree and how, if any, have bioturbation, artifact collecting, or modern activities affected site formation including vertical and horizontal artifact and feature patterning?

   a. Bioturbation was present through the evidence of rodent burrows in each of the STPs during excavation, as well as numerous, large piles of rodent-burrow back dirt upon the surface. Likely this is a process that occurred both in the present day and during historic and prehistoric times. No direct evidence of artifact collecting was seen though, due to the use of the area in which the site is located as a parking lot, recognition and collection of artifacts by the public cannot be ruled out. For example, during the survey in October, a Santiago Peak Metavolcanic hammerstone was observed and recorded. During testing, this artifact could not be relocated. Either erosion or artifact collecting could explain the disappearance of this artifact.

7.0 CALIFORNIA REGISTER EVALUATION

In accordance with CEQA Section 15064.5(a), a resource shall be considered by the lead agency to be historically significant if the resource is listed in or meets the criteria for listing in the California Register, is listed in a local register of historical resources, or is identified as significant in a historical resources survey. Historical resources may be eligible for inclusion in the California Register if they possess historic integrity and any of the following is true:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. The resource is associated with the lives of persons important in our past;
3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and/or
4. The resource has yielded, or may be likely to yield, information important in prehistory or history.

All cultural resources must be evaluated under the four criteria. A few generalities may be made about this process. Prehistoric archaeological sites are frequently only evaluated only under Criteria 4 as significant events (Criterion 1), important persons (Criterion 2), or distinctive characteristics (Criterion 3) are not knowable due to the age of the site, loss of traditional knowledge of the material assemblage at the site, and post-depositional processes. As a general rule, buried cultural deposits can have data potential but importance of those data will need to be considered.

Five areas of important research for the site—chronology, settlement, site structure and function, subsistence practices, and site formation processes—have been developed. These research areas, called domains, are the important areas where scientific archaeological data would indicate the possibility of significance. Research questions and data requirements outline what data is required to indicate significance as well.

The data recovered from the site have been used to attempt to answer the important questions about prehistory within the research design. By and large, the data recovered from the site have not been able to answer the research questions. As the research questions cannot be answered, the site does not have, or have the potential to yield, important information about prehistory.

8.0 CONCLUSIONS

This Phase II testing and evaluation report documents the methods and results of the California Register evaluation of FEN-001 and includes a prehistoric and environmental context, background research, research design, updated DPR 523 forms, and summary and recommendations. FEN-001 is recommended not eligible for listing in the California Register and is not a historical resource or unique archaeological resource; therefore, the project will not impact historical/archaeological resources as defined by CEQA Section 15064.5(a) or PRC 21083.2(g).

Recommendations

If changes are made to project planning area boundaries or if the level of planned disturbance within those planning areas changes, the changes will need to be reviewed by a qualified archaeologist and the recommendations herein may be subject to change.

There is still the potential for the discovery of unknown archaeological deposits during earth-moving activities and there is still the potential for significant impacts to cultural deposits, if discovered. This impact could be considered potentially significant. Recommendations include:

Cultural Resources Monitoring Program. A Cultural Resource Mitigation Monitoring Program shall be conducted to provide for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the proposed project. The monitoring shall consist of the full-time presence of a qualified archaeologist and a traditionally and culturally affiliated (TCA) Native American monitor (San Luis Rey Band of Mission Indians) shall be retained to monitor all ground-disturbing activities associated with project construction, including vegetation

removal, clearing, grading, trenching, excavation, or other activities that may disturb original (pre-project) ground, including the placement of imported fill materials and related roadway improvements (i.e., for access).

- The requirement for cultural resource mitigation monitoring shall be noted on all applicable construction documents, including demolition plans, grading plans, etc.
- The qualified archaeologist and TCA Native American monitor shall attend all applicable pre-construction meetings with the Contractor and/or associated Subcontractors.
- The qualified archaeologist shall maintain ongoing collaborative consultation with the TCA Native American monitor during all ground disturbing or altering activities, as identified above.
- The qualified archaeologist and/or TCA Native American monitor may halt ground disturbing activities if archaeological artifact deposits or cultural features are discovered. In general, ground disturbing activities shall be directed away from these deposits for a short time to allow a determination of potential significance, the subject of which shall be determined by the qualified archaeologist and the TCA Native American monitor, in consultation with the San Luis Rey Band of Mission Indians ("San Luis Rey Band"). Ground disturbing activities shall not resume until the qualified archaeologist, in consultation with the TCA Native American monitor, deems the cultural resource or feature has been appropriately documented and/or protected. At the qualified archaeologist's discretion, the location of ground disturbing activities may be relocated elsewhere on the project site to avoid further disturbance of cultural resources.
- The avoidance and protection of discovered unknown and significant cultural resources and/or unique archaeological resources is the preferable mitigation for the proposed project. If avoidance is not feasible a Data Recovery Plan may be authorized by the City as the lead agency under CEQA. If a data recovery is required, then the San Luis Rey Band shall be notified and consulted in drafting and finalizing any such recovery plan.
- The qualified archaeologist and/or TCA Native American monitor may also halt ground disturbing activities around known archaeological artifact deposits or cultural features if, in their respective opinions, there is the possibility that they could be damaged or destroyed.
- The landowner shall relinquish ownership of all tribal cultural resources collected during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the San Luis Rey Band for respectful and dignified treatment and disposition, including reburial, in accordance with the Tribe's cultural and spiritual traditions. All cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission per California Public Resources Code Section 5097.98.

Prepare Monitoring Report and/or Evaluation Report. Prior to the release of the Grading Bond, a Monitoring Report and/or Evaluation Report, which describes the results, analysis and conclusions of the cultural resource mitigation monitoring efforts (such as, but not limited to, the Research Design and Data Recovery Program) shall be submitted by the qualified archaeologist, along with the TCA Native American monitor's notes and comments, to the City's Development Services Director for approval.

Identification of Human Remains. As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the qualified archaeologist and/or the TCA Native American monitor) shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the qualified archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by state law, the Coroner would determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. If Native American remains are discovered, the remains shall be kept in situ ("in place"), or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of the TCA Native American monitor.

9.0 REFERENCES CITED

Adams, Jenny L. 2014. *Ground Stone Analysis: A Technological Approach*. , Salt Lake City, University of Utah Press.

Anderson, R. S., and Brian F. Byrd. 1998. "Late-Holocene Vegetation Changes from the Las Flores Creek Coastal Lowlands, San Diego County, California." *Madrono* 45(2): 171–182.

Antevs, Ernst. 1948. "Climate Changes and Pre-white Man." *University of Utah Bulletin* 38(20): 167–191.

ASM Affiliates, Inc. 2006. *Archaeological Evaluation Report for Nine Prehistoric Sites (CA-SDI-4553, -6831, -7296, -12121, -13484, -16639, -17672, -17673, and -17928) on the Central San Diego Coast, San Diego County, California.*

Basgall, Mark E. 2004. "Resource Intensification Among Hunter-Gatherers: Acorn Economies in Prehistoric California." In *Prehistoric California Archaeology and the Myth of Paradise*, edited by Mark Raab and Terry L. Jones, pp. 86–98. Salt Lake City: University of Utah Press.

Baumhoff, Martin A. 1963. "Ecological Determinants of Aboriginal California Populations." In *University of California Publications in American Archaeology and Ethnology*, Vol. 49, edited by R. F. Heizer, W. R. Bascom, and E. A. Hammel, pp. 155-236. Berkeley, CA: University of California Press.

Bean, Lowell J., and Florence C. Shipek. 1978. "Luiseño." In *California*, edited by Robert F. Heizer, pp. 550–563. *Handbook of North American Indians*, Vol. 8, W. C. Sturtevant, general editor. Washington, DC: Smithsonian Institution.

BLO (Bureau of Land Office). 1875. *Original Survey*. Accessed December 5, 2020. https://glorecords.blm.gov/ConvertedImages/Plat_290844_1.PDF .

Bocek, Barbara. 1986. "Rodent Ecology and Burrowing Behavior: Predicted Effects on Archaeological Site Formation." *American Antiquity* 51:589-603.

Bull, Charles S. 1983. "Shaking the Foundations: The Evidence for San Diego Prehistory." San Diego State University Cultural Resource Management Center Casual Papers 1(3): 15–64.

———. 1987. "A New Proposal: Some Suggestions for San Diego Prehistory." In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis Gallegos, pp. 35–42. San Diego County Archaeological Society Research Paper No. 1.

Byrd, Brian F. 1998. "Harvesting the Littoral Landscape During the Late Holocene: New Perspectives from Northern San Diego County." *Journal of California and Great Basin Anthropology* 20:195-218.

Christenson, Lynne E. 1989. "The Late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence Systems." Ph.D. dissertation, Arizona State University.

Crabtree, Robert H., Claude N. Warren, and Delbert L. True. 1963. "Archaeological Investigations at Batiquitos Lagoon, San Diego County, California." *Archaeological Survey Annual Report 1962–1963*: 407–459. University of California, Los Angeles.

Davis, Emma L., and Richard Shutler, Jr. 1969. "Recent Discoveries of Fluted Points in California and Nevada." *Nevada State Museum Anthropological Papers* 14: 154–169.

Davis, Nichole Jordan. 2017. *Archaeological Testing and Research Design for the Weston Subdivision Project, City of Encinitas, San Diego County, California*. Carlsbad, CA. Michael Baker International.

Erlandson, Jon M. 1984. "A Case Study in Faunalturbation: Delineating the Effects of the Burrowing Pocket Gopher on the Distribution of Archaeological Materials." *American Antiquity* 49:785-790.

Erlandson, Jon, Todd Braje, and Grant Snitker. 2008. "Two Chipped Stone Crescents from CA-SMI-680, Cardwell Bluffs, San Miguel Island, California." *Current Research in the Pleistocene* 25:81-83.

Ezell, Paul H. 1983. "A New Look at the San Dieguito Culture." San Diego State University Cultural Resource Management Center Casual Papers 1(3): 103–109.

———. 1987. "The Harris Site – an Atypical San Dieguito Site or Am I Beating a Dead Horse?" In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis R. Gallegos, pp. 15–22. San Diego County Archaeological Society Research Paper No. 1.

DeCourten, Frank. 2010. "Geology of Southern California." Electronic document, https://www.yumpu.com/en/document/view/10088307/geology-of-southern-californiapdf-grossmont-college, accessed February 1, 2021.

Flenniken, Jeffrey, and A.C. Spencer. 2001. "In-Field, On-Site Analysis of Lithic Debitage Dominated Sites (LDDS) Associated with the McCoy Wash Watershed Project, Riverside County, California." In *A Cultural Resource Inventory of the Proposed McCoy Wash Watershed Project near Blythe, Riverside County, California*, by Alan C. Spencer, Jerry Reioux and Julia Grim. Prepared for the Natural Resources Conservation Service, Davis, California.

Flenniken, J. Jeffrey and Phillip Wilke. 1989. Typology, Technology, and Chronology of Great Basin Dart Points. *American Anthropologist* 91(1):149-158.

Gallegos, Dennis R. 1985. "Batiquitos Lagoon Revisited." San Diego State University Cultural Resource Management Center Casual Papers 2(1): 1–13.

———. 1987a. "A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region." In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis Gallegos, pp. 23–34. San Diego County Archaeological Society Research Paper No. 1.

———. 1987b. *San Dieguito-La Jolla: Chronology and Controversy*. San Diego County Archaeological Society Research Paper No. 1.

———. 1992. "Patterns and Implications of Coastal Settlement in San Diego County: 9000 to 1300 Years Ago." In *Essays on the Prehistory of Maritime California*, edited by Terry L. Jones, pp. 205–216. Center for Archaeological Research at Davis Publication No. 10.

———. 2017. *First People: A Revised Chronology for San Diego County*. San Diego, California. StorySeekers.

Gallegos, Dennis R., and Carolyn Kyle. 1988. *Five Thousand Years of Maritime Subsistence at Ballast Point Prehistoric Site SDI- 48 (W-164) San Diego*. San Diego: Westec Services.

Griffith, Glenn E., James M. Omernik, David W. Smith, Terry D. Cook, Ed Tallyn, Kendra Moseley, and Colleen B. Johnson. 2016. *Ecoregions of California*. Ecoregion map, 1:1,100,000. Washington DC. US Geological Open-File Report 2016-1021.

Griset, Suzanne. 1996. "Southern California Brown Ware." PhD dissertation, Department of Anthropology, University of California, Davis.

Groza, Randall G., Jeffrey Rosenthal, John Southon, and Randall Milliken. 2011. "A Refined Shell Bead Chronology for Late Holocene Central California." *Journal of California and Great Basin Anthropology* 31:135-154.

Hanna, David C. 1983. "A Major Challenge to 'San Dieguito' and 'La Jolla'." San Diego State University Cultural Resource Management Center Casual Papers 1(3): 76–102.

Harding, Mabel. 1951. "La Jollan Culture." *El Museo* 1(1): 10–11; 31–38. San Diego.

Hart, Siobhan M. and Elizabeth S. Chilton 2014. "Digging and Destruction: Artifact Collecting as Meaningful Social Practice." *International Journal of Heritage Studies* 350. Electronic document, http://dx.doi.org/10.1080/13527258.2014.934267, accessed January 27, 2021.

Hearth, Nicholas F. 2020. Department of Parks and Recreation (DPR) 523 forms for site FEN-001. Records on file with the South Coastal Information Center, San Diego.

Hearth, Nicholas F. and Curt Duke. 2021. "Chapter 4, Research Design: Research Domains, Questions, and Data." In *Skyridge Project: Data Recovery Report at CA-ORA-507*. Ms. in possession of author.

Hearth, Nicholas F. and Chris Wendt. 2021. *Cultural Resources Identification: Marea Village Mixed Use Development Project.* San Diego, CA: Michael Baker International.

Hester, Thomas R. Harry J. Shafer, and Kenneth L. Feder. 1997. *Field Methods in Archaeology*. 7th edition. Walnut Creek, CA: Left Coast Press Inc.

Hintzman, Marc. W. and Alan Garfinkel. 2011. "Behavioral Snapshots: Single-Reduction Loci Patterning in the Mojave Desert." *SCA Proceedings* 25:1–9.

Historicaerials.com. 1990. Aerial photograph of 1900 North Coast Highway 101. Accessed multiple, https://www.historicaerials.com/.

Inman, D. L. 1983. "Application of Coastal Dynamics to the Reconstruction of Paleocoastlines in the Vicinity of La Jolla, California." In *Quaternary Coastlines and Marine Archaeology*, edited by P. M. Masters and N. C. Flemming, pp. 1–49. New York: Academic Press.

Jones, Terry L. 1992. "Settlement Trends along the California Coast." In *Essays on the Prehistory of Maritime California*, edited by Terry L. Jones, pp. 1–37. Center for Archaeological Research at Davis Publication No. 10.

Jones, Terry L., Gary M. Brown, L. Mark Raab, Janet L. McVickar, W. Geoffrey Spaulding, Douglas J. Kennett, Andrew York, and Phillip L. Walker. 1999. "Environmental Imperatives Reconsidered: Demographic Crises in Western North America during the Medieval Climatic Anomaly." *Current Anthropology* 40: 137–169.

Justice, Noel D. 2002. *Stone Age Spear and Arrow Points of California and the Great Basin*. University of Indiana Press, Indianapolis.

Kelly, Robert L. 1985. "Hunter-Gatherer Mobility and Sedentism: A Great Basin Study." Unpublished Ph.D. Dissertation, Department of Anthropology, University of Michigan.

King, Chester D. 1990. "Evolution of Chumash Society: A Comparative Study of Artifacts Used for Social System Maintenance in the Santa Barbara Channel Region before A. D. 1804." 1982 PhD dissertation, Department of Anthropology, University of California, Davis. Updated and reprinted. New York: Garland Publishing Inc.

Kirby, Matthew E.C., William P. Patterson, Matthew Lachniet, James A. Noblet, Michael A. Anderson, Kevin Nichols and Judith Avila. 2019. "Pacific Southwest United States Holocene Droughts and Pluvials Inferred From Sediment δ18O(calcite) and Grain Size Data (Lake Elsinore, California)." *Frontiers in Earth Science* 7: 74

Kroeber, Alfred L. 1976. *Handbook of the Indians of California*. Reprinted. Dover Publications, Inc. New York. Originally published 1925, Bulletin No. 78, Bureau of American Ethnology. Washington, DC: Smithsonian Institution.

Koerper, Henry C., and Christopher E. Drover. 1983. "Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A." *Pacific Coast Archaeological Society Quarterly* 19(2):1–34.

Koerper, Henry C., Adella B. Schroth, Roger D. Mason and Mark L. Peterson. 1996. "Arrow Projectile Point Types as Temporal Types: Evidence from Orange County, California." *Journal of California and Great Basin Anthropology* 18:258-283.

Langenwalter, Paul and James Brock. 1985. *Phase II Archaeological Studies: Prado Basin and the Lower Santa Ana River*. ECOS Management Criteria, Inc. Submitted to U.S. Army Corps of Engineers. Copies available at South Central Coastal Information Center, Fullerton.

Laylander, Don, ed. 1993. *Research Issues in San Diego Archaeology*. Revised edition. San Diego County Archaeological Society.

Laylander, Don, and Dan Saunders. 1993. "Donax Exploitation on the Pacific Coast: Spatial and Temporal Limits." *Proceedings of the Society for California Archaeology* 6: 313–325.

Ludwig, Brian. 2005. "The Northern Baja Pipeline Project: Lithic Artifact Studies." *Proceedings of the Society for California Archaeology*, Volume 18: 120-130.

Luomala, Katherine. 1978. "Tipai and Ipai." In *California*, edited by Robert F. Heizer, pp. 592–609. *Handbook of the North American Indians*, Vol. 8, W. C. Sturtevant, general editor. Washington, DC: Smithsonian Institution.

Masters, Patricia M. 1983. "Detection and Assessment of Prehistoric Artifact Sites off the Coast of Southern California." In *Quaternary Coastlines and Marine Archaeology: Towards the Prehistory of Land Bridges and Continental Shelves*, edited by P. M. Masters and N. C. Flemming, pp. 189–214. New York: Academic Press.

Masters, Patricia M., and Dennis R. Gallegos. 1997. "Environmental Change and Coastal Adaptations in San Diego County during the Middle Holocene." In *Archaeology of the California Coast during the Middle Holocene*, edited by Jon M. Erlandson and Michael A. Glassow, pp. 11–21. Perspectives in California Archaeology No. 4. University of California, Los Angeles.

Meighan, Clement W. 1954. "A Late Complex in Southern California Prehistory." *Southwestern Journal of Anthropology* 10: 215–227.

Miller, Jacquelin N. 1966. "The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons." Master's thesis, Scripps Institution of Oceanography, University of California, San Diego.

Moratto, Michael J. 1984. *California Archaeology*. Orlando, FL: Academic Press.

Moratto, Michael J., Thomas F. King, and Wallace B. Woolfenden. 1978. "Archaeology and California's Climate." *Journal of California Anthropology* 5: 147–161.

Moriarty, James R., III. 1966. "Cultural Phase Divisions Suggested by Typological Change Coordinated with Stratigraphically Controlled Radiocarbon Dating at San Diego." *Anthropological Journal of Canada* 4: 20–30.

———. 1967. "Transitional Pre-desert Phase in San Diego County, California." *Science* 155: 553–556.

Moriarty, James R., III, George Shumway, and Claude N. Warren. 1959. "Scripps Estates Site I (SDi-525): A Preliminary Report on an Early Site on the San Diego Coast." *Archaeological Survey Annual Report 1958–1959*: 185–216. University of California, Los Angeles.

Noah, Anna C. 1998. "Prehistoric Fishing on the San Diego Coast." *Pacific Coast Archaeological Society Quarterly* 34(2):5-31.

Norris, Robert M. and Robert W. Webb. 1976. *Geology of California*. 2nd ed. New York: John Wiley & Sons.

Nova Services Inc. 2020. *Revised Report Geotechnical Investigation: Leucadia Mixed-Use 1900-1950 North Coast Highway, Encinitas, California*. San Diego/Dana Point, California.

NRCS (Natural Resource Conservation Service). 2001. "Marina Series Soil Description." Accessed November 29, 2020. https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MARINA.html.

———. 2020. Soil Mapping. Accessed November 29, 2020. https://websoilsurvey.nrcs.usda.gov/.

Patten, Bob. 1999. *Old Tools-New Eyes: A Primal Primer of Flintknapping*. Denver, Colorado. Stone Dagger Publications.

Pigniolo, Andrew R. 1996. "Lithic Material Types as a Chronological Indicator in the Archaeological Record of San Diego County." *Proceedings of the Society for California Archaeology* 9:209-220.

———. 2004. "Points, Patterns, and People: Distribution of the Desert Side-Notched Point in San Diego." *Proceedings of the Society for California Archaeology* 14: 27–39.

———. 2009. "Patterns in Stone: Mobility and the Distribution of Locally Important Lithic Material." *Proceedings for the Society for California Archeology* 22:1-10.

Reddy, Seetha. 1999. "Plant Usage and Prehistoric Diet: Paleoethnobotanical Investigations on Camp Pendleton, Southern California." *Pacific Coast Archaeological Society Quarterly* 35(4):25-44.

Rogers, Malcolm J. 1929a. "The Stone Art of the San Dieguito Plateau." *American Anthropologist* 31: 454–467.

———. 1929b. Field Notes: 1929 San Diego-Smithsonian Expedition. Manuscript on file at the San Diego Museum of Man.

———. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1: 167– 198.

———. 1966. *Ancient Hunters of the Far West*, edited by Richard F. Pourade. San Diego: Union-Tribune Publishing Company.

Rogers, Thomas. 1965. *Geologic Map of California, Santa Ana Sheet*. 1:250,000 scale geologic map. Sacramento. State of California Mines and Geology.

Schiffer, Michael B. 1987. *Formation Processes of the Archeological Record*. Salt Lake City: University of Utah.

Schneider, Joan. 1996. Quarrying and Production of Milling Implements at Antelope Hill, Arizona. *Journal of Field Archaeology* 23:299-311.

Schneider, Joan S., Michael K. Lerch, Gerald A. Smith. 1995. A Milling-Implement Quarry at Elephant Mountain, California. *Journal of California and Great Basin Anthropology*. 17:191-221.

Shumway, George, Carl L. Hubbs, and James R. Moriarty, III. 1961. "Scripps Estate Site, San Diego, California: A La Jolla Site Dated 5460 to 7370 Years Before the Present." *Annals of the New York Academy of Sciences* 93: 37–132.

Strong, William Duncan. 1929. "Aboriginal Society in Southern California." *University of California Publications in American Archaeology and Ethnology* 26: 1–249.

Sutton, Mark Q. 2019. "Reassessing the Paleoindian Witt Archaeological Locality, Tulare Lake, San Joaquin Valley, California." *PaleoAmerica* 5(3):276-299.

Sutton, Mark Q. and Jill K. Gardner. 2010. "Reconceptualizing the Encinitas Tradition of Southern California." *Pacific Coast Archaeological Society Quarterly* 42 (4): 1-64.

Thoms, Alson V. 2003. "Cook-Stone Technology in North American: Evolutionary Changes in Domestic fire Structures during the Holocene." In *Le Feu Domestique et Ses Structures au Neolithic aux Ages des Metaux*, edited by Christophe Bontemps, Jacqueline Chastel, Georges Vicherd, and Alain Villes, pp. 87-96. Montagnac, France: Éditions Monique Mergoil.

True, D. L. 1958. "An Early Complex in San Diego County, California." In *American Antiquity* 23: 255– 263.

———. 1966. "Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California." Ph.D. dissertation, University of California, Los Angeles.

———. 1980. "The Pauma Complex in Northern San Diego County: 1978." In *Journal of New World Archaeology* 3(4): 1–39.

UCSB (University of California, Santa Barbara). 1932. Aerial photograph C-1980. Accessed multiple. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-1980.

———1939. Aerial photograph C-5750. Accessed multiple. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-5750.

———1947. Aerial photograph GS-CP. Accessed multiple. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=GS-CP.

———1953. Aerial photograph AXN-1953. Accessed multiple. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AXN-1953.

———1975. Aerial photograph TG-7500. Accessed multiple. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=TG-7500.

USGS (US Geological Survey). 1893. Oceanside, Calif. 1:24,000 scale topographic quadrangle. Reston, VA: US Department of the Interior.

———.1948 (Photo revised 1955). Encinitas, Calif. 1:24,000 scale topographic quadrangle. Reston, VA: US Department of the Interior.

———.1949. Encinitas, Calif. 1:24,000 scale topographic quadrangle. Reston, VA: US Department of the Interior.

Wallace, William J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11: 214–230.

———. 1960. "Archaeological Resources of the Buena Vista Watershed, San Diego County, California." In *Archaeological Survey Annual Report 1959–1960*: 277–306. University of California, Los Angeles.

Warren, Claude N. 1966. "The San Dieguito Type Site: Malcolm J. Rogers' 1938 Excavation on the San Dieguito River." San Diego Museum Papers No. 5.

———. 1967. "The San Dieguito Complex: A Review and Hypothesis." *American Antiquity* 32(2): 168–185.

———. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In *Archaic Prehistory in the Western United States*, edited by Cynthia Irwin-Williams, pp. 1–14. Eastern New Mexico University Contributions in Anthropology No. 1.

———. 1985. "Garbage About the Foundations: A Comment on Bull's Assertions." San Diego State University Cultural Resource Management Center Casual Papers 2(1): 82–90.

———. 1987. "The San Dieguito and La Jolla: Some Comments." In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis Gallegos, pp. 73–85. San Diego County Archaeological Society Research Paper No. 1.

Warren, Claude N., and D. L. True. 1961. "The San Dieguito Complex and Its Place in California Prehistory." In *UCLA Archaeological Survey Annual Report 1960–61*: 246–338. University of California, Los Angeles.

Warren, Claude N., D. L. True, and Ardith A. Eudey. 1961. "Early Gathering Complexes of Western San Diego County: Results and Interpretations of an Archaeological Survey." In *UCLA Archaeological Survey Annual Report 1960–1961*: 1-106. University of California, Los Angeles.

Warren, Claude N., Elizabeth von Till Warren, and Ernest Chandonet. 1961. "Archaeology: State Agencies Cooperate to Save Valuable Midden Sites." *California Highways and Public Works* May/June: 45–51.

White, Raymond C. 1963. "Luiseño Social Organization." *University of California Publications in American Archaeology and Ethnology* 48: 91–194.

Whittaker, John C. 1994. *Flintknapping: Making & Understanding Stone Tools*. Austin, University of Texas Press.

Wilke, Phillip J. and J. Jeffrey Flenniken. 1991. "Missing the Point: Rebuttal to Bettinger, O'Connell, and Thomas." *American Anthropologist* 93(1):172-173.

Willey, Gordon R. 1953. "Prehistoric Settlement Patterns in the Viru Valley, Peru." Bulletin 153. Washington, DC: Bureau of American Ethnology.

Willey, Gordon R., and Philip Phillips. 1958. *Method and Theory in American Archaeology*. University of Chicago Press.

Wood, W. Raymond and Donald L. Johnson. 1978. "A Survey of Disturbance Processes in Archaeological Site Formation." In *Advances in Archaeological Method and Theory*, Vol. 1, edited by M. B. Schiffer, pp. 315-381. New York: Academic Press.

Yatsko, Andy. 2002. "Paleodemographic Change on San Clemente Island during the Medieval Climatic Anomaly." Paper presented to the San Diego County Archaeological Society.

Yohe II, Robert M. 2002. Analysis of Flaked Stone Artifacts. In *Archaeological Laboratory Methods: An Introduction*. Dubuque, Iowa. Kendal/Hunt Publishing Company.

Michael Baker
INTERNATIONAL

Appendix A:
Figures

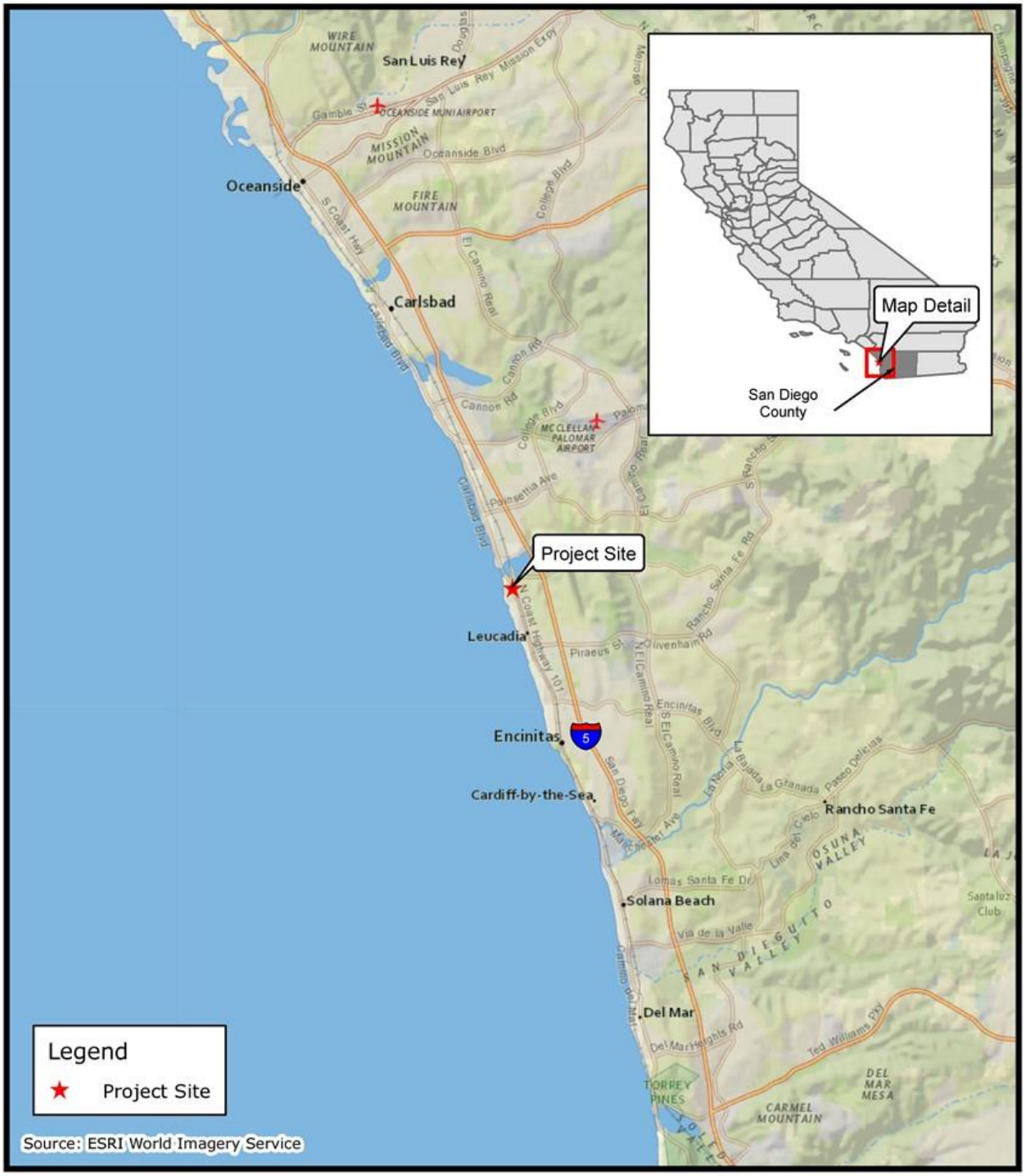
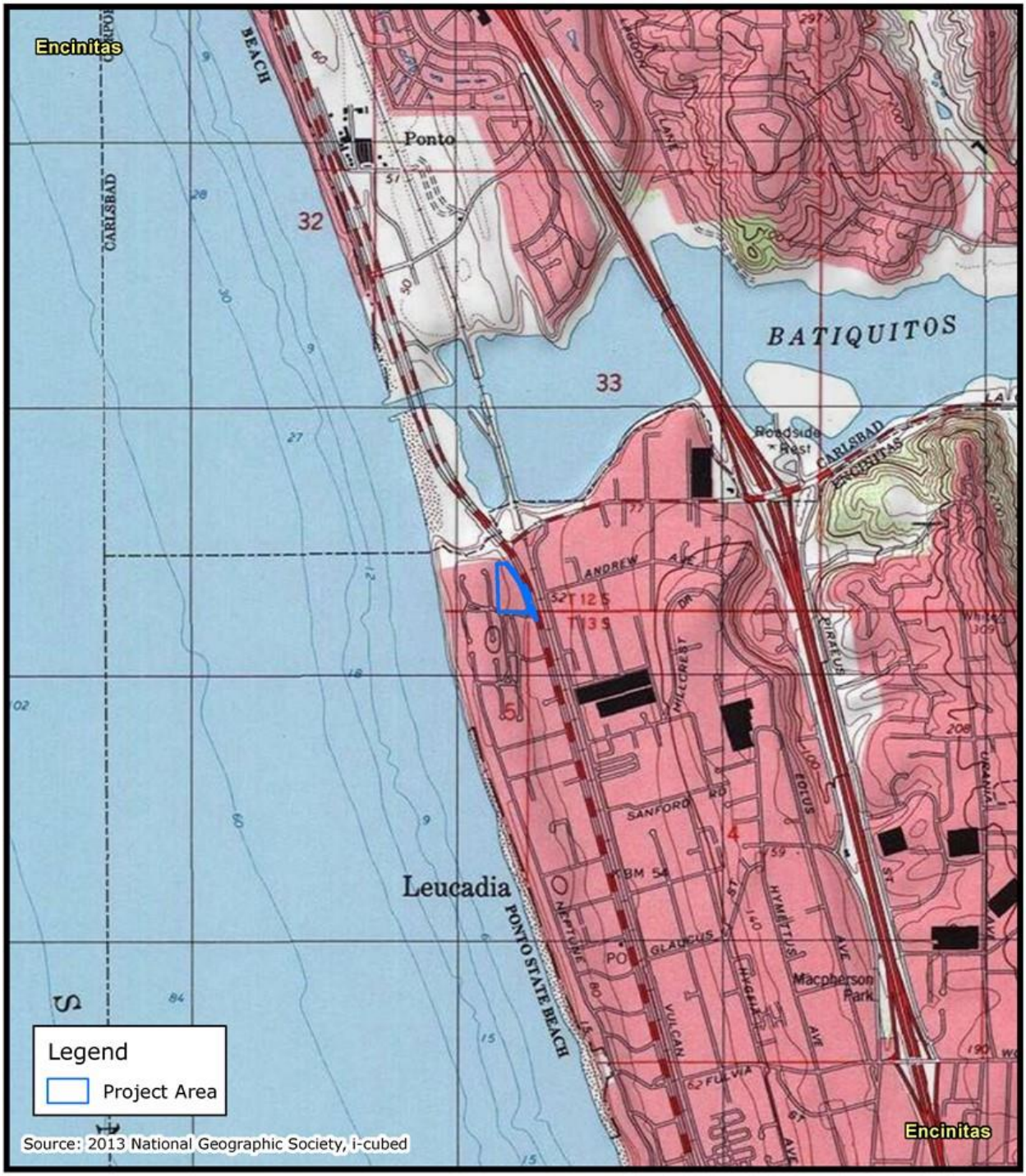


FIGURE 1
Regional Location Map



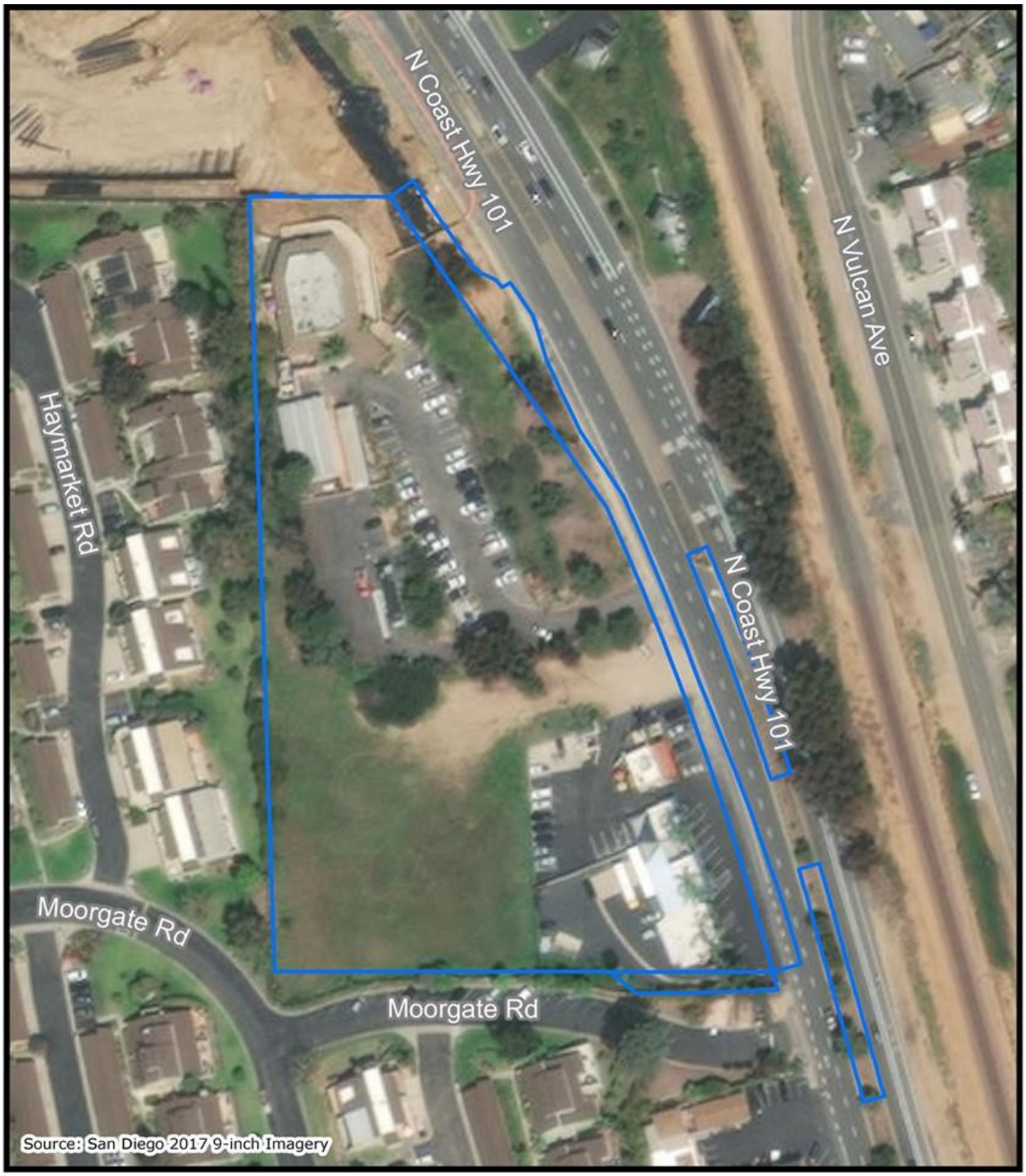
N W E S

0 1,000 2,000 Feet

FIGURE 2

Project Location Map

Michael Baker INTERNATIONAL



N
W E
S
0 100 200 Feet

FIGURE 3
Project Aerial

Michael Baker INTERNATIONAL

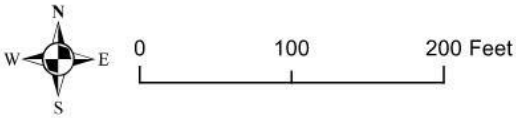


FIGURE 4
Project Plans

Michael Baker INTERNATIONAL

Michael Baker
INTERNATIONAL

Appendix B:
Project Plans with Site FEN-001 as Overlay

CONFIDENTIAL

Michael Baker
INTERNATIONAL

Appendix B has been redacted from this report.

Michael Baker
INTERNATIONAL

Appendix C:
Native American Scoping

Michael Baker
INTERNATIONAL

Native American Consultation Record

Project Name:	Marea Village EIR / formerly Fenway EIR
Project Number:	180066
Scoping Contact Initiated:	12/16/2020
Method of contact:	US Certified Mail

Group/Name/Contact Info	Result/Response
Barona Group of the Capitan Grande Edwin Romero, Chairperson 1095 Barona Road Lakeside, CA, 92040 Phone: (619) 443 - 6612 Fax: (619) 443-0681 cloyd@barona-nsn.gov Diegueno	On 1-14-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 Michael Baker International in a phone call with tribal admin staff contact information was provided:916-361-8384 and marcel.young@mbakerintl.com, new Chair is Raymond Welch. On 1-21-21 Michael Baker International was contacted via phone by Art Bunce, attroney for Barona, and on 1-22-21 a letter was emailed to him. On behalf of the current Chairperson, Ray Welch, the Tribal Attorney, Art Bruce responded that the area generally is sensitive for cultural sites and requested consultation under Assembly Bill (AB) 52 with the City.The City replied to Mr. Bruce that consultation will resume once the PHII has been completed.
Campo Band of Diegueno Mission Indians Ralph Goff, Chairperson 36190 Church Road, Suite 1 Campo, CA, 91906 Phone: (619) 478 - 9046 Fax: (619) 478-5818 rgoff@campo-nsn.gov Diegueno	On 1-14-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. The email was retruned undeliveralble. On 1-20-21 Michaeol Baker International left a follow-up voice mail with contact info: 916-361-8384 and marcel.young@mbakerintl.com.
Jamul Indian Village Erica Pinto, Chairperson P.O. Box 612 Jamul, CA, 91935 Phone: (619) 669 - 4785 Fax: (619) 669-4817 epinto@jiv-nsn.gov Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the original scoping letter/map. On 1-19-21 Michael Baker International left a follow-up voice mail with contact info: 916-361-8384 and marcel.young@mbakerintl.com.
Ewiiaapaayp Band of Kumeyaa Indians Michael Garcia, Vice Chairperson 4054 Willows Road Alpine, CA, 91901 Phone: (619) 445 - 6315 Fax: (619) 445-9126 michaelg@leaningrock.net Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map.On 1-20-21 Michael Baker International called for a follow-up, but this voice mail is full, unable to leave message.

Iipay Nation of Santa Ysabel Clint Linton, Director of Cultural Resources P.O. Box 507 Santa Ysabel, CA, 92070 Phone: (760) 803 - 5694 cjlinton73@aol.com Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 Michaeol Baker International left a follow up voice mail with contact info: 916-361-8384 and marcel.young@mbakerintl.com.
Iipay Nation of Santa Ysabel Virgil Perez, Chairperson P.O. Box 130 Santa Ysabel, CA, 92070 Phone: (760) 765 - 0845 Fax: (760) 765-0320 Diegueno	On 1-20-21 Michael Baker International left a follow up voice message for B. Pitha, current Chairperson with contact info: 916-361-8384 and marcel.young@mbakerintl.com provided.
Inaja-Cosmit Band of Indians Rebecca Osuna, Chairperson 2005 S. Escondido Blvd. Escondido, CA, 92025 Phone: (760) 737 - 7628 Fax: (760) 747-8568 Diegueno	On 1-20-21 Michael Baker International spoke with Ms. Lisa Contreres, Vice Chairperson; the tribe as no questions/concerns as the project location is far from their homelands.
Ewiiaapaayp Band of Kumeyaay Indians Robert Pinto, Chairperson 4054 Willows Road Alpine, CA, 91901 Phone: (619) 445 - 6315 Fax: (619) 445-9126 wmicklin@leaningrock.net Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 Michael Baker International called for a follow up, this voice mail box is full, unable to leave message.
Jamul Indian Village Lisa Cumper, Tribal Historic Preservation Officer P.O. Box 612 Jamul, CA, 91935 Phone: (619) 669 - 4855 lcumper@jiv-nsn.gov Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-19-21 Michael Baker International left a follow-up voice mail with contact info: 916-361-8384 and marcel.young@mbakerintl.com.
Kwaaymii Laguna Band of Mission Indians Carmen Lucas P.O. Box 775 Pine Valley, CA, 91962 Phone: (619) 709 - 4207 Kwaaymii Diegueno	On 1-20-21 Michaeol Baker International left a follow up phone message with contact info: 916-361-8384 and marcel.young@mbakerintl.com.

La Posta Band of Diegueno Mission Indians Gwendolyn Parada, Chairperson 8 Crestwood Road Boulevard, CA, 91905 Phone: (619) 478 - 2113 Fax: (619) 478-2125 LP13boots@aol.com Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 a followup phone message was left with contact info: 916-361-8384 and marcel.young@mbakerintl.com provided at her extension.
La Posta Band of Diegueno Mission Indians Javaughn Miller, Tribal Administrator 8 Crestwood Road Boulevard, CA, 91905 Phone: (619) 478 - 2113 Fax: (619) 478-2125 jmiller@LPtribe.net Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 Michael Baker International left a message with tribal admin staff. A message was taken and included contact information: 916-361-8384 and marcel.young@mbakerintl.com. Tribal admin provided James Hill's email, he is the new Tribal Administrator. Michael Baker forwarded Mr. Hill the map and scoping letter 1.20.21.
Manzanita Band of Kumeyaay Nation Angela Elliott Santos, Chairperson P.O. Box 1302 Boulevard, CA, 91905 Phone: (619) 766 - 4930 Fax: (619) 766-4957 Diegueno	On 1-20-21 Michael Baker International called and was unable to contact A. Santos via phone due to no voice mail capabilties.
Mesa Grande Band of Diegueno Mission Indians Michael Linton, Chairperson P.O Box 270 Santa Ysabel, CA, 92070 Phone: (760) 782 - 3818 Fax: (760) 782-9092 mesagrandeband@msn.com Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. The email Michael Baker International sent failed due to a full mailbox. On 1-20-21 Michael Baker International in a phone call with tribal admin staff. A message was taken and contact info: 916-361-8384 and marcel.young@mbakerintl.com provided.
San Pasqual Band of Diegueno Mission Indians John Flores, Environmental Coordinator P. O. Box 365 Valley Center, CA, 92082 Phone: (760) 749 - 3200 Fax: (760) 749-3876 johnf@sanpasqualtribe.org Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-19-21 Michael Baker International left a follow-up voice mail with contact info: 916-361-8384 and marcel.young@mbakerintl.com.
San Pasqual Band of Diegueno Mission Indians Allen Lawson, Chairperson P.O. Box 365 Valley Center, CA, 92082 Phone: (760) 749 - 3200 Fax: (760) 749-3876 allenl@sanpasqualtribe.org Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 Michael Baker International in a phone call with tribal admin staff, A. Lawson is no longer Chairperson; a voice mail was left for the current Chair, Steven Cope and Michael Baker International emailed Mr. Cope a scoping letter per admin's request.

Sycuan Band of the Kumeyaay Nation Kristie Orosco, Kumeyaay Resource Specialist 1 Kwaaypaay Court El Cajon, CA, 92019 Phone: (619) 445 - 6917 Kumeyaay	The Email scoping letter sent 1-20-21 was bounced back undeliverable. On 1-20-21 Michael Baker International spoke with Ms. Orosco she asked for the project scoping letter to be sent via email. On 1-21-21 Michael Baker International called Orosco to clarify her email address, a voice mail with contact info: 916-361-8384 and marcel.young@mbakerintl.com was provided. On 1-22-21 Michael Baker International Emailed K. Orosco the scoping letter per her request.
Sycuan Band of the Kumeyaay Nation Cody Martinez, Chairperson 1 Kwaaypaay Court El Cajon, CA, 92019 Phone: (619) 445 - 2613 Fax: (619) 445-1927 ssilva@sycuan-nsn.gov Kumeyaay	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. On 1-20-21 a followup phone message was left with contact info: 916-361-8384 and marcel.young@mbakerintl.com provided in a general delivery mailbox as Mr. Martinea's ext rings with no VM capability.
Viejas Band of Kumeyaay Indians John Christman, Chairperson 1 Viejas Grade Road Alpine, CA, 91901 Phone: (619) 445 - 3810 Fax: (619) 445-5337 Diegueno	On 1-20-21 Michael Baker International called tribal admin staff and left a follow-up voice mail and provided them contact info to the Tribe: 916-361-8384 and marcel.young@mbakerintl.com.
Viejas Band of Kumeyaay Indians Ernest Pingleton, Tribal Historic Officer 1 Viejas Grade Road Alpine, CA, 91901 Phone: (619) 659 - 2314 epingleton@viejas-nsn.gov Diegueno	On 1-15-21 Michael Baker International emailed a communication that included the orginal scoping letter/map. Mr. Pingleton requested that Vejas NA monitors be present for ground disturbing activity. Viejas Band of Kumeyaay Indians: Ernest Pingleton, Tribal Historic Officer, indicated that the tribe has reviewed the proposed project and determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the proposed project. The tribe requested that a Kumeyaay cultural monitor be on-site for ground-disturbing activities and to inform them of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains. The City indicated that the Phase II evaluation will be forwarded to the Tribe for review and comment. If necessary, the City will coordinate with Mr. Pingleton on the need for Viejas cultural monitors in the future.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Fenway Hwy 101 Mixed Use Project

County: San Diego

USGS Quadrangle Name: Encinitas

Township: 12S Range: 4W Section(s): SE 1/4, SW/14 sec. 33

Company/Firm/Agency: Michael Baker International

Contact Person: Chris Wendt

Street Address: 2729 Prospect Park Drive #220

City: Rancho Cordova Zip: 95670

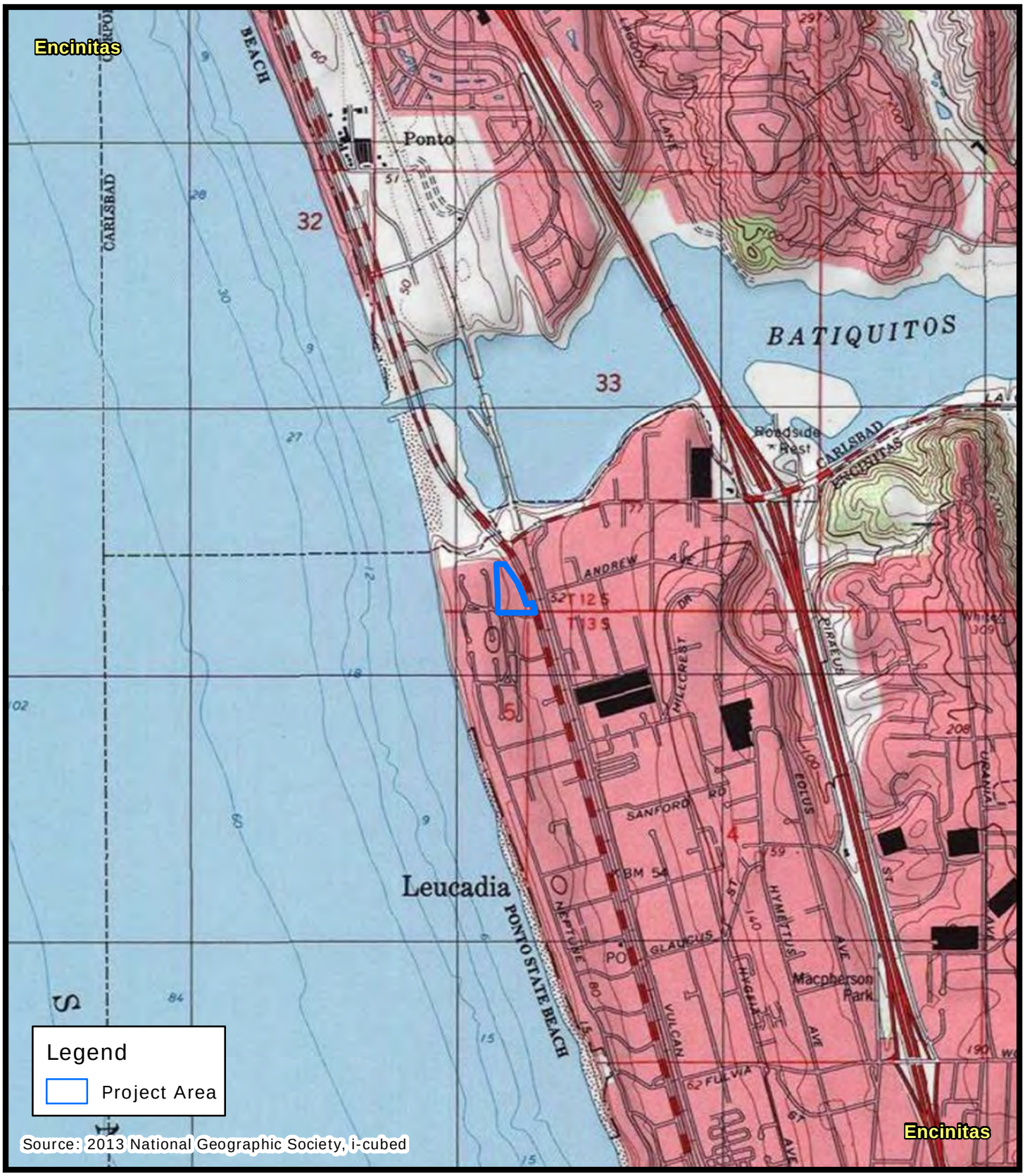
Phone: (707) 787-7488

Fax: N/A

Email: chris.wendt@mbakerintl.com

Project Description:

Demolition of 3 buildings and redevelopment of the site with residential and commercial mixed-use.



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
[**Vacant**]

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 22, 2020

Chris Wendt
Michael Baker International

Via Email to: chris.wendt@mbakerintl.com

Re: Fenway Hwy 101 Mixed Use Project, San Diego County

Dear Mr. Wendt:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Diego County
9/22/2020

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road — Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
cloyd@barona-nsn.gov

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 — Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
4054 Willows Road — Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
wmicklin@leaningrock.net

Ewiiaapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road — Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
michaelg@leaningrock.net

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
cjlinton73@aol.com

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 — Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Inaja-Cosmit Band of Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. — Diegueno
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village
Erica Pinto, Chairperson
P.O. Box 612 — Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Jamul Indian Village
Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 — Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 — Kwaaymii
Pine Valley, CA, 91962 — Diegueno
Phone: (619) 709 - 4207

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road — Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

La Posta Band of Diegueno Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road — Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fenway Hwy 101 Mixed Use Project, San Diego County.

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

San Pasqual Band of Diegueno Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

San Pasqual Band of Diegueno Mission Indians
Allen Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

Sycuan Band of the Kumeyaay Nation
Kristie Orosco, Kumeyaay Resource Specialist
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 6917

Sycuan Band of the Kumeyaay Nation
Cody Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

Viejas Band of Kumeyaay Indians
John Christman, Chairperson
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

Viejas Band of Kumeyaay Indians
Ernest Pingleton, Tribal Historic Officer, Resource Management
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 659 - 2314
epingleton@viejas-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fenway Hwy 101 Mixed Use Project, San Diego County.

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 $0.00 $0.00 $0.00

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Ernie Orozco
Kwaayppay Resource Specialist
Tyrown Band of the Kumeyaay Nation
1 Kwaayppay Court
El Cajon, CA 92019

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Rosa Olvera, Chairperson
Inaja Council Band of Indians
2005 S. Escondido Blvd
Escondido, CA 92025

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Victor Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA, 92070

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Ernest Pingleton, Tribal Historic Officer
Resource Management
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Robert Pinto, Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, CA, 91901

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Edward Romero, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Angela Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA, 91905

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

OFFICIAL USE

$1.55 $2.85 0040 12

$0.55 12/17/2020

Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Cody Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaypaay Court
El Cajon, CA, 92019
9590 9402 5698 9346 3317 88
7019 2970 0000 1919 0175
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY
A. Signature
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? Yes No
If YES, enter delivery address below:
3. Service Type

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA, 91962
9590 9402 5888 0049 3899 92
7019 2970 0000 1919 0168
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Michael Linton, Chairperson
Mesa Grande Band of
Diegueno Mission Indians
P.O Box 270
Santa Ysabel, CA, 92070
9590 9402 5176 9122 7542 09
7019 2970 0000 1919 0151
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Allen Lawson, Chairperson
San Pasqual Band of
Diegueno Mission Indians
P.O. Box 365
Valley Center, CA, 92082
9590 9402 5176 9122 7541 86
7019 2970 0000 1919 0120
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Ralph Goff, Chairperson
Campo Band of Diegueno
Mission Indians
36190 Church Road, Suite 1
Campo, CA, 91906
9590 9402 5176 9122 7541 79
7019 2970 0000 1919 0113
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Lisa Cumper
Tribal Historic Preservation Officer
Jamul Indian Village
P.O. Box 612
Jamul, CA, 91935
9590 9402 5176 9122 7542 16
7019 2970 0000 1919 0076
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
John Flores, Environmental Coordinator
San Pasqual Band of
Diegueno Mission Indians
P.O. Box 365
Valley Center, CA, 92082
9590 9402 5176 9122 7541 55
7019 2970 0000 1919 0090
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
John Christman, Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901
9590 9402 5176 9122 7542 23
7019 2970 0000 0262 6702
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA, 91935
9590 9402 5176 9122 7541 48
7019 2970 0000 1919 0083
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905
9590 9402 5698 9346 3317 95
7019 2970 0000 1919 0182
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Angela Elliott Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA, 91905
9590 9402 5888 0049 3899 16
7019 2970 0000 1919 0267
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Edwin Romero, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040
9590 9402 5888 0049 3899 23
7019 2970 0000 1919 0250
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Ernest Pingleton, Tribal Historic Officer
Resource Management
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901
9590 9402 5888 0049 3899 47
7019 2970 0000 1919 0236
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905
9590 9402 5888 0049 3899 61
7019 2970 0000 1919 0212
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA, 92070
9590 9402 5888 0049 3899 78
7019 2970 0000 1919 0229
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Kristie Orosco
Kumeyaay Resource Specialist
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA, 92019
9590 9402 5888 0049 3899 85
7019 2970 0000 1919 0199
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Rebecca Osuna, Chairperson
Inaja-Cosmit Band of Indians
2005 S. Escondido Blvd.
Escondido, CA, 92025
9590 9402 5888 0049 3899 54
7019 2970 0000 1919 0205
PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

John Christman, Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Christman,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

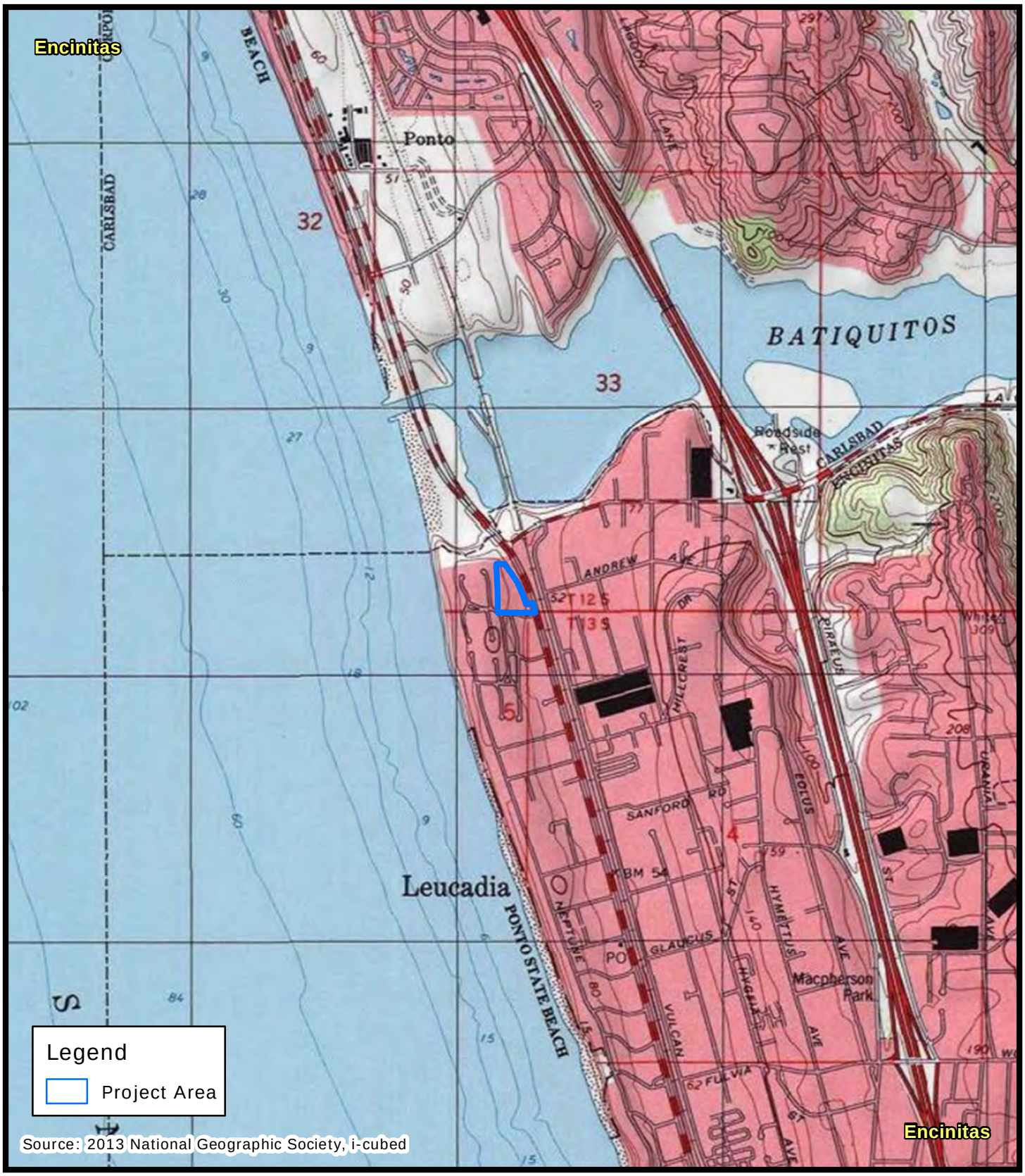
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Lisa Cumper, Tribal Historic Preservation Officer
Jamul Indian Village
P.O. Box 612
Jamul, CA, 91935

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Cumper,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

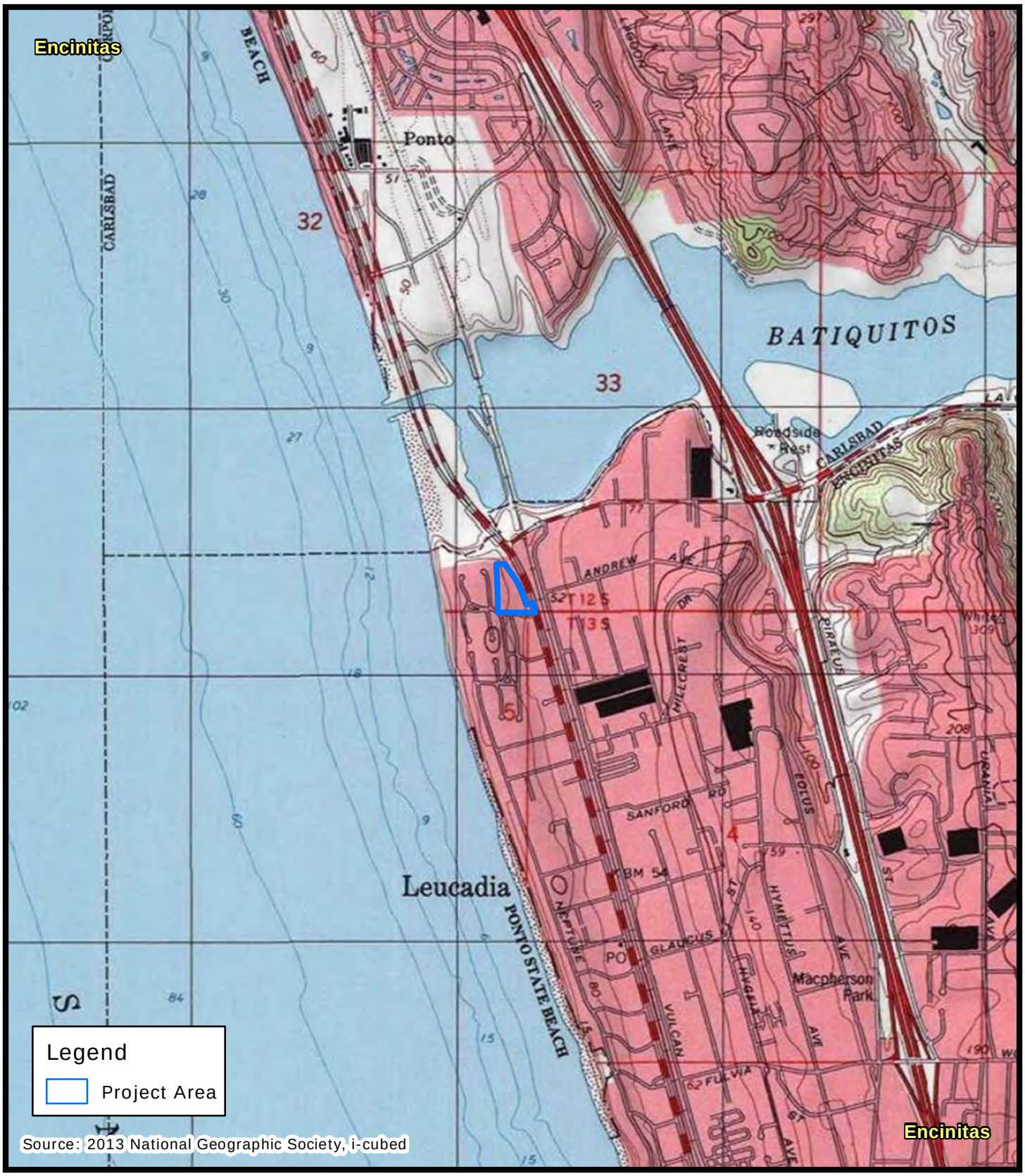
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA, 91935

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Pinto,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

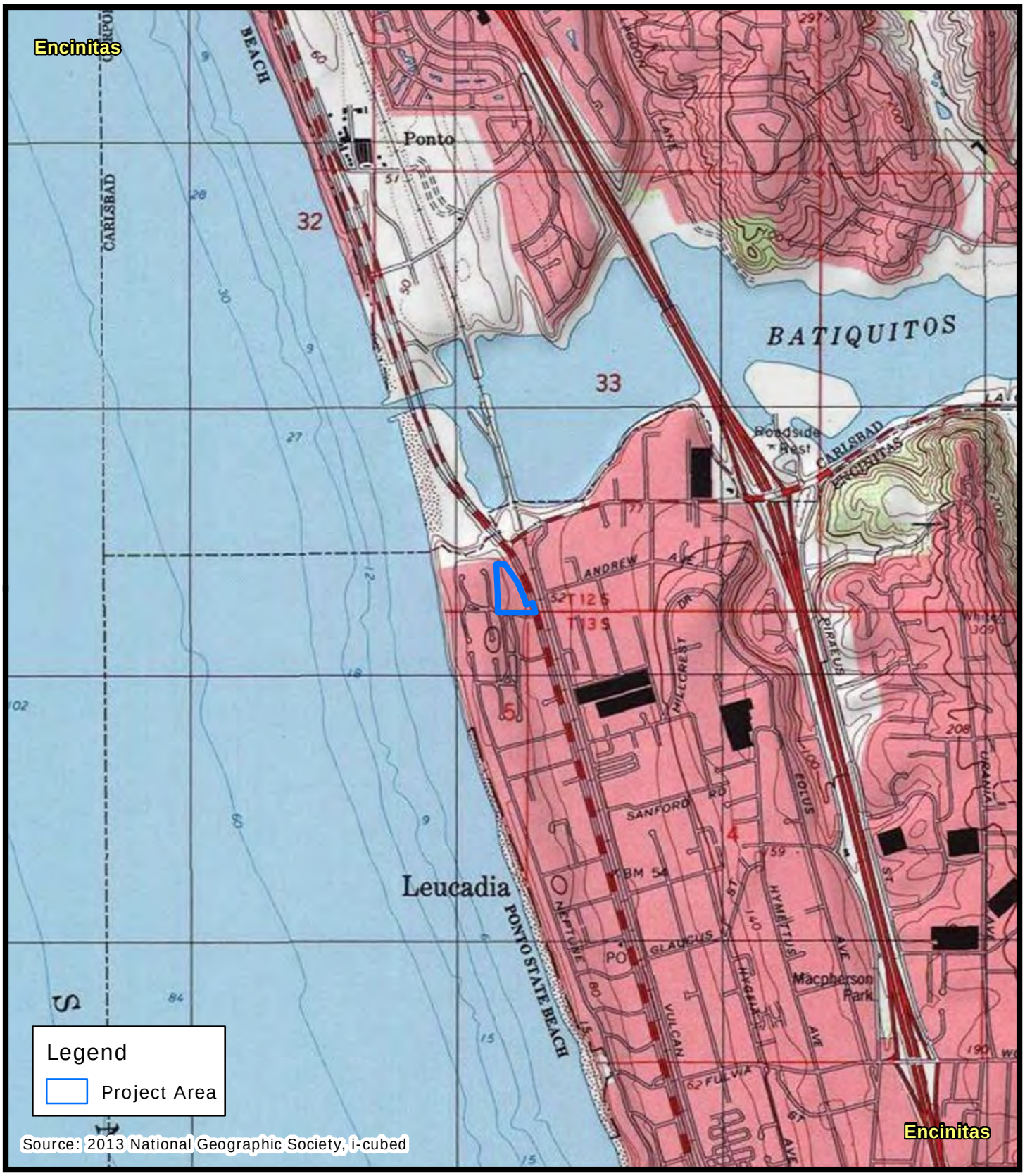
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

John Flores, Environmental Coordinator
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA, 92082

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Flores,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

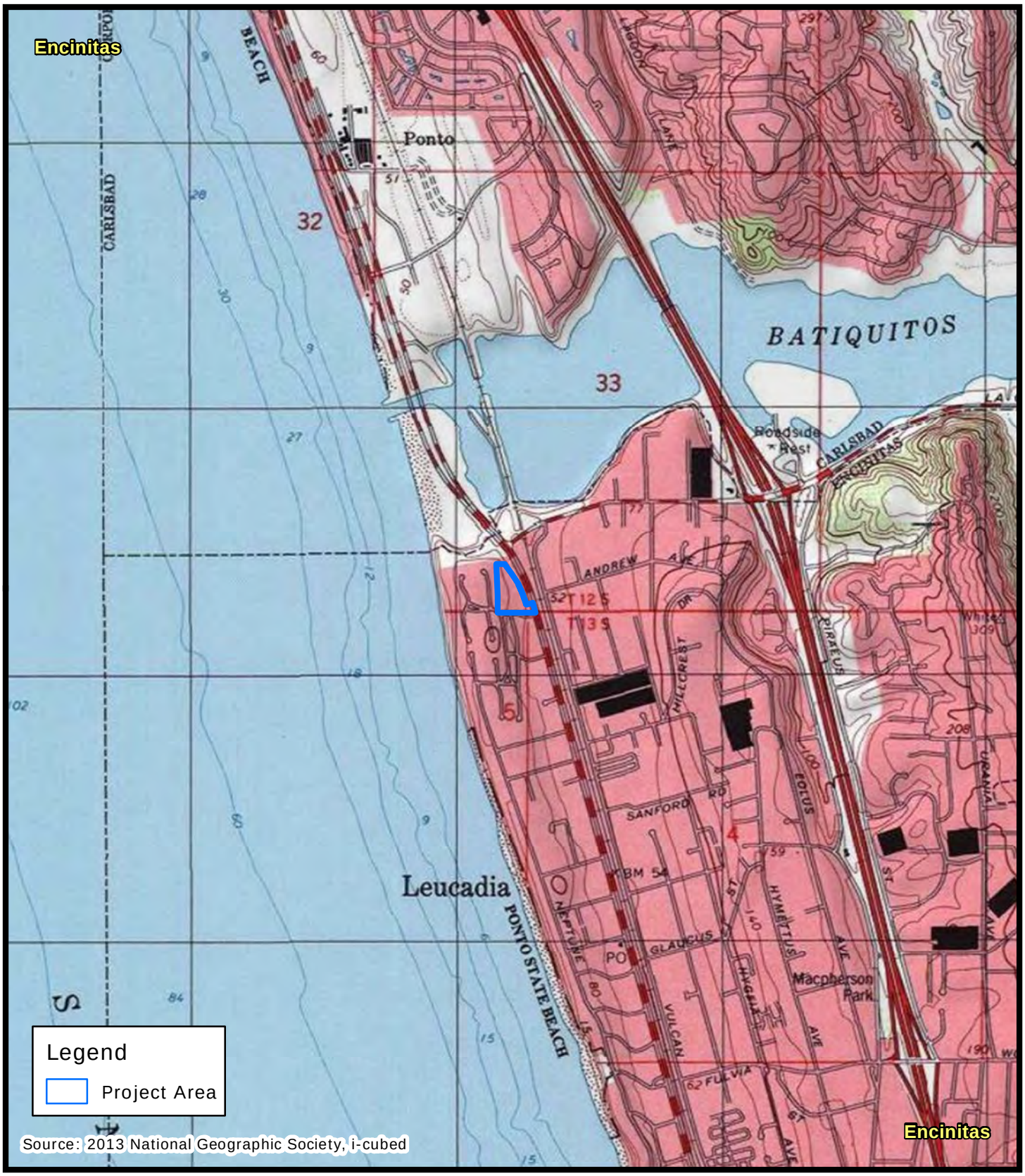
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Michael Garcia, Vice Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Garcia,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

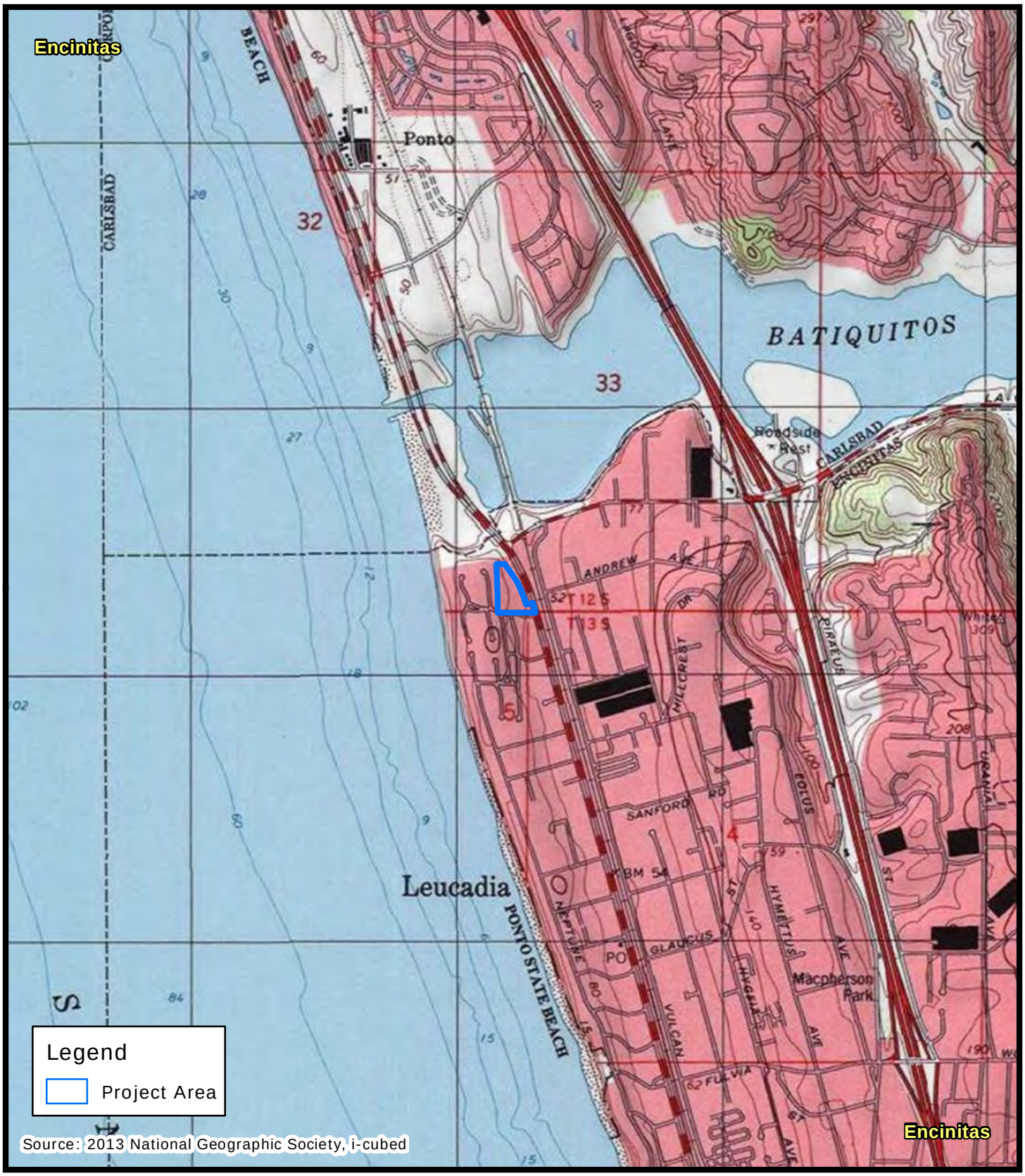
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Ralph Goff, Chairperson
Campo Band of Diegueno
Mission Indians
36190 Church Road, Suite 1
Campo, CA, 91906

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Goff,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile

of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

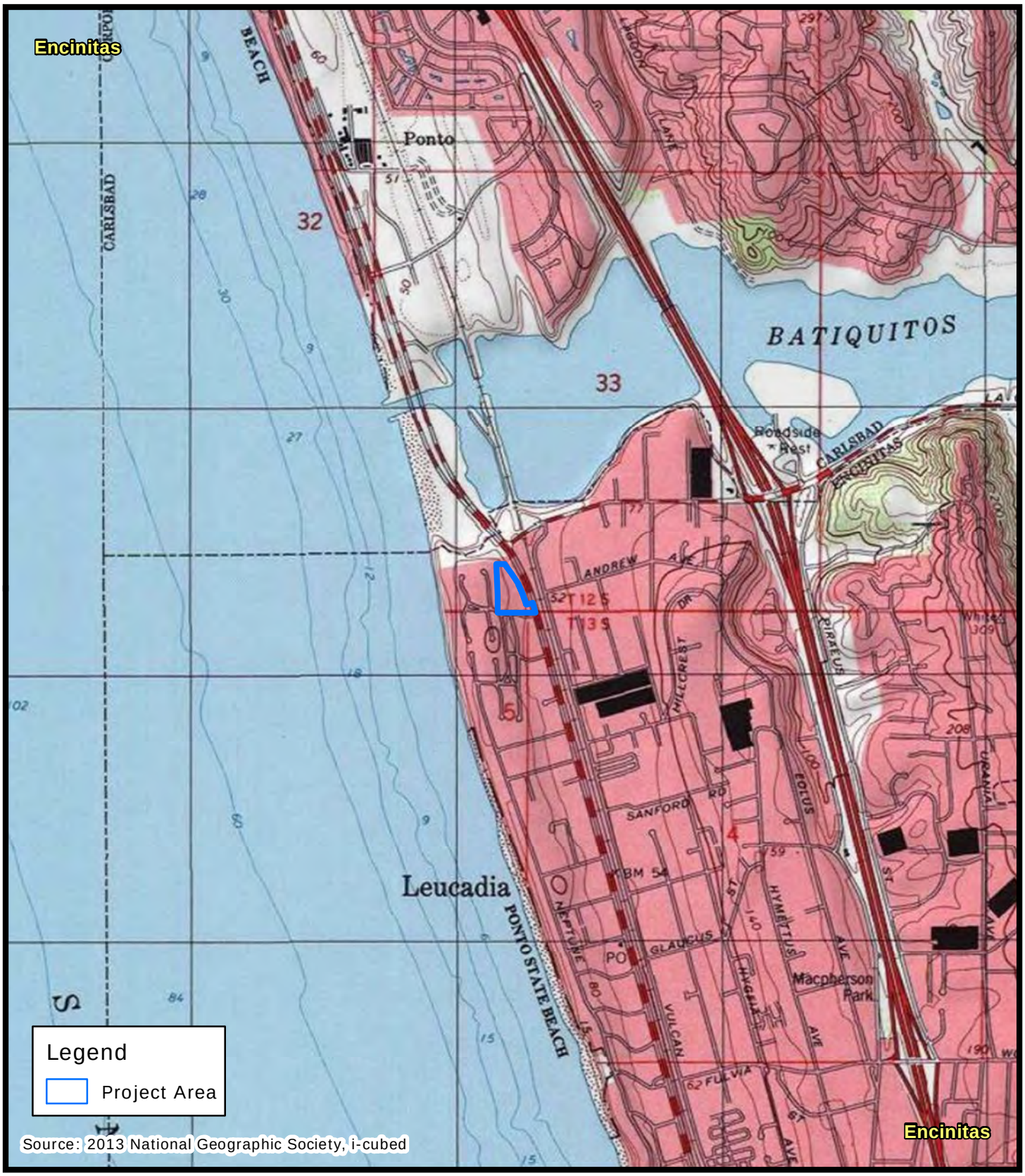
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Allen Lawson, Chairperson
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA, 92082

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Lawson,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

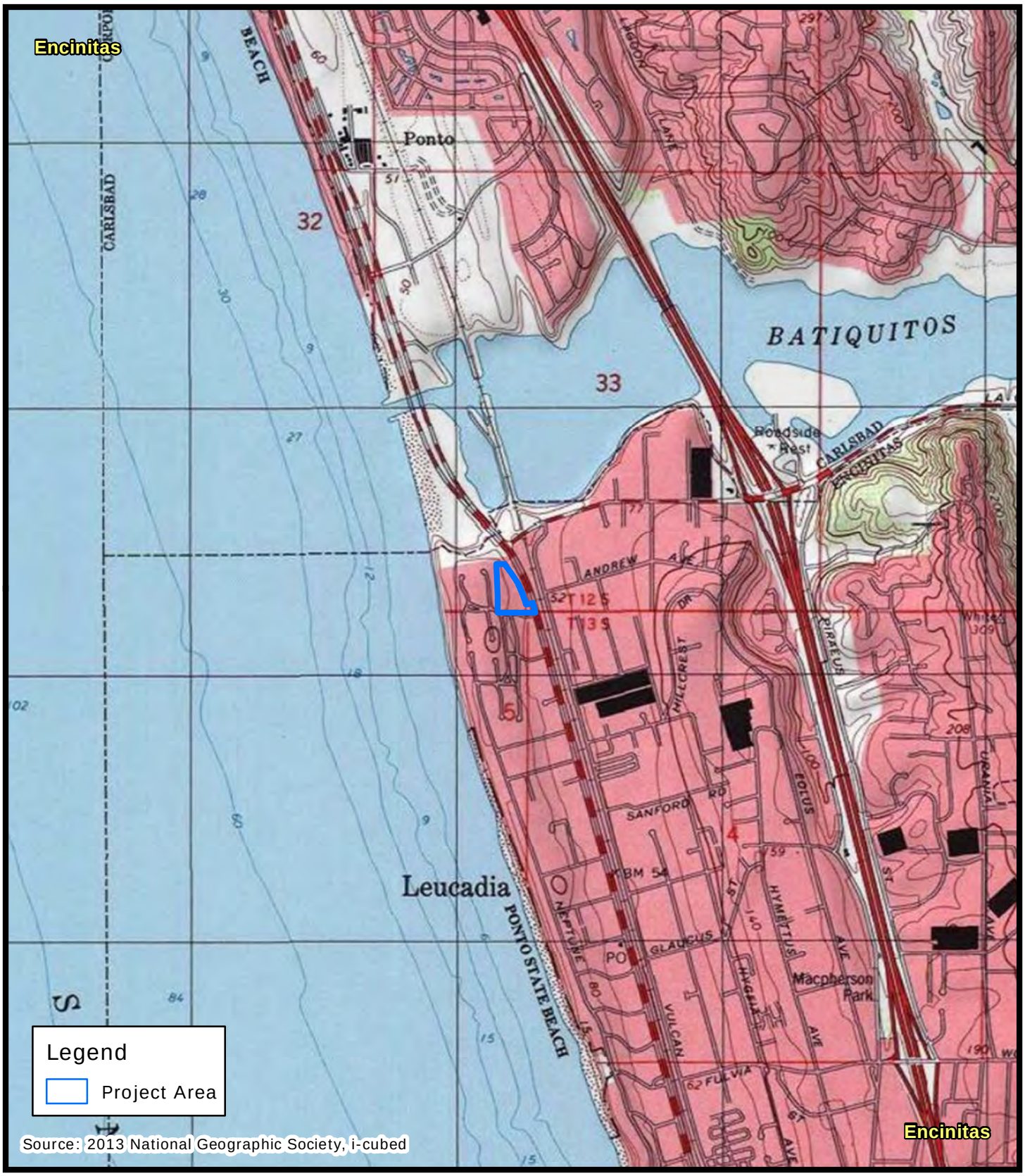
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Clint Linton, Director of Cultural Resources
Iipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, CA, 92070

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Linton,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

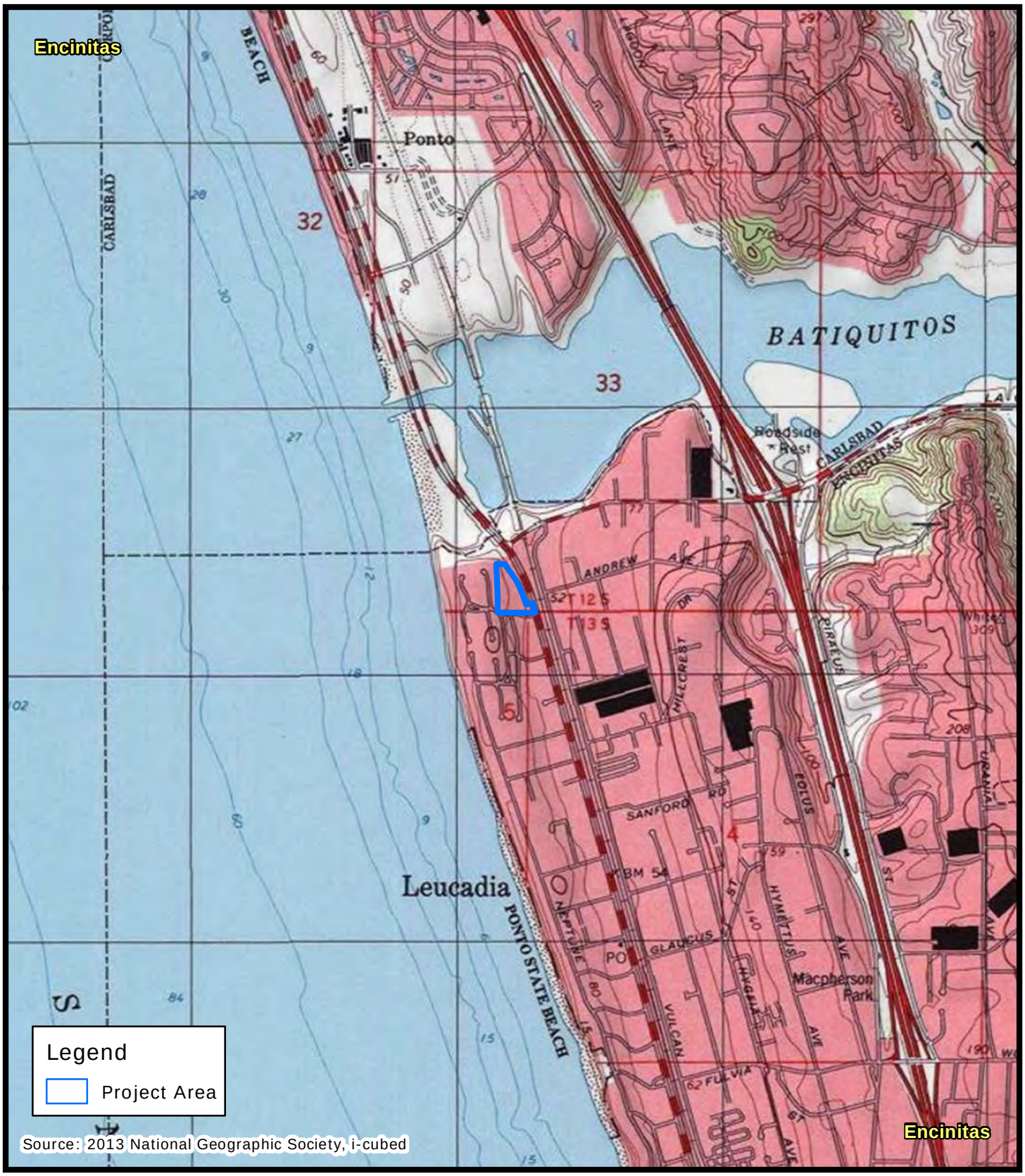
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Michael Linton, Chairperson
Mesa Grande Band of Diegueno Mission Indians
P.O Box 270
Santa Ysabel, CA, 92070

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Linton,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

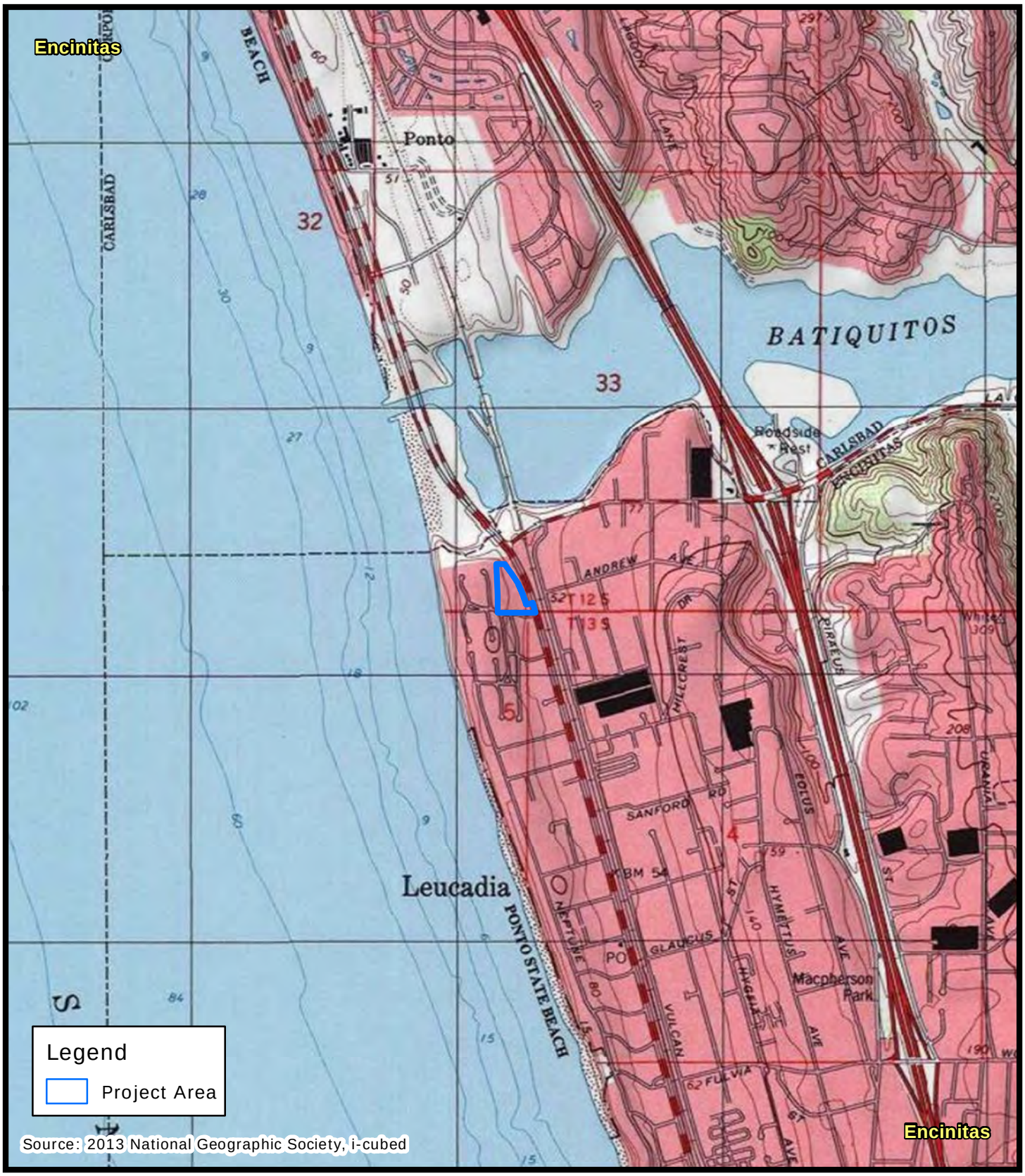
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA, 91962

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Lucas,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

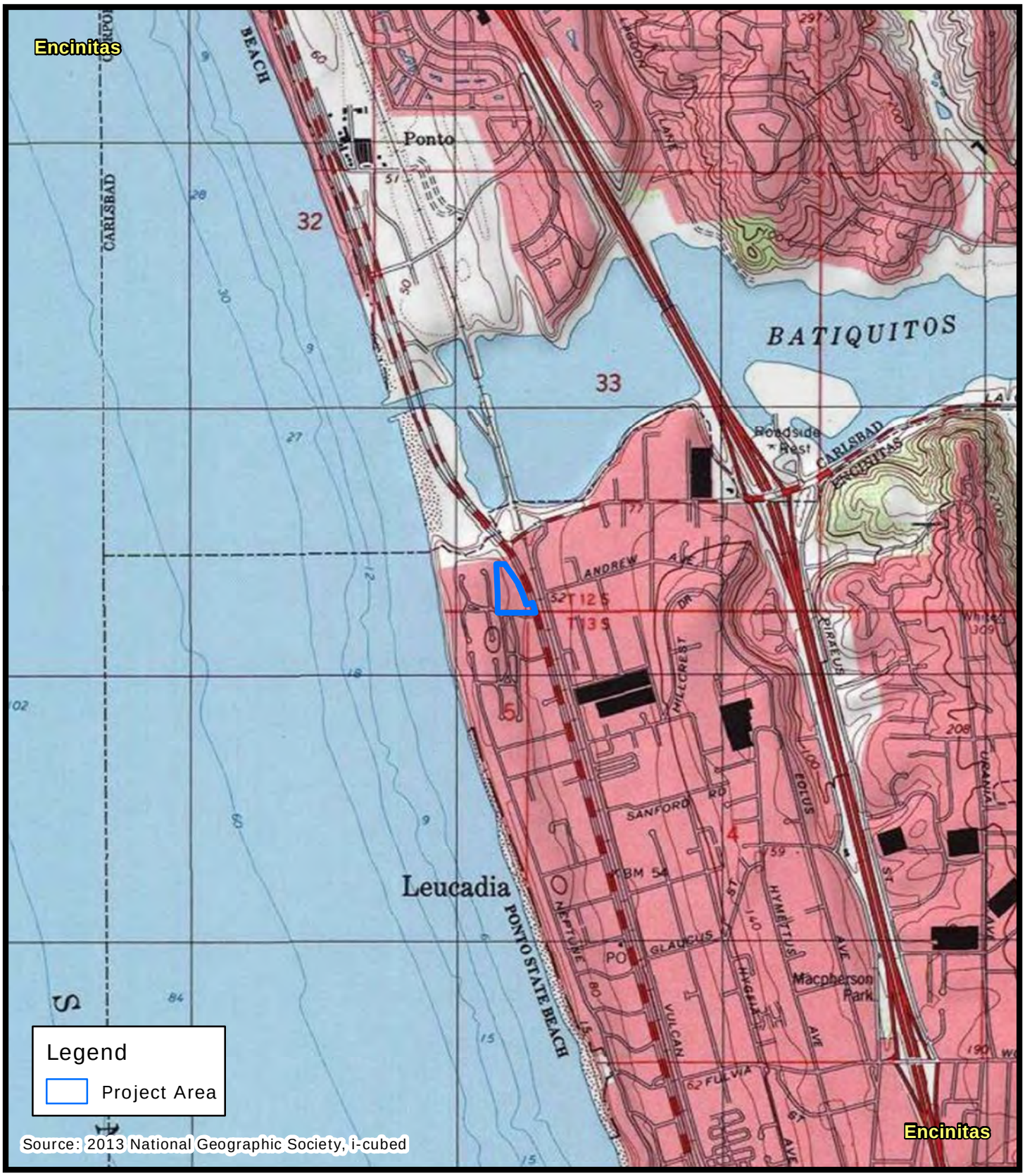
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Cody Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA, 92019

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Cody Martinez,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

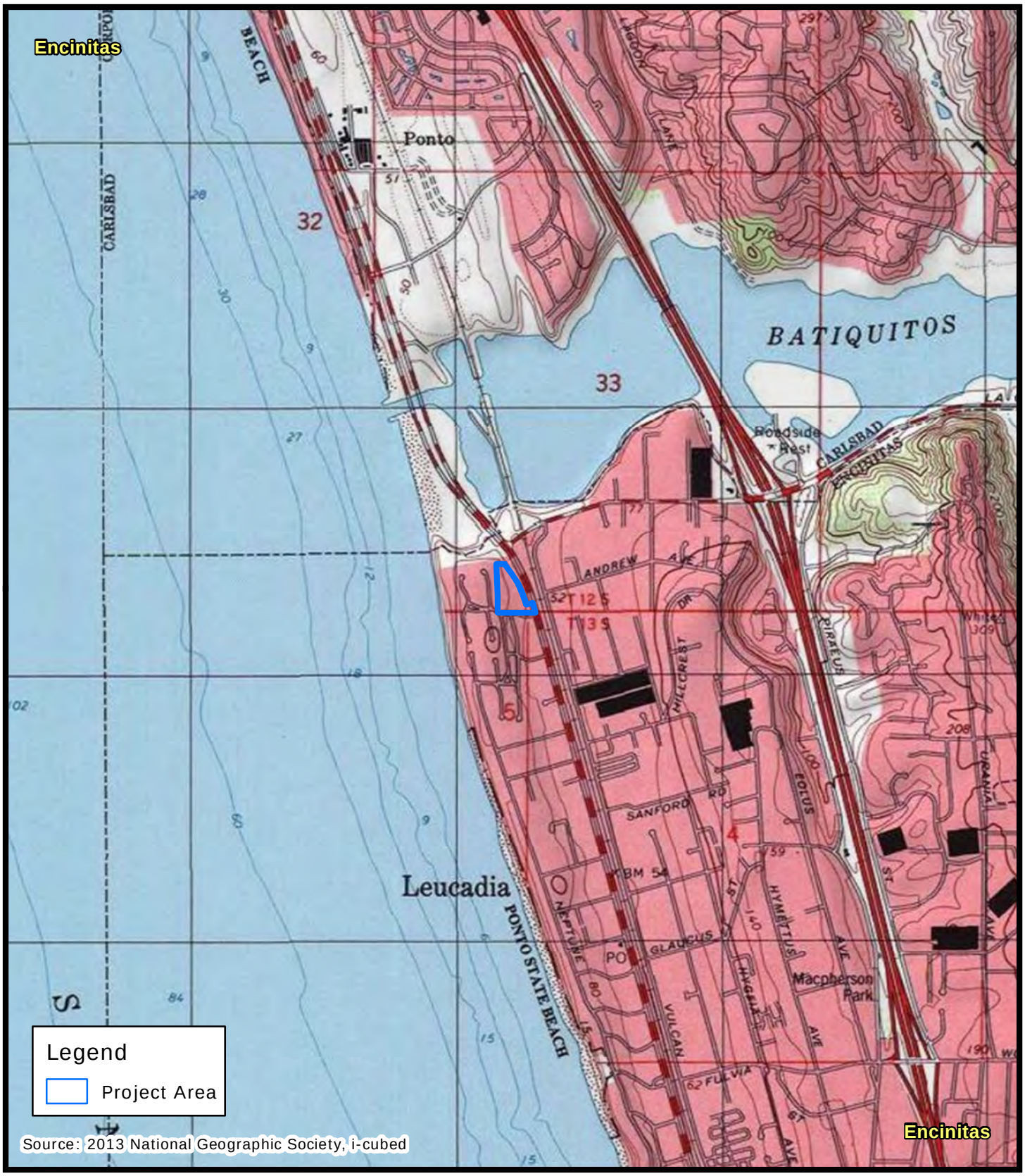
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Miller,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

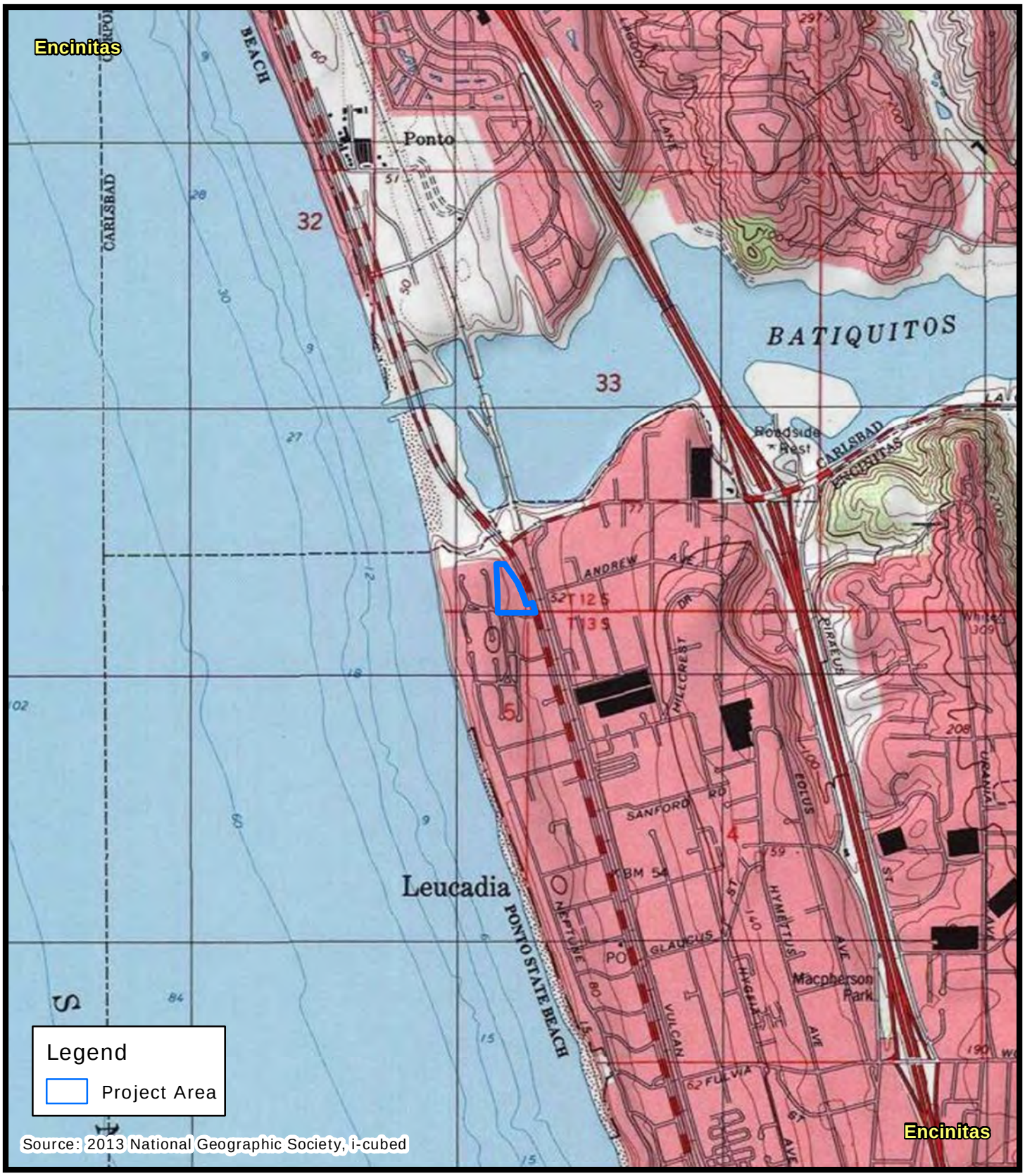
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Kristie Orosco, Kumeyaay Resource Specialist
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA, 92019

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Orosco,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

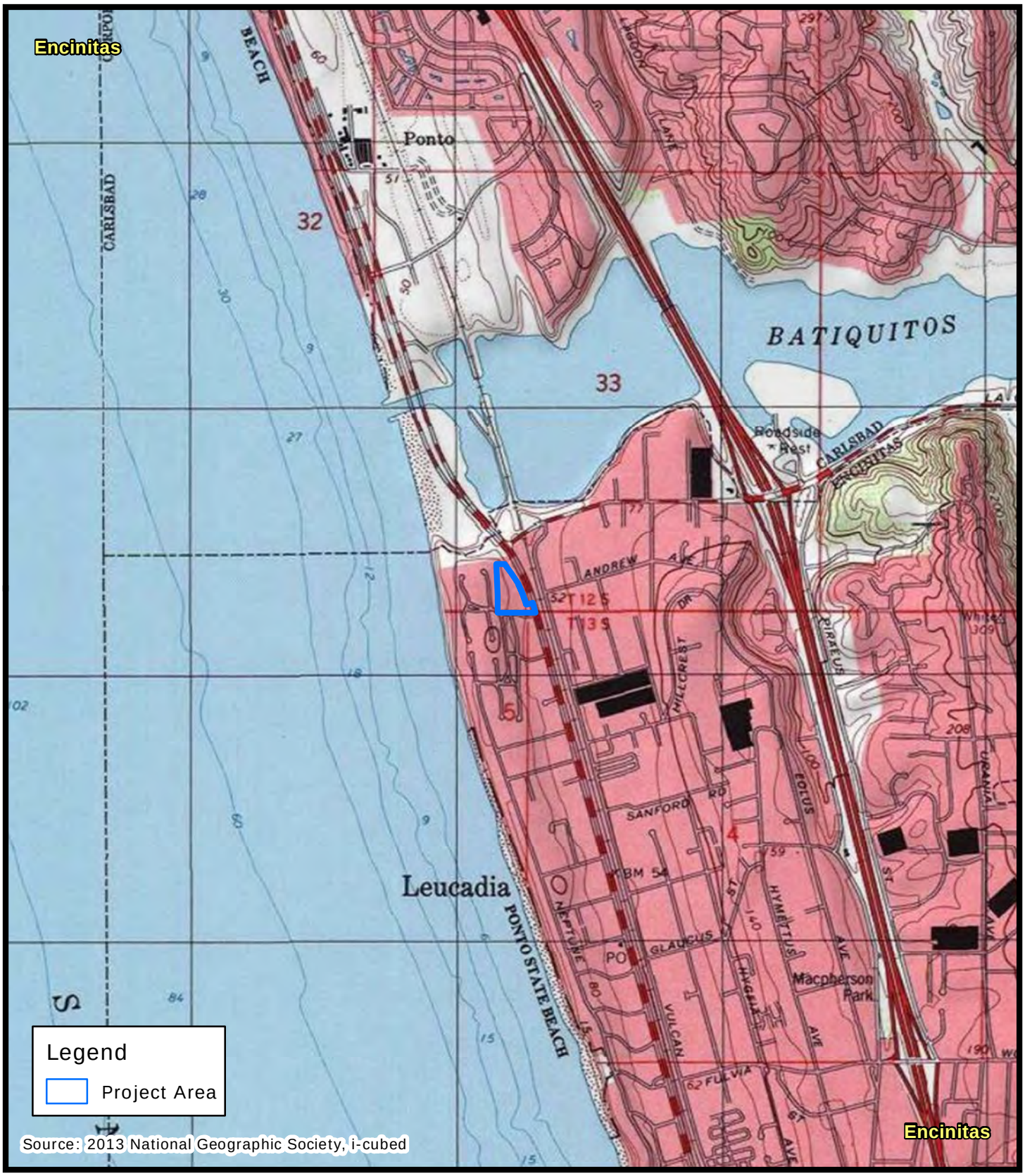
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Rebecca Osuna, Chairperson
Inaja-Cosmit Band of Indians
2005 S. Escondido Blvd.
Escondido, CA, 92025

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Osuna,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

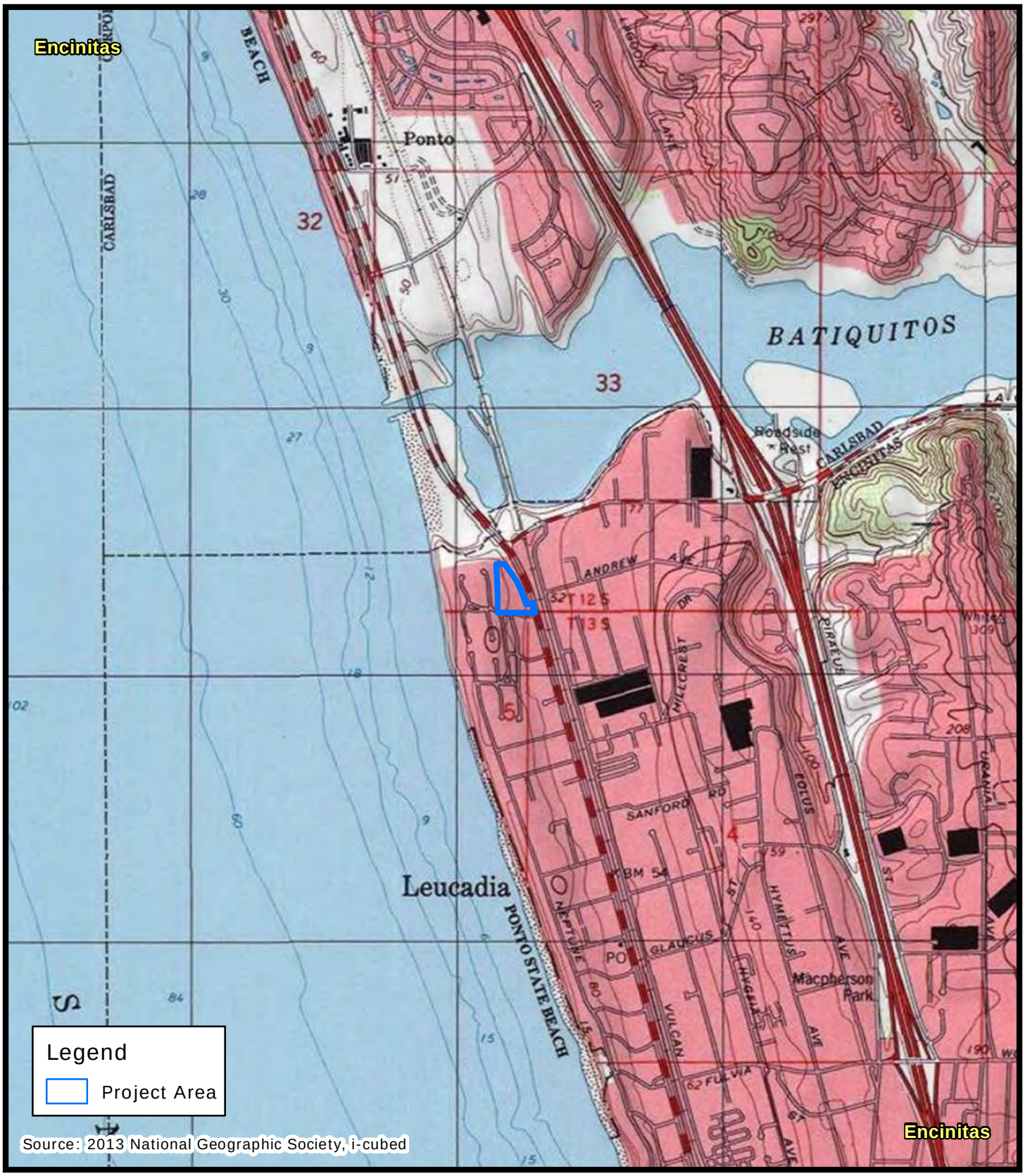
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Road
Boulevard, CA, 91905

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Parada,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

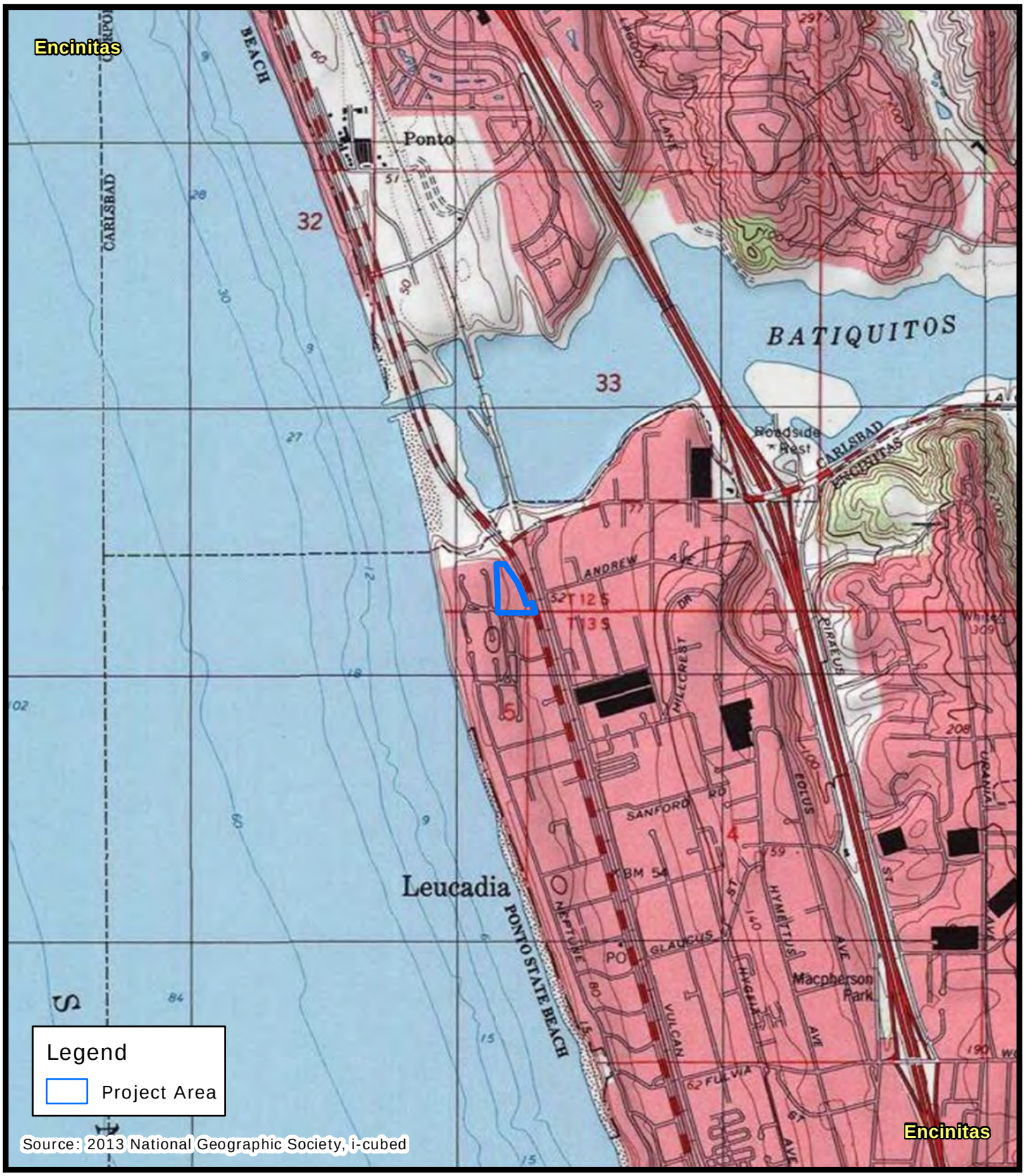
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA, 92070

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Perez,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

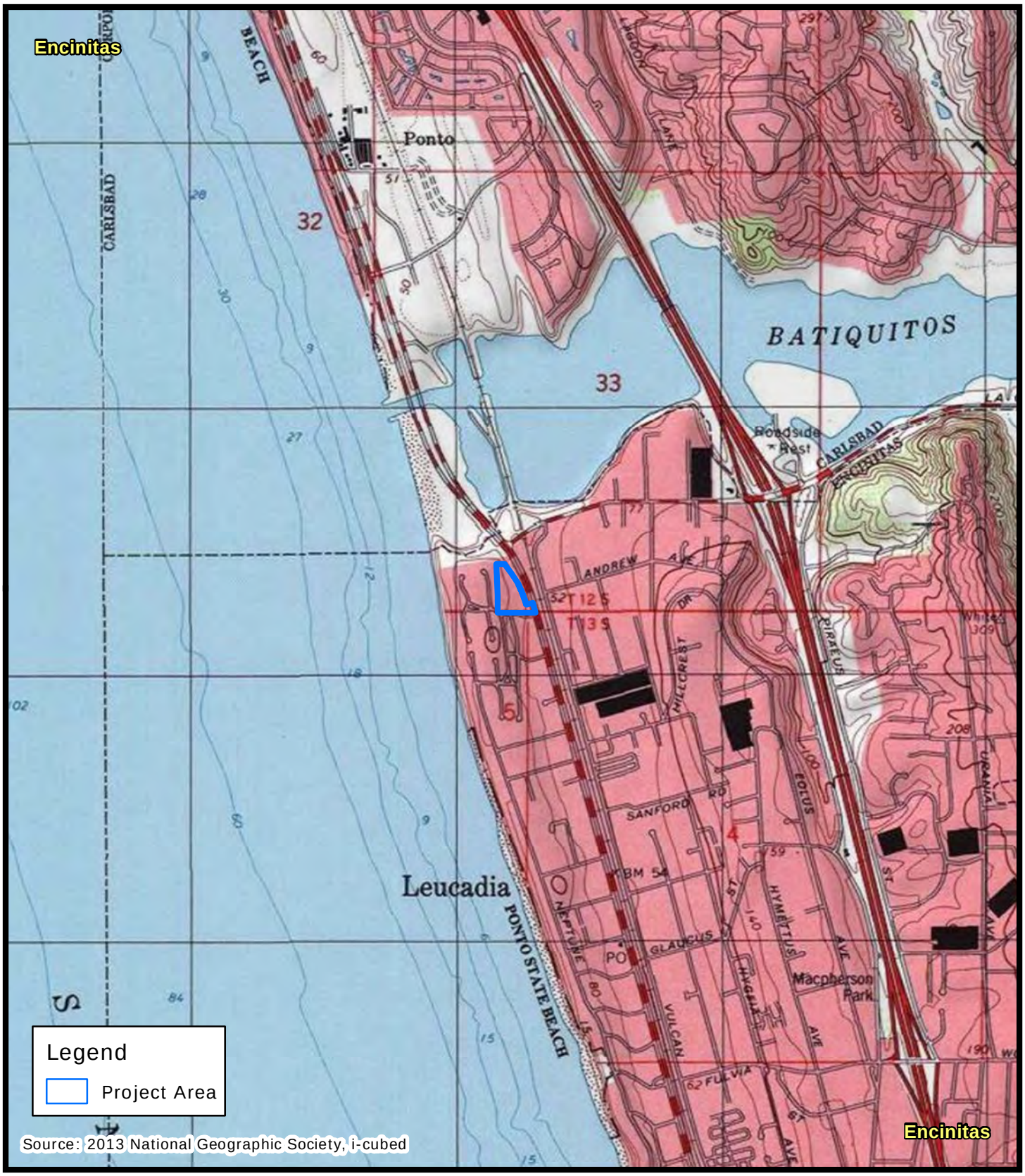
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Ernest Pingleton, Tribal Historic Officer, Resource Management
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Pingleton,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

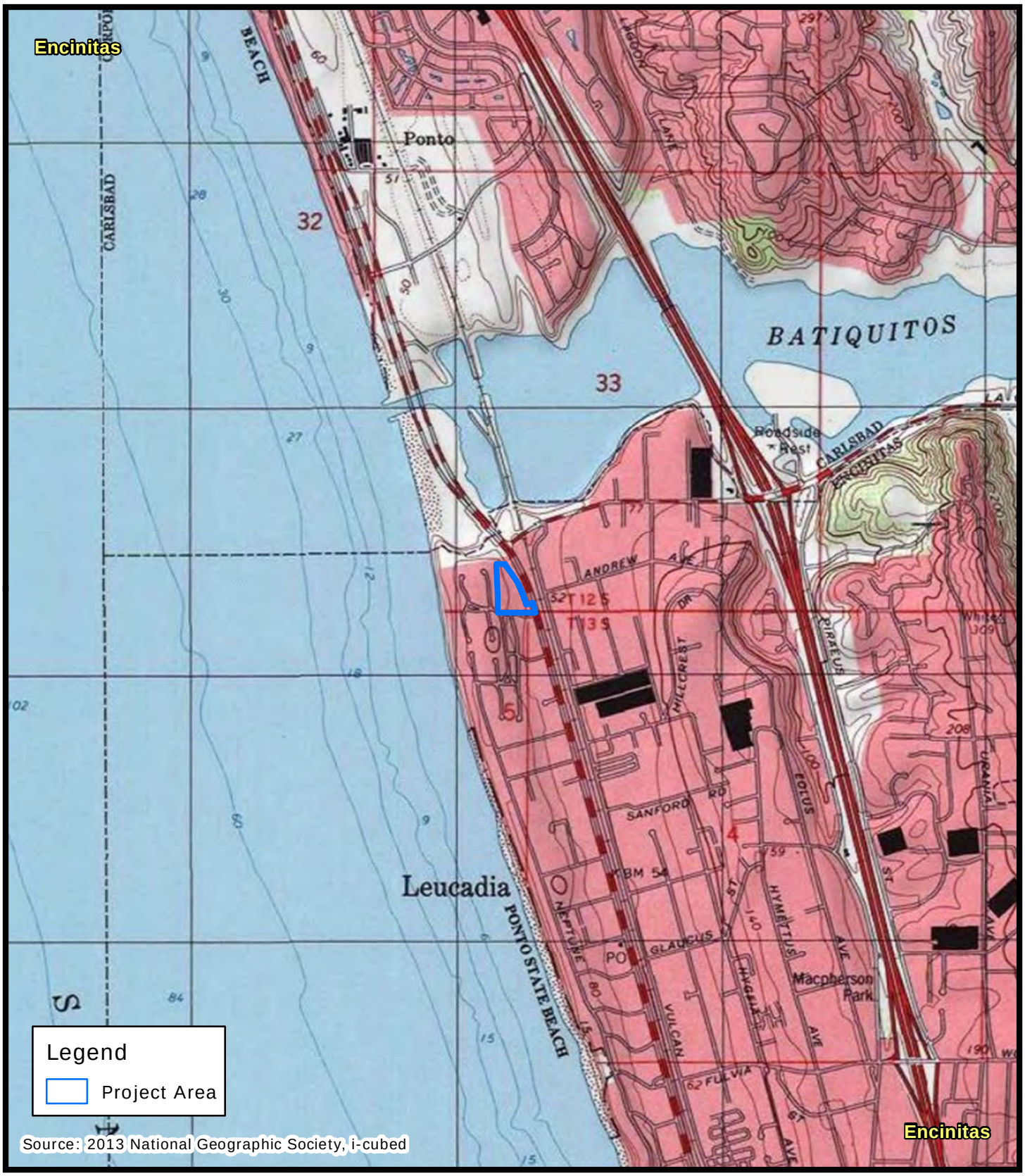
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Robert Pinto, Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, CA, 91901

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Pinto,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

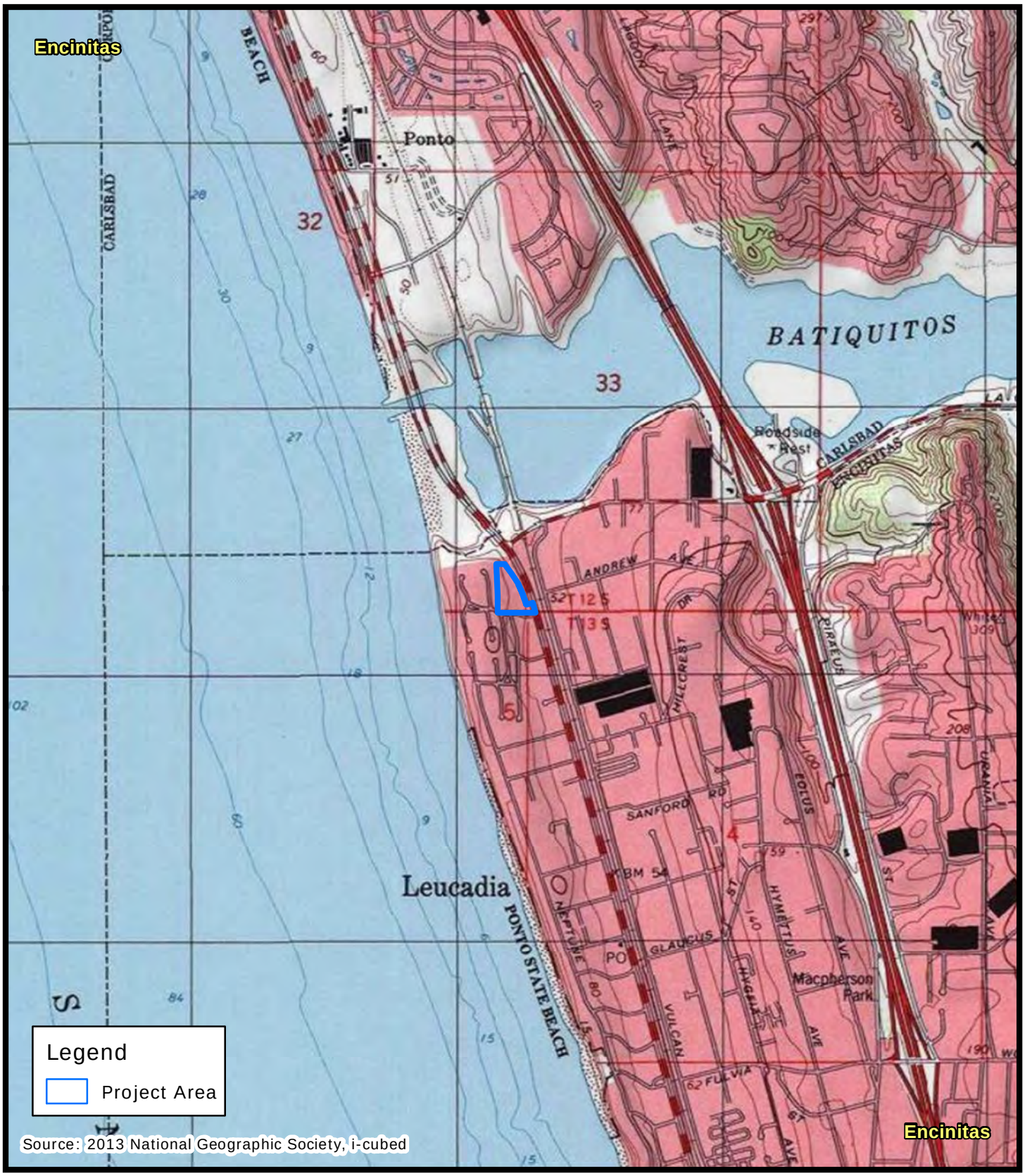
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Edwin Romero, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Mr. Romero,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

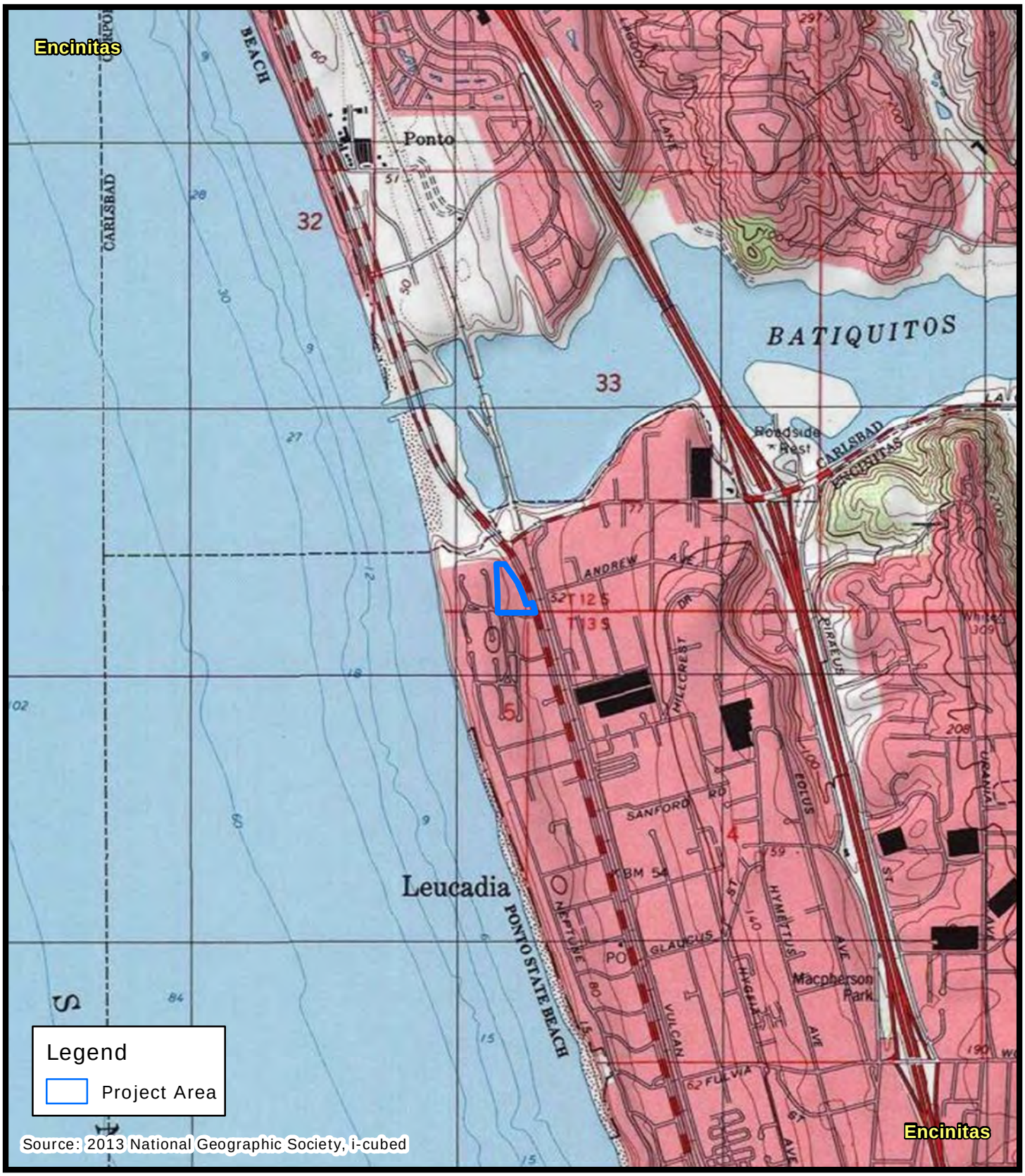
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

City of Encinitas
Development Services Department
505 S. Vulcan Avenue, Encinitas, California 92024-3633

December 16, 2020

VIA ELECTRONIC MAIL
AND CERTIFIED U.S. MAIL

Angela Elliott Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA, 91905

SUBJECT: Cultural Resources Study for the Marea Village Environmental Impact Report (APNs 216-041-20, 216-041-21 and 216-041-06)

Dear Ms. Santos,

Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village project, a mixed-use development located at 1900 and 1950 North Coast Highway 101 in the city of Encinitas. The project site consists of three parcels; the Assessor Parcel Numbers (APNs) associated with the project are 216-041-20, 216-041-21, and 216-041-06. The project site is currently occupied by an operating restaurant, a commercial center, and an abandoned building formerly operated as a restaurant. The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. The project requires California Environmental Quality Act (CEQA) review and approval of a coastal development permit. The city of Encinitas (City) is the CEQA Lead Agency.

The Native American Heritage Commission (NAHC) has identified you as a member of a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project. You or your tribe may have concerns regarding a previously unrecorded prehistoric site identified within the project footprint; therefore, we are contacting you to ask for your input on cultural resources in the area as part of informal information gathering.

The City has contracted with Michael Baker International to conduct cultural resource studies for the project. A record search of NAHC Sacred Lands File (SLF) was completed and the results were negative. Additionally, a record search from the South Coastal Information Center indicated no cultural resources were previously recorded within the project footprint. However, three prehistoric resources were identified within one-half mile of the project. Two of these sites (P-37-009589/CA-SDI-009589 and P-37-026508/CA-

SDI-017404) can be described as consisting of charcoal, fire affected rock, shell, and lithic debitage. P-37-009589 has been tested and evaluated to be considered not a cultural resource. P-37-026508 has not been evaluated. The third site (P-37-037812/CA-SDI-022520); consists of flaked stone, ground stone, charcoal and shell scatter with midden soil. Testing revealed buried prehistoric cultural deposit and site recommended eligible for the National Register of Historic Properties (NRHP) and the California Register of Historic Resources (CRHR).

During a pedestrian survey of the project site by Michael Baker International Senior Archaeologist Nicholas F. Hearth M.A., RPA, a previously unrecorded prehistoric site consisting of four flaked stone and fire affected rock artifacts was discovered. In addition, there are four historic-age buildings located at 1900 North Coast Highway 101. These potential resources have not been evaluated for inclusion on the CRHR, but will be as part of CEQA review.

The City is requesting any information that you may have regarding traditional cultural properties, heritage sites or the presence of sensitive Native American cultural resources within the project area. Early identification of heritage sites or other concerns will ensure their consideration during project planning.

If you know of any cultural resources that could be impacted by the proposed project, or if you would like additional information, please do not hesitate to contact Nicholas Hearth at nicholas.hearth@mbakerintl.com or by phone at (909) 974-4924. Also, please do not hesitate to contact me.

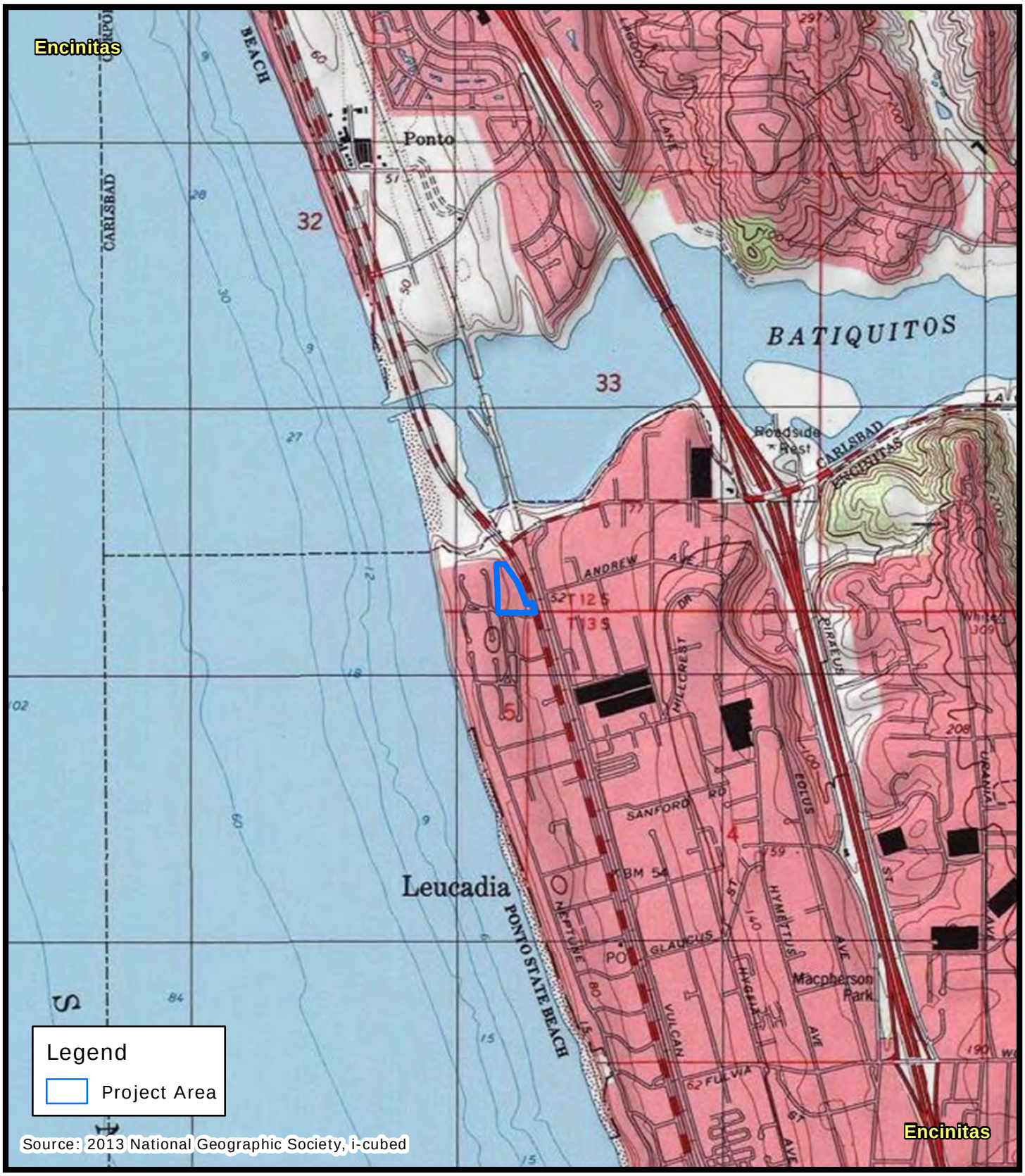
My contact information is:

Scott Vurbeff
Environmental Project Manager
Encinitas Development Services Department
505 S. Vulcan Avenue
Encinitas, CA 92024
Ph. 760-633-2692
Email: svurbeff@encinitasca.gov

Sincerely,

Scott Vurbeff
Environmental Project Manager

Enclosure: Project Location Map



N
W E
S

0 1,000 2,000 Feet

Project Location Map

Michael Baker
INTERNATIONAL

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:45 AM
To: allenl@sanpasqualtribe.org
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Lawson - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Allen Lawson,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:15 AM
To: cjlinton73@aol.com
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Linton - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Clint Linton,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:48 AM
To: ssilva@sycuan-nsn.gov
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Martinez - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Cody Martinez,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Hearth, Nicholas

From: Smith, Natalie
Sent: Tuesday, February 16, 2021 3:58 PM
To: Hearth, Nicholas
Subject: FW: EXTERNAL: FW: Marea Village (Fenway) Environmental Impact Report Project

Can you please make the change to the appendices?

Natalie Smith| Senior Environmental Project Manager - Planning
9755 Clairemont Mesa Blvd Suite 100 | San Diego, CA 92124-1333
[O] 858-614-5000 | [D] 858-614-5033 | [M] 916-620-4763
Natalie.Smith@mbakerintl.com | www.mbakerintl.com

Michael Baker INTERNATIONAL 80 YEARS Making a Difference

From: Scott Vurbeff <SVurbeff@encinitasca.gov>
Sent: Tuesday, February 16, 2021 3:57 PM
To: rteran@viejas-nsn.gov
Cc: epingleton@viejas-nsn.gov
Subject: RE: EXTERNAL: FW: Marea Village (Fenway) Environmental Impact Report Project

Mr. Teran,

Thank you for your comments. The City's consultant is wrapping up completion of the Phase II assessment and we will forward the report to you and Mr. Pingleton for review and comment when it is completed. If necessary, we will coordinate with Mr. Pingleton on the need for Viejas cultural monitors in the future.

Regards,

Scott Vurbeff | Environmental Project Manager | Encinitas Development Services Dept.
505 S. Vulcan Ave. | Encinitas, CA 92024 | ph. 760-633-2692
svurbeff@encinitasca.gov

From: Ray Teran <rteran@viejas-nsn.gov>
Sent: Friday, January 15, 2021 11:10 AM
To: Hearth, Nicholas <Nicholas.Hearth@mbakerintl.com>
Cc: Ernest Pingleton <epingleton@viejas-nsn.gov>
Subject: EXTERNAL: FW: Marea Village (Fenway) Environmental Impact Report Project

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the APE-DE of the proposed project.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

If you wish to utilize Viejas cultural monitors, please call Ernest Pingleton at 619-655-0410 or email, epingleton@viejas-nsn.gov, for contracting and scheduling. Thank you.

From: Ernest Pingleton
Sent: Friday, January 15, 2021 11:05 AM
To: Ray Teran <rteran@viejas-nsn.gov>
Subject: Fwd: Marea Village (Fenway) Environmental Impact Report Project

Sent from my iPhone

Begin forwarded message:

> **From:** "Young, Marcel" <Marcel.Young@mbakerintl.com>
> **Date:** January 15, 2021 at 10:59:56 AM PST
> **To:** Ernest Pingleton <epingleton@viejas-nsn.gov>
> **Cc:** "Hearth, Nicholas" <Nicholas.Hearth@mbakerintl.com>
> **Subject: Marea Village (Fenway) Environmental Impact Report Project**
>
> Good Afternoon Mr. Ernest Pingleton,
>
> On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.
>
> Thank you for your time,
>
> **Marcel Young** | Archaelogical Field Technician
> 2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
> Marcel.Young@mbakerintl.com | www.mbakerintl.com

<image001.png>
<Pingleton - 2020-12-16 - Marea Village EIR.pdf>

This message contains confidential information and is intended only for the individual(s) addressed in the message. If you are not the named addressee, you should not disseminate, distribute, or copy this e-mail. If you are not the intended recipient, you are notified that disclosing, distributing, or copying this e-mail is strictly prohibited.

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:20 AM
To: epinto@jiv-nsn.gov
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: E Pinto - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Ms. Erica Pinto,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Thursday, January 14, 2021 4:42 PM
To: cloyd@barona-nsn.gov
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Romero - 2020-12-16 - Marea Village EIR.pdf

Good afternoon Mr. Edwin Romero,

I am following up regarding the Marea Village (Fenway) Environmental Impact Report Project located in the city of Encinitas, County of San Diego. On behalf of the city, Michael Baker International sent out a letter to the tribal contact listed on the NAHC list on December 16, 2020. We were hoping you may have information regarding any cultural resources within this area. Additionally, we want to answer any questions you may have. Please see the attached letter and map with the Project Area location.

Please contact me at your earliest convenience regarding this project.

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Hearth, Nicholas

From: Scott Vurbeff <SVurbeff@encinitasca.gov>
Sent: Tuesday, February 2, 2021 11:56 AM
To: buncelaw@aol.com
Cc: Young, Marcel; Smith, Natalie; Hearth, Nicholas
Subject: EXTERNAL: RE: Cultural resources study for Marea Village project EIR

Mr. Bunce,

We start the consultation process with you after the Phase II study has been completed. This study will be forwarded to you for review and comment.

Thank you,

Scott Vurbeff | Environmental Project Manager | Encinitas Development Services Dept.
505 S. Vulcan Ave. | Encinitas, CA 92024 | ph. 760-633-2692
svurbeff@encinitasca.gov

From: buncelaw@aol.com <buncelaw@aol.com>
Sent: Friday, January 22, 2021 1:46 PM
To: nicholas.hearth@mbakerintl.com
Cc: Marcel.Young@mbakerintl.com; Scott Vurbeff <SVurbeff@encinitasca.gov>
Subject: Cultural resources study for Marea Village project EIR

[**NOTICE:** Caution: External Email]

Dear Mr. Hearth,

Yesterday I called Marcel Young of Michael Baker International concerning the letter of December 16, 2020 from the City of Encinitas to former Chairman Edwin Romero of the Barona Band of Mission Indians concerning the cultural resources study being performed for the EIR for the above project. Chairman Romero has now retired, and has been succeeded by Chairman Ray Welch. I serve as the Tribal Attorney for the Barona Band. Chairman Welch has asked me to follow up on your letter.

We appreciate the outreach to the Barona Band on this project. Normally, the Barona Band conducts consultation with many local governments under AB 52 and otherwise, but has not with the City of Encinitas because this is the first time that a project of interest has come to Barona's attention from the City of Encinitas. Please consider the copy of this email to Mr. Vurbeff to be a request for consultation under AB 52. Although the project site is apparently significantly disturbed, the project includes a large subterranean parking garage, for which major new excavation would likely be needed. The site is located at the mouth of a lagoon, a likely location for a hunting camp or habitation, especially because one of the nearby known cultural sites includes midden.

As instructed in Mr. Vurbeff's letter, I tried to call you earlier today, but got a recording saying that I had reached a different number. So I left a message for you to call me. The email from Mr. Young says that, if he does not receive a reply to his email of January 22, 2021 by January 22, 2021, the City will consider its outreach effort complete. Consultation is not complete, and I am writing today to verify the Barona Band's interest in this project and consulting regarding it. Please call me at 760-489-0329 to continue the discussion.

Sincerely,

Art Bunce, Tribal Attorney

This message contains confidential information and is intended only for the individual(s) addressed in the message. If you are not the named addressee, you should not disseminate, distribute, or copy this e-mail. If you are not the intended recipient, you are notified that disclosing, distributing, or copying this e-mail is strictly prohibited.

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:30 AM
To: LP13boots@aol.com
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Parada - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Ms. Gwendolyn Parada,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:42 AM
To: johnf@sanpasqualtribe.org
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Flores - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. John Flores,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:33 AM
To: jmiller@LPtribe.net
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Miller - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Javaughn Miller,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:25 AM
To: lcumper@jiv-nsn.gov
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Cumper - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Ms. Lisa Cumper,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:11 AM
To: michaelg@leaningrock.net
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Garcia - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Michael Garcia,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:37 AM
To: mesagrandeband@msn.com
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Linton2 - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Michael Linton,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Thursday, January 14, 2021 4:47 PM
To: rgoff@campo-nsn.gov
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: Goff - 2020-12-16 - Marea Village EIR.pdf

Good afternoon Mr. Ralph Goff,

I am following up regarding the Marea Village (Fenway) Environmental Impact Report Project located in the city of Encinitas, County of San Diego. On behalf of the city, Michael Baker International sent out a letter to the tribal contact listed on the NAHC list on December 16, 2020. We were hoping you may have information regarding any cultural resources within this area. Additionally, we want to answer any questions you may have. Please see the attached letter and map with the Project Area location.

Please contact me at your earliest convenience regarding this project.

Marcel Young | Archaelogical Field Technician
2729 Prospect Park Dr. Suite 220 | Rancho Cordova, CA 95670 | [O] (916) 361-8384
Marcel.Young@mbakerintl.com | www.mbakerintl.com

Young, Marcel

From: Young, Marcel
Sent: Friday, January 15, 2021 10:05 AM
To: wmicklin@leaningrock.net
Cc: Hearth, Nicholas
Subject: Marea Village (Fenway) Environmental Impact Report Project
Attachments: R Pinto - 2020-12-16 - Marea Village EIR.pdf

Good Afternoon Mr. Robert Pinto,

On behalf of the City of Encinitas, Michael Baker International mailed a letter on December 16, 2020, for the Marea Village (Fenway) Environmental Impact Report Project in Encinitas, San Diego County. Please find the same letter and map attached. Please feel free to respond with any questions, concerns, or information that you care to share about the project or location. Please direct all follow-ups to Nick Hearth, M.A., RPA at nicholas.hearth@mbakerintl.com. We will try you by phone next week if we don't receive a reply to this email. If we don't hear back from you by January 22, 2021, the City will consider this outreach effort complete.

Thank you for your time,

Nick Hearth | Senior Archaeologist/Principal Investigator
3536 Concours St. #100 | Ontario, CA 91764 | [O] 909.974.4924
nicholas.hearth@mbakerintl.com | www.mbakerintl.com

Michael Baker INTERNATIONAL 80 YEARS Making a Difference

Michael Baker
INTERNATIONAL

Appendix D:
Site Photographs

CONFIDENTIAL

Michael Baker
INTERNATIONAL

Appendix D has been redacted from this report.

Michael Baker
INTERNATIONAL

Appendix E:

DPR 523 Records (Update)

CONFIDENTIAL

Appendix E has been redacted from this report.

Michael Baker
INTERNATIONAL

Michael Baker
INTERNATIONAL

Appendix F:
Surface Collection and Shovel Test Pit Data

		Shell		bone/teeth		Flakes/Shatter		Flake Tools		FAR		GS/FAR		Possible Tarring pebble		TOTAL	
		n=	g	n=	g	n=	g	n=	g	n=	g	n=	g	n=	g	n=	g
STP 1	0-10 cm															0	0.0
	10-20 cm															0	0.0
	20-30 cm									2	275.9	1	127.1			3	403.0
	30-40 cm															0	0.0
	40-50 cm	2	0.2			1	5.0									3	5.2
	50-60 cm															0	0.0
	60-70 cm	7	0.9			1	0.0	1	26.6							9	27.5
	70-80 cm	1	0.1			1	0.0							1	6.3	3	6.4
	80-90 cm	1	0.0	2	0.0	4	0.3									7	0.3
	90-100 cm					1	0.0									1	0.0
	TOTAL	11	1.2	2	0.0	8	5.3	1	26.6	2	275.9	1	127.1	1	6.3	26	442.4

		Shell		Flakes/Shatter		GS/FAR		battered/groundstone		TOTAL	
		n=	g	n=	g	n=	g	n=	g	n=	g
STP 2	0-10 cm									0	0.0
	10-20 cm	1	0.0	2	0.1					3	0.1
	20-30 cm			1	0.3					1	0.3
	30-40 cm			1	2.2					1	2.2
	40-50 cm									0	0.0
	50-60 cm			1	0.0					1	0.0
	60-70 cm									0	0.0
	70-80 cm			1	1.3	1	17.7			1	1.3
	80-90 cm									0	0.0
	90-100 cm							1	135.2	1	135.2
	TOTAL	1	0.0	6	3.9	1	17.7	1	135.2	8	139.1

		Shell		Flakes/Shatter		TOTAL	
		n=	g	n=	g	n=	g
STP 3	0-10 cm	1	0.0			1	0.0
	10-20 cm	1	0.1			1	0.1
	20-30 cm			2	2.6	2	2.6
	30-40 cm					0	0.0
	40-50 cm					0	0.0
	50-60 cm					0	0.0
	TOTAL	2	0.1	2	2.6	4	2.7

		Flakes/Shatter		TOTAL	
		n=	g	n=	g
STP 4	0-10 cm			0	0.0
	10-20 cm			0	0.0
	20-30 cm	2	0.0	2	0.0
	30-40 cm			0	0.0
	40-50 cm			0	0.0
	TOTAL	2	0.0	2	0.0

		Shell		Flakes/Shatter		Hammerstone		Hammerstone/FAR		TOTAL	
		n=	g	n=	g	n=	g	n=	g	n=	g
STP 5	0-10 cm							1	138.5	1	138.5
	10-20 cm	1	0.0	1	1.4					2	1.4
	20-30 cm									0	0.0
	30-40 cm									0	0.0
	40-50 cm	1	0.0	3	5.8					4	5.8
	50-60 cm			1	0.9					1	0.9
	60-70 cm			1	0.1	1	195.6			2	195.7
	70-80 cm									0	0.0
	80-90 cm									0	0.0
	TOTAL	2	0.0	6	8.2	1	195.6	1	138.5	10	342.3

		Shell		bone/teeth		Flakes/Shatter		Core/Core Fragment		TOTAL	
		n=	g	n=	g	n=	g	n=	g	n=	g
STP 6	0-10 cm	3	1.0							3	1.0
	10-20 cm							1	501.1	1	501.1
	20-30 cm	1	0.3							1	0.3
	30-40 cm					1	0.0			1	0.0
	40-50 cm	3	0.4							3	0.4
	50-60 cm	3	2.7			2	38.4			5	41.1
	60-70 cm					4	39.9			4	39.9
	70-80 cm	1	0.0	1	0.3	2	0.9			4	1.2
	80-90 cm									0	0.0
	90-100 cm					2	0.7			2	0.7
	TOTAL	11	4.4	1	0.3	11	79.9	1	501.1	24	585.7

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX E
GREENHOUSE GAS EMISSIONS AND ENERGY TECHNICAL MEMORANDUM

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

Technical Memorandum:
GREENHOUSE GAS EMISSIONS AND ENERGY

Marea Village Mixed Use Development Project

MBAKERINTL.COM

Technical Memorandum

TO:	City of Encinitas	**DATE:**	March 1, 2021
FROM:	Michael Baker International	**SUBJECT:**	Greenhouse Gas Emissions and Energy for the Marea Village Mixed Use Development Project

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential greenhouse gas (GHG) impacts and energy consumption impacts resulting from the construction and operation of the proposed project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site is via North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area.

Vehicular access to the site would be provided via a right turn in from the southbound lane of North Coast Highway 101 and a new left turn lane from the northbound North Coast Highway 101. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. It is anticipated there would also be pedestrian access to

the site from the property to the north of the project which is the site of a hotel that is currently under construction. The hotel is anticipated to be operational prior to the project.

Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone overlay. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Limited Visitor-Serving Commercial (N-LVSC) with a Coastal Zone and Residential-30 (R-30) Zone overlay. As part of the City of Encinitas Housing Element Update, Site 1 of the project site was allocated a minimum of 33 residential units if the site is developed at a mixed-use ratio.

Project construction would occur over approximately 15 months, beginning in September 2021. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating. It is anticipated that the project would be completed and operational by February 2023.

EXISTING SITE CONDITIONS

The project site is currently occupied by an operating restaurant, a small commercial center, and a vacant structure formerly operated as a restaurant, along with various supporting surface parking areas and a small area of previously undeveloped land.

The topography of the project site varies. Developed areas in the southern portion of the site are generally flat; however, approximately 14 percent of the overall site has a slope greater than 25 percent, with some on-site slopes exceeding 40 percent.

The existing Seabluffe residential community of 255-gated townhomes is located directly adjacent to the south and west. Moorgate Road and approximately 18 parking stalls run along the southern boundary of the site. The Pacific Ocean lies further west, approximately 0.14-mile from the site. A new hotel (currently under construction) is located adjacent to the north of the project site. The intersection of La Costa Avenue and North Coast Highway 101 lies approximately 215 feet to the northeast. North Coast Highway 101, a four-lane divided highway with two lanes and a dedicated bike lane in both directions, forms the eastern boundary of the project site. Sidewalks are only available along southbound Highway 101 on the north half of the project site. The North County Transit District (NCTD) railroad runs north-south and parallels Highway 101 on the east, approximately 135 feet to the east of the project site at its nearest point.

ENVIRONMENTAL SETTING

Global Climate Change

The natural process through which heat is retained in the troposphere is called the "greenhouse effect."[1] The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHG in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This "trapping" of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

The most abundant GHGs are water vapor and carbon dioxide (CO_2). Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP)

[1] The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

for each GHG based on its ability to absorb and re-radiate long wave radiation. GHGs normally associated with development projects include the following:[2]

Water Vapor (H_2O). Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively. The primary human related source of water vapor comes from fuel combustion in motor vehicles; however, it does not contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The IPCC has not determined a GWP for water vapor.

Carbon Dioxide (CO_2). Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, CO_2 emissions from fossil fuel combustion increased by a total of 3.7 percent between 1990 and 2018.[3] CO_2 is the most widely emitted GHG and is the reference gas (GWP of 1) for determining GWPs for other GHGs.

Methane (CH_4). Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The United States' top three methane sources are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, used for space and water heating, steam production, and power generation. The GWP of methane is 25.

Nitrous Oxide (N_2O). Nitrous oxide is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 298.

Hydrofluorocarbons (HFCs). Typically used as refrigerants for both stationary refrigeration and mobile air conditioning, use of HFCs for cooling and foam blowing is increasing, as the continued phase out of chlorofluorocarbons (CFCs) and HCFCs gains momentum. The 100-year GWP of HFCs range from 12 for HFC-161 to 14,800 for HFC-23.

Perfluorocarbons (PFCs). PFCs are compounds consisting of carbon and fluorine and are primarily created as a byproduct of aluminum production and semiconductor manufacturing. PFCs are potent GHGs with a GWP several thousand times that of CO_2, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years). The GWP of PFCs range from 7,390 to 12,200.

Sulfur hexafluoride (SF_6). SF_6 is a colorless, odorless, nontoxic, nonflammable gas. SF_6 is the most potent GHG that has been evaluated by the IPCC with a GWP of 22,800. However, its global warming contribution is not as high as the GWP would indicate due to its low mixing ratio compared to CO_2 (4 parts per trillion [ppt] in 1990 versus 365 ppm, respectively).

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified

[2] All GWPs are given as 100-year GWP. Generally, GWPs were obtained from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4), with the addition of GWPs from the IPCC's Fifth Assessment Report for fluorinated GHGs that did not have GWPs in the AR4.

[3] United States Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2018*, 2020, https://www.epa.gov/sites/production/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf, accessed October 15, 2020.

as stratospheric ozone (O_3) depletors; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

Hydrochlorofluorocarbons (HCFCs). HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year GWPs of HCFCs range from 77 for HCFC-123 to 2,310 for HCFC-142b.

1,1,1 trichloroethane. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The GWP of methyl chloroform is 146 times that of CO_2.

Chlorofluorocarbons (CFCs). CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the U.S. Environmental Protection Agency's (EPA) Final Rule (57 Federal Register [FR] 3374) for the phase out of O_3 depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with 100-year GWPs ranging from 4,750 for CFC-11 to 14,400 for CFC-13.

Electricity/Natural Gas Services

San Diego Gas and Electric (SDG&E) provides electrical services to the City through State-regulated public utility contracts. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, generation of electricity is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatt (MW). One MW provides enough energy to power 1,000 average California homes per day. Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

SDG&E also provides natural gas services to the City. Natural gas is a hydrocarbon fuel found in reservoirs beneath the earth's surface and is composed primarily of CH_4. It is used for space and water heating, process heating and electricity generation, and as transportation fuel. Use of natural gas to generate electricity is expected to increase in coming years because it is a relatively clean alternative to other fossil fuels like oil and coal. In California and throughout the western United States, many new electrical generation plants that are fired by natural gas are being brought online. Thus, there is great interest in importing liquefied natural gas from other parts of the world. Nearly 45 percent of the electricity consumed in California was generated using natural gas.[4] While the supply of natural gas in the United States and production has increased greatly, California produces little, and imports 90 percent of its natural gas.[5]

[4] California Energy Commission, *Supply and Demand of Natural Gas in California*, https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california, accessed October 15, 2020.

[5] Ibid.

Energy Usage

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 7,966.6 trillion BTU in 2018 (the most recent year for which this specific data is available), which equates to an average of 202 million BTU per capita.[6,7] Of California's total energy usage, the breakdown by sector is 39.8 percent transportation, 23.2 percent industrial, 18.9 percent commercial, and 18.1 percent residential.[8] Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2019, taxable gasoline sales (including aviation gasoline) in California accounted for 15,338,758,756 gallons of gasoline.[9]

The electricity consumption attributable to San Diego County from 2009 to 2019 is shown in Table 1, *Electricity Consumption in San Diego County 2009-2019*. As indicated in Table 1, energy consumption in San Diego County remained relatively constant between 2009 and 2019, with no substantial increase or decrease.

Table 1
Electricity Consumption in San Diego County 2009-2019

Year	Electricity Consumption (in millions of kilowatt hours)
2009	19,561
2010	19,115
2011	19,122
2012	19,647
2013	19,688
2014	19,999
2015	19,894
2016	19,666
2017	19,667
2018	19,733
2019	19,048

Source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms. energy.ca.gov/elecbycounty.aspx, accessed October 15, 2020.

The natural gas consumption in San Diego County from 2009 to 2019 is shown in Table 2, *Natural Gas Consumption in San Diego County 2009-2019*. Similar to energy consumption, natural gas consumption in San Diego County remained relatively constant between 2009 and 2019, with no substantial increase or decrease.

6 U.S. Energy Information Administration, *Rankings: Total Energy Consumed per Capita, 2018 (million Btu)*, https://www.eia.gov/state/rankings/?sid=CA#series/12, accessed October 15, 2020.

7 U.S. Energy Information Administration, *Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2018*, https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=US, accessed October 15, 2020.

8 U.S. Energy Information Administration, *California Energy Consumption by End-Use Section, 2018*, https://www.eia.gov/state/?sid=CA#tabs-1, accessed October 15, 2020.

9 California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, https://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.xlsx, accessed October 15, 2020.

Table 2
Natural Gas Consumption in San Diego County 2009-2019

Year	Natural Gas Consumption (in millions of therms)
2009	515
2010	556
2011	529
2012	515
2013	528
2014	451
2015	453
2016	473
2017	480
2018	483
2019	534

Source: California Energy Commission, *Gas Consumption by County*, http://www.ecdms.energy. ca.gov/gasbycounty.aspx, accessed October 15, 2020.

Gasoline/Diesel Fuels

Automotive fuel consumption in San Diego County from 2009 to 2019 is shown in Table 3, *Automotive Fuel Consumption in San Diego County 2009-2019* (projections for the year 2020 are also shown). As shown in Table 3, since 2009 on-road automotive fuel consumption in San Diego County has generally declined and heavy-duty vehicle fuel consumption has steadily increased.

Table 3
Automotive Fuel Consumption in San Diego County 2009-2019

Year	On-Road Automotive Fuel Consumption (Gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Gallons)
2009	1,497,291,231	99,875,130
2010	1,508,667,038	97,156,155
2011	1,481,337,159	96,017,458
2012	1,472,989,765	95,242,542
2013	1,478,545,554	101,043,794
2014	1,490,518,576	101,313,889
2015	1,531,616,348	101,781,235
2016	1,569,728,227	107,743,690
2017	1,556,356,992	107,679,306
2018	1,524,037,178	108,226,615
2019	1,490,698,455	108,601,793
2020 (projected)	1,460,575,916	108,341,542

Source: California Air Resources Board, EMFAC2017.

REGULATORY SETTING

Global Climate Change

Federal

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding. The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2, CH_4, N_2O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Presidential Executive Order 13783. Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

State

Various statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

Executive Order S-1-07. Executive Order S-1-07 proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32. The development of the 2017 Scoping Plan Update has identified the LCFS as a regulatory measure to reduce GHG emissions to meet the 2030 emissions target. In calculating statewide emissions and targets, the 2017 Scoping Plan Update has assumed the LCFS be extended to an 18-percent reduction in carbon intensity beyond 2020. On September 27, 2018, CARB approved a rulemaking package that amended the Low Carbon Fuel Standard to relax the 2020 carbon intensity reduction from 10 percent to 7.5 percent and to require a carbon intensity reduction of 20 percent by 2030.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (Cal/EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary also submits biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of Cal/EPA created the California Climate Action Team, made up of members from various State agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-13-08. Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of the State's first climate adaptation strategy. This Executive Order results in consistent guidance from experts on how to address climate change impacts in the State of California.

Assembly Bill 1493. AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. The near-term standards were intended to achieve a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards were intended to achieve a reduction of about 30 percent.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; *California Health and Safety Code* Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Senate Bill 32 (SB 32). Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations

in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

Senate Bill 100 (SB 100). SB 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. The bill would require the California Public Utilities Commission (CPUC), CEC, state board, and all other state agencies to incorporate that policy into all relevant planning. In addition, SB 100 would require the CPUC, CEC, and state board to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every 4 years thereafter, that includes specified information relating to the implementation of the policy.

CARB Scoping Plan. On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business-as-Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce CO_2e emissions by 174 million metric tons. This reduction of 42 million metric tons carbon dioxide equivalent ($MTCO_2e$), or almost ten percent from 2002 to 2004 average emissions, would be required despite the population and economic growth forecasted through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan update did not establish or propose any specific post-2020 goals, but identified such goals in water, waste, natural resources, clean energy, transportation, and land use.

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was approved on December 14, 2017 and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new statewide emissions limit of 260 million $MTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030. The 2017 Scoping Plan Update contains the following goals:

1. SB 350
    - Increases renewable electricity procurement goal from 33 percent to 50 percent by 2030.
    - Doubling of energy efficiency savings by 2030.

2. Low Carbon Fuel Standard (LCFS)
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).

3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.
   - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
   - Increase ZEV buses, delivery and other trucks.

4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.

5. Short-Lived Climate Pollutant (SLCP) Reduction Strategy
   - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
   - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.

6. SB 375 Sustainable Communities Strategies
   - Increased stringency of 2035 targets.

7. Post-2020 Cap-and-Trade Program
   - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
   - CARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements.

8. 20 percent reduction in GHG emissions from the refinery sector.

9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Senate Bill 375. Acknowledging the relationship between land use planning and transportation sector GHG emissions, SB 375 was passed by the State Assembly on August 25, 2008 and signed by the Governor on September 30, 2008. The legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. Reductions in GHG emissions can be achieved by, for example, locating employment opportunities close to transit. Under SB 375, each Metropolitan Planning Organization (MPO) is required to adopt a Sustainable Communities Strategy (SCS) to encourage compact development that reduces passenger vehicle miles traveled (VMT) and trips so the region can meet a target, created by CARB, for reducing GHG emissions. If the SCS is unable to achieve the regional GHG emissions reduction targets, then the MPO is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

Regional

San Diego Association of Governments

The San Diego Association of Governments (SANDAG) developed *San Diego Forward: The Regional Plan* (Regional Plan) to provide a regional growth-management strategy that targets per-capita GHG emissions reductions from passenger vehicles and light-duty trucks in the San Diego region. The Regional Plan integrates land use and transportation strategies to meet GHG emissions reduction targets that are forecasted to achieve the State's GHG reduction goals. The Regional Plan incorporates local land use

projections and circulation networks in city and county general plans. The latest plan is the 2015 Regional Plan, and the Sustainable Community Strategy (SCS) of the 2015 Regional Plan is valid for State funding eligibility and other consistency purposes until the 2021 Regional Plan is adopted in late 2021. Specially, these strategies are:

- Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit;
- Protect the environment and help ensure the success of smart growth land use policies by preserving sensitive habitat, open space, cultural resources, and farmland;
- Invest in a transportation network that gives people transportation choices and reduces greenhouse gas emissions;
- Address the housing needs of all economic segments of the population; and
- Implement the Regional Plan through incentives and collaboration.

Local

<u>City of Encinitas General Plan</u>

The General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life in the City. The General Plan states that a goal of the City is to analyze proposed land uses to ensure that the designations would contribute to a proper balance of land uses within the community. The relevant goals and policies of the General Plan include:

Circulation Element

- **Goal 1**: Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character.
    - **Policy 1.15**: The City will actively support an integrated transportation program that encourages and provides for mass-transit, bicycle transportation, pedestrians, equestrians, and car-pooling.
- **Goal 3**: The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile.
    - **Policy 3.2**: Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives.
    - **Policy 3.3**: Create a safe and convenient circulation system for pedestrians.
    - **Policy 3.11**: The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following:
        - All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network.
        - The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use; and

- The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.

Resource Management Element

- **Goal 1**: The City will conserve, protect, and enhance the water resources in the Planning Area.
  - **Policy 1.1**: Require new development to utilize measures designed to conserve water in their construction.
  - **Policy 1.10**: Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.
- **Goal 6**: The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes.
  - **Policy 6.1**: The City will phase in all practical forms of mandatory recycling as soon as possible.
  - **Policy 6.2**: The City will contract only with waste haulers who will willingly cooperate with the City's recycling effort.
- **Goal 9**: The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as possible, in undeveloped areas.
  - **Policy 9.4**: Encourage and adopt standards for the use of drought tolerant and/ or natural landscaping and efficient irrigation systems throughout the City.
- **Goal 15**: The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.
  - **Policy 15.1**: The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development.
  - **Policy 15.2**: The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.
  - **Policy 15.3**: Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.

<u>Encinitas North 101 Corridor Specific Plan</u>

The project is located within the *Encinitas North 101 Corridor Specific Plan* (Specific Plan). Chapter 9, G*eneral Plan and Local Coastal Program Compliance*, of the Specific Plan identifies goals and policies of the General Plan that are relevant to the Specific Plan area and addresses the Specific Plan's consistency with the General Plan. There are no Specific Plan policies related to GHG or energy. Consistency with the General Plan would ensure compliance with the Specific Plan.

<u>City of Encinitas General Plan Housing Element Update</u>

In March 2019, the City adopted the Housing Element Update (HEU) which provides the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing for all within the City. The purpose of the HEU is to ensure that the City establishes policies,

procedures, and incentives to increase the quality and quantity of the housing supply in the City. The following goal and policy from the HEU are related to GHG reduction.

- **Goal 2**: Sound housing will be provided in the City of Encinitas for all persons.
    - **Policy 2.8**: Continue to develop and promote an energy efficiency conservation measure consistent with the strategies outlined in the City's Climate Action Plan.

Additionally, according to the HEU Environmental Assessment, implementation of projects identified in the HEU would not directly conflict with the policies and reduction measures in the City's Climate Action Plan (CAP). As part of the mitigation requirements of the HEU EA, projects that exceed the City's interim screening threshold of 900 $MTCO_2e$ per year shall prepare a project-specific GHG analysis that identifies an appropriate project-level significance threshold and project-specific mitigation measures. The project-level analysis shall demonstrate that, with implementation of the applicable mitigation measures, the project will not impede implementation of AB 32 or SB 32.

Climate Action Plan

The City's CAP was adopted in January 2018 and was most recently updated and adopted on November 18, 2020. The CAP serves as a guiding document and outlines a course of action for community and municipal operations to reduce GHG emissions and the potential impacts of climate change within the jurisdiction. The CAP benchmarks GHG emissions in 2012 and identifies what reductions are required to meet GHG reduction targets based on state goals embodied in AB 32. The 2020 CAP Update incorporates the HEU residential units into the business-as-usual projection and legislatively adjusted projection and presents associated updates and revisions to the CAP measures. The CAP aims to achieve local community wide GHG reduction targets of 13 percent below 2012 levels by 2020 and 44 percent below 2012 levels by 2030.

To achieve these objectives, the CAP identifies a summary of baseline GHG emissions and the potential growth of these emissions over time; the expected climate change effects on the City; GHG emissions reduction targets and goals to reduce the community's contribution to global warming; and identification of strategies, specific actions, and supporting measures to comply with statewide GHG reduction targets and goals, along with strategies to help the community adapt to climate change impacts.

As part of the CAP implementation, each strategy, action, and supporting measure will be continually assessed and monitored. Reporting on the status of implementation of these strategies, periodic updates to the GHG emissions inventory, and other monitoring activities will help ensure that the CAP is making progress. It should be noted that as of this time, the City has not adopted implementing ordinances for the CAP. Therefore, strategies requiring the City to adopt ordinances to implement are not applicable to the project. The following strategies are applicable to the project:

- RE-2: Require New Homes to install Solar Photovoltaic Systems
- RE-3: Require Commercial Buildings to install Solar Photovoltaic Systems
- CET-4: Require Residential Electric Vehicle Charging Stations
- CET-5: Require Commercial Electric Vehicle Charging Stations

Energy

State

California Building Energy Efficiency Standards (Title 24). In 1978, the CEC established the Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24,", California's energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. The 2016 Title 24 standards went into effect on January 1, 2017. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2016 Title 24 standards are 28 percent more efficient than previous standards for residential development.[10] The standards offer developers better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Further, the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020, promote photovoltaic systems in newly constructed residential buildings. With rooftop solar electricity generation, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards.[11] Additionally, under 2019 Title 24 Building Energy Efficiency Standards nonresidential buildings will use about 30 percent less energy, mainly to lighting upgrades, when compared to 2016 standards.[12]

California Green Building Standards. The California Green Building (CALGreen) Code (California Code of Regulations, Title 24, Part 11), is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and went into effect on January 1, 2020. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

California Public Utilities Commission Energy Efficiency Strategic Plan. The California Public Utilities Commission (CPUC) prepared an Energy Efficiency Strategic Plan (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and a reduction in greenhouse gases. In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California's single roadmap to achieving maximum energy savings in the State between 2009 and 2020, and beyond 2020. The Strategic Plan contains the practical strategies and actions to attain significant statewide energy savings, as a result of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally and internationally. The plan includes the four big bold strategies:

1. All new residential construction in California will be zero net energy by 2020.
2. All new commercial construction in California will be zero net energy by 2030.

[10] California Energy Commission, *2016 Energy Standards Overview*, https://www.lgc.org/wordpress/wp-content/uploads/2016/02/2016-Energy-Standards-Overview-California-Energy-Commission.pdf, accessed October 15, 2020.

[11] California Energy Commission, *2019 Building Energy Efficiency Standards*, March 2018.

[12] Ibid.

3. Heating, ventilation and air condition (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate.
4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

California Energy Commission Integrated Energy Policy Report. In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2019 IEPR on February 20, 2020. The 2019 IEPR provides the results of the CEC's assessments of various energy issues facing California and covers a broad range of topics, including implementation of SB 100 (statewide greenhouse gas reduction targets), integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission, landscape-scale planning, electricity and natural gas demand forecast, transportation energy demand forecast, renewable gas, updates on Southern California's electricity reliability, natural gas outlook, and climate adaptation and resiliency.

Local

The applicable goals, policies, strategies, and actions from the City's General Plan, Specific Plan, and CAP that would help reduce energy consumption and increase renewable energy use in the City would also reduce GHG emissions in the City, and thus have been discussed in the Global Climate Change regulations section above.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) THRESHOLDS

The environmental analysis in this memorandum is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section.

Global Climate Change

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to GHG emissions, if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement GHG-1); and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact Statement GHG-2).

Energy

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to energy, if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement EN-1); and/or

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (refer to Impact Statement EN-2).

METHODOLOGY

Global Climate Change

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). The California Natural Resources Agency (CNRA) has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (see CEQA Guidelines Section 15064(h)(3)).[13] A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.[14]

The City has adopted an interim screening threshold of 900 $MTCO_2e$ per year based on guidance in the CAPCOA's *CEQA & Climate Change* report.[15] The *CEQA & Climate Change* report references an annual 900 $MTCO_2e$ guideline as a conservative threshold for requiring further analysis and is based on a project's vehicle trips, electricity generation, natural gas consumption/combustion, water usage, and solid waste generation. The HEU EA requires developments that would exceed the interim screening threshold of significance to prepare a project-specific GHG analysis that identifies an appropriate project-level significance threshold and project-specific mitigation measures. The project-level analysis shall demonstrate that, with implementation of the applicable mitigation measures, the project will not impede implementation of AB 32 or SB 32.

The project-level analysis calculates the amount of GHG emissions that would be attributable to the project using recommended models, including the most recent version of the California Emissions Estimator Model (CalEEMod), version 2016.3.2, and the CARB EMission FACtor Model 2017 (EMFAC2017), and compares to the City's interim screening threshold of significance. GHG emissions from on-road transportation were calculated using CalEEMod default trip lengths for San Diego County, trip generation data within the *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis* (Traffic Impact Analysis) prepared by LOS Engineering, Inc. (dated November 12, 2020)[16], emission factors from EMFAC2017, and project-specific land use data. GHG emissions from other sources were calculated using CalEEMod default emission rates for San Diego County and project-specific land use data. A CalEEMod model run was conducted to quantify the existing GHG emissions from the operation of the existing restaurant and small commercial center. The CalEEMod

[13] See Generally California Natural Resources Agency, Final Statement of Reasons for Regulatory Action (December 2009), pp. 11-13, 14, 16; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009. Available at https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf, accessed December 16, 2020.

[14] 14 CCR Section 15064(h)(3).

[15] California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, January 2008.

[16] LOS Engineering, Inc., *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, dated November 12, 2020.

model run relied on land use information and daily vehicle trips provided in the Traffic Impact Analysis. It should be noted that although the existing restaurant is currently unoccupied, consistent with the Traffic Impact Analysis, trips generated by the restaurant were accounted for in the existing conditions model.

In the *2017 Climate Change Scoping Plan Update*, CARB suggested substantial progress could be made if a regional or countywide GHG reduction plan, such as the City's CAP, targeted reducing emissions to 6 $MTCO_2e$ per capita by 2030 and 2 $MTCO_2e$ per capita by 2050. However, instead of purely relying on the regional/countywide projections, local data was gathered to establish a baseline to ensure that the proposed project would provide its fair share contribution toward meeting GHG reduction targets.

The significance threshold for the project was developed based on the City's CAP. During preparation of the City's baseline emissions inventory, the University of San Diego's Energy Policy Initiatives Center (EPIC) calculated GHG emissions for both community-wide sectors and County government operations for the year 2012. EPIC then projected emissions for the years 2020 and 2030 based on factors such as population and job growth. EPIC concluded that, in 2012, the total emissions in the City was approximately 459,000 $MTCO_2e$.

To be consistent with SB 32, the City must reduce emissions by 44 percent from the baseline, which equates to a target of 254,575 $MTCO_2e$ per year in 2030. The City's service population in 2030 is expected to be 95,585 (68,345 residents and 27,240 jobs). Therefore, to achieve a City emissions level of 254,575 $MTCO_2e$ per year in 2030, the required per capita efficiency target would be approximately 2.7 $MTCO_2e$ (254,575/95,585) per service population per year, which is approximately half of CARB's suggested target. Based on this approach, for the analysis in Impact Statement GHG-1, if the proposed project would generate GHG emissions equal to or less than 2.7 $MTCO_2e$ per service population per year, the impact would be less than significant. Otherwise, mitigation measures would need to be implemented to mitigate the project's GHG emissions impacts.

The analysis in Impact Statement GHG-2 discusses the project's consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. If the project would be consistent with all applicable plans, the project would not impede implementation of AB 32 or SB 32, and the impact would be less than significant. Otherwise, mitigation measures would need to be implemented to mitigate the project's GHG emissions impacts.

Energy

Appendix F of the CEQA Guidelines is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in Impact Statement EN-1 relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1**: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2**: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- **Criterion 3**: The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4**: The degree to which the project complies with existing energy standards.
- **Criterion 5**: The effects of the project on energy resources.

- **Criterion 6**: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses **Criterion 1**. The discussion on construction-related energy use focuses on **Criteria 2, 4,** and **5**. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses **Criteria 2, 4,** and **6**, and the building energy demand analysis discusses **Criteria 2, 3, 4,** and **5**.

The analysis in Impact Statement EN-2 discusses project consistency with applicable statewide, regional, and local plans related to energy efficiency and renewable energy.

GREENHOUSE GAS EMISSIONS IMPACTS

Impact GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact With Mitigation Incorporated.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO_2, N_2O, and CH_4, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct project related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from energy consumption, water demand, and solid waste generation.[17] CalEEMod was used to calculate direct and indirect project related GHG emissions. Table 4, *Estimated Greenhouse Gas Emissions*, presents the estimated CO_2, N_2O, and CH_4 emissions of the existing uses and the proposed project. CalEEMod outputs are contained within Appendix A, *Greenhouse Gas Emissions and Energy Data*.

Existing Sources of Greenhouse Gases

A CalEEMod model run was conducted to quantify the existing GHG emissions from the operation of the existing restaurant and small commercial center. As shown in Table 4, the existing development emits approximately 699.05 $MTCO_2e$/year.

Table 4
Annual Estimated Greenhouse Gas Emissions

Source[6]	CO_2	CH_4		N_2O		Total Metric Tons of CO_2e[3]
	Metric Tons/yr[1]	Metric Tons/yr[1]	Metric Tons of CO_2e/yr[2]	Metric Tons/yr[1]	Metric Tons of CO_2e/yr[2]	
Existing Conditions Emissions						
Direct Emissions						
Area Source	<0.01	0.00	0.00	0.00	0.00	<0.01
Mobile Source[4]	685.86	0.05	1.17	0.00	0.00	687.02
Total Direct Emissions[3]	685.86	0.05	1.17	0.00	0.00	687.02
Indirect Emissions						
Energy	9.50	<0.01	0.01	<0.01	0.02	9.53

[17] According to EPA, Scope 1 GHG emissions are direct emissions from sources that are owned or controlled by the Agency, including on-site fossil fuel combustion and fleet fuel consumption. Scope 2 GHG emissions are indirect emissions from sources that are owned or controlled by the Agency, including emissions that result from the generation of electricity, heat or steam purchased by the Agency from a utility provider.

Table 4, continued

Solid Waste	0.48	0.03	0.71	0.00	0.00	1.19
Water Demand	1.13	0.01	0.14	<0.01	0.04	1.31
Total Indirect Emissions[3]	11.11	0.03	0.85	0.00	0.07	12.03
Total Existing Emissions[3]	***699.05 MTCO$_2$e/yr***					
Proposed Project Emissions						
Direct Emissions						
Construction[5]	49.55	0.01	0.29	0.00	0.00	49.84
Area Source	67.78	<0.01	0.06	<0.01	0.36	68.20
Mobile Source[4]	1,690.85	0.11	2.83	0.00	0.00	1,693.68
Total Direct Emissions[3]	1,808.18	0.13	3.18	<0.01	0.36	1,811.73
Indirect Emissions						
Energy	574.38	0.02	0.50	0.01	1.86	576.74
Solid Waste	6.11	0.36	9.03	0.00	0.00	15.15
Water Demand	56.99	0.26	6.57	0.01	1.97	65.53
Total Indirect Emissions[3]	637.49	0.64	16.11	0.01	3.83	657.42
Total Project-Related Emissions[3]	***2,469.15 MTCO$_2$e/yr***					
Net Increase of Total Project-Related Emissions[3]	***1,770.10 MTCO$_2$e/yr***					
Reduction from 250 kW Solar Panels	***140.26 MTCO$_2$e/yr***					
Reduction from 39 EV Charging Stations	***141.68 MTCO$_2$e/yr***					
Net Increase of Total Project-Related Emissions After Reductions[3]	***1,488.16 MTCO$_2$e/yr***					
Total Project Service Population (Residence + Employment)[6]	***274***					
Project Per Service Population Emissions	***5.4 MTCO$_2$e/yr per capita***					
City of Encinitas Climate Action Plan Threshold	***2.7 MTCO$_2$e/yr per capita***					
Is Threshold Exceeded?	***Yes***					

Notes:
MTCO$_2$e/yr = Metric Tons Carbon Dioxide Equivalent per year; kW = kilowatt; EV = electric vehicle

1. Emissions calculated using the CalEEMod version 2016.3.2 and the California Air Resources Board EMission FACtor model 2017 (EMFAC2017).
2. Consistent with CalEEMod version 2016.3.2, carbon dioxide equivalent values were calculated using global warming potentials from the 2007 Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf, accessed December 15, 2020.
3. Totals may be slightly off due to rounding.
4. The mobile source emissions were calculated using the trip generation data provided in the LOS Engineering, Inc., *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, dated November 12, 2020.
5. Total project construction GHG emissions equate to 1,495.30 MTCO$_2$e. Value shown is amortized over the lifetime of the project (assumed to be 30 years).
6. Total project service population includes 236 residents and 38 employees. The 38 employees represent net increase from existing conditions (i.e. 62 employees for the project and 24 employees for the existing uses).

Refer to Appendix A, *Greenhouse Gas Emissions and Energy Data*, for detailed model input/output data.

Direct Project-Related Source of Greenhouse Gases

Construction Emissions. Because impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively minimal portion of the overall lifetime project GHG emissions. To adequately include GHG emission from construction in the lifetime/operational GHG estimates, construction emissions are amortized over a 30-year project lifetime.[18] Construction GHG emissions are amortized (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30

[18] South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008, http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf, accessed January 11, 2021.

Table 4, continued

years),[19] then added to the operational emissions. As seen in Table 4, construction of the proposed project would result in an annual total of 49.84 $MTCO_2e$ (amortized over 30 years) which represents a total of approximately 1,495.30 $MTCO_2e$ from the overall construction activities.

Area Source. The project would result in nominal area source emissions; refer to Table 4. Area source emissions would be generated due to an increased demand for natural gas and fuel associated with the development of the proposed project. The primary use of natural gas and fuel producing area source emissions by the project would be for consumer products, architectural coating, natural gas hearth, and landscaping.

Mobile Source Emissions. According to the Traffic Impact Analysis, the proposed project would result in a maximum of 1,963 daily trips, which equates to approximately 1,693.68 $MTCO_2e$/year of mobile source-generated GHG emissions as modeled in CalEEMod; refer to Table 4.

Indirect Project-Related Source of Greenhouse Gases

Energy Consumption. Energy consumption emissions were calculated using the CalEEMod model and project-specific land use data. Electricity would be provided to the project site via SDG&E. The project would indirectly result in 576.74 $MTCO_2e$/year of GHG emissions due to energy consumption; refer to Table 4.

Water Demand. The proposed project's operations would result in a demand of approximately 13.62 million gallons of water per year. Emissions from indirect energy impacts due to water supply would result in 65.53 $MTCO_2e$/year; refer to Table 4.

Solid Waste. Solid waste associated with operations of the proposed project would result in 15.15 $MTCO_2e$/year; refer to Table 4.

Project Sustainable Design

The proposed project includes design features that would reduce project related GHG emissions. The project would install water-efficient fixtures in compliance with 2019 CALGreen Code. The proposed project would include recycling services per Assembly Bill 341, which would divert at least 75 percent of the solid waste generation. The project would install high-efficiency lighting, and would comply with the 2019 Title 24 standards, which would reduce energy usage by approximately 30 percent compared to nonresidential buildings constructed under the 2016 Title 24 standards.[20] These sustainable design features have been incorporated in CalEEMod and shown in Table 4.

In addition, the project would install approximately 250 kilowatt (kW) of solar panels on-site. According to the City's CAP, the City would increase solar capacity by 1.9 megawatt (MW) from residential and commercial development by 2030 and reduce GHG emissions by 1,066 $MTCO_2e$, which is equivalent to approximately 561 $MTCO_2e$ per MW. Therefore, the 250 kW solar panels on-site would reduce GHG emissions by 140.26 $MTCO_2e$/year. Furthermore, the project would include 39 electric vehicle (EV) charging stations on-site. According to the City's CAP, the City would increase the number of EV charging stations by 866 from residential and commercial development by 2030 and reduce GHG emissions by 3,146 $MTCO_2e$, which is equivalent to approximately 3.63 $MTCO_2e$ per EV charging station. Therefore, the 39 EV charging stations on-site would reduce GHG emissions by 141.68 $MTCO_2e$/year.

[19] Projected GHGs from construction have been quantified and amortized over 30 years, which is the number of years considered to represent the life of the project. The amortized construction emissions are added to the annual average operational emissions.

[20] California Energy Commission, *2019 Building Energy Efficiency Standards Fact Sheet*, March 2018.

Total Project-Related Sources of Greenhouse Gases

As shown in Table 4, the total amount of project related GHG emissions from direct and indirect sources combined minus the existing uses GHG emissions would total 1,770.10 $MTCO_2e$/year. With the emission reductions from on-site solar panels and EV charging stations, the project related GHG emissions would total 1,488.16 $MTCO_2e$/year. The project would increase population by 236 residents and employment by 38 employees (net increase from 24 employees for the existing uses to 62 employees for the project), totaling 274 service population. As such, the project would generate GHG emissions of approximately 5.4 $MTCO_2e$ per year per service population, which would exceed the significance threshold of 2.7 $MTCO_2e$ per year per service population from the City's CAP. Therefore, the impact would be potentially significant and mitigation measure would be required. Mitigation Measure MM GHG-1 requires the project applicant to purchase and retire GHG offsets to reduce the project's GHG emissions to 2.7 $MTCO_2e$ per year per service population. With the implementation of Mitigation Measure MM GHG-1, the project would not exceed the GHG emissions threshold from the City's CAP, and the impact would be less than significant.

Mitigation Measures: The following mitigation measure would be required.

MM GHG-1: The applicant or its designee shall purchase and retire greenhouse gas (GHG) offsets to reduce the project's GHG emissions level to 2.7 metric tons carbon dioxide equivalent ($MTCO_2e$) per service population per year, consistent with the performance standards and requirements set forth below.

- The GHG offsets shall be secured from an accredited registry that is recognized by the California Air Resources Board (CARB) or a California air district, or from an emissions reduction credits program that is administered by CARB or a California air district.
- The GHG offsets shall be real, permanent, quantifiable, verifiable, and enforceable.
- Recognizing that future regulatory mandates, technological advances, and/or final project design features would likely result in GHG emissions that are lower than the levels presented in this memorandum, the applicant may prepare a final project GHG emissions inventory prior to City of Encinitas issuance of building permits. The inventory shall be subject to verification by a City-approved third party (at applicant expense), with the final emissions estimates dictating the increment to be mitigated through purchase of GHG offsets. The offsets must also be secured by the applicant and verified by the City of Encinitas prior to certificate of occupancy, thus providing full mitigation prior to completion of the project.

Impact GHG-2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact.

Consistency with Applicable GHG Plans, Policies, or Regulations

The GHG plan consistency for the project is based on the project's consistency with the 2015 Regional Plan, the 2017 Scoping Plan Update, the City's CAP, and applicable goals found within the General Plan. The 2015 Regional Plan is a regional growth-management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the San Diego region. The 2015 Regional Plan incorporates local land use projections and circulation networks in city and county general plans. The 2017 Scoping Plan Update describes the approach California will take to reduce GHG emissions by 40 percent below 1990 levels by the year 2030. The City's CAP and General Plan contain strategies, goals,

and policies that would help implement energy efficient, transportation, water efficient, and waste reduction measures and would subsequently reduce GHG emissions within the City.

Consistency with the SANDAG San Diego Forward: The Regional Plan

On October 9, 2015, SANDAG adopted the 2015 Regional Plan. The 2015 Regional Plan includes five key SCS strategies for achieving the regional VMT and GHG reduction goals, as required by the State. Table 5, *Consistency with the 2015 Regional Plan* shows the project's consistency with the five strategies found within SANDAG's 2015 Regional Plan. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2015 Regional Plan.

Table 5
Consistency with the 2015 Regional Plan

Reduction Strategy	Project Consistency Analysis
Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit.	**Consistent.** The project is an infill project located in urbanized area. The bus stop for North County Transit District's Bus Line 101 is located near the project eastern boundary. In addition, the nearest transit station serving Coaster trains is located approximately 2 miles to the north of the project site. The project would also implement Transportation Demand Management (TDM) strategies including voluntary employer commute program, bikeshare program, pedestrian improvements, and providing public transit information. Therefore, the project would support this strategy by providing housing and jobs near existing transportation infrastructure.
Protect the environment and help ensure the success of smart growth land use policies by preserving sensitive habitat, open space, cultural resources, and farmland.	**Consistent.** The project is located in an urbanized area on disturbed land. Therefore, the project would not conflict with the preservation of sensitive habitat, open space, cultural resources, or farmland.
Invest in a transportation network that gives people transportation choices and reduces greenhouse gas emissions.	**Consistent.** As discussed above, the project would be located near bus stops and transit station and would implement TDM strategies to provide residences and employees multiple transportation choices, and thus would reduce GHG emissions.
Address the housing needs of all economic segments of the population.	**Consistent.** The project is a mixed-use project with 94 multi-family residential units, including 20 low-income density bonus affordable units. Therefore, the project would be consistent with this strategy by providing housing for both the general population and low-income population.
Implement the Regional Plan through incentives and collaboration.	**Not Applicable.** The project would not impair the ability of SANDAG to implement the Regional Plan through incentives and collaborations.
Source: SANDAG, *San Diego Forward: The Regional Plan*, October 9, 2015.	

Consistency with the 2017 CARB Scoping Plan Update

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. Provided in Table 6, *Consistency with the 2017 Scoping Plan Update*, is an evaluation of applicable reduction actions and strategies by emissions source category to determine how the project would be consistent with or exceed reduction actions and strategies outlined in the 2017 Scoping Plan Update.

Table 6
Consistency with the 2017 Scoping Plan Update

Actions and Strategies	Project Consistency Analysis
SB 350	
Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	**Consistent.** The proposed project would not be an electrical provider or would delay the goals of SB 350. Furthermore, the project would utilize electricity from SDG&E which would be required to comply with SB 350. As such, the project would be in compliance with SB 350.
Low Carbon Fuel Standard (LCFS)	
Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	**Consistent.** Motor vehicles driven within the project area would be required to use LCFS complaint fuels, thus the project would be in compliance with this goal.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	
Maintain existing GHG standards of light and heavy-duty vehicles while adding an addition 4.2 million zero-emission vehicles (ZEVs) on the road. Increase the number of ZEV buses, delivery trucks, or other trucks.	**Consistent.** The proposed project would include residential and commercial uses which may include occasional light-, medium-, and heavy-duty truck trips. Truck uses associated with the project would be required to comply with all CARB regulations, including the LCFS and newer engine standards. The proposed project would not conflict with the CARB's goal of adding 4.2 million zero-emission (ZEVs) on the road. Furthermore, development within the project area would be required to comply with the most current version of the Title 24 and CALGreen Code at the time of construction. Therefore, the project would install electric vehicle (EV) charging stations and EV parking spaces on-site. As such, the project would not conflict with the goals of the Mobile Source Strategy.
Sustainable Freight Action Plan	
Improve the freight system efficiency and maximize the use of near zero emission vehicles and equipment powered by renewable energy. Deploy over 100,000 zero-emission trucks and equipment by 2030.	**Consistent.** As described above, truck uses within the project area would be required to comply with all CARB regulations, including the LCFS and newer engine standards. Additionally, the project would not conflict with CARB's goal to deploy over 100,000 zero-emission trucks and equipment by 2030, as the project would comply with all future applicable regulatory standard adopted by CARB. The project would also install EV charging stations and parking spaces on-site, which would encourage the use of zero-emission vehicles.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	
Reduce the GHG emissions of methane and hydrofluorocarbons by 40 percent below the 2013 levels by 2030. Furthermore, reduce the emissions of black carbon by 50 percent below the 2013 levels by the year 2030.	**Consistent.** The project does not involve sources that would emit large amounts of methane (refer to Table 4). Furthermore, the project would comply with all CARB and SDAPCD hydrofluorocarbon regulations. As such, the proposed project would not conflict with the SLCP reduction strategy.
SB 375 Sustainable Communities Strategies	
Increase the stringency of the 2035 GHG emission per capita reduction target for metropolitan planning organizations (MPO).	**Consistent.** As shown in Table 5, the project would be consistent with the SANDAG's 2015 Regional Plan and would not conflict with the goals of SB 375. Furthermore, the project would implement Transportation Demand Management measures to reduce vehicle miles traveled.
Post-2020 Cap and Trade Programs	
The Cap-and-Trade Program will reduce greenhouse gas (GHG) emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals.	**Not Applicable.** As seen in Table 5, the project would not generate GHG emissions over 25,000 metric tons per year cap and trade emission threshold. Therefore, the project would not conflict with this goal.

Table 6, continued

Actions and Strategies	Project Consistency Analysis
Source: California Air Resources Board, *2017 Scoping Plan*, November 2017.	

Consistency with City of Encinitas General Plan

The City's General Plan Circulation Element, Resource Management Element, and Housing Element Update identify goals and policies that would contribute to a reduction in the City's overall GHG emissions. Table 7, *Project Consistency with Applicable Goals and Policies of the City of Encinitas General Plan* compares the proposed project to applicable policies from the General Plan.

Table 7
Project Consistency with Applicable Goals and Policies of the City of Encinitas General Plan

Goal/Policy	Project Consistency
Circulation Element	
Goal 1: Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character. • Policy 1.15: The City will actively support an integrated transportation program that encourages and provides for mass-transit, bicycle transportation, pedestrians, equestrians, and car-pooling.	**Consistent.** The project would incorporate Transportation Demand Management (TDM) strategies that would promote alternative transportation modes and reduce the dependence on personal automobile, including: • Voluntary employer commute program • Develop and/or promote bicycle usage through a bikeshare program • Provide pedestrian improvements such as a connection to the hotel to the north • Provide information about maps, routes, and schedules for public transit In addition, the project site is located close to local bus stops and regional transit stations, and the project would provide bicycle parking spaces on-site. These measures and strategies would ensure the project's consistency with General Plan Circulation Element policies and goals.
Goal 3: The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile. • Policy 3.2: Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives. • Policy 3.3: Create a safe and convenient circulation system for pedestrians. • Policy 3.11: The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following: – All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network. – The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use; and – The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.	
Resource Management Element	
Goal 1: The City will conserve, protect, and enhance the water resources in the Planning Area. • Policy 1.1: Require new development to utilize measures designed to conserve water in their construction. • Policy 1.10: Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.	**Consistent.** The project would install water-efficient fixtures in compliance with 2019 CALGreen Code. In addition, the project would utilize low water use plants appropriate to the region and efficient irrigation system with smart controllers and rain sensors.
Goal 6: The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes. • Policy 6.1: The City will phase in all practical forms of mandatory recycling as soon as possible. • Policy 6.2: The City will contract only with waste haulers who will willingly cooperate with the City's recycling effort.	**Consistent.** The project would include recycling services per Assembly Bill 341, which would divert at least 75 percent of the solid waste generation.
Goal 9: The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as	**Consistent.** Refer to Goal 1 of Resource Management Element above.

Table 7, continued

Goal/Policy	Project Consistency
possible, in undeveloped areas. • Policy 9.4: Encourage and adopt standards for the use of drought tolerant and/ or natural landscaping and efficient irrigation systems throughout the City.	
Goal 15: The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels. • Policy 15.1: The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development. • Policy 15.2: The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation. • Policy 15.3: Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.	**Consistent.** The project would utilize renewable energy by installing solar water heaters for commercial uses and installing approximately 250 kW of solar panels throughout the project site. The project would also comply with the latest energy conserving construction standards and requirements in the 2019 Title 24 Standards and CALGreen Code.
Housing Element Update	
Goal 2: Sound housing will be provided in the City of Encinitas for all persons. • Policy 2.8: Continue to develop and promote an energy efficiency conservation measure consistent with the strategies outlined in the City's Climate Action Plan.	**Consistent.** Refer to Table 8 below for discussion on project consistency with the City's Climate Action Plan energy efficiency conservation measures.
Source: City of Encinitas, *General Plan Circulation Element*, last amended January 22, 2003. City of Encinitas, *General Plan Resource Management Element*, last amended March 9, 2011. City of Encinitas, *2013-2021 Housing Element, Section 1: Housing Element Policy Program*, adopted March 13, 2019.	

Consistency with City of Encinitas Climate Action Plan

The City's CAP identifies GHG reduction strategies, goals, and actions that the City will implement to achieve its GHG reduction target by 2030. Strategies, goals, and actions focus on locally based programs, policies, and projects that will reduce GHG emissions in various categories as a complement to legislative actions taken by the federal and State governments. Table 8, *Project Consistency with Applicable Strategies of the City of Encinitas Climate Action Plan* compares the proposed project to applicable strategies from the CAP.

Table 8
Project Consistency with Applicable Strategies of the City of Encinitas Climate Action Plan

Strategy	Project Consistency
RE-2 Require New Homes to install Solar Photovoltaic Systems Require new multi-family homes to install at least 1 W solar per square feet (e.g., 1,000 sq. ft. home = 1 kW) or minimum 1 kW per unit, to install solar PV systems, unless the installation is impracticable due to poor solar resources.	**Consistent.** The project would include 73,284 square feet of multi-family residential buildings, 18,109 square feet of hotel, and 18,262 square feet of commercial buildings. According to Strategy RE-2, the project would be required to install 1 kW of solar panels per square feet of multi-family residential use, which is equivalent to 73 kW of solar panels in total. The project would install approximately 250 kW of solar panels on-site. Therefore, the project would be consistent with these strategies.
RE-3 Require Commercial Buildings to install Solar Photovoltaic Systems Require installation solar photovoltaic systems on all new commercial buildings, including the commercial portion of mixed-use projects, unless the installation is impracticable due to poor solar resources or other physical constraints, as approved Director of Development Services.	
CET-4 Require Residential Electric Vehicle Charging Stations Starting in 2018, require new residential units to install EVCS equipment. For Multi-Family: Install EVCS equipment at 5% of the total number of parking spaces.	**Consistent.** The project would include a total of 258 parking spaces on-site, and 39 of these spaces would be electric vehicle charging stations (EVCS), which would constitute 15 percent of total parking spaces. Therefore, the project would be consistent with these strategies by providing more than 8 percent EVCS of total parking spaces.
CET-5 Require Commercial Electric Vehicle Charging Stations Stating in 2018, require installation of EVCS at 8% of the total number of parking spaces. For all new commercial buildings, including the	

Strategy	Project Consistency
commercial portion of mixed-use projects.	
Source: City of Encinitas, *Climate Action Plan*, November 2020.	

Consistency with Applicable GHG Plans, Policies, or Regulations

In summary, the project's characteristics render it consistent with statewide, regional, and local climate change mandates, plans, policies, and recommendations. More specifically, the GHG plan consistency analysis provided above demonstrates that the project complies with the regulations and GHG reduction goals, policies, actions, and strategies outlined in the 2015 Regional Plan, the 2017 Scoping Plan Update, the City's General Plan, and the City's CAP. Consistency with these plans would reduce the impact of the project's incremental contribution of GHG emissions. Accordingly, the project would not conflict with any applicable plan, policy, regulation, or recommendation adopted for the purpose of reducing GHG emissions. Therefore, project related greenhouse gas emission impacts in relation to consistency with applicable plans, policies, and/or regulations governing GHG reductions would be less than significant.

Mitigation Measures: No mitigation measures are required.

ENERGY IMPACTS

Impact EN-1: Would the project result in wasteful, inefficient, or unnecessary consumption of energy resources?

Electricity, natural gas, and fuel consumption associated with the proposed project has been prepared utilizing CalEEMod and EMFAC2017. Energy consumption was calculated for both the existing conditions and the proposed project; refer to Appendix A, *Greenhouse Gas Emissions and Energy Data*. The project's electricity, natural gas, and fuel consumption depicted in Table 9, *Project and Countywide Energy Consumption*, include energy consumption reductions from existing uses. As shown in Table 9, the project's energy usage would constitute an approximate 0.0068 percent increase over the County's typical annual electricity consumption, and an approximate 0.0051 percent increase over the County's typical annual natural gas consumption. Additionally, the project's operational vehicle fuel consumption would increase the County's consumption by 0.0109 percent, and the project's construction fuel consumption would increase the County's consumption by 0.0948 percent. (**Criterion 1**).

Table 9
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption[1]	San Diego County Annual Energy Consumption[2]	Percentage Increase Countywide
Electricity Consumption[3]	1,286 MWh	19,047,674 MWh	0.0068%
Natural Gas Consumption[3]	27,119 therms	533,912,231 therms	0.0051%
Operational Automotive Fuel Consumption[3,4]	162,083 gallons	1,490,698,455 gallons	0.0109%
Construction (Heavy-Duty Diesel Vehicle) Fuel Consumption	102,977 gallons	108,601,793 gallons	0.0948%

Notes:
1. As modeled in CalEEMod version 2016.3.2.
2. The project's electricity, natural gas, and fuel consumption are compared to the total consumption in San Diego County in 2019. San Diego County consumption data are shown in Table 1, Table 2, and Table 3 of this study.
3. The project's electricity and natural gas consumption includes reductions from existing uses.
4. Project fuel consumption is calculated based on CalEEMod results for the proposed project. Trip generation and vehicle miles traveled modeled under proposed project included reductions from existing uses. Countywide fuel consumption is from the California Air Resources Board's EMFAC2017 model.

Refer to Appendix A for assumptions used in this analysis.

Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during demolition, grading, and construction. As indicated in Table 9, the project's fuel consumption from construction would be approximately 102,977 gallons, which would increase fuel use in the County by 0.0948 percent. As such, construction would have a nominal effect on the local and regional energy supplies and would not require additional capacity (**Criterion 2**).

Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. In addition, because the cost of fuel and transportation is a significant aspect of construction budgets, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

Significant reductions in energy inputs for construction materials can be achieved by selecting green building materials composed of recycled materials that require less energy to produce than non-recycled materials.[21] The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source materials.[22] It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment, building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**Criterion 5**).

Therefore, construction energy use would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

Operational Energy Consumption

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. Table 9 estimates the annual fuel consumed by vehicles traveling to and from the project site. As indicated in Table 9, project operations are estimated to consume a net increase of approximately 162,083 gallons of fuel per year, which would increase Countywide automotive fuel consumption by 0.0109 percent. The project does not propose any unusual features that would result in excessive long-term operational fuel consumption (**Criterion 2**).

[21] California Department of Resources Recycling and Recovery, *Green Building Materials*, https://www.calrecycle.ca.gov/greenbuilding/materials#Material, accessed December 17, 2020.

[22] Ibid.

The key drivers of transportation-related fuel consumption are job locations/commuting distance and many personal choices on when and where to drive for various purposes. Those factors are outside of the scope of the design of the proposed project. However, the project would include 39 on-site electric vehicle charging stations in parking lots. This project design feature would encourage and support the use of electric vehicles by residents, workers, and visitors of the proposed project and thus reduce the petroleum fuel consumption. In addition, as discussed in the Traffic Impact Analysis, the project would implement Transportation Demand Management (TDM) strategies including voluntary employer commute program, bikeshare program, pedestrian improvements, and providing public transit information. These strategies would reduce VMT and thus reduce transportation fuel consumption (**Criterion 4** and **Criterion 6**).

Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur.

Building Energy Demand

The CEC developed 2018–2030 forecasts for energy consumption and peak demand in support of the 2017 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections. CEC forecasts that the statewide annual average growth rates of energy demand between 2016 and 2030 would be 0.99 percent to 1.59 percent for electricity and 0.25 percent to 0.77 percent for natural gas.[23] As shown in Table 9, operational energy consumption of the project would represent approximately 0.0068 percent increase in electricity consumption and 0.0051 percent increase in natural gas consumption over the current Countywide usage, which would be significantly lower than the CEC's energy demand forecasts. The commercial component of the project would consume energy during the same time periods as other commercial developments, and the residential component of the project would consume energy evenly throughout the day. As a result, the project would not result in unique or more intensive peak or base period electricity demand (**Criterion 2** and **Criterion 3**).

The proposed project would be required to comply with the most current version of the Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the current 2019 Title 24 standards significantly reduces energy usage (30 percent for nonresidential buildings and 53 percent for residential buildings compared to the 2016 standards). The Title 24 Building Energy Efficiency Standards are updated every three years and become more stringent between each update; therefore, complying with the latest 2019 Title 24 standards would make the proposed project more energy efficient than existing buildings built under the earlier versions of the Title 24 standards (**Criterion 4**).

Furthermore, the electricity provider, SDG&E, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The project would also install approximately 250 kW of solar panels on-site. The increase in reliance of renewable energy resources further ensures that the project would not result in the waste of the finite energy resources (**Criterion 5**).

[23] California Energy Commission, *California Energy Demand 2018-2030 Revised Forecast*, February 2018. Annual average growth rates of electricity demand and natural gas per capita demand are shown in Table 1 and Table 3, respectively.

Therefore, the project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

Impact EN-2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would comply the most recent version Title 24 and CALGreen efficiency standards, which would ensure the project incorporates photovoltaic solar panels, energy efficient windows, insulation, lighting, ventilation systems, water efficient fixtures, as well as green building standards. In addition, the project would comply with energy efficiency and renewable energy goals and policies found within the City's CAP and General Plan, as listed in Table 7 and Table 8 under the GHG impacts discussion above. Adherence to the Title 24 and CALGreen requirements and the City's CAP and General Plan goals and policies would ensure that the project would be consistent with the Energy Efficiency Strategic Plan strategies and the IEPR building energy efficiency recommendations. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to energy efficiency. A less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

CUMULATIVE IMPACTS

Global Climate Change

Project-related GHG emissions are not confined to a particular region; instead, GHG emissions are dispersed worldwide. No single project is large enough to result in a measurable increase in global concentrations of GHG emissions. Therefore, impacts identified under Impact Statement GHG-1 and Impact Statement GHG-2 are not project-specific impacts to global climate change, but the proposed project's contribution to this cumulative impact. As discussed above, the proposed project would be consistent with statewide, regional, and local climate change mandates, plans, policies, and recommendations, and therefore would not impede implementation of AB 32 or SB 32. Therefore, the proposed project would not cumulatively contribute to GHG impacts and impacts in this regard would be less than significant.

Energy

The geographic context for cumulative energy consumption impacts for electricity and natural gas is County-wide and relative to SDG&E's service areas. While the geographic context for the transportation-related energy use is more difficult to define, it is meaningful to consider the project in the context of County-wide consumption. Future growth within the County is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure. As shown above, the project would nominally increase the County's electricity, natural gas, and operational fuel consumption; refer to Table 9. Additionally, per the RPS, the project and cumulative projects would utilize electricity provided by SDG&E that would be comprised of 60 percent renewable energy by 2030 and 100 percent renewable energy by 2045. Furthermore, the project and other cumulative projects in the site vicinity would be subject to Title 24, CALGreen Code, CPUC's Energy Efficiency Strategic Plan, and CEC's 2019 IEPR. Thus, the project and related projects would comply with energy conservation plans and efficiency standards required to ensure that energy is used efficiently. As such, implementation of the project and other cumulative projects would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

REFERENCES

Documents

1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed October 15, 2020.
2. California Building Standards Commission, *Guide to the California Green Building Standards Code Residential*, January 1, 2020.
3. California Energy Commission, *2013 California Energy Efficiency Potential and Goals Study, Appendix Volume I*, August 15, 2013.
4. United States Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2018*, 2020, https://www.epa.gov/sites/production/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf, accessed October 15, 2020.
5. California Energy Commission, *2019 Building Energy Efficiency Standards Fact Sheet*, March 2018.
6. California Energy Commission, *Electricity Consumption by County*, http://www.ecdms.energy.ca.gov/elecbycounty.aspx, accessed October 15, 2020.
7. California Energy Commission, *Gas Consumption by County*, http://www.ecdms.energy.ca.gov/gasbycounty.aspx, accessed October 15, 2020.
8. California Energy Commission, *Supply and Demand of Natural Gas in California*, https://ww2.energy.ca.gov/almanac/naturalgas_data/overview.html, accessed October 15, 2020.
9. California Department of Resources Recycling and Recovery, *Green Building Materials*, https://www.calrecycle.ca.gov/greenbuilding/materials#Material, accessed December 17, 2020.
10. California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, http://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.pdf, accessed October 15, 2020.
11. City of Encinitas, *Climate Action Plan*, January 2018, Interim Revision November 2020.
12. City of Encinitas, *General Plan Circulation Element*, last amended January 22, 2003.
13. City of Encinitas, *General Plan Resource Management Element*, last amended March 9, 2011.
14. City of Encinitas, *2013-2021 Housing Element*, Section 1: Housing Element Policy Program, adopted March 13, 2019.
15. Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report*, https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf, accessed October 15, 2020.
16. LOS Engineering, Inc., *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, November 12, 2020.
17. Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, https://scripps.ucsd.edu/programs/keelingcurve/, accessed October 15, 2020.
18. South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008, http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf, accessed January 11, 2021.

19. U.S. Energy Information Administration, *Table F32: Total energy consumption, price, and expenditure estimates, 2017,* https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=CA, accessed October 15, 2020.
20. U.S. Energy Information Administration, *California State Profile and Energy Estimates*, https://www.eia.gov/state/?sid=CA, accessed October 15, 2020.

Websites / Programs

1. Google Earth, 2020.
2. South Coast Air Quality Management District, California Emissions Estimator Model (CalEEMod), version 2016.3.2.

Michael Baker
INTERNATIONAL

Appendix A:
Greenhouse Gas Emissions and Energy Data

Fenway Highway 101 Mixed Use Project
Energy Calculations

Existing Conditions

Land Use	Natural Gas Use		Electricity Use	
	(kBTU/yr)	(Therms)	(kWh/yr)	(MWh/yr)
High Turnover (Sit Down Restaurant)	0	0	0	0
Strip Mall	5,015	50	28,247	28
Totals	**5,015**	**50**	**28,247**	**28**

Proposed Project

Land Use	Natural Gas Use		Electricity Use	
	(kBTU/yr)	(Therms)	(kWh/yr)	(MWh/yr)
Apartments Low Rise	856,513	8,565	387,769	388
City Park	0	0	0	0
Enclosed Parking with Elevator	0	0	359,253	359
General Office Building	56,000	560	43,116	43
High Turnover (Sit Down Restaurant)	638,874	6,389	140,158	140
Hotel	800,219	8,002	204,469	204
Parking Lot	0	0	5,586	6
Quality Restaurant	349,131	3,491	76,594	77
Strip Mall	16,207	162	96,956	97
Totals	**2,716,943**	**27,169**	**1,313,901**	**1,314**

1 kBTU = 0.01 therms

Energy Type	Project Annual Energy Consumption	San Diego County Annual Energy Consumption (2019)	Percentage Increase Countywide
Electricity (MWh)	1,286	19,047,674	0.0067%
Natural Gas (Therms)	27,119	533,912,231	0.0051%

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Fenway Highway 101 Mixed Use Project
Energy Calculations

Existing Conditions

Vehicle Type	Percent of Vehicle Trips[1]	Daily Trips[2]	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon)[3]	Total Annual Fuel Consumption (gallons)[4]
Passenger Cars	0.60	507	1,154,440	22	52,475
Light/Medium Trucks	0.32	273	621,208	17.3	35,908
Heavy Trucks/Other	0.07	61	139,799	6.4	21,844
TOTAL [6]	***1.00***	841	***1,915,447***	--	***110,226***

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from ITE manual.
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Values may be slightly off due to rounding.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Proposed Project

Vehicle Type	Percent of Vehicle Trips[1]	Daily Trips[2]	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon)[3]	Total Annual Fuel Consumption (gallons)[4]
Passenger Cars	0.60	1,183	2,851,999	22	129,636
Light/Medium Trucks	0.32	637	1,534,671	17.3	88,709
Heavy Trucks/Other	0.07	143	345,368	6.4	53,964
TOTAL [6]	***1.00***	1,963	***4,732,038***	--	***272,309***

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from ITE manual.
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Values may be slightly off due to rounding.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Net Increase

Vehicle Type	Daily Trips[2]	Annual Vehicle Miles Traveled[3]	Total Annual Fuel Consumption (gallons)[5]	2019 Countywide Fuel Consumption (gallons)	Percentage Increase Countywide
TOTAL	***1,122***	***2,816,591***	***162,083***	***1,490,698,455***	***0.0109%***

Fenway Highway 101 Mixed Use Project
Energy Calculations

WORKER TRIPS

Phase	Phase Length (# days)	# Worker Trips	Worker Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)	Total Fuel Consumption
Demolition	22	18	10.8	4277		171.74
Grading	98	40	10.8	42336		1700.05
Building Construction	217	129	10.8	302324	**24.90284233**	12140.16
Architectural Coating	132	26	10.8	37066		1488.41
Paving	44	33	10.8	15682		629.71
						16130.06

VENDOR TRIPS

Phase	Phase Length (# days)	# Vendor Trips	Vendor Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)	Total Fuel Consumption
Demolition	22	0	7.3	0		0.00
Grading	98	0	7.3	0		0.00
Building Construction	217	34	7.3	248	**8.343886151**	29.75
Architectural Coating	132	0	7.3	0		0.00
Paving	44	0	7.3	0		0.00
						29.75

HAULING TRIPS

Phase	Phase Length (# days)	# Hauling Trips	Hauling Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)[1]	Total Fuel Consumption
Demolition	22	50	20	1000		119.85
Grading	98	6050	20	121000		14501.64
Building Construction	217	0	20	0	**8.343886151**	0.00
Architectural Coating	132	0	20	0		0.00
Paving	44	0	20	0		0.00
						0.00

TOTAL OFF-SITE MOBILE GALLONS CONSUMED DURING CONSTRUCTION	**16,159.81**

Fenway Highway 101 Mixed Use Project
Energy Calculations

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate (gallons per hour)	Duration (total hours/day)	# days	Total Fuel Consumption (gallons)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	2.3652	8	21	397.35
Demolition	Crawler Tractors	1	8	212	0.43	3.6464	8	21	612.60
Demolition	Crushing/Proc. Equipment	1	8	85	0.78	2.652	8	21	445.54
Demolition	Excavators	1	8	158	0.38	2.4016	8	20	384.26
Demolition	Other Construction Equipment	2	8	172	0.42	2.8896	16	20	924.67
Demolition	Rubber Tired Loaders	1	8	203	0.36	2.9232	8	20	467.71
Grading	Bore/Drill Rigs	2	8	221	0.50	4.42	16	20	1414.40
Grading	Cranes	1	8	231	0.29	2.6796	8	21	450.17
Grading	Crawler Tractors	1	8	212	0.43	3.6464	8	21	612.60
Grading	Excavators	2	8	158	0.38	2.4016	16	21	806.94
Grading	Plate Compactors	2	8	8	0.43	0.1376	16	20	44.03
Grading	Rollers	1	8	80	0.38	1.216	8	20	194.56
Grading	Rough Terrain Forklifts	2	8	100	0.40	1.6	16	20	512.00
Grading	Rubber Tired Loaders	1	8	203	0.36	2.9232	8	20	467.71
Grading	Scrapers	1	8	367	0.48	7.0464	8	20	1127.42
Grading	Signal Boards	2	8	6	0.82	0.1968	16	132	415.64
Grading	Skid Steer Loaders	1	8	65	0.37	0.962	8	132	1015.87
Building Construction	Cranes	1	7	231	0.29	2.6796	7	132	2475.95
Building Construction	Other Construction Equipment	3	8	172	0.42	2.8896	24	132	9154.25
Building Construction	Paving Equipment	1	8	132	0.36	1.9008	8	132	2007.24
Building Construction	Rough Terrain Forklifts	2	8	100	0.4	1.6	16	22	563.20
Building Construction	Rubber Tired Loaders	1	8	203	0.36	2.9232	8	21	491.10
Building Construction	Signal Boards	2	8	6	0.82	0.1968	16	21	66.12
Building Construction	Skid Steer Loaders	1	8	65	0.37	0.962	8	21	161.62
Building Construction	Tractors/Loaders/Backhoes	2	7	97	0.37	1.4356	14	20	401.97
Architectural Coating	Air Compressors	1	6	78	0.48	1.4976	6	20	179.71
Paving	Cement and Mortar Mixers	2	6	9	0.56	0.2016	12	20	48.38
Paving	Graders	1	8	187	0.41	3.0668	8	20	490.69
Paving	Off-Highway Trucks	4	8	402	0.38	6.1104	32	20	3910.66
Paving	Paving Equipment	1	8	132	0.36	1.9008	8	132	2007.24
Paving	Rollers	1	8	80	0.38	1.216	8	132	1284.10
Paving	Rubber Tired Loaders	1	8	203	0.36	2.9232	8	132	3086.90
Paving	Signal Boards	2	8	6	0.82	0.1968	16	132	415.64
Paving	Surfacing Equipment	1	8	263	0.3	3.156	8	132	3332.74
Paving	Tractors/Loaders/Backhoes	2	8	97	0.37	1.4356	16	22	505.33
								Total:	40,876
								Off-Site Mobile Construction Total:	16,160
								TOTAL:	**57,036**

Notes:

Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor

Where:

Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Fenway North Coast Highway 101

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
City Park	0.65	Acre	0.65	28,200.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	30.00	Room	0.50	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	2.19	73,284.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - per traffic study and site plan; city park = open space; based on site plan, 42 surface parking spaces, remaining subterranaen; total lot 3.8 acres

Construction Phase - per construction questionnaire

Off-road Equipment -

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Off-road Equipment - per construction questionnaire

Demolition -

Grading -

Architectural Coating - SDAPCD Rule 67.0.1 Non-flat coatings

Vehicle Trips - based on traffic study; pass-by trips incorporated in trip rate, so set to 0%

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Area Coating - SDAPCD Rule 67.0.1 Non-flat coatings

Construction Off-road Equipment Mitigation - dust control implemented by applicant

Area Mitigation - no wood-burning hearth

Energy Mitigation - 2019 Title 24. Applicant will install high efficiency lighting

Water Mitigation -

Waste Mitigation - AB 341

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00

tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaCoating	Area_Parking	5697	4989
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	98.00
tblConstructionPhase	NumDays	18.00	44.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.4350e-003	0.00
tblFleetMix	MCY	5.9380e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	1.0560e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9340e-003	0.00
tblFleetMix	SBUS	7.5700e-004	0.00
tblFleetMix	UBUS	1.8880e-003	0.00
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00

tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	28,200.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	43,560.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	73,284.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	1.00	0.50
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	2.19
tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	36.00	34.00
tblTripsAndVMT	WorkerTripNumber	133.00	129.00
tblTripsAndVMT	WorkerTripNumber	27.00	26.00
tblTripsAndVMT	WorkerTripNumber	38.00	33.00
tblVehicleEF	HHD	0.59	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.74	6.66
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.37	9.0030e-003
tblVehicleEF	HHD	4,504.81	1,118.02
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	15.07	5.75
tblVehicleEF	HHD	1.98	2.66
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.1570e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.0200e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02

tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.43	0.45
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.51	0.52
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.56	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.27	6.57
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.17	8.4620e-003
tblVehicleEF	HHD	4,772.44	1,105.76
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.09

tblVehicleEF	HHD	15.55	5.50
tblVehicleEF	HHD	1.91	2.56
tblVehicleEF	HHD	19.51	2.38
tblVehicleEF	HHD	0.01	2.7490e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	9.6380e-003	2.6300e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.40	0.48
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.49	0.55
tblVehicleEF	HHD	1.4300e-004	1.0000e-005

tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.64	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	2.40	6.80
tblVehicleEF	HHD	1.09	0.48
tblVehicleEF	HHD	3.46	9.2430e-003
tblVehicleEF	HHD	4,135.22	1,134.96
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	14.40	6.09
tblVehicleEF	HHD	1.98	2.65
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.7200e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.5590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004

tblVehicleEF	HHD	0.46	0.41
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.56	0.48
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	6.1170e-003	2.0310e-003
tblVehicleEF	LDA	7.4160e-003	0.05
tblVehicleEF	LDA	0.58	0.53
tblVehicleEF	LDA	1.39	2.07
tblVehicleEF	LDA	248.05	253.20
tblVehicleEF	LDA	54.17	51.49
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003

tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	7.5890e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.10	0.20
tblVehicleEF	LDA	2.4840e-003	2.5050e-003
tblVehicleEF	LDA	5.6600e-004	5.1000e-004
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	6.5890e-003	2.2110e-003
tblVehicleEF	LDA	6.4700e-003	0.04
tblVehicleEF	LDA	0.65	0.60
tblVehicleEF	LDA	1.15	1.71
tblVehicleEF	LDA	262.13	267.26
tblVehicleEF	LDA	54.17	50.84
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.04	0.06

tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	8.1610e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.09	0.18
tblVehicleEF	LDA	2.6260e-003	2.6440e-003
tblVehicleEF	LDA	5.6200e-004	5.0300e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDA	6.0150e-003	1.9880e-003
tblVehicleEF	LDA	7.8030e-003	0.05
tblVehicleEF	LDA	0.56	0.52
tblVehicleEF	LDA	1.49	2.22
tblVehicleEF	LDA	245.50	250.66
tblVehicleEF	LDA	54.17	51.77
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.08	0.18
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10

tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	7.4640e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.21
tblVehicleEF	LDA	2.4590e-003	2.4790e-003
tblVehicleEF	LDA	5.6800e-004	5.1200e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.12	0.23
tblVehicleEF	LDT1	0.01	5.8260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.15	1.12
tblVehicleEF	LDT1	2.76	2.33
tblVehicleEF	LDT1	318.80	308.27
tblVehicleEF	LDT1	69.57	63.74
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12

tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.2010e-003	3.0510e-003
tblVehicleEF	LDT1	7.4400e-004	6.3100e-004
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT1	0.01	6.2810e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.28	1.25
tblVehicleEF	LDT1	2.27	1.92
tblVehicleEF	LDT1	336.12	323.06
tblVehicleEF	LDT1	69.57	62.92
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.03	0.03

tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	3.3760e-003	3.1970e-003
tblVehicleEF	LDT1	7.3600e-004	6.2300e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.18	0.34
tblVehicleEF	LDT1	0.01	5.7180e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	1.13	1.10
tblVehicleEF	LDT1	2.97	2.50
tblVehicleEF	LDT1	315.67	305.60
tblVehicleEF	LDT1	69.57	64.07
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.23	0.90

tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	3.1700e-003	3.0240e-003
tblVehicleEF	LDT1	7.4800e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.22	0.42
tblVehicleEF	LDT2	5.2450e-003	3.5940e-003
tblVehicleEF	LDT2	5.9320e-003	0.07
tblVehicleEF	LDT2	0.65	0.78
tblVehicleEF	LDT2	1.31	2.67
tblVehicleEF	LDT2	352.67	328.12
tblVehicleEF	LDT2	76.85	68.00
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.27
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.08	0.30

tblVehicleEF	LDT2	3.5310e-003	3.2460e-003
tblVehicleEF	LDT2	7.9000e-004	6.7300e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.09	0.33
tblVehicleEF	LDT2	5.6410e-003	3.8950e-003
tblVehicleEF	LDT2	5.1630e-003	0.06
tblVehicleEF	LDT2	0.72	0.87
tblVehicleEF	LDT2	1.09	2.20
tblVehicleEF	LDT2	372.26	342.39
tblVehicleEF	LDT2	76.85	67.13
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.7270e-003	3.3870e-003

tblVehicleEF	LDT2	7.8600e-004	6.6400e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	5.1590e-003	3.5220e-003
tblVehicleEF	LDT2	6.2490e-003	0.07
tblVehicleEF	LDT2	0.63	0.76
tblVehicleEF	LDT2	1.41	2.86
tblVehicleEF	LDT2	349.13	325.54
tblVehicleEF	LDT2	76.85	68.36
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.28
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	3.4950e-003	3.2210e-003
tblVehicleEF	LDT2	7.9200e-004	6.7700e-004

tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LHD1	4.6610e-003	4.6580e-003
tblVehicleEF	LHD1	0.02	9.0720e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.84
tblVehicleEF	LHD1	2.19	0.96
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.79
tblVehicleEF	LHD1	27.83	10.50
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.05
tblVehicleEF	LHD1	0.85	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003

tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.1900e-004	1.0400e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6680e-003
tblVehicleEF	LHD1	0.02	9.2260e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	2.07	0.91
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.82
tblVehicleEF	LHD1	27.83	10.41
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.42	1.01

tblVehicleEF	LHD1	0.81	0.27
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5190e-003
tblVehicleEF	LHD1	3.1700e-004	1.0300e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6540e-003

tblVehicleEF	LHD1	0.02	9.0050e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.83
tblVehicleEF	LHD1	2.25	0.98
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.78
tblVehicleEF	LHD1	27.83	10.54
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.04
tblVehicleEF	LHD1	0.87	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005

tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.2000e-004	1.0400e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.24	0.08
tblVehicleEF	LHD2	3.3670e-003	3.1630e-003
tblVehicleEF	LHD2	7.3190e-003	7.0780e-003
tblVehicleEF	LHD2	6.3840e-003	8.1370e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.64
tblVehicleEF	LHD2	1.07	0.58
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.02
tblVehicleEF	LHD2	23.94	7.63
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.80	1.03
tblVehicleEF	LHD2	0.44	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1690e-003
tblVehicleEF	LHD2	7.3940e-003	7.1360e-003
tblVehicleEF	LHD2	6.1320e-003	7.8000e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.65
tblVehicleEF	LHD2	1.02	0.55
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.03
tblVehicleEF	LHD2	23.94	7.57

tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.99
tblVehicleEF	LHD2	0.42	0.17
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5800e-004	7.5000e-005
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.09	0.04

tblVehicleEF	LHD2	3.3670e-003	3.1600e-003
tblVehicleEF	LHD2	7.2860e-003	7.0520e-003
tblVehicleEF	LHD2	6.4980e-003	8.2880e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.55	0.64
tblVehicleEF	LHD2	1.10	0.59
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.01
tblVehicleEF	LHD2	23.94	7.65
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.79	1.02
tblVehicleEF	LHD2	0.45	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004

tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.15	20.36
tblVehicleEF	MCY	9.73	8.62
tblVehicleEF	MCY	182.50	220.59
tblVehicleEF	MCY	45.45	60.38
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.41	2.43
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.10	1.86

tblVehicleEF	MCY	2.2260e-003	2.1830e-003
tblVehicleEF	MCY	6.7500e-004	5.9700e-004
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.99	3.00
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.29	2.02
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	19.19	19.39
tblVehicleEF	MCY	8.77	7.73
tblVehicleEF	MCY	182.50	218.78
tblVehicleEF	MCY	45.45	58.13
tblVehicleEF	MCY	1.04	1.04
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.34	2.35
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2080e-003	2.1650e-003

tblVehicleEF	MCY	6.5100e-004	5.7500e-004
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.90	2.91
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	20.81	21.03
tblVehicleEF	MCY	10.22	9.08
tblVehicleEF	MCY	182.50	221.81
tblVehicleEF	MCY	45.45	61.49
tblVehicleEF	MCY	1.17	1.17
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	2.45	2.47
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	2.2370e-003	2.1950e-003
tblVehicleEF	MCY	6.8700e-004	6.0900e-004

tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	3.04	3.05
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.43	2.15
tblVehicleEF	MDV	8.8620e-003	4.0850e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.94	0.82
tblVehicleEF	MDV	2.31	2.98
tblVehicleEF	MDV	472.46	396.95
tblVehicleEF	MDV	101.95	81.91
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.7270e-003	3.9230e-003
tblVehicleEF	MDV	1.0600e-003	8.1100e-004
tblVehicleEF	MDV	0.05	0.07

tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.19	0.41
tblVehicleEF	MDV	9.5090e-003	4.4250e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	0.92
tblVehicleEF	MDV	1.92	2.45
tblVehicleEF	MDV	498.02	411.39
tblVehicleEF	MDV	101.95	80.91
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.19	0.29
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	4.9840e-003	4.0660e-003
tblVehicleEF	MDV	1.0530e-003	8.0100e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15

tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	8.7270e-003	4.0050e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.92	0.81
tblVehicleEF	MDV	2.49	3.21
tblVehicleEF	MDV	467.83	394.33
tblVehicleEF	MDV	101.95	82.33
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	4.6810e-003	3.8980e-003
tblVehicleEF	MDV	1.0630e-003	8.1500e-004
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08

tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.20	0.43
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.63	1.44
tblVehicleEF	MH	5.98	2.11
tblVehicleEF	MH	1,229.84	1,578.48
tblVehicleEF	MH	59.91	18.87
tblVehicleEF	MH	1.50	1.64
tblVehicleEF	MH	0.88	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0300e-004	1.8700e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07

tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.16	0.12
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.72	1.48
tblVehicleEF	MH	5.59	1.98
tblVehicleEF	MH	1,229.84	1,578.55
tblVehicleEF	MH	59.91	18.64
tblVehicleEF	MH	1.42	1.56
tblVehicleEF	MH	0.83	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.33	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9700e-004	1.8400e-004
tblVehicleEF	MH	1.33	1.10

tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.60	1.42
tblVehicleEF	MH	6.17	2.18
tblVehicleEF	MH	1,229.84	1,578.45
tblVehicleEF	MH	59.91	18.98
tblVehicleEF	MH	1.50	1.63
tblVehicleEF	MH	0.90	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0700e-004	1.8800e-004

tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.39	0.11
tblVehicleEF	MHD	0.02	4.0650e-003
tblVehicleEF	MHD	4.2710e-003	2.3930e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	0.34	0.31
tblVehicleEF	MHD	5.31	1.27
tblVehicleEF	MHD	143.80	80.44
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.83
tblVehicleEF	MHD	0.42	0.50
tblVehicleEF	MHD	1.14	1.40
tblVehicleEF	MHD	11.05	1.63
tblVehicleEF	MHD	1.5900e-004	4.7800e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.5200e-004	4.5700e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02

tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.3830e-003	7.6300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5600e-004	1.0700e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.02	3.8640e-003
tblVehicleEF	MHD	4.3360e-003	2.4460e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.24	0.36
tblVehicleEF	MHD	0.35	0.31
tblVehicleEF	MHD	4.99	1.20
tblVehicleEF	MHD	152.31	80.75
tblVehicleEF	MHD	1,192.51	1,110.80
tblVehicleEF	MHD	56.35	10.70
tblVehicleEF	MHD	0.43	0.50
tblVehicleEF	MHD	1.10	1.34
tblVehicleEF	MHD	11.01	1.63
tblVehicleEF	MHD	1.3400e-004	4.0600e-004

tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.2800e-004	3.8900e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.4640e-003	7.6600e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	1.0600e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	0.02	4.3540e-003
tblVehicleEF	MHD	4.2430e-003	2.3680e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.46	0.50
tblVehicleEF	MHD	0.34	0.30

tblVehicleEF	MHD	5.46	1.31
tblVehicleEF	MHD	132.03	80.00
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.88
tblVehicleEF	MHD	0.40	0.51
tblVehicleEF	MHD	1.14	1.39
tblVehicleEF	MHD	11.07	1.64
tblVehicleEF	MHD	1.9400e-004	5.7700e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.8500e-004	5.5200e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2720e-003	7.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5900e-004	1.0800e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	5.3900e-004	3.2400e-004

tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	OBUS	0.01	8.7080e-003
tblVehicleEF	OBUS	9.2660e-003	9.7640e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.59
tblVehicleEF	OBUS	0.60	1.09
tblVehicleEF	OBUS	5.69	2.71
tblVehicleEF	OBUS	97.15	83.74
tblVehicleEF	OBUS	1,321.20	1,532.41
tblVehicleEF	OBUS	68.99	20.78
tblVehicleEF	OBUS	0.20	0.32
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.24	0.75
tblVehicleEF	OBUS	1.9000e-005	1.0700e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.8000e-005	1.0300e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.32

tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	9.3900e-004	7.9800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9000e-004	2.0600e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.7890e-003
tblVehicleEF	OBUS	9.4730e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.58
tblVehicleEF	OBUS	0.61	1.12
tblVehicleEF	OBUS	5.32	2.54
tblVehicleEF	OBUS	101.91	82.81
tblVehicleEF	OBUS	1,321.20	1,532.46
tblVehicleEF	OBUS	68.99	20.48
tblVehicleEF	OBUS	0.21	0.30
tblVehicleEF	OBUS	0.81	1.18
tblVehicleEF	OBUS	2.19	0.74
tblVehicleEF	OBUS	1.6000e-005	9.5000e-005
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.5000e-005	9.1000e-005

tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.8400e-004	7.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8300e-004	2.0300e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6110e-003
tblVehicleEF	OBUS	9.1750e-003	9.6490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.60
tblVehicleEF	OBUS	0.60	1.08
tblVehicleEF	OBUS	5.86	2.80
tblVehicleEF	OBUS	90.56	85.02
tblVehicleEF	OBUS	1,321.20	1,532.39

tblVehicleEF	OBUS	68.99	20.92
tblVehicleEF	OBUS	0.20	0.34
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.26	0.76
tblVehicleEF	OBUS	2.3000e-005	1.2400e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	8.7600e-004	8.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.0700e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.39	0.14

tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.4420e-003
tblVehicleEF	SBUS	0.08	2.7370e-003
tblVehicleEF	SBUS	6.51	1.26
tblVehicleEF	SBUS	0.93	0.75
tblVehicleEF	SBUS	7.02	0.43
tblVehicleEF	SBUS	1,202.36	332.94
tblVehicleEF	SBUS	1,104.05	1,097.57
tblVehicleEF	SBUS	42.89	2.06
tblVehicleEF	SBUS	9.97	4.02
tblVehicleEF	SBUS	4.09	7.31
tblVehicleEF	SBUS	14.11	0.63
tblVehicleEF	SBUS	9.4890e-003	5.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	9.0780e-003	4.9200e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.36	0.02

tblVehicleEF	SBUS	0.01	3.1570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5000e-004	2.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.39	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.5710e-003
tblVehicleEF	SBUS	0.07	2.3800e-003
tblVehicleEF	SBUS	6.39	1.21
tblVehicleEF	SBUS	0.95	0.77
tblVehicleEF	SBUS	5.49	0.34
tblVehicleEF	SBUS	1,261.22	344.72
tblVehicleEF	SBUS	1,104.05	1,097.59
tblVehicleEF	SBUS	42.89	1.91
tblVehicleEF	SBUS	10.29	4.13
tblVehicleEF	SBUS	3.94	7.04
tblVehicleEF	SBUS	14.07	0.63
tblVehicleEF	SBUS	7.9990e-003	4.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	7.6530e-003	4.1540e-003

tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	0.77	0.13
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.11	0.13
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.31	0.01
tblVehicleEF	SBUS	0.01	3.2680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2400e-004	1.9000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	1.11	0.18
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.34	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.3810e-003
tblVehicleEF	SBUS	0.08	2.9140e-003
tblVehicleEF	SBUS	6.68	1.32
tblVehicleEF	SBUS	0.92	0.75
tblVehicleEF	SBUS	7.78	0.48
tblVehicleEF	SBUS	1,121.06	316.67

tblVehicleEF	SBUS	1,104.05	1,097.55
tblVehicleEF	SBUS	42.89	2.14
tblVehicleEF	SBUS	9.53	3.87
tblVehicleEF	SBUS	4.07	7.28
tblVehicleEF	SBUS	14.12	0.63
tblVehicleEF	SBUS	0.01	6.2490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	0.01	5.9780e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.38	0.02
tblVehicleEF	SBUS	0.01	3.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6300e-004	2.1000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004

tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.41	0.02
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.16	1.23
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.21
tblVehicleEF	UBUS	6.89	0.40
tblVehicleEF	UBUS	13.92	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2970e-003	1.4100e-004

tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.69	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.04	0.01
tblVehicleEF	UBUS	7.43	38.17
tblVehicleEF	UBUS	6.11	1.06
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	13.93
tblVehicleEF	UBUS	6.64	0.40
tblVehicleEF	UBUS	13.86	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	8.6180e-003	0.02

tblVehicleEF	UBUS	0.58	0.05
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2790e-003	1.3800e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.02
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.63	1.31
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.34
tblVehicleEF	UBUS	6.85	0.40
tblVehicleEF	UBUS	13.94	0.14
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003

tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.66	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.3050e-003	1.4200e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	2.23	5.00
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.72	0.07
tblVehicleTrips	HO_TTP	39.60	39.50
tblVehicleTrips	HS_TTP	18.80	18.90
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	77.00	81.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	38.00	82.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	ST_TR	7.16	6.00

tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	19.24
tblVehicleTrips	ST_TR	158.37	141.10
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	94.36	87.82
tblVehicleTrips	ST_TR	42.04	33.95
tblVehicleTrips	SU_TR	6.07	6.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	19.24
tblVehicleTrips	SU_TR	131.84	141.10
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	72.16	87.82
tblVehicleTrips	SU_TR	20.43	33.95
tblVehicleTrips	WD_TR	6.59	6.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	19.24
tblVehicleTrips	WD_TR	127.15	141.10
tblVehicleTrips	WD_TR	8.17	10.00
tblVehicleTrips	WD_TR	89.95	87.82
tblVehicleTrips	WD_TR	44.32	33.95

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2828	3.4168	2.4308	6.9900e-003	0.1779	0.1159	0.2938	0.0343	0.1073	0.1415	0.0000	635.1526	635.1526	0.1435	0.0000	638.7393
2022	1.0621	4.0862	3.9614	9.5700e-003	0.2550	0.1609	0.4159	0.0550	0.1488	0.2038	0.0000	851.3212	851.3212	0.2097	0.0000	856.5635
Maximum	**1.0621**	**4.0862**	**3.9614**	**9.5700e-003**	**0.2550**	**0.1609**	**0.4159**	**0.0550**	**0.1488**	**0.2038**	**0.0000**	**851.3212**	**851.3212**	**0.2097**	**0.0000**	**856.5635**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2828	3.4168	2.4308	6.9900e-003	0.1250	0.1159	0.2409	0.0283	0.1073	0.1356	0.0000	635.1521	635.1521	0.1435	0.0000	638.7388
2022	1.0621	4.0862	3.9614	9.5700e-003	0.2053	0.1609	0.3663	0.0495	0.1488	0.1984	0.0000	851.3205	851.3205	0.2097	0.0000	856.5628
Maximum	**1.0621**	**4.0862**	**3.9614**	**9.5700e-003**	**0.2053**	**0.1609**	**0.3663**	**0.0495**	**0.1488**	**0.1984**	**0.0000**	**851.3205**	**851.3205**	**0.2097**	**0.0000**	**856.5628**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**23.70**	**0.00**	**14.45**	**12.77**	**0.00**	**3.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	2.4983	2.4983
2	**12-1-2021**	**2-28-2022**	2.4839	2.4839
3	**3-1-2022**	**5-31-2022**	1.1617	1.1617
4	**6-1-2022**	**8-31-2022**	1.4962	1.4962
5	**9-1-2022**	**9-30-2022**	0.1227	0.1227
		Highest	2.4983	2.4983

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.4499	0.1233	7.9816	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8671	138.9651	0.0907	7.6400e-003	143.5090
Energy	0.0176	0.1566	0.1114	9.6000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	660.0635	660.0635	0.0229	7.2400e-003	662.7925
Mobile	0.7537	1.2332	6.1745	0.0181	1.7785	0.0147	1.7932	0.4755	0.0137	0.4892	0.0000	1,690.8538	1,690.8538	0.1132	0.0000	1,693.6834
Waste						0.0000	0.0000		0.0000	0.0000	24.4564	0.0000	24.4564	1.4453	0.0000	60.5896
Water						0.0000	0.0000		0.0000	0.0000	3.1720	62.9626	66.1346	0.3283	8.2200e-003	76.7915
Total	**7.2211**	**1.5131**	**14.2674**	**0.0323**	**1.7785**	**1.0515**	**2.8300**	**0.4755**	**1.0506**	**1.5260**	**124.7264**	**2,455.7471**	**2,580.4734**	**2.0005**	**0.0231**	**2,637.3659**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5585	0.0656	0.7254	4.0000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045
Energy	0.0147	0.1307	0.0934	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	574.3808	574.3808	0.0201	6.2300e-003	576.7400
Mobile	0.7537	1.2332	6.1745	0.0181	1.7785	0.0147	1.7932	0.4755	0.0137	0.4892	0.0000	1,690.8538	1,690.8538	0.1132	0.0000	1,693.6834
Waste						0.0000	0.0000		0.0000	0.0000	6.1141	0.0000	6.1141	0.3613	0.0000	15.1474
Water						0.0000	0.0000		0.0000	0.0000	2.5376	54.4533	56.9909	0.2628	6.6100e-003	65.5307
Total	**1.3268**	**1.4295**	**6.9933**	**0.0193**	**1.7785**	**0.0333**	**1.8118**	**0.4755**	**0.0324**	**0.5078**	**8.6517**	**2,387.4687**	**2,396.1204**	**0.7598**	**0.0141**	**2,419.3060**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**81.63**	**5.52**	**50.98**	**40.27**	**0.00**	**96.83**	**35.98**	**0.00**	**96.92**	**66.72**	**93.06**	**2.78**	**7.14**	**62.02**	**39.13**	**8.27**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	9/30/2021	5	22	
2	Grading	Grading	9/16/2021	1/31/2022	5	98	
3	Building Construction	Building Construction	11/2/2021	8/31/2022	5	217	
4	Architectural Coating	Architectural Coating	5/22/2022	11/22/2022	5	132	
5	Paving	Paving	10/5/2022	12/5/2022	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 147

Acres of Paving: 0.38

Residential Indoor: 148,400; Residential Outdoor: 49,467; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Crawler Tractors	1	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38

Grading	Graders	0	8.00	187	0.41
Grading	Plate Compactors	2	8.00	8	0.43
Grading	Rollers	1	8.00	80	0.38
Grading	Rough Terrain Forklifts	2	8.00	100	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	3	8.00	172	0.42
Building Construction	Paving Equipment	1	8.00	132	0.36
Building Construction	Rough Terrain Forklifts	2	8.00	100	0.40
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Graders	1	8.00	187	0.41
Paving	Off-Highway Trucks	4	8.00	402	0.38
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	203	0.36

Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	50.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	129.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.4800e-003	0.0000	5.4800e-003	8.3000e-004	0.0000	8.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0315	0.3111	0.2577	4.9000e-004		0.0147	0.0147		0.0138	0.0138	0.0000	43.1097	43.1097	0.0107	0.0000	43.3768
Total	**0.0315**	**0.3111**	**0.2577**	**4.9000e-004**	**5.4800e-003**	**0.0147**	**0.0202**	**8.3000e-004**	**0.0138**	**0.0147**	**0.0000**	**43.1097**	**43.1097**	**0.0107**	**0.0000**	**43.3768**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5300e-003	1.6100e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9041	1.9041	1.7000e-004	0.0000	1.9084
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.9000e-004	4.9500e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3870	1.3870	4.0000e-005	0.0000	1.3880
Total	**8.8000e-004**	**7.0200e-003**	**6.5600e-003**	**4.0000e-005**	**2.0200e-003**	**3.0000e-005**	**2.0500e-003**	**5.4000e-004**	**3.0000e-005**	**5.7000e-004**	**0.0000**	**3.2911**	**3.2911**	**2.1000e-004**	**0.0000**	**3.2964**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1400e-003	0.0000	2.1400e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0315	0.3111	0.2577	4.9000e-004		0.0147	0.0147		0.0138	0.0138	0.0000	43.1096	43.1096	0.0107	0.0000	43.3767
Total	**0.0315**	**0.3111**	**0.2577**	**4.9000e-004**	**2.1400e-003**	**0.0147**	**0.0168**	**3.2000e-004**	**0.0138**	**0.0142**	**0.0000**	**43.1096**	**43.1096**	**0.0107**	**0.0000**	**43.3767**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5300e-003	1.6100e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9041	1.9041	1.7000e-004	0.0000	1.9084
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.9000e-004	4.9500e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3870	1.3870	4.0000e-005	0.0000	1.3880
Total	**8.8000e-004**	**7.0200e-003**	**6.5600e-003**	**4.0000e-005**	**2.0200e-003**	**3.0000e-005**	**2.0500e-003**	**5.4000e-004**	**3.0000e-005**	**5.7000e-004**	**0.0000**	**3.2911**	**3.2911**	**2.1000e-004**	**0.0000**	**3.2964**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0814	0.0000	0.0814	8.9300e-003	0.0000	8.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1508	1.6982	1.2549	3.0100e-003		0.0665	0.0665		0.0613	0.0613	0.0000	262.1647	262.1647	0.0835	0.0000	264.2523
Total	**0.1508**	**1.6982**	**1.2549**	**3.0100e-003**	**0.0814**	**0.0665**	**0.1479**	**8.9300e-003**	**0.0613**	**0.0703**	**0.0000**	**262.1647**	**262.1647**	**0.0835**	**0.0000**	**264.2523**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0179	0.6207	0.1531	1.8200e-003	0.0490	1.8800e-003	0.0509	0.0132	1.7900e-003	0.0150	0.0000	181.0210	181.0210	0.0163	0.0000	181.4295
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3500e-003	3.8200e-003	0.0385	1.2000e-004	0.0124	9.0000e-005	0.0124	3.2800e-003	8.0000e-005	3.3600e-003	0.0000	10.7881	10.7881	3.1000e-004	0.0000	10.7958
Total	**0.0232**	**0.6246**	**0.1916**	**1.9400e-003**	**0.0614**	**1.9700e-003**	**0.0633**	**0.0165**	**1.8700e-003**	**0.0184**	**0.0000**	**191.8091**	**191.8091**	**0.0167**	**0.0000**	**192.2253**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0317	0.0000	0.0317	3.4800e-003	0.0000	3.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1508	1.6982	1.2549	3.0100e-003		0.0665	0.0665		0.0613	0.0613	0.0000	262.1644	262.1644	0.0835	0.0000	264.2520
Total	**0.1508**	**1.6982**	**1.2549**	**3.0100e-003**	**0.0317**	**0.0665**	**0.0982**	**3.4800e-003**	**0.0613**	**0.0648**	**0.0000**	**262.1644**	**262.1644**	**0.0835**	**0.0000**	**264.2520**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0179	0.6207	0.1531	1.8200e-003	0.0490	1.8800e-003	0.0509	0.0132	1.7900e-003	0.0150	0.0000	181.0210	181.0210	0.0163	0.0000	181.4295
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3500e-003	3.8200e-003	0.0385	1.2000e-004	0.0124	9.0000e-005	0.0124	3.2800e-003	8.0000e-005	3.3600e-003	0.0000	10.7881	10.7881	3.1000e-004	0.0000	10.7958
Total	**0.0232**	**0.6246**	**0.1916**	**1.9400e-003**	**0.0614**	**1.9700e-003**	**0.0633**	**0.0165**	**1.8700e-003**	**0.0184**	**0.0000**	**191.8091**	**191.8091**	**0.0167**	**0.0000**	**192.2253**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0814	0.0000	0.0814	8.9300e-003	0.0000	8.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0366	0.3894	0.3313	8.2000e-004		0.0153	0.0153		0.0141	0.0141	0.0000	71.5414	71.5414	0.0228	0.0000	72.1111
Total	**0.0366**	**0.3894**	**0.3313**	**8.2000e-004**	**0.0814**	**0.0153**	**0.0966**	**8.9300e-003**	**0.0141**	**0.0230**	**0.0000**	**71.5414**	**71.5414**	**0.0228**	**0.0000**	**72.1111**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5700e-003	0.1548	0.0415	4.9000e-004	0.0417	4.3000e-004	0.0421	0.0106	4.1000e-004	0.0110	0.0000	48.7218	48.7218	4.4100e-003	0.0000	48.8320
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	9.5000e-004	9.7400e-003	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	8.9000e-004	2.0000e-005	9.2000e-004	0.0000	2.8343	2.8343	8.0000e-005	0.0000	2.8363
Total	**5.9500e-003**	**0.1557**	**0.0512**	**5.2000e-004**	**0.0450**	**4.5000e-004**	**0.0455**	**0.0114**	**4.3000e-004**	**0.0119**	**0.0000**	**51.5561**	**51.5561**	**4.4900e-003**	**0.0000**	**51.6683**

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0317	0.0000	0.0317	3.4800e-003	0.0000	3.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0366	0.3894	0.3313	8.2000e-004		0.0153	0.0153		0.0141	0.0141	0.0000	71.5413	71.5413	0.0228	0.0000	72.1110
Total	**0.0366**	**0.3894**	**0.3313**	**8.2000e-004**	**0.0317**	**0.0153**	**0.0470**	**3.4800e-003**	**0.0141**	**0.0176**	**0.0000**	**71.5413**	**71.5413**	**0.0228**	**0.0000**	**72.1110**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5700e-003	0.1548	0.0415	4.9000e-004	0.0417	4.3000e-004	0.0421	0.0106	4.1000e-004	0.0110	0.0000	48.7218	48.7218	4.4100e-003	0.0000	48.8320
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	9.5000e-004	9.7400e-003	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	8.9000e-004	2.0000e-005	9.2000e-004	0.0000	2.8343	2.8343	8.0000e-005	0.0000	2.8363
Total	**5.9500e-003**	**0.1557**	**0.0512**	**5.2000e-004**	**0.0450**	**4.5000e-004**	**0.0455**	**0.0114**	**4.3000e-004**	**0.0119**	**0.0000**	**51.5561**	**51.5561**	**4.4900e-003**	**0.0000**	**51.6683**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0643	0.6920	0.6287	1.0900e-003		0.0324	0.0324		0.0299	0.0299	0.0000	95.3415	95.3415	0.0304	0.0000	96.1016
Total	**0.0643**	**0.6920**	**0.6287**	**1.0900e-003**		**0.0324**	**0.0324**		**0.0299**	**0.0299**	**0.0000**	**95.3415**	**95.3415**	**0.0304**	**0.0000**	**96.1016**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3100e-003	0.0769	0.0205	2.0000e-004	4.9600e-003	1.6000e-004	5.1300e-003	1.4300e-003	1.6000e-004	1.5900e-003	0.0000	19.5557	19.5557	1.4500e-003	0.0000	19.5920
Worker	9.8700e-003	7.0400e-003	0.0709	2.2000e-004	0.0228	1.6000e-004	0.0229	6.0500e-003	1.5000e-004	6.2000e-003	0.0000	19.8808	19.8808	5.7000e-004	0.0000	19.8951
Total	**0.0122**	**0.0839**	**0.0914**	**4.2000e-004**	**0.0277**	**3.2000e-004**	**0.0281**	**7.4800e-003**	**3.1000e-004**	**7.7900e-003**	**0.0000**	**39.4365**	**39.4365**	**2.0200e-003**	**0.0000**	**39.4871**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0643	0.6920	0.6287	1.0900e-003		0.0324	0.0324		0.0299	0.0299	0.0000	95.3414	95.3414	0.0304	0.0000	96.1015
Total	**0.0643**	**0.6920**	**0.6287**	**1.0900e-003**		**0.0324**	**0.0324**		**0.0299**	**0.0299**	**0.0000**	**95.3414**	**95.3414**	**0.0304**	**0.0000**	**96.1015**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3100e-003	0.0769	0.0205	2.0000e-004	4.9600e-003	1.6000e-004	5.1300e-003	1.4300e-003	1.6000e-004	1.5900e-003	0.0000	19.5557	19.5557	1.4500e-003	0.0000	19.5920
Worker	9.8700e-003	7.0400e-003	0.0709	2.2000e-004	0.0228	1.6000e-004	0.0229	6.0500e-003	1.5000e-004	6.2000e-003	0.0000	19.8808	19.8808	5.7000e-004	0.0000	19.8951
Total	**0.0122**	**0.0839**	**0.0914**	**4.2000e-004**	**0.0277**	**3.2000e-004**	**0.0281**	**7.4800e-003**	**3.1000e-004**	**7.7900e-003**	**0.0000**	**39.4365**	**39.4365**	**2.0200e-003**	**0.0000**	**39.4871**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2267	2.3709	2.4459	4.3000e-003		0.1089	0.1089		0.1004	0.1004	0.0000	374.9209	374.9209	0.1196	0.0000	377.9099
Total	**0.2267**	**2.3709**	**2.4459**	**4.3000e-003**		**0.1089**	**0.1089**		**0.1004**	**0.1004**	**0.0000**	**374.9209**	**374.9209**	**0.1196**	**0.0000**	**377.9099**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4600e-003	0.2854	0.0763	7.8000e-004	0.0195	5.5000e-004	0.0201	5.6400e-003	5.3000e-004	6.1600e-003	0.0000	76.1614	76.1614	5.5300e-003	0.0000	76.2996
Worker	0.0367	0.0252	0.2588	8.3000e-004	0.0895	6.2000e-004	0.0901	0.0238	5.7000e-004	0.0244	0.0000	75.3024	75.3024	2.0500e-003	0.0000	75.3537
Total	**0.0452**	**0.3106**	**0.3351**	**1.6100e-003**	**0.1090**	**1.1700e-003**	**0.1102**	**0.0294**	**1.1000e-003**	**0.0305**	**0.0000**	**151.4637**	**151.4637**	**7.5800e-003**	**0.0000**	**151.6532**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2267	2.3709	2.4459	4.3000e-003		0.1089	0.1089		0.1004	0.1004	0.0000	374.9205	374.9205	0.1196	0.0000	377.9094
Total	**0.2267**	**2.3709**	**2.4459**	**4.3000e-003**		**0.1089**	**0.1089**		**0.1004**	**0.1004**	**0.0000**	**374.9205**	**374.9205**	**0.1196**	**0.0000**	**377.9094**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4600e-003	0.2854	0.0763	7.8000e-004	0.0195	5.5000e-004	0.0201	5.6400e-003	5.3000e-004	6.1600e-003	0.0000	76.1614	76.1614	5.5300e-003	0.0000	76.2996
Worker	0.0367	0.0252	0.2588	8.3000e-004	0.0895	6.2000e-004	0.0901	0.0238	5.7000e-004	0.0244	0.0000	75.3024	75.3024	2.0500e-003	0.0000	75.3537
Total	**0.0452**	**0.3106**	**0.3351**	**1.6100e-003**	**0.1090**	**1.1700e-003**	**0.1102**	**0.0294**	**1.1000e-003**	**0.0305**	**0.0000**	**151.4637**	**151.4637**	**7.5800e-003**	**0.0000**	**151.6532**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.0930	0.1197	2.0000e-004		5.3900e-003	5.3900e-003		5.3900e-003	5.3900e-003	0.0000	16.8515	16.8515	1.1000e-003	0.0000	16.8789
Total	**0.6538**	**0.0930**	**0.1197**	**2.0000e-004**		**5.3900e-003**	**5.3900e-003**		**5.3900e-003**	**5.3900e-003**	**0.0000**	**16.8515**	**16.8515**	**1.1000e-003**	**0.0000**	**16.8789**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6400e-003	3.8800e-003	0.0398	1.3000e-004	0.0138	1.0000e-004	0.0139	3.6600e-003	9.0000e-005	3.7400e-003	0.0000	11.5803	11.5803	3.2000e-004	0.0000	11.5882
Total	**5.6400e-003**	**3.8800e-003**	**0.0398**	**1.3000e-004**	**0.0138**	**1.0000e-004**	**0.0139**	**3.6600e-003**	**9.0000e-005**	**3.7400e-003**	**0.0000**	**11.5803**	**11.5803**	**3.2000e-004**	**0.0000**	**11.5882**

3.5 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.0930	0.1197	2.0000e-004		5.3900e-003	5.3900e-003		5.3900e-003	5.3900e-003	0.0000	16.8515	16.8515	1.1000e-003	0.0000	16.8789
Total	**0.6538**	**0.0930**	**0.1197**	**2.0000e-004**		**5.3900e-003**	**5.3900e-003**		**5.3900e-003**	**5.3900e-003**	**0.0000**	**16.8515**	**16.8515**	**1.1000e-003**	**0.0000**	**16.8789**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6400e-003	3.8800e-003	0.0398	1.3000e-004	0.0138	1.0000e-004	0.0139	3.6600e-003	9.0000e-005	3.7400e-003	0.0000	11.5803	11.5803	3.2000e-004	0.0000	11.5882
Total	**5.6400e-003**	**3.8800e-003**	**0.0398**	**1.3000e-004**	**0.0138**	**1.0000e-004**	**0.0139**	**3.6600e-003**	**9.0000e-005**	**3.7400e-003**	**0.0000**	**11.5803**	**11.5803**	**3.2000e-004**	**0.0000**	**11.5882**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0854	0.7610	0.6215	1.9300e-003		0.0296	0.0296		0.0273	0.0273	0.0000	168.5079	168.5079	0.0537	0.0000	169.8513
Paving	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0859**	**0.7610**	**0.6215**	**1.9300e-003**		**0.0296**	**0.0296**		**0.0273**	**0.0273**	**0.0000**	**168.5079**	**168.5079**	**0.0537**	**0.0000**	**169.8513**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.6400e-003	0.0168	5.0000e-005	5.8200e-003	4.0000e-005	5.8600e-003	1.5500e-003	4.0000e-005	1.5800e-003	0.0000	4.8994	4.8994	1.3000e-004	0.0000	4.9027
Total	**2.3900e-003**	**1.6400e-003**	**0.0168**	**5.0000e-005**	**5.8200e-003**	**4.0000e-005**	**5.8600e-003**	**1.5500e-003**	**4.0000e-005**	**1.5800e-003**	**0.0000**	**4.8994**	**4.8994**	**1.3000e-004**	**0.0000**	**4.9027**

3.6 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0854	0.7610	0.6215	1.9300e-003		0.0296	0.0296		0.0273	0.0273	0.0000	168.5077	168.5077	0.0537	0.0000	169.8511
Paving	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0859**	**0.7610**	**0.6215**	**1.9300e-003**		**0.0296**	**0.0296**		**0.0273**	**0.0273**	**0.0000**	**168.5077**	**168.5077**	**0.0537**	**0.0000**	**169.8511**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.6400e-003	0.0168	5.0000e-005	5.8200e-003	4.0000e-005	5.8600e-003	1.5500e-003	4.0000e-005	1.5800e-003	0.0000	4.8994	4.8994	1.3000e-004	0.0000	4.9027
Total	**2.3900e-003**	**1.6400e-003**	**0.0168**	**5.0000e-005**	**5.8200e-003**	**4.0000e-005**	**5.8600e-003**	**1.5500e-003**	**4.0000e-005**	**1.5800e-003**	**0.0000**	**4.8994**	**4.8994**	**1.3000e-004**	**0.0000**	**4.9027**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7537	1.2332	6.1745	0.0181	1.7785	0.0147	1.7932	0.4755	0.0137	0.4892	0.0000	1,690.8538	1,690.8538	0.1132	0.0000	1,693.6834
Unmitigated	0.7537	1.2332	6.1745	0.0181	1.7785	0.0147	1.7932	0.4755	0.0137	0.4892	0.0000	1,690.8538	1,690.8538	0.1132	0.0000	1,693.6834

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,664,152	1,664,152
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	70.03	70.03	70.03	175,445	175,445
High Turnover (Sit Down Restaurant)	550.29	550.29	550.29	1,274,735	1,274,735
Hotel	300.00	300.00	300.00	603,293	603,293
Quality Restaurant	187.06	187.06	187.06	445,494	445,494
Strip Mall	291.29	291.29	291.29	568,918	568,918
Parking Lot	0.00	0.00	0.00		
Total	1,962.67	1,962.67	1,962.67	4,732,038	4,732,038

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.90	39.50	89	11	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	81	19	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	82	18	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	60	40	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
City Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Enclosed Parking with Elevator	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
High Turnover (Sit Down Restaurant)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Hotel	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Quality Restaurant	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Strip Mall	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	429.3944	429.3944	0.0173	3.5800e-003	430.8920
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	486.2099	486.2099	0.0196	4.0500e-003	487.9058
NaturalGas Mitigated	0.0147	0.1307	0.0934	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.9864	144.9864	2.7800e-003	2.6600e-003	145.8480
NaturalGas Unmitigated	0.0176	0.1566	0.1114	9.6000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	173.8536	173.8536	3.3300e-003	3.1900e-003	174.8867

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.0552e+006	5.6900e-003	0.0486	0.0207	3.1000e-004		3.9300e-003	3.9300e-003		3.9300e-003	3.9300e-003	0.0000	56.3093	56.3093	1.0800e-003	1.0300e-003	56.6439
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	73451.2	4.0000e-004	3.6000e-003	3.0200e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9196	3.9196	8.0000e-005	7.0000e-005	3.9429
High Turnover (Sit Down Restaurant)	680954	3.6700e-003	0.0334	0.0280	2.0000e-004		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	36.3383	36.3383	7.0000e-004	6.7000e-004	36.5542
Hotel	1.05702e+006	5.7000e-003	0.0518	0.0435	3.1000e-004		3.9400e-003	3.9400e-003		3.9400e-003	3.9400e-003	0.0000	56.4067	56.4067	1.0800e-003	1.0300e-003	56.7419
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	372127	2.0100e-003	0.0182	0.0153	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	19.8581	19.8581	3.8000e-004	3.6000e-004	19.9761
Strip Mall	19142.3	1.0000e-004	9.4000e-004	7.9000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0215	1.0215	2.0000e-005	2.0000e-005	1.0276
Total		**0.0176**	**0.1566**	**0.1114**	**9.6000e-004**		**0.0121**	**0.0121**		**0.0121**	**0.0121**	**0.0000**	**173.8536**	**173.8536**	**3.3400e-003**	**3.1800e-003**	**174.8867**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	856513	4.6200e-003	0.0395	0.0168	2.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	45.7068	45.7068	8.8000e-004	8.4000e-004	45.9784
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	55999.7	3.0000e-004	2.7500e-003	2.3100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9884	2.9884	6.0000e-005	5.0000e-005	3.0061
High Turnover (Sit Down Restaurant)	638874	3.4400e-003	0.0313	0.0263	1.9000e-004		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	34.0927	34.0927	6.5000e-004	6.3000e-004	34.2953
Hotel	800219	4.3100e-003	0.0392	0.0330	2.4000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	42.7027	42.7027	8.2000e-004	7.8000e-004	42.9565
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	349131	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	18.6310	18.6310	3.6000e-004	3.4000e-004	18.7417
Strip Mall	16206.6	9.0000e-005	7.9000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8649	0.8649	2.0000e-005	2.0000e-005	0.8700
Total		**0.0146**	**0.1307**	**0.0934**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**144.9864**	**144.9864**	**2.7900e-003**	**2.6600e-003**	**145.8480**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	398934	130.3752	5.2500e-003	1.0900e-003	130.8299
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	458006	149.6803	6.0200e-003	1.2500e-003	150.2024
General Office Building	48894.7	15.9792	6.4000e-004	1.3000e-004	16.0350
High Turnover (Sit Down Restaurant)	151124	49.3885	1.9900e-003	4.1000e-004	49.5608
Hotel	234512	76.6404	3.0800e-003	6.4000e-004	76.9077
Parking Lot	5880	1.9216	8.0000e-005	2.0000e-005	1.9283
Quality Restaurant	82585.8	26.9898	1.0900e-003	2.2000e-004	27.0839
Strip Mall	107815	35.2349	1.4200e-003	2.9000e-004	35.3578
Total		**486.2099**	**0.0196**	**4.0500e-003**	**487.9058**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	387769	126.7264	5.1000e-003	1.0600e-003	127.1684
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	359253	117.4071	4.7300e-003	9.8000e-004	117.8166
General Office Building	43115.8	14.0906	5.7000e-004	1.2000e-004	14.1398
High Turnover (Sit Down Restaurant)	140158	45.8050	1.8400e-003	3.8000e-004	45.9647
Hotel	204469	66.8222	2.6900e-003	5.6000e-004	67.0552
Parking Lot	5586	1.8256	7.0000e-005	2.0000e-005	1.8319
Quality Restaurant	76593.5	25.0314	1.0100e-003	2.1000e-004	25.1187
Strip Mall	96956.3	31.6862	1.2800e-003	2.6000e-004	31.7967
Total		**429.3944**	**0.0173**	**3.5900e-003**	**430.8920**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5585	0.0656	0.7254	4.0000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045
Unmitigated	6.4499	0.1233	7.9816	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8671	138.9651	0.0907	7.6400e-003	143.5090

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8981	0.1152	7.2806	0.0132		1.0208	1.0208		1.0208	1.0208	97.0980	40.7215	137.8195	0.0896	7.6400e-003	142.3356
Landscaping	0.0213	8.0700e-003	0.7009	4.0000e-005		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	1.1456	1.1456	1.1100e-003	0.0000	1.1734
Total	**6.4499**	**0.1233**	**7.9816**	**0.0132**		**1.0247**	**1.0247**		**1.0247**	**1.0247**	**97.0980**	**41.8671**	**138.9651**	**0.0907**	**7.6400e-003**	**143.5090**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.7300e-003	0.0575	0.0245	3.7000e-004		4.6500e-003	4.6500e-003		4.6500e-003	4.6500e-003	0.0000	66.6352	66.6352	1.2800e-003	1.2200e-003	67.0312
Landscaping	0.0213	8.0700e-003	0.7009	4.0000e-005		3.8700e-003	3.8700e-003		3.8700e-003	3.8700e-003	0.0000	1.1456	1.1456	1.1100e-003	0.0000	1.1734
Total	**0.5585**	**0.0656**	**0.7254**	**4.1000e-004**		**8.5200e-003**	**8.5200e-003**		**8.5200e-003**	**8.5200e-003**	**0.0000**	**67.7808**	**67.7808**	**2.3900e-003**	**1.2200e-003**	**68.2045**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	56.9909	0.2628	6.6100e-003	65.5307
Unmitigated	66.1346	0.3283	8.2200e-003	76.7915

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	6.12448 / 3.86108	42.0240	0.2012	5.0500e-003	48.5572
City Park	0 / 0.774463	2.8120	1.1000e-004	2.0000e-005	2.8218
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.646951 / 0.396518	4.3980	0.0213	5.3000e-004	5.0879
High Turnover (Sit Down Restaurant)	1.18378 / 0.0755605	5.6873	0.0388	9.6000e-004	6.9416
Hotel	0.761003 / 0.0845559	3.7868	0.0249	6.2000e-004	4.5936
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.646527 / 0.0412677	3.1062	0.0212	5.2000e-004	3.7912
Strip Mall	0.635542 / 0.389526	4.3204	0.0209	5.2000e-004	4.9982
Total		**66.1346**	**0.3283**	**8.2200e-003**	**76.7915**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	4.89958 / 3.86108	36.4230	0.1611	4.0600e-003	41.6593
City Park	0 / 0.774463	2.8120	1.1000e-004	2.0000e-005	2.8218
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.517561 / 0.396518	3.8063	0.0170	4.3000e-004	4.3593
High Turnover (Sit Down Restaurant)	0.947025 / 0.0755605	4.6048	0.0310	7.6000e-004	5.6084
Hotel	0.608802 / 0.0845559	3.0908	0.0200	4.9000e-004	3.7365
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.517221 / 0.0412677	2.5149	0.0170	4.2000e-004	3.0630
Strip Mall	0.508434 / 0.389526	3.7392	0.0167	4.2000e-004	4.2824
Total		**56.9909**	**0.2628**	**6.6000e-003**	**65.5307**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.1141	0.3613	0.0000	15.1474
Unmitigated	24.4564	1.4453	0.0000	60.5896

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	43.24	8.7773	0.5187	0.0000	21.7455
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	3.39	0.6881	0.0407	0.0000	1.7048
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	23.3397
Hotel	16.43	3.3351	0.1971	0.0000	8.2627
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.94	0.3938	0.0233	0.0000	0.9756
Strip Mall	9.01	1.8290	0.1081	0.0000	4.5311
Total		**24.4564**	**1.4453**	**0.0000**	**60.5896**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	10.81	2.1943	0.1297	0.0000	5.4364
City Park	0.015	3.0400e-003	1.8000e-004	0.0000	7.5400e-003
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.8475	0.1720	0.0102	0.0000	0.4262
High Turnover (Sit Down Restaurant)	11.6025	2.3552	0.1392	0.0000	5.8349
Hotel	4.1075	0.8338	0.0493	0.0000	2.0657
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.485	0.0985	5.8200e-003	0.0000	0.2439
Strip Mall	2.2525	0.4572	0.0270	0.0000	1.1328
Total		**6.1141**	**0.3613**	**0.0000**	**15.1474**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Fenway Existing Conditions

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High Turnover (Sit Down Restaurant)	5.33	1000sqft	0.12	5,333.00	0
Strip Mall	2.25	1000sqft	0.05	2,249.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Architectural Coating -

Vehicle Trips - based on traffic study; pass-by trips incorporated in trip rates, so set as 0%

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - restaurant is currently unoccupied

Water And Wastewater - restaurant is currently unoccupied

Solid Waste - restaurant is currently unoccupied

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	6.78	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	T24E	8.23	0.00
tblEnergyUse	T24NG	35.92	0.00
tblSolidWaste	SolidWasteGenerationRate	63.43	0.00
tblVehicleEF	HHD	0.59	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.74	6.66
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.37	9.0030e-003
tblVehicleEF	HHD	4,504.81	1,118.02
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10

tblVehicleEF	HHD	15.07	5.75
tblVehicleEF	HHD	1.98	2.66
tblVehicleEF	HHD	19.53	2.38
tblVehicleEF	HHD	0.01	3.1570e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.0200e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.43	0.45
tblVehicleEF	HHD	8.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	1.0000e-006
tblVehicleEF	HHD	8.7000e-005	6.0000e-006
tblVehicleEF	HHD	4.6540e-003	2.7700e-004
tblVehicleEF	HHD	0.51	0.52
tblVehicleEF	HHD	8.2000e-005	5.0000e-006

tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.1600e-004	1.7310e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.56	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	1.27	6.57
tblVehicleEF	HHD	1.10	0.48
tblVehicleEF	HHD	3.17	8.4620e-003
tblVehicleEF	HHD	4,772.44	1,105.76
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.09
tblVehicleEF	HHD	15.55	5.50
tblVehicleEF	HHD	1.91	2.56
tblVehicleEF	HHD	19.51	2.38
tblVehicleEF	HHD	0.01	2.7490e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	9.6380e-003	2.6300e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004

tblVehicleEF	HHD	0.40	0.48
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	1.0000e-006
tblVehicleEF	HHD	1.3000e-004	9.0000e-006
tblVehicleEF	HHD	4.8050e-003	2.8600e-004
tblVehicleEF	HHD	0.49	0.55
tblVehicleEF	HHD	1.4300e-004	1.0000e-005
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.0200e-004	1.7110e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.64	0.03
tblVehicleEF	HHD	0.13	0.07
tblVehicleEF	HHD	0.08	1.0000e-006
tblVehicleEF	HHD	2.40	6.80
tblVehicleEF	HHD	1.09	0.48
tblVehicleEF	HHD	3.46	9.2430e-003
tblVehicleEF	HHD	4,135.22	1,134.96
tblVehicleEF	HHD	1,581.68	1,437.27
tblVehicleEF	HHD	10.55	0.10
tblVehicleEF	HHD	14.40	6.09
tblVehicleEF	HHD	1.98	2.65
tblVehicleEF	HHD	19.53	2.38

tblVehicleEF	HHD	0.01	3.7200e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2470e-003	0.02
tblVehicleEF	HHD	1.0100e-004	2.0000e-006
tblVehicleEF	HHD	0.01	3.5590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8120e-003	8.8680e-003
tblVehicleEF	HHD	5.9770e-003	0.02
tblVehicleEF	HHD	9.3000e-005	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.46	0.41
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	7.5000e-005	5.0000e-006
tblVehicleEF	HHD	5.0550e-003	3.2300e-004
tblVehicleEF	HHD	0.56	0.48
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.10
tblVehicleEF	HHD	4.6000e-004	1.8670e-003
tblVehicleEF	HHD	0.09	3.0000e-006

tblVehicleEF	LDA	6.1170e-003	2.0310e-003
tblVehicleEF	LDA	7.4160e-003	0.05
tblVehicleEF	LDA	0.58	0.53
tblVehicleEF	LDA	1.39	2.07
tblVehicleEF	LDA	248.05	253.20
tblVehicleEF	LDA	54.17	51.49
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	7.5890e-003
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.10	0.20
tblVehicleEF	LDA	2.4840e-003	2.5050e-003
tblVehicleEF	LDA	5.6600e-004	5.1000e-004
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.20
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	6.5890e-003	2.2110e-003

tblVehicleEF	LDA	6.4700e-003	0.04
tblVehicleEF	LDA	0.65	0.60
tblVehicleEF	LDA	1.15	1.71
tblVehicleEF	LDA	262.13	267.26
tblVehicleEF	LDA	54.17	50.84
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	8.1610e-003
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.09	0.18
tblVehicleEF	LDA	2.6260e-003	2.6440e-003
tblVehicleEF	LDA	5.6200e-004	5.0300e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.03	0.19
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDA	6.0150e-003	1.9880e-003
tblVehicleEF	LDA	7.8030e-003	0.05

tblVehicleEF	LDA	0.56	0.52
tblVehicleEF	LDA	1.49	2.22
tblVehicleEF	LDA	245.50	250.66
tblVehicleEF	LDA	54.17	51.77
tblVehicleEF	LDA	0.06	0.03
tblVehicleEF	LDA	0.08	0.18
tblVehicleEF	LDA	1.8380e-003	1.5160e-003
tblVehicleEF	LDA	2.2710e-003	1.7820e-003
tblVehicleEF	LDA	1.6940e-003	1.3970e-003
tblVehicleEF	LDA	2.0880e-003	1.6380e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	7.4640e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.11	0.21
tblVehicleEF	LDA	2.4590e-003	2.4790e-003
tblVehicleEF	LDA	5.6800e-004	5.1200e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.12	0.23
tblVehicleEF	LDT1	0.01	5.8260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.15	1.12

tblVehicleEF	LDT1	2.76	2.33
tblVehicleEF	LDT1	318.80	308.27
tblVehicleEF	LDT1	69.57	63.74
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.2010e-003	3.0510e-003
tblVehicleEF	LDT1	7.4400e-004	6.3100e-004
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.73
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT1	0.01	6.2810e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.28	1.25
tblVehicleEF	LDT1	2.27	1.92

tblVehicleEF	LDT1	336.12	323.06
tblVehicleEF	LDT1	69.57	62.92
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	3.3760e-003	3.1970e-003
tblVehicleEF	LDT1	7.3600e-004	6.2300e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.18	0.19
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.17	0.67
tblVehicleEF	LDT1	0.18	0.34
tblVehicleEF	LDT1	0.01	5.7180e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	1.13	1.10
tblVehicleEF	LDT1	2.97	2.50
tblVehicleEF	LDT1	315.67	305.60

tblVehicleEF	LDT1	69.57	64.07
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6340e-003	2.1010e-003
tblVehicleEF	LDT1	3.2330e-003	2.4620e-003
tblVehicleEF	LDT1	2.4260e-003	1.9340e-003
tblVehicleEF	LDT1	2.9730e-003	2.2640e-003
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	3.1700e-003	3.0240e-003
tblVehicleEF	LDT1	7.4800e-004	6.3400e-004
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.31	0.24
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.23	0.90
tblVehicleEF	LDT1	0.22	0.42
tblVehicleEF	LDT2	5.2450e-003	3.5940e-003
tblVehicleEF	LDT2	5.9320e-003	0.07
tblVehicleEF	LDT2	0.65	0.78
tblVehicleEF	LDT2	1.31	2.67
tblVehicleEF	LDT2	352.67	328.12
tblVehicleEF	LDT2	76.85	68.00

tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.27
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	3.5310e-003	3.2460e-003
tblVehicleEF	LDT2	7.9000e-004	6.7300e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.43
tblVehicleEF	LDT2	0.09	0.33
tblVehicleEF	LDT2	5.6410e-003	3.8950e-003
tblVehicleEF	LDT2	5.1630e-003	0.06
tblVehicleEF	LDT2	0.72	0.87
tblVehicleEF	LDT2	1.09	2.20
tblVehicleEF	LDT2	372.26	342.39
tblVehicleEF	LDT2	76.85	67.13
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.7270e-003	3.3870e-003
tblVehicleEF	LDT2	7.8600e-004	6.6400e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	5.1590e-003	3.5220e-003
tblVehicleEF	LDT2	6.2490e-003	0.07
tblVehicleEF	LDT2	0.63	0.76
tblVehicleEF	LDT2	1.41	2.86
tblVehicleEF	LDT2	349.13	325.54
tblVehicleEF	LDT2	76.85	68.36
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.28

tblVehicleEF	LDT2	1.8240e-003	1.5100e-003
tblVehicleEF	LDT2	2.2870e-003	1.7290e-003
tblVehicleEF	LDT2	1.6780e-003	1.3890e-003
tblVehicleEF	LDT2	2.1030e-003	1.5900e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	3.4950e-003	3.2210e-003
tblVehicleEF	LDT2	7.9200e-004	6.7700e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LHD1	4.6610e-003	4.6580e-003
tblVehicleEF	LHD1	0.02	9.0720e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.84
tblVehicleEF	LHD1	2.19	0.96
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.79
tblVehicleEF	LHD1	27.83	10.50

tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.05
tblVehicleEF	LHD1	0.85	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.1900e-004	1.0400e-004
tblVehicleEF	LHD1	2.1470e-003	1.8170e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.6470e-003	1.3870e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.29	0.50

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6680e-003
tblVehicleEF	LHD1	0.02	9.2260e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	2.07	0.91
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.82
tblVehicleEF	LHD1	27.83	10.41
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.42	1.01
tblVehicleEF	LHD1	0.81	0.27
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004
tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.28	0.48

tblVehicleEF	LHD1	0.21	0.06
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5190e-003
tblVehicleEF	LHD1	3.1700e-004	1.0300e-004
tblVehicleEF	LHD1	3.0940e-003	2.6280e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7550e-003	2.3350e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.28	0.48
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	4.6610e-003	4.6540e-003
tblVehicleEF	LHD1	0.02	9.0050e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	1.04	0.83
tblVehicleEF	LHD1	2.25	0.98
tblVehicleEF	LHD1	9.27	9.21
tblVehicleEF	LHD1	672.14	771.78
tblVehicleEF	LHD1	27.83	10.54
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	1.48	1.04
tblVehicleEF	LHD1	0.87	0.29
tblVehicleEF	LHD1	1.0210e-003	9.6900e-004
tblVehicleEF	LHD1	0.01	9.9790e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.2300e-004	2.3500e-004

tblVehicleEF	LHD1	9.7700e-004	9.2700e-004
tblVehicleEF	LHD1	2.5850e-003	2.4950e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	7.5600e-004	2.1600e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	9.2000e-005	8.9000e-005
tblVehicleEF	LHD1	6.5770e-003	7.5180e-003
tblVehicleEF	LHD1	3.2000e-004	1.0400e-004
tblVehicleEF	LHD1	1.9780e-003	1.6780e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4560e-003	1.2260e-003
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.24	0.08
tblVehicleEF	LHD2	3.3670e-003	3.1630e-003
tblVehicleEF	LHD2	7.3190e-003	7.0780e-003
tblVehicleEF	LHD2	6.3840e-003	8.1370e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.64
tblVehicleEF	LHD2	1.07	0.58

tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.02
tblVehicleEF	LHD2	23.94	7.63
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.80	1.03
tblVehicleEF	LHD2	0.44	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.9100e-004	9.0800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.8700e-004	7.2800e-004

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.24
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1690e-003
tblVehicleEF	LHD2	7.3940e-003	7.1360e-003
tblVehicleEF	LHD2	6.1320e-003	7.8000e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.65
tblVehicleEF	LHD2	1.02	0.55
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.03
tblVehicleEF	LHD2	23.94	7.57
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.99
tblVehicleEF	LHD2	0.42	0.17
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.10	0.11

tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5800e-004	7.5000e-005
tblVehicleEF	LHD2	1.0020e-003	1.3170e-003
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.8700e-004	1.2280e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.23
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	3.3670e-003	3.1600e-003
tblVehicleEF	LHD2	7.2860e-003	7.0520e-003
tblVehicleEF	LHD2	6.4980e-003	8.2880e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.55	0.64
tblVehicleEF	LHD2	1.10	0.59
tblVehicleEF	LHD2	14.07	14.23
tblVehicleEF	LHD2	706.25	771.01
tblVehicleEF	LHD2	23.94	7.65
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.79	1.02
tblVehicleEF	LHD2	0.45	0.18
tblVehicleEF	LHD2	1.2450e-003	1.4140e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.8200e-004	1.2200e-004
tblVehicleEF	LHD2	1.1910e-003	1.3530e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.5100e-004	1.1200e-004
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3600e-004
tblVehicleEF	LHD2	6.8680e-003	7.4440e-003
tblVehicleEF	LHD2	2.5900e-004	7.6000e-005
tblVehicleEF	LHD2	6.1400e-004	8.2300e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.1700e-004	6.4100e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.27
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.15	20.36
tblVehicleEF	MCY	9.73	8.62
tblVehicleEF	MCY	182.50	220.59
tblVehicleEF	MCY	45.45	60.38

tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.41	2.43
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.10	1.86
tblVehicleEF	MCY	2.2260e-003	2.1830e-003
tblVehicleEF	MCY	6.7500e-004	5.9700e-004
tblVehicleEF	MCY	0.93	0.93
tblVehicleEF	MCY	0.74	0.74
tblVehicleEF	MCY	0.73	0.73
tblVehicleEF	MCY	2.99	3.00
tblVehicleEF	MCY	0.59	2.01
tblVehicleEF	MCY	2.29	2.02
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	19.19	19.39
tblVehicleEF	MCY	8.77	7.73
tblVehicleEF	MCY	182.50	218.78
tblVehicleEF	MCY	45.45	58.13
tblVehicleEF	MCY	1.04	1.04

tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.34	2.35
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2080e-003	2.1650e-003
tblVehicleEF	MCY	6.5100e-004	5.7500e-004
tblVehicleEF	MCY	1.50	1.51
tblVehicleEF	MCY	0.83	0.84
tblVehicleEF	MCY	1.42	1.43
tblVehicleEF	MCY	2.90	2.91
tblVehicleEF	MCY	0.55	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	20.81	21.03
tblVehicleEF	MCY	10.22	9.08
tblVehicleEF	MCY	182.50	221.81
tblVehicleEF	MCY	45.45	61.49
tblVehicleEF	MCY	1.17	1.17
tblVehicleEF	MCY	0.32	0.27

tblVehicleEF	MCY	2.1640e-003	2.0970e-003
tblVehicleEF	MCY	3.6600e-003	2.9890e-003
tblVehicleEF	MCY	2.0230e-003	1.9610e-003
tblVehicleEF	MCY	3.4480e-003	2.8140e-003
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	2.45	2.47
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	2.2370e-003	2.1950e-003
tblVehicleEF	MCY	6.8700e-004	6.0900e-004
tblVehicleEF	MCY	0.84	0.85
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.57	0.58
tblVehicleEF	MCY	3.04	3.05
tblVehicleEF	MCY	0.70	2.38
tblVehicleEF	MCY	2.43	2.15
tblVehicleEF	MDV	8.8620e-003	4.0850e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.94	0.82
tblVehicleEF	MDV	2.31	2.98
tblVehicleEF	MDV	472.46	396.95
tblVehicleEF	MDV	101.95	81.91
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.20	0.32
tblVehicleEF	MDV	1.8890e-003	1.5990e-003

tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.7270e-003	3.9230e-003
tblVehicleEF	MDV	1.0600e-003	8.1100e-004
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.19	0.41
tblVehicleEF	MDV	9.5090e-003	4.4250e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	0.92
tblVehicleEF	MDV	1.92	2.45
tblVehicleEF	MDV	498.02	411.39
tblVehicleEF	MDV	101.95	80.91
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.19	0.29
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003

tblVehicleEF	MDV	1.7410e-003	1.4750e-003
tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	4.9840e-003	4.0660e-003
tblVehicleEF	MDV	1.0530e-003	8.0100e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	8.7270e-003	4.0050e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	0.92	0.81
tblVehicleEF	MDV	2.49	3.21
tblVehicleEF	MDV	467.83	394.33
tblVehicleEF	MDV	101.95	82.33
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8890e-003	1.5990e-003
tblVehicleEF	MDV	2.3380e-003	1.8340e-003
tblVehicleEF	MDV	1.7410e-003	1.4750e-003

tblVehicleEF	MDV	2.1490e-003	1.6870e-003
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	4.6810e-003	3.8980e-003
tblVehicleEF	MDV	1.0630e-003	8.1500e-004
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.54
tblVehicleEF	MDV	0.20	0.43
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.63	1.44
tblVehicleEF	MH	5.98	2.11
tblVehicleEF	MH	1,229.84	1,578.48
tblVehicleEF	MH	59.91	18.87
tblVehicleEF	MH	1.50	1.64
tblVehicleEF	MH	0.88	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003

tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0300e-004	1.8700e-004
tblVehicleEF	MH	0.97	0.80
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.16	0.12
tblVehicleEF	MH	0.03	1.69
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.72	1.48
tblVehicleEF	MH	5.59	1.98
tblVehicleEF	MH	1,229.84	1,578.55
tblVehicleEF	MH	59.91	18.64
tblVehicleEF	MH	1.42	1.56
tblVehicleEF	MH	0.83	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1530e-003	2.6600e-004

tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.33	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9700e-004	1.8400e-004
tblVehicleEF	MH	1.33	1.10
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.88	0.74
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.03	1.64
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.60	1.42
tblVehicleEF	MH	6.17	2.18
tblVehicleEF	MH	1,229.84	1,578.45
tblVehicleEF	MH	59.91	18.98
tblVehicleEF	MH	1.50	1.63
tblVehicleEF	MH	0.90	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03

tblVehicleEF	MH	1.1530e-003	2.6600e-004
tblVehicleEF	MH	3.2140e-003	3.2780e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.0610e-003	2.4400e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.36	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0700e-004	1.8800e-004
tblVehicleEF	MH	0.99	0.82
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.48	0.40
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.81
tblVehicleEF	MH	0.39	0.11
tblVehicleEF	MHD	0.02	4.0650e-003
tblVehicleEF	MHD	4.2710e-003	2.3930e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	0.34	0.31
tblVehicleEF	MHD	5.31	1.27
tblVehicleEF	MHD	143.80	80.44
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.83

tblVehicleEF	MHD	0.42	0.50
tblVehicleEF	MHD	1.14	1.40
tblVehicleEF	MHD	11.05	1.63
tblVehicleEF	MHD	1.5900e-004	4.7800e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.5200e-004	4.5700e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.3830e-003	7.6300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5600e-004	1.0700e-004
tblVehicleEF	MHD	7.7800e-004	4.7000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.1300e-004	3.6800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.02	3.8640e-003

tblVehicleEF	MHD	4.3360e-003	2.4460e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.24	0.36
tblVehicleEF	MHD	0.35	0.31
tblVehicleEF	MHD	4.99	1.20
tblVehicleEF	MHD	152.31	80.75
tblVehicleEF	MHD	1,192.51	1,110.80
tblVehicleEF	MHD	56.35	10.70
tblVehicleEF	MHD	0.43	0.50
tblVehicleEF	MHD	1.10	1.34
tblVehicleEF	MHD	11.01	1.63
tblVehicleEF	MHD	1.3400e-004	4.0600e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.2800e-004	3.8900e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.4640e-003	7.6600e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	1.0600e-004

tblVehicleEF	MHD	1.1470e-003	6.9200e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0690e-003	6.4100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	0.02	4.3540e-003
tblVehicleEF	MHD	4.2430e-003	2.3680e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.46	0.50
tblVehicleEF	MHD	0.34	0.30
tblVehicleEF	MHD	5.46	1.31
tblVehicleEF	MHD	132.03	80.00
tblVehicleEF	MHD	1,192.51	1,110.79
tblVehicleEF	MHD	56.35	10.88
tblVehicleEF	MHD	0.40	0.51
tblVehicleEF	MHD	1.14	1.39
tblVehicleEF	MHD	11.07	1.64
tblVehicleEF	MHD	1.9400e-004	5.7700e-004
tblVehicleEF	MHD	3.1900e-003	6.6580e-003
tblVehicleEF	MHD	8.3700e-004	1.3400e-004
tblVehicleEF	MHD	1.8500e-004	5.5200e-004
tblVehicleEF	MHD	3.0470e-003	6.3620e-003
tblVehicleEF	MHD	7.7000e-004	1.2400e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03

tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2720e-003	7.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5900e-004	1.0800e-004
tblVehicleEF	MHD	7.1400e-004	4.3200e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	5.3900e-004	3.2400e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	OBUS	0.01	8.7080e-003
tblVehicleEF	OBUS	9.2660e-003	9.7640e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.59
tblVehicleEF	OBUS	0.60	1.09
tblVehicleEF	OBUS	5.69	2.71
tblVehicleEF	OBUS	97.15	83.74
tblVehicleEF	OBUS	1,321.20	1,532.41
tblVehicleEF	OBUS	68.99	20.78
tblVehicleEF	OBUS	0.20	0.32
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.24	0.75

tblVehicleEF	OBUS	1.9000e-005	1.0700e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.8000e-005	1.0300e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	9.3900e-004	7.9800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9000e-004	2.0600e-004
tblVehicleEF	OBUS	1.3050e-003	2.0590e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5300e-004	1.2750e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.32
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	OBUS	0.01	8.7890e-003
tblVehicleEF	OBUS	9.4730e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.58

tblVehicleEF	OBUS	0.61	1.12
tblVehicleEF	OBUS	5.32	2.54
tblVehicleEF	OBUS	101.91	82.81
tblVehicleEF	OBUS	1,321.20	1,532.46
tblVehicleEF	OBUS	68.99	20.48
tblVehicleEF	OBUS	0.21	0.30
tblVehicleEF	OBUS	0.81	1.18
tblVehicleEF	OBUS	2.19	0.74
tblVehicleEF	OBUS	1.6000e-005	9.5000e-005
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	1.5000e-005	9.1000e-005
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.8400e-004	7.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8300e-004	2.0300e-004
tblVehicleEF	OBUS	1.8490e-003	2.8930e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07

tblVehicleEF	OBUS	1.5300e-003	2.2630e-003
tblVehicleEF	OBUS	0.06	0.08
tblVehicleEF	OBUS	0.04	0.31
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6110e-003
tblVehicleEF	OBUS	9.1750e-003	9.6490e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.60
tblVehicleEF	OBUS	0.60	1.08
tblVehicleEF	OBUS	5.86	2.80
tblVehicleEF	OBUS	90.56	85.02
tblVehicleEF	OBUS	1,321.20	1,532.39
tblVehicleEF	OBUS	68.99	20.92
tblVehicleEF	OBUS	0.20	0.34
tblVehicleEF	OBUS	0.85	1.24
tblVehicleEF	OBUS	2.26	0.76
tblVehicleEF	OBUS	2.3000e-005	1.2400e-004
tblVehicleEF	OBUS	2.5760e-003	7.2660e-003
tblVehicleEF	OBUS	9.1300e-004	2.5600e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.4400e-003	6.9270e-003
tblVehicleEF	OBUS	8.3900e-004	2.3500e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.05	0.05

tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	8.7600e-004	8.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.0700e-004
tblVehicleEF	OBUS	1.2450e-003	2.0190e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6900e-004	1.1640e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.05	0.35
tblVehicleEF	OBUS	0.39	0.14
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.4420e-003
tblVehicleEF	SBUS	0.08	2.7370e-003
tblVehicleEF	SBUS	6.51	1.26
tblVehicleEF	SBUS	0.93	0.75
tblVehicleEF	SBUS	7.02	0.43
tblVehicleEF	SBUS	1,202.36	332.94
tblVehicleEF	SBUS	1,104.05	1,097.57
tblVehicleEF	SBUS	42.89	2.06
tblVehicleEF	SBUS	9.97	4.02
tblVehicleEF	SBUS	4.09	7.31
tblVehicleEF	SBUS	14.11	0.63
tblVehicleEF	SBUS	9.4890e-003	5.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04

tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	9.0780e-003	4.9200e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.36	0.02
tblVehicleEF	SBUS	0.01	3.1570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5000e-004	2.0000e-005
tblVehicleEF	SBUS	2.2010e-003	4.9500e-004
tblVehicleEF	SBUS	0.03	5.2410e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.4590e-003	2.4300e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.39	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.5710e-003
tblVehicleEF	SBUS	0.07	2.3800e-003
tblVehicleEF	SBUS	6.39	1.21
tblVehicleEF	SBUS	0.95	0.77

tblVehicleEF	SBUS	5.49	0.34
tblVehicleEF	SBUS	1,261.22	344.72
tblVehicleEF	SBUS	1,104.05	1,097.59
tblVehicleEF	SBUS	42.89	1.91
tblVehicleEF	SBUS	10.29	4.13
tblVehicleEF	SBUS	3.94	7.04
tblVehicleEF	SBUS	14.07	0.63
tblVehicleEF	SBUS	7.9990e-003	4.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	7.6530e-003	4.1540e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003
tblVehicleEF	SBUS	0.77	0.13
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.11	0.13
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.31	0.01
tblVehicleEF	SBUS	0.01	3.2680e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2400e-004	1.9000e-005
tblVehicleEF	SBUS	3.1130e-003	6.9800e-004
tblVehicleEF	SBUS	0.03	5.4960e-003

tblVehicleEF	SBUS	1.11	0.18
tblVehicleEF	SBUS	2.6250e-003	4.5800e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	9.3450e-003	0.03
tblVehicleEF	SBUS	0.34	0.02
tblVehicleEF	SBUS	0.84	0.03
tblVehicleEF	SBUS	0.02	9.3810e-003
tblVehicleEF	SBUS	0.08	2.9140e-003
tblVehicleEF	SBUS	6.68	1.32
tblVehicleEF	SBUS	0.92	0.75
tblVehicleEF	SBUS	7.78	0.48
tblVehicleEF	SBUS	1,121.06	316.67
tblVehicleEF	SBUS	1,104.05	1,097.55
tblVehicleEF	SBUS	42.89	2.14
tblVehicleEF	SBUS	9.53	3.87
tblVehicleEF	SBUS	4.07	7.28
tblVehicleEF	SBUS	14.12	0.63
tblVehicleEF	SBUS	0.01	6.2490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.8600e-004	3.3000e-005
tblVehicleEF	SBUS	0.01	5.9780e-003
tblVehicleEF	SBUS	2.7130e-003	2.8310e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	7.2300e-004	3.0000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003

tblVehicleEF	SBUS	0.78	0.13
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.38	0.02
tblVehicleEF	SBUS	0.01	3.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6300e-004	2.1000e-005
tblVehicleEF	SBUS	2.0770e-003	5.1300e-004
tblVehicleEF	SBUS	0.03	5.7420e-003
tblVehicleEF	SBUS	1.12	0.18
tblVehicleEF	SBUS	1.3030e-003	2.1600e-004
tblVehicleEF	SBUS	0.14	0.15
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.41	0.02
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.16	1.23
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.21
tblVehicleEF	UBUS	6.89	0.40
tblVehicleEF	UBUS	13.92	0.13
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004

tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2970e-003	1.4100e-004
tblVehicleEF	UBUS	2.2340e-003	4.8800e-004
tblVehicleEF	UBUS	0.04	5.1130e-003
tblVehicleEF	UBUS	2.2130e-003	4.1700e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	9.6460e-003	0.02
tblVehicleEF	UBUS	0.69	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.04	0.01
tblVehicleEF	UBUS	7.43	38.17
tblVehicleEF	UBUS	6.11	1.06
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	13.93
tblVehicleEF	UBUS	6.64	0.40
tblVehicleEF	UBUS	13.86	0.13
tblVehicleEF	UBUS	0.57	0.07

tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.58	0.05
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.2790e-003	1.3800e-004
tblVehicleEF	UBUS	2.7460e-003	7.0800e-004
tblVehicleEF	UBUS	0.05	5.5750e-003
tblVehicleEF	UBUS	3.9420e-003	7.9900e-004
tblVehicleEF	UBUS	2.24	5.00
tblVehicleEF	UBUS	8.6180e-003	0.02
tblVehicleEF	UBUS	0.63	0.06
tblVehicleEF	UBUS	1.67	4.89
tblVehicleEF	UBUS	0.05	0.02
tblVehicleEF	UBUS	7.41	38.17
tblVehicleEF	UBUS	7.63	1.31
tblVehicleEF	UBUS	1,914.19	1,906.11
tblVehicleEF	UBUS	116.57	14.34

tblVehicleEF	UBUS	6.85	0.40
tblVehicleEF	UBUS	13.94	0.14
tblVehicleEF	UBUS	0.57	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0810e-003
tblVehicleEF	UBUS	1.0130e-003	1.6800e-004
tblVehicleEF	UBUS	0.24	0.03
tblVehicleEF	UBUS	3.0000e-003	7.1460e-003
tblVehicleEF	UBUS	0.10	2.9270e-003
tblVehicleEF	UBUS	9.3100e-004	1.5400e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	0.51	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.66	0.06
tblVehicleEF	UBUS	0.01	3.7920e-003
tblVehicleEF	UBUS	1.3050e-003	1.4200e-004
tblVehicleEF	UBUS	2.0580e-003	4.5000e-004
tblVehicleEF	UBUS	0.05	5.9530e-003
tblVehicleEF	UBUS	2.0030e-003	3.7300e-004
tblVehicleEF	UBUS	2.23	5.00
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.72	0.07
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	37.00	80.00

tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	ST_TR	158.37	140.82
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	131.84	140.82
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	127.15	140.82
tblVehicleTrips	WD_TR	44.32	40.02
tblWater	IndoorWaterUseRate	1,617,834.69	0.00
tblWater	OutdoorWaterUseRate	103,266.04	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	7.0900e-003	0.0651	0.0607	1.0000e-004	1.5700e-003	3.7600e-003	5.3200e-003	5.9000e-004	3.5500e-003	4.1400e-003	0.0000	8.6986	8.6986	1.8200e-003	0.0000	8.7442
2021	0.1286	0.4134	0.3807	6.2000e-004	1.8700e-003	0.0229	0.0247	5.0000e-004	0.0211	0.0216	0.0000	54.1462	54.1462	0.0166	0.0000	54.5602
Maximum	**0.1286**	**0.4134**	**0.3807**	**6.2000e-004**	**1.8700e-003**	**0.0229**	**0.0247**	**5.9000e-004**	**0.0211**	**0.0216**	**0.0000**	**54.1462**	**54.1462**	**0.0166**	**0.0000**	**54.5602**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	7.0900e-003	0.0651	0.0607	1.0000e-004	1.5700e-003	3.7600e-003	5.3200e-003	5.9000e-004	3.5500e-003	4.1400e-003	0.0000	8.6986	8.6986	1.8200e-003	0.0000	8.7442
2021	0.1286	0.4133	0.3807	6.2000e-004	1.8700e-003	0.0229	0.0247	5.0000e-004	0.0211	0.0216	0.0000	54.1462	54.1462	0.0166	0.0000	54.5601
Maximum	**0.1286**	**0.4133**	**0.3807**	**6.2000e-004**	**1.8700e-003**	**0.0229**	**0.0247**	**5.9000e-004**	**0.0211**	**0.0216**	**0.0000**	**54.1462**	**54.1462**	**0.0166**	**0.0000**	**54.5601**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-10-2020**	**3-9-2021**	0.2862	0.2862
2	**3-10-2021**	**6-9-2021**	0.3300	0.3300
		Highest	0.3300	0.3300

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0384	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.4000e-004
Energy	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4991	9.4991	3.8000e-004	8.0000e-005	9.5329
Mobile	0.3195	0.5075	2.5442	7.3300e-003	0.7199	5.9800e-003	0.7259	0.1925	5.5900e-003	0.1980	0.0000	685.8563	685.8563	0.0467	0.0000	687.0241
Waste						0.0000	0.0000		0.0000	0.0000	0.4791	0.0000	0.4791	0.0283	0.0000	1.1869
Water						0.0000	0.0000		0.0000	0.0000	0.0529	1.0801	1.1330	5.4700e-003	1.4000e-004	1.3107
Total	**0.3579**	**0.5077**	**2.5445**	**7.3300e-003**	**0.7199**	**6.0000e-003**	**0.7259**	**0.1925**	**5.6100e-003**	**0.1981**	**0.5319**	**696.4356**	**696.9676**	**0.0809**	**2.2000e-004**	**699.0547**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0384	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.4000e-004
Energy	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4991	9.4991	3.8000e-004	8.0000e-005	9.5329
Mobile	0.3195	0.5075	2.5442	7.3300e-003	0.7199	5.9800e-003	0.7259	0.1925	5.5900e-003	0.1980	0.0000	685.8563	685.8563	0.0467	0.0000	687.0241
Waste						0.0000	0.0000		0.0000	0.0000	0.4791	0.0000	0.4791	0.0283	0.0000	1.1869
Water						0.0000	0.0000		0.0000	0.0000	0.0529	1.0801	1.1330	5.4700e-003	1.4000e-004	1.3107
Total	**0.3579**	**0.5077**	**2.5445**	**7.3300e-003**	**0.7199**	**6.0000e-003**	**0.7259**	**0.1925**	**5.6100e-003**	**0.1981**	**0.5319**	**696.4356**	**696.9676**	**0.0809**	**2.2000e-004**	**699.0547**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/25/2021	5/31/2021	5	5	
2	Building Construction	Building Construction	12/29/2020	5/17/2021	5	100	
3	Demolition	Demolition	12/10/2020	12/23/2020	5	10	
4	Grading	Grading	12/25/2020	12/28/2020	5	2	
5	Paving	Paving	5/18/2021	5/24/2021	5	5	
6	Site Preparation	Site Preparation	12/24/2020	12/24/2020	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,373; Non-Residential Outdoor: 3,791; Striped Parking Area: 0 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Fenway Existing Conditions - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0884**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.2 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0175	0.0175	0.0000	0.0000	0.0175
Total	**1.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0175**	**0.0175**	**0.0000**	**0.0000**	**0.0175**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0879					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0884**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.2 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0175	0.0175	0.0000	0.0000	0.0175
Total	**1.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0175**	**0.0175**	**0.0000**	**0.0000**	**0.0175**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2900e-003	0.0133	0.0111	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.5009	1.5009	4.9000e-004	0.0000	1.5130
Total	**1.2900e-003**	**0.0133**	**0.0111**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.5009**	**1.5009**	**4.9000e-004**	**0.0000**	**1.5130**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	1.7000e-004	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0396	0.0396	0.0000	0.0000	0.0397
Worker	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0326	0.0326	0.0000	0.0000	0.0326
Total	**3.0000e-005**	**1.8000e-004**	**1.7000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0722**	**0.0722**	**0.0000**	**0.0000**	**0.0723**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2900e-003	0.0133	0.0111	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.5009	1.5009	4.9000e-004	0.0000	1.5130
Total	**1.2900e-003**	**0.0133**	**0.0111**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.5009**	**1.5009**	**4.9000e-004**	**0.0000**	**1.5130**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	1.7000e-004	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0396	0.0396	0.0000	0.0000	0.0397
Worker	2.0000e-005	1.0000e-005	1.2000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0326	0.0326	0.0000	0.0000	0.0326
Total	**3.0000e-005**	**1.8000e-004**	**1.7000e-004**	**0.0000**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0722**	**0.0722**	**0.0000**	**0.0000**	**0.0723**

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0376	0.3873	0.3523	5.5000e-004		0.0217	0.0217		0.0200	0.0200	0.0000	48.5398	48.5398	0.0157	0.0000	48.9323
Total	**0.0376**	**0.3873**	**0.3523**	**5.5000e-004**		**0.0217**	**0.0217**		**0.0200**	**0.0200**	**0.0000**	**48.5398**	**48.5398**	**0.0157**	**0.0000**	**48.9323**

3.3 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.9800e-003	1.3300e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.3000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2680	1.2680	9.0000e-005	0.0000	1.2703
Worker	5.1000e-004	3.6000e-004	3.6300e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0193	1.0193	3.0000e-005	0.0000	1.0200
Total	**6.6000e-004**	**5.3400e-003**	**4.9600e-003**	**2.0000e-005**	**1.4900e-003**	**2.0000e-005**	**1.5100e-003**	**4.0000e-004**	**2.0000e-005**	**4.2000e-004**	**0.0000**	**2.2872**	**2.2872**	**1.2000e-004**	**0.0000**	**2.2903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0376	0.3873	0.3523	5.5000e-004		0.0217	0.0217		0.0200	0.0200	0.0000	48.5397	48.5397	0.0157	0.0000	48.9322
Total	**0.0376**	**0.3873**	**0.3523**	**5.5000e-004**		**0.0217**	**0.0217**		**0.0200**	**0.0200**	**0.0000**	**48.5397**	**48.5397**	**0.0157**	**0.0000**	**48.9322**

3.3 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.9800e-003	1.3300e-003	1.0000e-005	3.2000e-004	1.0000e-005	3.3000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2680	1.2680	9.0000e-005	0.0000	1.2703
Worker	5.1000e-004	3.6000e-004	3.6300e-003	1.0000e-005	1.1700e-003	1.0000e-005	1.1800e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0193	1.0193	3.0000e-005	0.0000	1.0200
Total	**6.6000e-004**	**5.3400e-003**	**4.9600e-003**	**2.0000e-005**	**1.4900e-003**	**2.0000e-005**	**1.5100e-003**	**4.0000e-004**	**2.0000e-005**	**4.2000e-004**	**0.0000**	**2.2872**	**2.2872**	**1.2000e-004**	**0.0000**	**2.2903**

3.4 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.3400e-003	0.0394	0.0381	6.0000e-005		2.3400e-003	2.3400e-003		2.2300e-003	2.2300e-003	0.0000	5.2038	5.2038	9.8000e-004	0.0000	5.2284
Total	**4.3400e-003**	**0.0394**	**0.0381**	**6.0000e-005**		**2.3400e-003**	**2.3400e-003**		**2.2300e-003**	**2.2300e-003**	**0.0000**	**5.2038**	**5.2038**	**9.8000e-004**	**0.0000**	**5.2284**

3.4 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	**1.8000e-004**	**1.4000e-004**	**1.3400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3624**	**0.3624**	**1.0000e-005**	**0.0000**	**0.3627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.3400e-003	0.0394	0.0381	6.0000e-005		2.3400e-003	2.3400e-003		2.2300e-003	2.2300e-003	0.0000	5.2038	5.2038	9.8000e-004	0.0000	5.2284
Total	**4.3400e-003**	**0.0394**	**0.0381**	**6.0000e-005**		**2.3400e-003**	**2.3400e-003**		**2.2300e-003**	**2.2300e-003**	**0.0000**	**5.2038**	**5.2038**	**9.8000e-004**	**0.0000**	**5.2284**

3.4 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	**1.8000e-004**	**1.4000e-004**	**1.3400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3624**	**0.3624**	**1.0000e-005**	**0.0000**	**0.3627**

3.5 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7000e-004	7.8700e-003	7.6200e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.5000e-004	4.5000e-004	0.0000	1.0408	1.0408	2.0000e-004	0.0000	1.0457
Total	**8.7000e-004**	**7.8700e-003**	**7.6200e-003**	**1.0000e-005**	**7.5000e-004**	**4.7000e-004**	**1.2200e-003**	**4.1000e-004**	**4.5000e-004**	**8.6000e-004**	**0.0000**	**1.0408**	**1.0408**	**2.0000e-004**	**0.0000**	**1.0457**

3.5 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0725	0.0725	0.0000	0.0000	0.0725
Total	**4.0000e-005**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0725**	**0.0725**	**0.0000**	**0.0000**	**0.0725**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7000e-004	7.8700e-003	7.6200e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.5000e-004	4.5000e-004	0.0000	1.0408	1.0408	2.0000e-004	0.0000	1.0457
Total	**8.7000e-004**	**7.8700e-003**	**7.6200e-003**	**1.0000e-005**	**7.5000e-004**	**4.7000e-004**	**1.2200e-003**	**4.1000e-004**	**4.5000e-004**	**8.6000e-004**	**0.0000**	**1.0408**	**1.0408**	**2.0000e-004**	**0.0000**	**1.0457**

3.5 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0725	0.0725	0.0000	0.0000	0.0725
Total	**4.0000e-005**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0725**	**0.0725**	**0.0000**	**0.0000**	**0.0725**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1200e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3152	0.3152	1.0000e-005	0.0000	0.3155
Total	**1.6000e-004**	**1.1000e-004**	**1.1200e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3152**	**0.3152**	**1.0000e-005**	**0.0000**	**0.3155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1200e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3152	0.3152	1.0000e-005	0.0000	0.3155
Total	**1.6000e-004**	**1.1000e-004**	**1.1200e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3152**	**0.3152**	**1.0000e-005**	**0.0000**	**0.3155**

3.7 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	4.2200e-003	2.0500e-003	0.0000		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.4280	0.4280	1.4000e-004	0.0000	0.4314
Total	**3.4000e-004**	**4.2200e-003**	**2.0500e-003**	**0.0000**	**2.7000e-004**	**1.7000e-004**	**4.4000e-004**	**3.0000e-005**	**1.5000e-004**	**1.8000e-004**	**0.0000**	**0.4280**	**0.4280**	**1.4000e-004**	**0.0000**	**0.4314**

3.7 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0181	0.0181	0.0000	0.0000	0.0181
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0181**	**0.0181**	**0.0000**	**0.0000**	**0.0181**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	4.2200e-003	2.0500e-003	0.0000		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.4280	0.4280	1.4000e-004	0.0000	0.4314
Total	**3.4000e-004**	**4.2200e-003**	**2.0500e-003**	**0.0000**	**2.7000e-004**	**1.7000e-004**	**4.4000e-004**	**3.0000e-005**	**1.5000e-004**	**1.8000e-004**	**0.0000**	**0.4280**	**0.4280**	**1.4000e-004**	**0.0000**	**0.4314**

3.7 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0181	0.0181	0.0000	0.0000	0.0181
Total	**1.0000e-005**	**1.0000e-005**	**7.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0181**	**0.0181**	**0.0000**	**0.0000**	**0.0181**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3195	0.5075	2.5442	7.3300e-003	0.7199	5.9800e-003	0.7259	0.1925	5.5900e-003	0.1980	0.0000	685.8563	685.8563	0.0467	0.0000	687.0241
Unmitigated	0.3195	0.5075	2.5442	7.3300e-003	0.7199	5.9800e-003	0.7259	0.1925	5.5900e-003	0.1980	0.0000	685.8563	685.8563	0.0467	0.0000	687.0241

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	750.99	750.99	750.99	1,739,659	1,739,659
Strip Mall	90.00	90.00	90.00	175,788	175,788
Total	841.00	841.00	841.00	1,915,447	1,915,447

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	60	40	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Strip Mall	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9.2315	9.2315	3.7000e-004	8.0000e-005	9.2637
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9.2315	9.2315	3.7000e-004	8.0000e-005	9.2637
NaturalGas Mitigated	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692
NaturalGas Unmitigated	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	5015.27	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692
Total		**3.0000e-005**	**2.5000e-004**	**2.1000e-004**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.2676**	**0.2676**	**1.0000e-005**	**0.0000**	**0.2692**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	5015.27	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692
Total		**3.0000e-005**	**2.5000e-004**	**2.1000e-004**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.2676**	**0.2676**	**1.0000e-005**	**0.0000**	**0.2692**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	28247.4	9.2315	3.7000e-004	8.0000e-005	9.2637
Total		**9.2315**	**3.7000e-004**	**8.0000e-005**	**9.2637**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	28247.4	9.2315	3.7000e-004	8.0000e-005	9.2637
Total		**9.2315**	**3.7000e-004**	**8.0000e-005**	**9.2637**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0384	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.4000e-004
Unmitigated	0.0384	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.7900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0296					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.4000e-004
Total	**0.0384**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4000e-004**	**1.4000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.7900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0296					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4000e-004	1.4000e-004	0.0000	0.0000	1.4000e-004
Total	**0.0384**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4000e-004**	**1.4000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.1330	5.4700e-003	1.4000e-004	1.3107
Unmitigated	1.1330	5.4700e-003	1.4000e-004	1.3107

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.166663 / 0.102148	1.1330	5.4700e-003	1.4000e-004	1.3107
Total		**1.1330**	**5.4700e-003**	**1.4000e-004**	**1.3107**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.166663 / 0.102148	1.1330	5.4700e-003	1.4000e-004	1.3107
Total		**1.1330**	**5.4700e-003**	**1.4000e-004**	**1.3107**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.4791	0.0283	0.0000	1.1869
Unmitigated	0.4791	0.0283	0.0000	1.1869

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.36	0.4791	0.0283	0.0000	1.1869
Total		**0.4791**	**0.0283**	**0.0000**	**1.1869**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.36	0.4791	0.0283	0.0000	1.1869
Total		**0.4791**	**0.0283**	**0.0000**	**1.1869**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX F
GEOTECHNICAL INVESTIGATION

THIS PAGE INTENTIONALLY LEFT BLANK

Update to the Revised Report Geotechnical Investigation

Leucadia Mixed-Use
1900-1950 North Coast Highway, Encinitas, California

Fenway Capital Advisors
674 Via de la Valle, Suite 310
Solana Beach, CA 92075

NOVA Project 2019189
April 13, 2021

NOVA

4373 Viewridge Avenue, Suite B
San Diego, California 92123
858.292.7575

24632 San Juan Avenue, Suite 100
Dana Point, CA 92629
949.388.7710

www.usa-nova.com

Fenway Capital Advisors
674 Via de la Valle, Suite 310
Solana Beach, CA 92075

April 13, 2021
NOVA Project 2019189

Attention: Mike Jensen

Subject: Update to the Revised Report
Geotechnical Investigation
Leucadia Mixed-Use
1950 North Coast Highway, Encinitas, California

Dear Mr. Jensen:

NOVA Services, Inc. (NOVA) is pleased to present herewith the above-referenced report. The work reported herein was completed by NOVA for Fenway Capital Advisors in accordance with NOVA's proposal dated August 15, 2019, as authorized on September 6, 2019. A report of the findings of the geotechnical investigation was submitted in April 27, 2020 and revised in NOVA's report submitted September 10, 2020.

This update to the September 10, 2020 report has been requested due to changes in stormwater planning for the site that have come about during conversations with the City of Encinitas, as well as minor revisions to the bluff overlay zone area calculations. The only revisions to NOVA's September 10, 2020 report are located in Section 4.4 Hillside Inland Bluff Overlay Zone, Section 8.0 Stormwater Infiltration of this report, and attached in Appendix E Infiltration Records.

NOVA appreciates the opportunity to be of continued service on this project.

Sincerely,
NOVA Services, Inc.

Wail Mokhtar
Senior Project Manager

Melissa Stayner, PG, CEG
Senior Engineering Geologist

CERTIFIED ENGINEERING GEOLOGIST
MELISSA STAYNER
2707
STATE OF CALIFORNIA

John F. O'Brien, PE, GE
Principal Geotechnical Engineer

REGISTERED PROFESSIONAL ENGINEER
JOHN F. O'BRIEN
651
EXPIRES 3-31-2021
GEOTECHNICAL
STATE OF CALIFORNIA

Hillary A. Price
Project Geologist

Report
Geotechnical Investigation

Leucadia Mixed-Use
1900-1950 North Coast Highway, Encinitas, California

Table of Contents

1.0 INTRODUCTION 1

1.1 Terms of Reference 1

1.2 Revised Report 1

1.3 Objectives, Scope and Limitations of Work 2
1.3.1 Objectives 2
1.3.2 Scope 2
1.3.3 Limitations 3

1.4 Understood Use of This Report 3

1.5 Report Organization 4

2.0 PROJECT INFORMATION 5

2.1 Location 5

2.2 Current Site Use 6

2.3 Historic Site Use 6

2.4 Planned Development 7
2.4.1 Architectural 7
2.4.2 Structural 8
2.4.3 Stormwater Infiltration BMPs 9
2.4.4 Earthwork 9

3.0 SUBSURFACE EXPLORATION AND LABORATORY TESTING ... 10

3.1 Overview 10

3.2 Engineering Borings 11
3.2.1 Drilling 11

3.2.2 Sampling 11
3.2.3 Logging 12
3.2.4 Closure 12

3.3 CPT Soundings 13

3.4 Percolation Testing 13
3.4.1 General 13
3.4.2 Drilling 13
3.4.3 Conversion to Percolation Well 13
3.4.4 Percolation Testing 14
3.4.5 Closure 15

3.5 Laboratory Testing 15
3.5.1 General 15
3.5.2 Maximum Density and Optimum Moisture 15
3.5.3 Soil Gradation 15
3.5.4 R-Value 16
3.5.5 Direct Shear 16
3.5.6 Chemical Testing 17

3.6 Shear Wave Velocity Analysis 17
3.6.1 General 17
3.6.2 Methodology 17
3.6.3 Findings (V100) 18

4.0 SITE CONDITIONS 19

4.1 Geologic Setting 19
4.1.1 Regional 19
4.1.2 Site Vicinity 19

4.2 Surface, Subsurface, and Groundwater 20
4.2.1 Surface 20
4.2.2 Subsurface 21
4.2.3 Groundwater 21
4.2.4 Surface Water 21

4.3 Mechanical Characteristics of the Subsurface Materials 23
4.3.1 Indications of the Borings and Soundings 23
4.3.2 Indications of Shear Wave Survey 23

4.4 Hillside Inland Bluff Overlay Zone 25
4.4.1 Regulatory 25
4.4.2 Existing Slope Gradients 25
4.4.3 Review of Historical Grading 25

5.0 REVIEW OF GEOLOGIC, SOIL AND SITING HAZARDS 30

5.1 Overview 30

5.2 Geologic Hazards 30
5.2.1 Strong Ground Motion 30
5.2.2 Fault Rupture 30
5.2.3 Landslide 31

5.3 Soil Hazards 32
5.3.1 Embankment Stability 32
5.3.2 Seismic 33
5.3.3 Expansive Soil 33
5.3.4 Hydro-Collapsible Soils 33
5.3.5 Corrosive Soils 34

5.4 Siting Hazards 34
5.4.1 Effect on Adjacent Properties 34
5.4.2 Flood 34
5.4.3 Tsunami 34

6.0 EARTHWORK AND FOUNDATIONS 36

6.1 Overview 36
6.1.1 Review of Site Hazards 36
6.1.2 Site Suitability 36
6.1.3 Review and Surveillance 36

6.2 Seismic Design Parameters 36
6.2.1 Site Class 36
6.2.2 Seismic Design Parameters 37

6.3 Corrosivity and Sulfates 37
6.3.1 Summary of Testing 37
6.3.2 Metals 38
6.3.3 Sulfate Attack 39
6.3.4 Limitations 39

6.4 Earthwork 39
6.4.1 General 39
6.4.2 Site Preparation 39
6.4.3 Excavation Characteristics 40
6.4.4 Select Fill 40
6.4.5 Remedial Grading 41
6.4.6 Processing Removal Bottoms 41
6.4.7 Foundation Preparation 42
6.4.8 Trenching and Backfilling for Utilities 42
6.4.9 Pavement Subgrades 43
6.4.10 Flatwork 43

6.5 Shallow Foundations 43
6.5.1 General 43

6.5.2 Shallow Foundations Supported on Compacted Fill 43
6.5.3 Shallow Foundations Supported on Unit 2 Sandstone 44
6.5.4 Ground Supported Slabs 45
6.5.5 Setbacks From Slopes and Walls 45

6.6 Capillary Break and Underslab Vapor Retarder 45
6.6.1 Capillary Break 45
6.6.2 Vapor Retarder 46

6.7 Control of Moisture Around Foundations 47
6.7.1 General 47
6.7.2 Erosion and Moisture Control During Construction 47
6.7.3 Design 47

6.8 Walls 47
6.8.1 Lateral Pressures 47
6.8.2 Seismic Increment to Non-Yielding Garage Walls 48
6.8.3 Elevator Pits 48

6.9 Temporary Slopes 48

7.0 TEMPORARY SHORING 50

7.1 General 50

7.2 Design Conditions for Soldier Pile Wall 50
7.2.1 General 50
7.2.2 Method of Temporary Shoring 50
7.2.3 Condition 2, 'Active' 51
7.2.4 Passive Resistance to Soldier Piles 52
7.2.5 Rakers 53

7.3 Tieback Anchors 53
7.3.1 Failure Wedge 53
7.3.2 Anchor Installation 54
7.3.3 Bond Stress 54
7.3.4 Performance Testing 54

7.4 Miscellaneous Wall Design Considerations 54

7.5 Construction 55
7.5.1 General 55
7.5.2 Expected Wall Movements 55

8.0 STORMWATER INFILTRATION 57

8.1 Overview 57

8.2 Infiltration Rate 57

8.3 Review of Geotechnical Feasibility Criteria 57
8.3.1 Overview 57
8.3.2 Soil and Geologic Conditions 58
8.3.3 Settlement and Volume Change 58
8.3.4 Slope Stability and Coastal Bluff Stability 58
8.3.5 Utilities 58
8.3.6 Groundwater Mounding 58
8.3.7 Retaining Walls and Foundations 58
8.3.8 Other Factors 58

8.4 Suitability of the Site for Stormwater Infiltration 59

9.0 PAVEMENTS 60

9.1 General 60
9.1.1 Control of Moisture 60
9.1.2 Planning for Preventive Maintenance 60

9.2 Subgrade Preparation 60
9.2.1 Rough Grading 60
9.2.2 Proof-Rolling 61
9.2.3 Moisture Control 61
9.2.4 Surveillance 61

9.3 Flexible Pavements 61

9.4 Rigid Pavements 61
9.4.1 General 61
9.4.2 Jointing and Reinforcement 62

9.5 Grasscrete Pavements and Interlocking Pavers 63
9.5.1 Location 63
9.5.2 General 63
9.5.3 Grasscrete Pavements 63
9.5.4 Interlocking Concrete Pavers 64
9.5.5 Control of Infiltration 65
9.5.6 Installation 65
9.5.7 Edge Restraint 66
9.5.8 Maintenance 66

10.0 GEOTECHNICAL REVIEW, OBSERVATION, AND TESTING 67

10.1 Overview 67

10.2 Design Phase Review 67

10.3 Construction Observation and Testing 67
10.3.1 General 67
10.3.2 Continuous Soils Special Inspection 67

10.3.3 Periodic Soils Special Inspection 68
10.3.4 Testing During Inspections 68

11.0 REFERENCES 69

11.1 Site Specific 69

11.2 Geologic and Site Setting 69

11.3 Design 69

Plates

Plate 1. Subsurface Investigation Map
Plate 2. Geologic Cross Sections
Plate 3. PLS&A Slope Analysis

List of Appendices

Appendix A Use of this Geotechnical Report
Appendix B Logs of Borings
Appendix C Logs of the CPT Soundings
Appendix D Laboratory Analytical Results
Appendix E Infiltration Records
Appendix F Seismic Shear Wave Survey Results
Appendix G Site-Specific Ground Motion Hazard Analysis

List of Tables

Table 3-1. Abstract of the Engineering Borings
Table 3-2. Abstract of the CPT Soundings
Table 3-3. Abstract of the Percolation Testing
Table 3-4. Abstract of the Soil Gradation Testing
Table 3-5. Abstract of the Direct Shear Testing
Table 3-6. Abstract of Chemical Testing
Table 6-1. Seismic Design Parameters, ASCE 7-16
Table 6-2. Summary of Corrosivity Testing of the Near Surface Soil
Table 6-3. Soil Resistivity and Corrosion Potential

Table 6-4. Exposure Categories and Requirements for Water-Soluble Sulfates
Table 6-5. Wall Lateral Loads from Soil
Table 8-1. Infiltration Rate Determined by Percolation Testing
Table 9-1. Preliminary Flexible Pavement Sections, R=35
Table 9-2. Recommended Concrete Requirements for Pavements
Table 9-3. Preliminary Recommendations for Porous Grass Pavers, R=35
Table 9-4. Gradation of Sand for Paver Systems

List of Figures

Figure 1-1. Site Vicinity Map
Figure 2-1. Site Location and Limits
Figure 2-2. 1967 Aerial View of the Site Vicinity
Figure 2-3. Concept Plan 3
Figure 2-4. Elevation View, East-West Section
Figure 3-1. Locations of the CPT Soundings, Engineering and Percolation Test Borings
Figure 3-2. Drilling Operations, September 17, 2019
Figure 3-3. Subsurface Profile at CPT-1
Figure 4-1. Geologic Mapping of the Site Vicinity
Figure 4-2. Surface Conditions
Figure 4-3. Near Surface Unit 2 Paralic Sandstone
Figure 4-4. Unit 2 Paralic Deposits at Depth
Figure 4-5. Strength and Compressibility of the Subsurface
Figure 4-6. Seismic Shear Wave Velocity Profile
Figure 4-7. Site-Specific Slope Analysis
Figure 4-8. 1947 Aerial Photo
Figure 4-9. 1964 Aerial Photo
Figure 4-10. 1980 Aerial Photo
Figure 4-11a. 1947 Site Condition
Figure 4-11b. 1980 Site Condition
Figure 4-12. 2019 Back Cut for Encinitas Resort Construction
Figure 5-1. Faulting in the Site Vicinity
Figure 5-2. Landslide Susceptibility Mapping of the Site Area
Figure 5-3. Flood Mapping of the Site Area

Figure 5-4. Tsunami Inundation Mapping of the Site Area
Figure 6-1. Sawed Contraction Joint
Figure 7-1. ‘At Rest’ Wall Pressure Distribution in Sands
Figure 7-2. ‘Active’ Lateral Earth Pressures
Figure 7-3. Recommended Effective Zone for Tieback Anchors
Figure 7-4. Observed Maximum Lateral Movements for In Situ Walls
Figure 9-1. Location of Proposed Grasscrete Pavements
Figure 9-2. Design to Control Infiltration

1.0 INTRODUCTION

1.1 Terms of Reference

This report presents the findings of the geotechnical investigation of project known to NOVA as the 'Leucadia Mixed Use,' proposed for development on three adjacent parcels (APN 216-041-20, APN 216-041-21, and APN 216-041-06), 1900-1950 North Coast Highway 101 in Encinitas (hereinafter, 'the site').

The work reported herein was completed by NOVA Services, Inc. (NOVA) for Fenway Capital Advisors in accordance with NOVA's proposal dated August 15, 2019, as authorized on September 6, 2019 and as modified by a Change Orders dated September 25, 2019, and March 3, 2020.

Figure 1-1 provides a graphic that depicts the site vicinity.

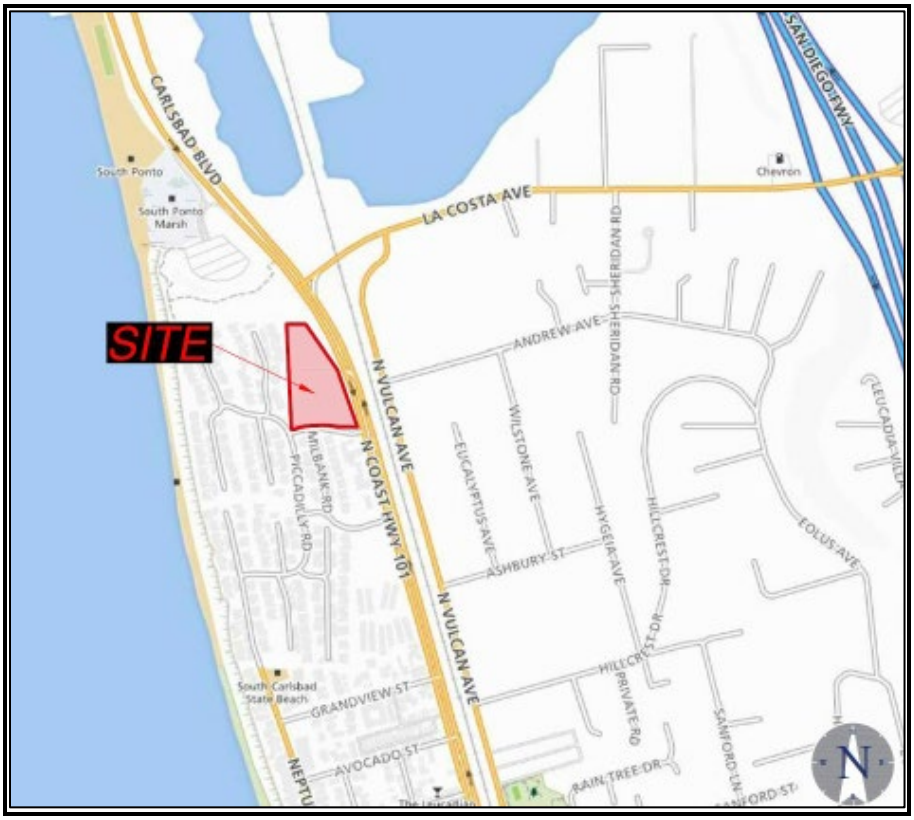


Figure 1-1. Site Vicinity Map

1.2 Update to the Revised Report

A report of the findings of the geotechnical investigation was submitted in April 27, 2020 and revised in NOVA's report submitted September 10, 2020. Review by the City of Encinitas based on revisions to the stormwater planning and slope analysis bluff overlay has required revisions to the geotechnical report. This report updates prior reporting to address the updated plans. The report revises and supersedes the September 10, 2020 report of the same title.

1.3 Objectives, Scope and Limitations of Work

1.3.1 Objectives

The objectives of the work reported herein are twofold, as described below.

1. Objective 1, Geotechnical. Characterize the subsurface in a manner sufficient to provide recommendations for geotechnical-related design, including foundations and related earthwork.

2. Objective 2, Infiltration. Assess the suitability of the site for development of permanent stormwater infiltration Best Management Practices ('BMPs').

1.3.2 Scope

To accomplish the above objectives, NOVA undertook the task-based scope of work described below.

1. Task 1, Background Review. Reviewed available background data regarding the site area, including geotechnical reports, historical aerial photography, topographic maps, geologic data, fault maps and reports, and preliminary development plans for the project. Structural information was not available at the time of this report.

2. Task 2, Subsurface Exploration. The subsurface exploration included seven subtasks:

   - *Subtask 2-1, Reconnaissance.* Prior to undertaking any invasive work, NOVA conducted a site reconnaissance, including layout of subsurface explorations used to determine subsurface conditions. Underground Service Alert was notified for utility mark-out services. NOVA contracted with a private utility locator to conduct additional underground utility locations.

   - *Subtask 2-2, Permitting and Coordination.* Borings were permitted in accordance with County of San Diego DEH requirements. Specialty subcontractors were retained to conduct the drilling, cone penetrometer soundings, and shear wave velocity survey. NOVA coordinated with the client regarding access for fieldwork.

   - *Subtask 2-3, Engineering Borings.* A specialty subcontractor drilled 8 hollow-stem auger borings. A NOVA geologist directed the drilling and conducted logging and sampling using ASTM methods.

   - *Subtask 2-4, Percolation Testing.* Two hollow stem auger borings were located in areas of possible Drainage Management Areas (DMAs). The borings were converted to wells and tested to determine percolation rates.

   - *Subtask 2-5, CPT Soundings.* Two cone penetration test soundings ('CPT', after ASTM D 5778) were completed by a specialty subcontractor.

   - *Subtask 2-6, Closure.* Borings were backfilled in accordance with County of San Diego DEH requirements.

- *Subtask 2-7, Seismic Shear Wave Survey*. A shear wave survey was conducted by a Professional Geophysicist. Findings of this survey provide the shear wave velocity in the top 30 meters of the site for site class determination, and for use in the site-specific ground motion hazard analysis.

3. Task 3, Laboratory Testing. Laboratory testing was conducted on representative samples of soils recovered from the engineering borings. The testing was focused toward determination of soil 'index' characteristics that can be correlated with soil mechanical characteristics (i.e., strength and compressibility).

4. Task 4, Engineering Evaluations. The findings of Tasks 1 through 3 were utilized to support geotechnical evaluations relevant to the planned development, addressing foundation design, earthwork, temporary shoring, pavements, and development of permanent stormwater infiltration BMPs.

5. Task 5, Reporting. This report presents the findings of the subsurface investigation and recommendations for foundation design and earthwork.

1.3.3 Limitations

Assessment of the subsurface in geological and geotechnical engineering is characterized by uncertainty. Opinions relating to environmental, geologic, and geotechnical conditions are based on limited data, such that actual conditions may vary from those encountered at the times and locations where the data are obtained, despite the use of due professional care. The judgments provided in this report are based upon NOVA's understanding of the planned construction, its experience with similar work, and its judgments regarding subsurface conditions indicated by the methods of subsurface exploration described in the report.

Conditions exposed by construction may vary from those disclosed by the borings. NOVA should be retained for design review and for surveillance to observe subsurface conditions revealed during construction. NOVA cannot assume responsibility for the recommendations of this report if NOVA does not perform construction observation. Section 10 of this report addresses this consideration in more detail

This report addresses geotechnical considerations only. The report does not provide any environmental assessment or investigation of the presence or absence of hazardous or toxic materials in the soil, soil gas, groundwater, or surface water within or beyond the site.

Appendix A provides additional discussion regarding limitations and use of this report.

1.4 Understood Use of This Report

NOVA expects that the findings and recommendations provided herein will be utilized by the Design Team in making geotechnical-related design and construction decisions for the planned development.

1.5 Report Organization

The remainder of this report is organized as described below.

- Section 2 reviews the presently available project information.
- Section 3 describes the field investigation and laboratory testing.
- Section 4 describes the site conditions.
- Section 5 reviews geologic, soil and siting-related hazards common to this area of California, considering each for its potential to affect this site.
- Section 6 provides recommendations for foundation design and related earthwork.
- Section 7 provides guidance for design of temporary shoring.
- Section 8 provides guidance for development of permanent stormwater infiltration BMPs.
- Section 9 provides recommendations for pavement design.
- Section 10 addresses design phase review and construction observation.
- Section 11 lists the references used in preparation of the report.

Figures and tables that amplify discussion in the text are embedded at their point of reference. Plates providing larger scale view of certain figures are provided immediately following the text of the report. The report is supported by seven appendices.

- Appendix A provides important guidance regarding the use and limitations of the report.
- Appendix B provides logs of borings.
- Appendix C provides records of CPT soundings.
- Appendix D provides laboratory analytical results.
- Appendix E provides infiltration records.
- Appendix F provides the results of the seismic shear wave survey.
- Appendix G provides the results of a Site-Specific Ground Motion Hazard Analysis.

2.0 PROJECT INFORMATION

2.1 Location

The mixed-use multifamily and commercial development is proposed to be constructed on three adjacent parcels, APN 216-041-20 (1.94 acres), APN 216-041-21 (1.06 acres), and APN 216-041-06 (collectively hereinafter, 'the site') in Encinitas. The nominal addresses of the site are 1900-1950 North Coast Highway 101, Encinitas, California.

The triangular site is bounded to the north by a site currently being graded for a new hotel development, North Coast Highway 101 to the east, Moorgate Road to the south, and residential development to the west.

The location and limits of the site are depicted on Figure 2-1.

Figure 2-1. Site Location and Limits

2.2 Current Site Use

As may be seen by review of Figure 2-1, the site includes several existing small structures and some asphalt and concrete pavements. The southeast portion of the site includes buildings currently being used commercially, with small single-story buildings and parking. Until relatively recently, the northern portion of the project was the site of a restaurant with two appurtenant parking areas.

The following describes the parcels that comprise the site.

- APN 216-041-20. Parcel 20 to the north, is currently occupied by a closed restaurant with a large two-level parking lot on a graded pad. Elevations on this pad range from +58 feet mean sea level (msl) at its access point with Highway 101, to +94 feet msl at the property line on the west. The eastern edge of the lower parking lot has an approximately 20-foot high slope descending to Highway 101. Historic aerial photography indicates that Parcel 20 has been developed since at least 1980.

- APN 216-041-21. Parcel 21 to the south is vacant and open, with elevations ranging from +95 feet msl along the western property line, to +58 msl at its access point with Highway 101. Parcel 21 has been undeveloped since at least 1947.

- APN 216-041-06. Parcel 06 at the southeast corner of the site is currently occupied by a restaurant, two small commercial businesses, and at grade parking areas. This parcel is contiguous with Parcel 21 to the west, with a 12-foot high cut slope separating them. Average elevation for this parcel is +57 feet msl. Parcel 06 has been developed since at least 1947.

2.3 Historic Site Use

NOVA reviewed aerial photography dating to 1947 using the Historical Aerials website in order to better understand historic site usage. This review indicates that the site and the area around it was largely undeveloped until sometime after 1967. Aerial photography available for review over the period 1947 to 1967 indicates that the area was largely used for agriculture. The site area itself was undeveloped except for a few small buildings on Parcel 06.

Surrounding areas in the site vicinity became developed for residential use sometime over the period 1967 to 1980. Despite relatively intensive development in the area, the site itself remained largely undeveloped. There is no indication by review of historic aerial photography that the site was used for any purpose other than the light commercial use evident from the existing structures on site.

Figure 2-2 (following page) provides a 1967 aerial view of the site, the time immediately prior to development of the area around the site. Evident in this view is the past agricultural use of the site and site area.

Figure 2-2. 1967 Aerial View of the Site Vicinity

2.4 Planned Development

2.4.1 Architectural

NOVA's understanding of current planning for the development is based upon review of conceptual planning provided in Concept Plan 3, Fenway Hwy 101, Encinitas, Stephen Dalton Architects, 26 August 2019 (hereinafter, 'SDA 2019').

The mixed-use development will include four multi-family, multi-story residential structures with underground parking in the central and southwest portion of the site, six at-grade retail structures with one to two stories of residential units above them along the eastern portion of the site, and an at-grade boutique hotel in the northwest corner of the site.

The residential buildings will be constructed with two below-grade garage parking levels. The difference in existing surface ground elevation compared to the design elevations across the site will result in significant grading in order to develop the site. Grading plans are not currently available.

Figure 2-3 (following page) shows a sketch of the Conceptual Plan 3 (SDA 2019).

Figure 2-3. Concept Plan 3
(source: SDA 2019)

2.4.2 Structural

Design is only conceptual at this point, such that no structural drawings are available. The two levels of below-grade construction will be of reinforced concrete. The above grade elements of the development may be framed in wood, masonry and/or steel.

Figure 2-4 provides an elevation view of the development, indicating the extent of below-grade construction that is anticipated.

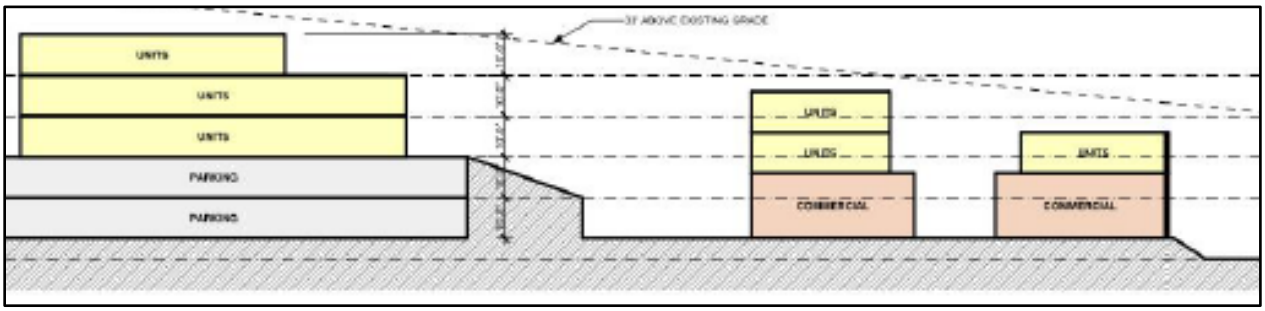


Figure 2-4. Elevation View, East-West Section
(source: SDA 2019, Section A-A)

Information regarding column loads is not yet available. The magnitude of these loads will vary primarily with column spacing. Based upon review of the architectural drawings, NOVA anticipates that interior columns will be loaded to about 800 kips (DL + LL), with exterior and corner columns loaded to about half that magnitude. It is unlikely that the structure will have foundations with net uplift.

2.4.3 Stormwater Infiltration BMPs

At the time of NOVA's field investigation, stormwater mitigation planning by the civil engineer had not been completed, so preliminary infiltration testing was performed. The subsurface exploration (see Section 3 and Section 4) indicates that the near-surface soils will behave as a relatively clean, sandy soil. As is discussed in Section 8, the design infiltration rate (I) ranges between 1.51 and 1.74 inches per hour, favorable for permanent stormwater BMPs. However, the *City of Encinitas BMP Design Manual* limits the use of permanent stormwater BMPs near slopes and coastal bluffs. Since the time of the field investigation, due to the adjacency of the site to the coastal bluffs to the west, the site has been designed with a 'no infiltration' condition.

2.4.4 Earthwork

The parking structure is developed to two levels beneath the residential structures as indicated on Figure 2-4, with excavations ranging between 15 feet and 32 feet below ground surface (bgs). SDA 2019 indicates the majority of the site is in cut, and will result in a significant amount of soil being removed from the property.

Standard over-excavations are recommended below the buildings that are located on undocumented fill and on buildings that span between cut and fill transitions. Detailed earthwork recommendations are presented in Section 6.

Virtually all of the excavation would be completed in the naturally occurring formational sandstone that underlie the site. The sandstone should largely be readily excavated utilizing conventional earthmoving equipment (i.e., larger backhoes, bulldozers, etc.). However, it should be expected that localized areas of higher cementation within the formation may require special excavation techniques. Such techniques could include the use of hoe-rams to loosen soils prior to excavation and ripping.

3.0 SUBSURFACE EXPLORATION AND LABORATORY TESTING

3.1 Overview

The subsurface exploration included eight engineering borings (‘B-1’ through ‘B-8’); percolation testing at two locations (‘P-1’ and ‘P-2’); 2 CPT soundings (‘CPT-1’ and ‘CPT-2’); and a shear wave survey (‘SW-1). Figure 3-1 provides a plan view of the site that indicates the locations of the separate elements of the subsurface exploration. Plate 1, provided immediately following the text of this report, reproduces this graphic in larger scale. Plate 2 provides geologic cross-sections, indicating subsurface conditions across the site.

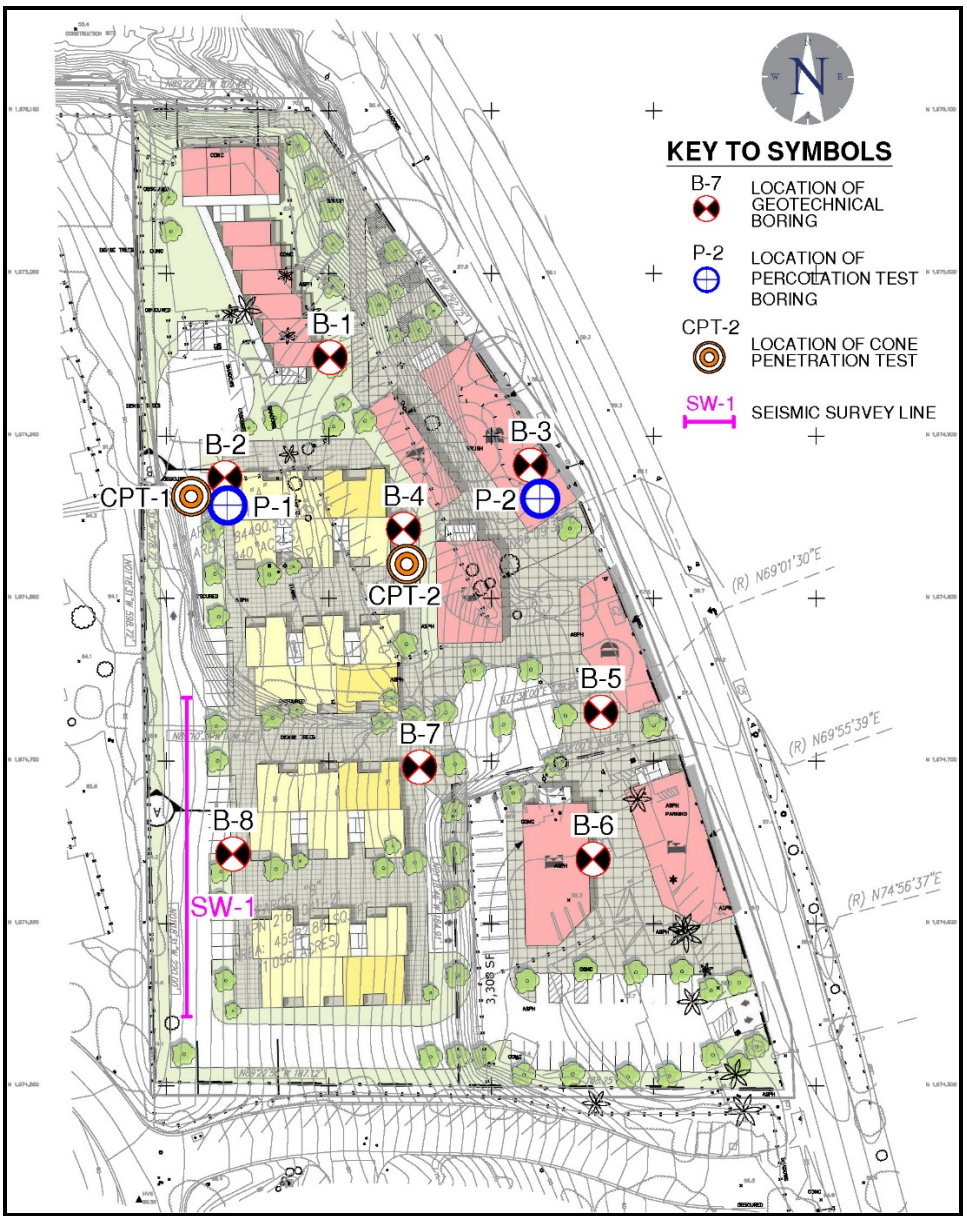


Figure 3-1. Location of the CPT Soundings, Engineering, and Percolation Test Borings

3.2 Engineering Borings

3.2.1 Drilling

Eight hollow-stem auger borings were drilled to depths between 21.5 feet and 56.5 feet below ground surface (bgs) on September 17 and 18, 2019. The borings were drilled at the locations depicted on Figure 3-1 under the surveillance of a NOVA geologist. Samples recovered from the borings were delivered to NOVA's materials laboratory for analysis.

The borings were advanced by a CME 95 truck-mounted drilling rig utilizing hollow-stem auger drilling equipment. Boring locations were determined in the field by the geologist. Figure 3-2 (following page) depicts drilling operations. Table 3-1 abstracts the indications of the borings.

Table 3-1. Abstract of the Engineering Borings

Boring Reference	Approx. Ground Surface Elevation (feet, msl)	Total Depth Below Ground Surface (feet)	Elevation at Completion (feet, msl) [1]	Depth to Formation (feet) [2]
B-1	+76.0	21.5	+54.5	3
B-2	+76.0	43.0	+33.0	0
B-3	+54.0	21.5	+32.5	5.5
B-4	+68.0	36.5	+31.5	0
B-5	+55.0	21.5	+33.5	0
B-6	+55.0	21.5	+33.5	2.5
B-7	+71.0	41.5	+29.5	0
B-8	+87.0	56.5	+30.5	0

Notes: 1. None of the borings encountered groundwater.
2. 'Formation' is sandstone of the Old Paralic Deposits (Qop).

3.2.2 Sampling

Both disturbed and relatively undisturbed samples were recovered from the borings. Sampling of the soils is described below.

1. The Modified California sampler ('ring sampler', after ASTM D 3550) was driven using a 140-pound hammer falling for 30 inches with a total penetration of 18 inches, recording blow counts for each 6-inches of penetration.

2. The Standard Penetration Test sampler ('SPT', after ASTM D1586) was driven in the same manner as the ring sampler. SPT blow counts for the final 12 inches of penetration comprise the SPT 'N' value, an index of soil consistency.

3. Bulk samples were recovered to provide composite samples for index testing.

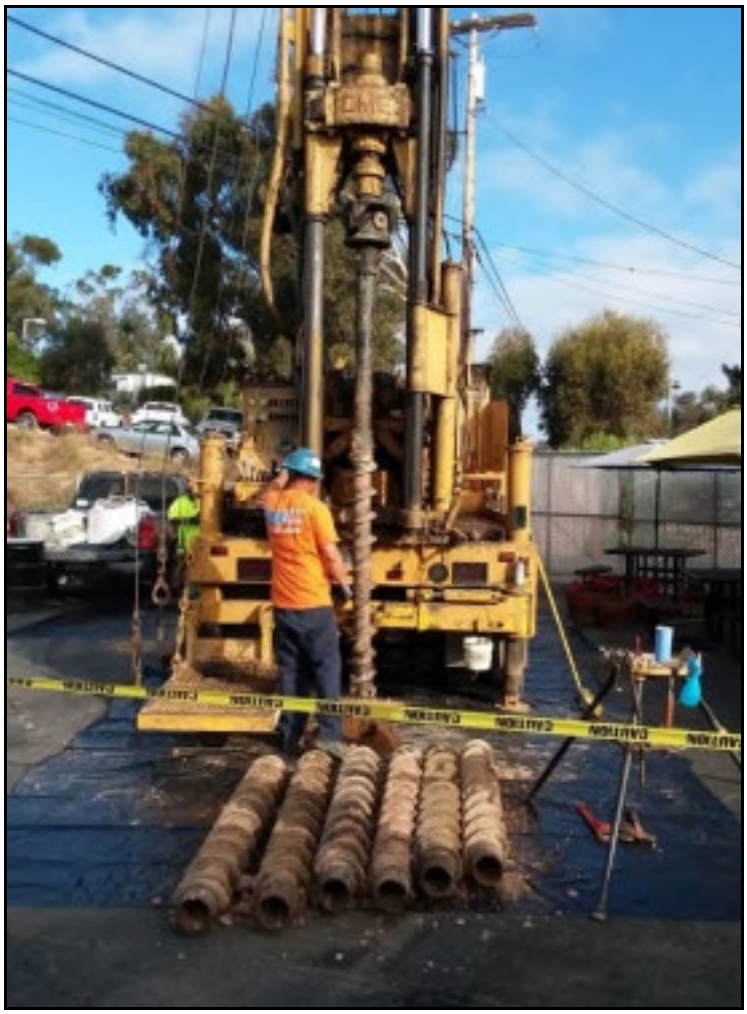


Figure 3-2. Drilling Operations, September 17, 2019

3.2.3 Logging

The geologist maintained a log of all sampling, as well as a depiction of the subsurface materials based on the indications of the samples and observation of the drilling itself. The recovered samples were transferred to NOVA's geotechnical laboratory for visual inspection and laboratory testing.

Records of the engineering borings are presented in Appendix B.

3.2.4 Closure

Upon completion, the borings were backfilled with soil cuttings. The area was cleaned and left as close to the original condition as practical. Where borings exceeded the depth of 21.5 feet bgs, the backfill was completed using bentonite in compliance with San Diego DEH well closure requirements.

3.3 CPT Soundings

Two (2) Cone Penetration Test soundings ('CPT', after ASTM 5778) were completed to depths of 50 feet and 38 feet bgs on October 10, 2019 at locations indicated on Figure 3-1.

Table 3-2 abstracts the CPT soundings.

Table 3-2. Abstract of the CPT Soundings

Sounding	Approx. Elevation (feet, msl)	Total Depth (feet)	Tip Elevation (feet, msl)
CPT-1	+82	50	+32
CPT-2	+68	38	+30

Both the CPT soundings and the borings indicate a relatively homogenous subsurface of fine to medium grained soils. Subsurface exploration using the cone penetration test (CPT) allows development of a continuous profile of the subsurface, useful for more detailed characterization of the soils.

Figure 3-3 (following page) reproduces the profile developed by CPT-1, from which it can be seen that sands dominate the subsurface. Both soundings correlate well with the borings.

3.4 Percolation Testing

3.4.1 General

The final location of the stormwater infiltration facilities, or BMPs, have not been designed at this time. NOVA directed the construction of two percolation test borings following the recommendations for percolation testing presented in the City of Encinitas BMP Design Manual, dated February 2016. The percolation test locations are shown on Figure 3-1 and designated as P-1 and P-2.

3.4.2 Drilling

The borings were drilled with a truck-mounted 8-inch hollow stem auger to depths of 5 feet bgs. Field measurements were taken to confirm that the borings were excavated to approximately 8-inches in diameter. The borings were logged by a NOVA geologist, who observed and recorded exposed soil cuttings and the boring conditions.

3.4.3 Conversion to Percolation Well

Once the borings were drilled to the desired depth, the borings were converted to percolation test wells by placing an approximately 2-inch layer of ¾-inch gravel on the bottoms, then extending 3-inch diameter Schedule 40 perforated PVC pipe to the ground surface. The ¾-inch gravel was used to partially fill the annular space around the pipe below the existing finish grade to minimize the potential of caving.

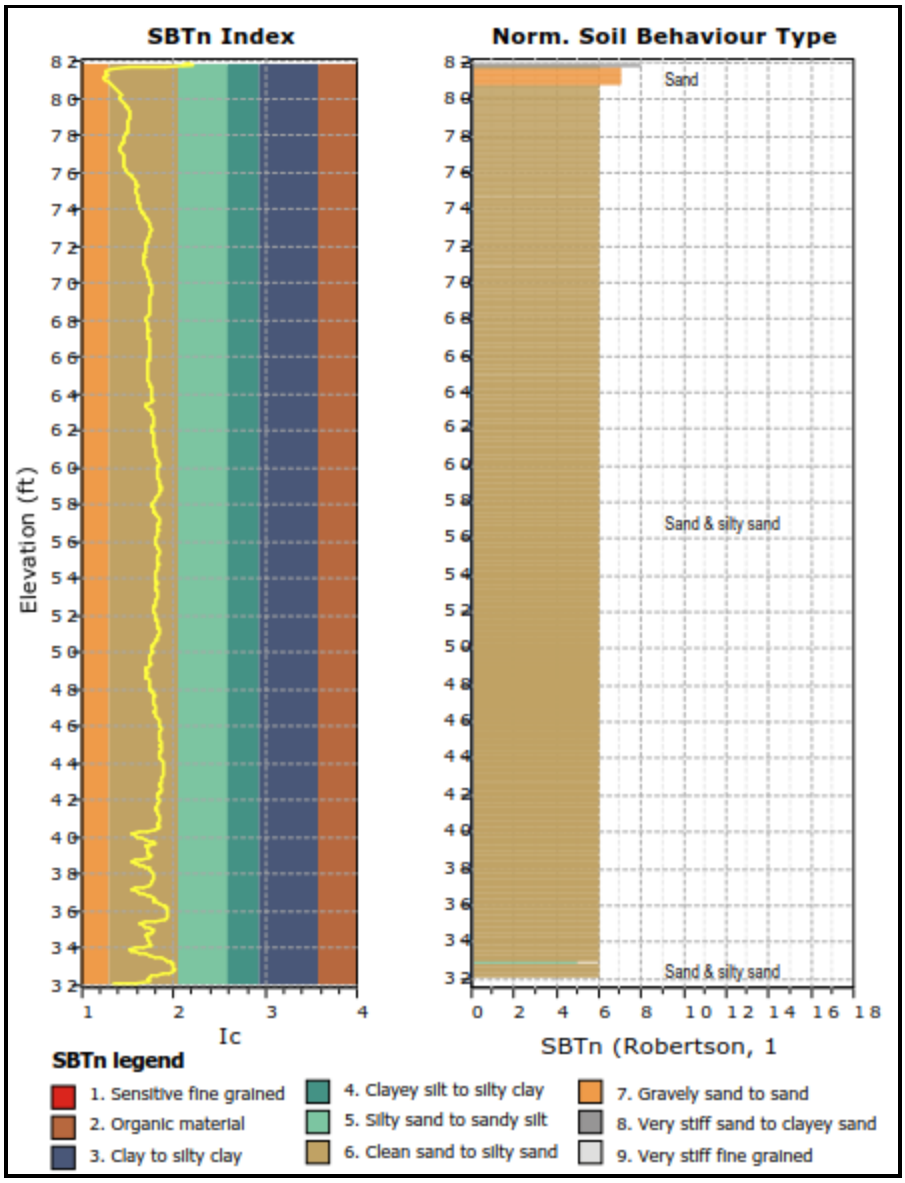


Figure 3-3. Subsurface Profile at CPT-1

3.4.4 Percolation Testing

The percolation test wells were pre-soaked by filling the wells with water to at least five times the well radius. The pre-soak water was observed to percolate more than 6-inches into the soil unit within 25 minutes. Therefore, the holes were filled with water to the ground surface elevation and testing commenced the following day, within a 26-hour window.

On the day of the percolation testing, a 25-minute test interval was used to determine if the fast test method (1-hour) or the slow test method (6-hours) should be used. When more than 6-inches of water percolated within the first 25 minutes in each test well, the fast test method was chosen per the City's BMP Design Manual.

Water levels were recorded every 10 minutes for one hour. At the beginning of each 10-minute test interval, the water level was raised to the water level of previous test intervals in order to maintain a near-constant head during the hour-long test.

Table 3-3 abstracts the percolation test conditions and resulting percolation rate.

Table 3-3. Abstract of the Percolation Testing

Boring	Approximate Elevation (feet, msl)	Total Depth (feet)	Approximate Percolation Test Elevation (feet, msl)	Percolation Rate (in/hr)	Subsurface Unit Tested
P-1	+55	5.0	+50	58.32	Qop
P-2	+76	5.0	+71	77.04	Qop

Notes: 1. The referenced geologic unit is Old Paralic Deposits (Qop).
2. Percolation rate is not infiltration rate. Infiltration rates are discussed in Section 8.

The infiltration rates, which were calculated using the percolation rates, is discussed in detail in Section 8.

3.4.5 Closure

At the conclusion of the percolation testing, the PVC pipes were removed and the resulting holes were backfilled with soil cuttings.

3.5 Laboratory Testing

3.5.1 General

Soil samples recovered from the engineering borings were transferred to NOVA's geotechnical laboratory where a geotechnical engineer reviewed the soil samples and the field logs. Representative soil samples were selected and tested in NOVA's materials laboratory to check visual classifications and to determine pertinent engineering properties.

The laboratory program included visual classifications of all soil samples as well as index testing in general accordance with ASTM standards. Records of the geotechnical laboratory testing are provided in Appendix D.

3.5.2 Maximum Density and Optimum Moisture

Two samples of the near-surface soil were tested to determine its moisture-density relationship after ASTM D1557 (the 'modified Proctor'). This testing indicated an optimum dry density (γ_{dry}) of γ_{dry} = 133.0 lb/ft^3 at an optimum moisture content (w) of w = 8.3 percent at B-1 and 133.8 lb/ft^3 at an optimum moisture content 7.3 percent at B-5.

3.5.3 Soil Gradation

The visual classifications were further evaluated by grain size testing. Table 3-4 (following page) provides an abstract of this testing.

Table 3-4. Abstract of the Soil Gradation Testing

Sample Reference		Percent Finer than the U.S. No 200 Sieve	Classification after ASTM D2488
Boring	Depth (feet)		
B-2	15	7	SP-SM
B-2	20	5	SP
B-3	5	13	SP-SM
B-4	5	21	SM
B-4	10	11	SP-SM
B-4	15	6	SP-SM
B-5	0	23	SM
B-5	5	29	SM
B-7	5	8	SP-SM
B-7	7.5	8	SP-SM
B-7	10	15	SM
B-7	35	4	SP
B-8	2.5	14	SP-SM
B-8	7.5	14	SP-SM
B-8	15	8	SP-SM
B-8	25	6	SP-SM
B-8	45	13	SP-SM
B-8	50	6	SP-SM

Note: 'Passing #200' percent by weight passing the U.S. # 200 sieve (0.074 mm), after ASTM D6913.

3.5.4 R-Value

The Resistance Value (R-value) test is a material stiffness test, demonstrating a material's resistance to deformation as a function of the ratio of transmitted lateral pressure to applied vertical pressure.

The purpose of this test is to determine the suitability of prospective subgrade soils and road aggregates for use in the pavement sections of roadways. The test is used by Caltrans for pavement design, replacing the California Bearing Ratio (CBR) test. A saturated cylindrical soil sample is placed in a Hveem Stabilometer device and then compressed. The stabilometer measures the horizontal pressure that is produced while the specimen is under compression.

A sample representative of soils from the near-surface was selected for this testing. Testing after ASTM D 2844 indicated an R-value of 35, a value characteristic of the sands that mantle the site.

3.5.5 Direct Shear

Two samples of the paralic deposits were tested in direct shear after ASTM D3080. The results of this testing are provided on Table 3-5 (following page).

Table 3-5. Abstract of the Direct Shear Testing

Sample Reference		Apparent Cohesion (c, psf)	Angle of Internal Friction (ϕ, degrees)
Boring	Depth (feet)		
B-7	7.5	323	25
B-8	10	307	38

Note: B-7 @ 27' is a remolded sample, remolded at 8% moisture

3.5.6 Chemical Testing

Resistivity, sulfate content and chloride contents were determined to estimate the potential corrosivity of the soils. These chemical tests were performed on a representative sample of the near-surface soils by Clarkson Laboratory and Supply, Inc.

Table 3-6 abstracts the chemical testing. Indications of this testing are discussed in more detail in Section 6.3.

Table 3-6. Abstract of Chemical Testing

Sample Ref		pH	Resistivity (Ohm-cm)	Sulfates		Chlorides	
Boring	Depth (feet)			ppm	%	ppm	%
B-5	2 – 5	7.4	1200	64	0.006	170	0.004
B-8	2.5 – 7.5	7.4	10000	33	0.003	32	0.003

3.6 Shear Wave Velocity Analysis

3.6.1 General

A seismic shear wave survey was performed on March 7, 2020 by a Professional Geophysicist (PGP). The purpose of the survey was to assess the one-dimensional average shear wave velocity of the underlying site soils to a minimum depth of 100 feet bgs in order to classify the site in accordance with ASCE 7-16 Table 20.3-1.

The seismic survey of the site included one shear wave survey traverse, approximately 180 feet in length. The approximate location of the survey is shown on Figure 3-1 and Plate 1.

3.6.2 Methodology

Multi-channel analysis of surface waves (MASW) and microtremor array measurement (MAM) methods were used for the analysis. Combining results of both methods maximizes the depth and resolution of the data.

The MAM survey records vibrations from background and ambient noise. The ground vibrations were recorded using a 32-second record length at 2-milisecond sampling rate with 30 separate records obtained for quality control purposes.

Figure 3-4. Seismic Survey Line, View towards the South

A 24-channel Geometrics StrataVisor NZXP model signal-enhancement refraction seismograph was used in conjunction with 24 4.5-Hz geophones spaced at regular intervals. For the MASW survey, two seismic records were obtained by multiple hammer strikes of a 16-pound sledge hammer on steel plates positioned 25 feet from the end of each terminus of the seismic line. Vibrations were recorded using a one second record length at a sampling rate of 0.5 milliseconds.

After the field data was collected, the geophysicist combined the MASW and MAM survey results using specialized software specific to this purpose.

3.6.3 Findings (V100)

The weighted average for velocity in the upper 100 feet of the site (V100) was computed from ASCE 7-16 Equation 20.4-1. The seismic model indicates that the average shear wave velocity (weighted average) in the upper 100 feet is 1,077.6 ft/sec. This average velocity classifies the underlying soils as Site Class D, near the D/C boundary.

4.0 SITE CONDITIONS

4.1 Geologic Setting

4.1.1 Regional

The project area is located in the Coastal Plain of the Peninsular Range geomorphic province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California. The province varies in width from approximately 30 to 100 miles.

This area of the Province has undergone several episodes of marine inundation and subsequent marine regression (coastline changes) throughout the last 54 million years. These events have resulted in the deposition of a thick sequence of marine and nonmarine sedimentary rocks on the basement igneous rocks of the Southern California Batholith and metamorphic rocks.

The gradual emergence of the region from the sea occurred in Pleistocene time, and numerous wave-cut platforms, most of which were covered by relatively thin marine and nonmarine terrace deposits, formed as the sea receded from the land. Accelerated fluvial erosion during periods of heavy rainfall, along with the lowering of base sea level during Quaternary times, resulted in the rolling hills, mesas, and deeply incised canyons which characterize the landforms in western San Diego County.

The Coastal Plain increases in elevation from west to east across marine terrace surfaces uplifted during Pleistocene time. Sedimentary rocks consist of sandstones, siltstones, and claystones that were deposited during the Cretaceous, Tertiary, and Quaternary periods.

4.1.2 Site Vicinity

The subject property is sited atop a coastal terrace, that forms a coastal bluff west of the property, at the beach. The property is underlain by Pleistocene-aged old paralic deposits (Qop6-7). Differently numbered Qvop deposits (evident in Figure 4-1 on the following page) designate different geologic ages and elevations of abrasion platforms.

The old paralic deposits occur widely. They are found from the international border and extend northward beyond San Diego County. These deposits comprise the dominant near-surface geologic formation in much of coastal San Diego County. Paralic deposits provide relatively high-quality foundation support for civil development across the county.

Figure 4-1 (following page) reproduces geologic mapping of the site vicinity.

The paralic deposits generally consist of strandline, beach, estuarine and colluvial siltstones, sandstones and conglomerates. As encountered at this site, the paralic deposits consist of orange-brown, dry to damp, weakly cemented, weathered, friable, silty sandstone. This silty sandstone is underlain by a pale orange gray to grayish-white, dry to damp friable sandstone with trace silt. In some areas of existing improvements, the paralic deposits are overlain by a thin veneer of artificial fill (Qaf), to maximum depths of 5 feet below existing ground surface (bgs) in Boring B-3, but generally less than 2 feet.

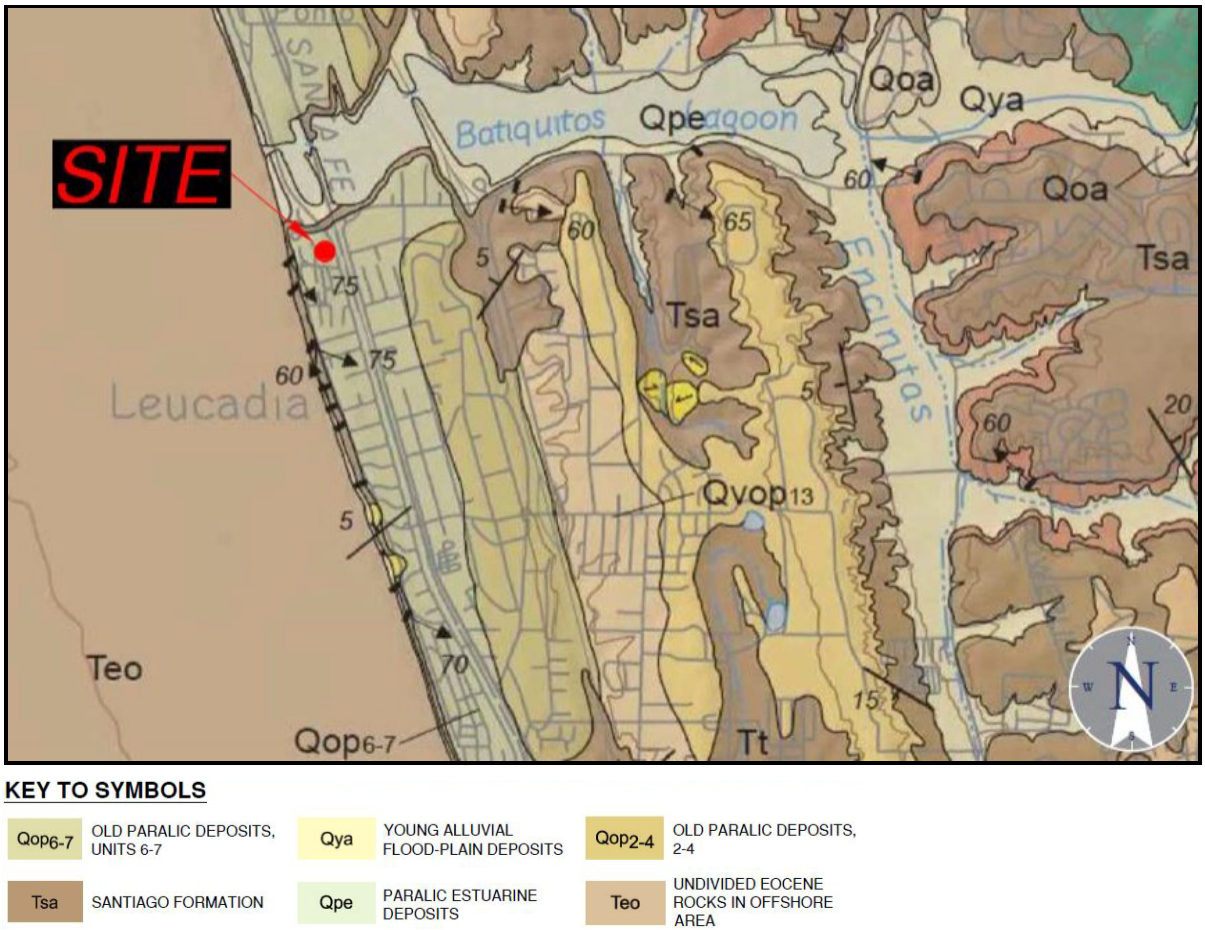


Figure 4-1. Geologic Mapping of the Site Vicinity

4.2 Surface, Subsurface, and Groundwater

4.2.1 Surface

The site includes several small structures and some asphalt and concrete pavements. The southeast portion of the site is used commercially, and until recently, a restaurant operated on the northern parcel. The restaurant is closed, but the structure and appurtenant utilities and parking lot remain. This northern portion of the site includes several mature trees surrounding the parking area. The undeveloped portions of the site are very lightly vegetated.

The western edge of the site is a north-south trending ridge with elevations between +88 feet and 95 feet msl. This ridge slopes to the east across Parcels 21 and 06 (the southern parcels) at a surface gradient of about 10%, descending about 30 feet to Highway 101. On Parcel 20, the parking lot areas have been graded into the slope, creating two benched areas, with slopes on the east and west.

Figure 4-2 (following page) depicts surface conditions looking west from Parcel 06 to 21.

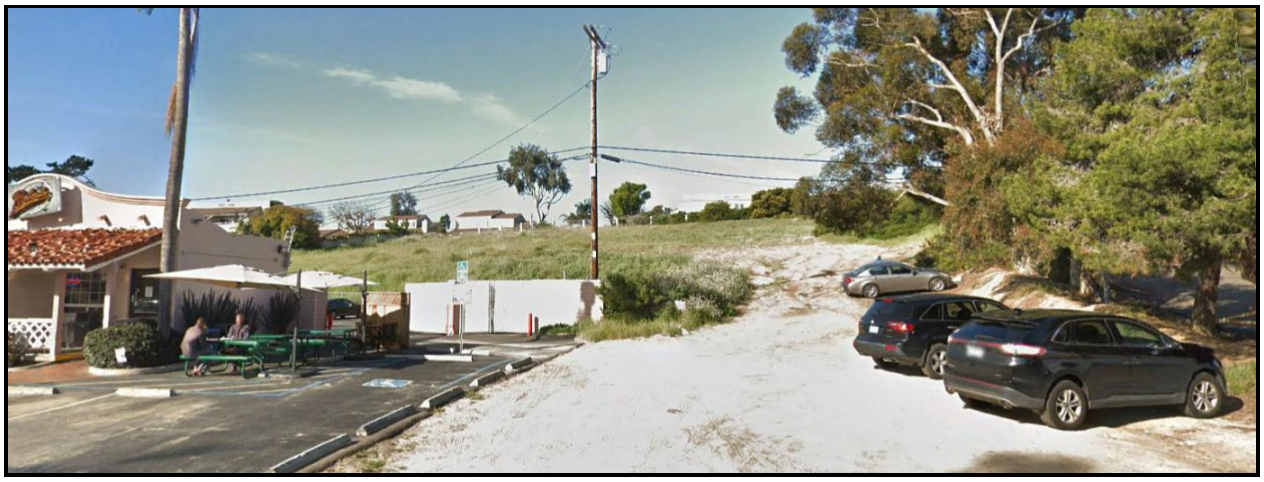


Figure 4-2. Surface Conditions

4.2.2 Subsurface

The field exploration indicates the site is covered by a thin veneer of undocumented sandy fill in some locations within the areas of existing improvements, below which occurs sandstones associated with old paralic deposits. For the purposes of this report, the sequence of subsurface soils may be described as listed below.

1. Unit 1, Fill (Qaf). Undocumented fill is assumed to underlie the existing structures on the property. This fill was encountered within Borings B-1, B-3, and Boring B-6, extending to depths of 2 feet to 5 feet. The fill may be thicker in other areas of the site not explored by our borings. The fill is an orange-brown silty sand of medium dense consistency.

2. Unit 2, Old Paralic Deposits (Qop6-7). The entire site is underlain by marine terrace deposits. The upper 15 to 20 feet of this unit is slightly cemented, with the consistency of a dense silty fine to medium sand. At depth, cementation weakens as the unit grades to a dense, poorly-graded ('well-sorted') sandstone with only trace fines.

   These friable poorly-graded sandy zones may affect shoring and other construction. Figures 4-3 and 4-4 (following page) depict the cemented and friable sandstone lenses.

Plate 2, provided immediately following the text of this report, presents geologic cross-sections that indicate the occurrence of the above soil/rock units across the site.

4.2.3 Groundwater

As is indicated on Table 3-1, none of the borings encountered groundwater. Groundwater thus occurs below about El +10 feet msl, at least 48 feet below the finished floor of the lowest parking level (to be set at about El +58 feet msl).

4.2.4 Surface Water

No surface water was evident on the site at the time of NOVA's work. There was no visual evidence (e.g., evident seeps, areas of water staining, eroded areas, etc.) at the time of NOVA's field exploration that would suggest active problems with surface water.

Figure 4-3. Near Surface Unit 2 Paralic Sandstone

Figure 4-4. Unit 2 Paralic Deposits (Poorly-Graded Sands) at Depth

4.3 Mechanical Characteristics of the Subsurface Materials

4.3.1 Indications of the Borings and Soundings

As is discussed in Section 3, the borings and CPT soundings indicate the site is underlain by deep, sandy soils. *In situ* testing conducted for this project indicates that these sands are of generally dense consistency, with higher strength and low compressibility.

Figure 4-5 is a graphic that provides the variation of soil strength and compressibility with depth, reproducing data developed at CPT-1.

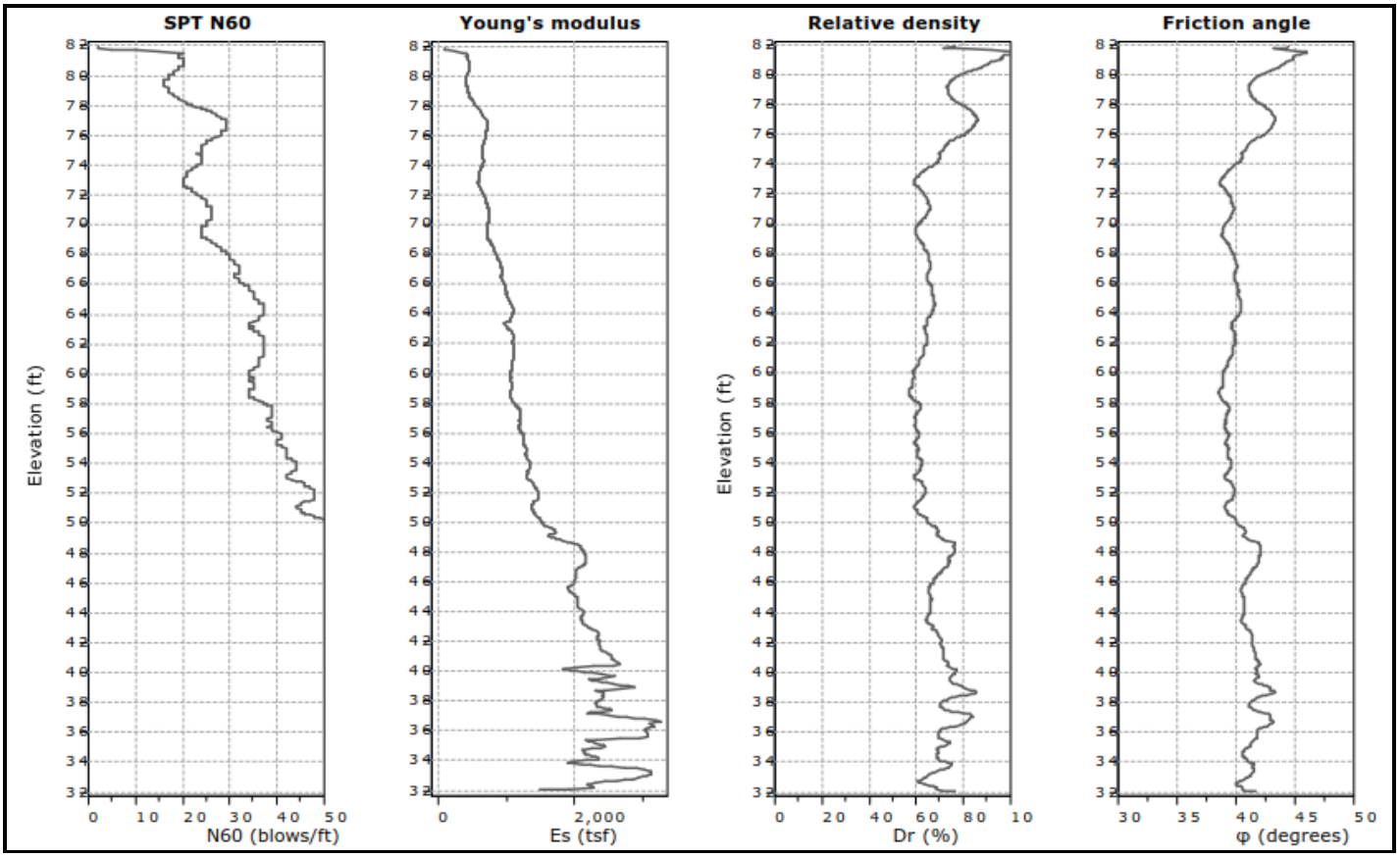


Figure 4-5. Strength and Compressibility of the Subsurface

4.3.2 Indications of Shear Wave Survey

As is discussed in Section 3, NOVA completed a seismic shear wave study along a single approximately 180-foot traverse ('SW-1') aligned as shown on Figure 3-1 and Plate 1.

Shear wave velocity measurements obtained from this survey correlate well with the data obtained from the borings. Analysis of the data indicates that the weighted average shear wave velocity in the upper 100 feet ('V100') beneath the limits of the planned building is V100 = 1,077.6 feet per second.

Figure 4-6 plots average shear wave velocities over different intervals of the subsurface to a depth of 200 feet below ground surface. Considering the weighted average of the shear wave velocity in the top 100 feet as determined along traverse SW-1, the site may be classified as Site Class D after ASCE 7-16, Table 20.3-1.

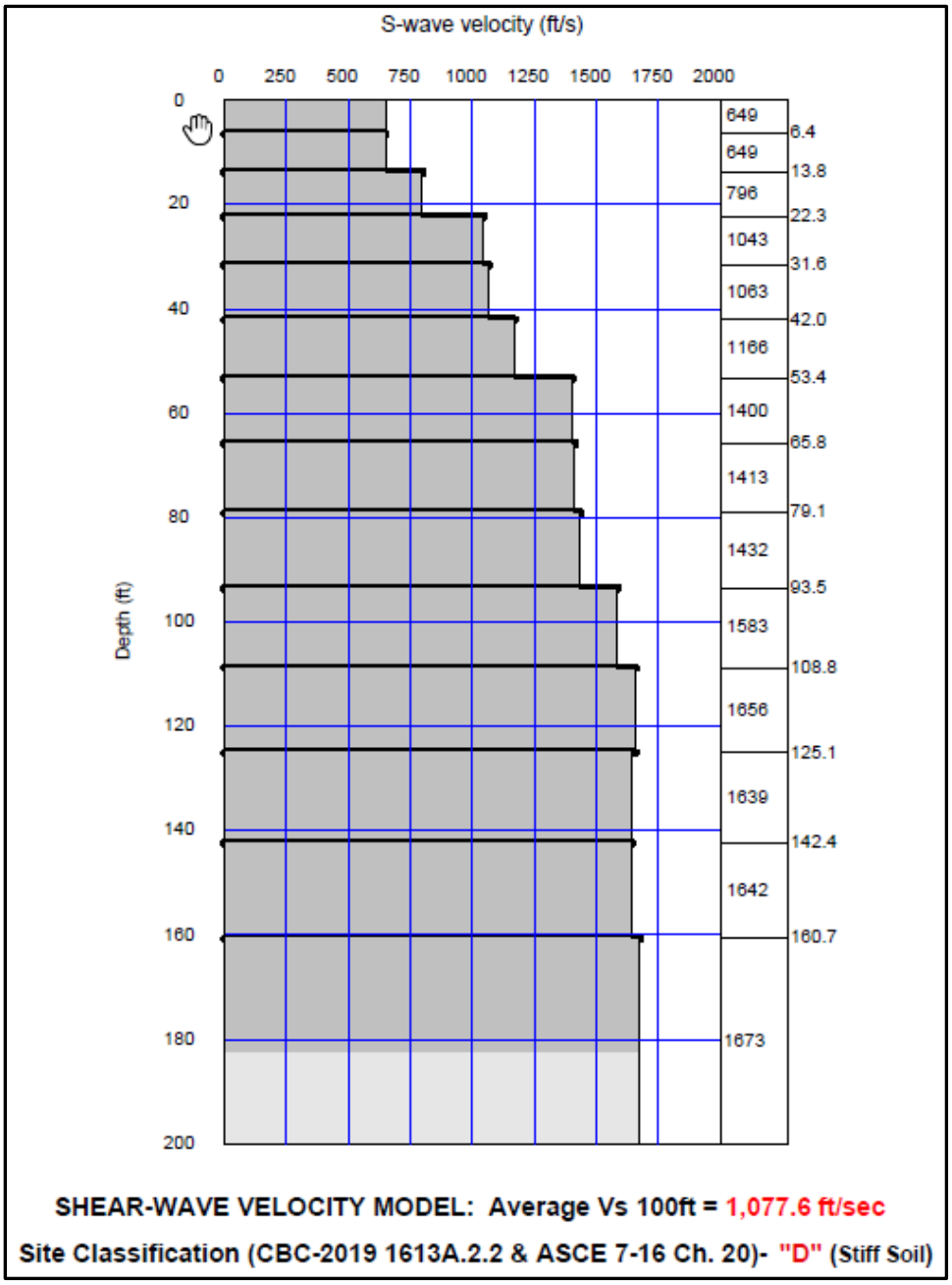


Figure 4-6. Seismic Shear Wave Velocity Profile

4.4 Hillside Inland Bluff Overlay Zone

4.4.1 Regulatory

In an effort to preserve natural coastal and inland bluffs within the City of Encinitas, Encinitas has adopted Municipal Code 30.34.030: Hillside/Inland Bluff Overlay Zone (HIBCZ) regulations.

The scope and principal requirements of the HIBCZ regulations are abstracted below.

- The HIBOZ regulations apply to all areas within the Special Study Overlay Zone where site-specific analysis indicates that 10% or more of the area of a parcel of land exceeds 25% gradient for natural slopes.

- Applicants for projects proposed within the HIBCZ must submit a slope analysis based upon a topographic map with contour intervals not exceeding two feet. This analysis must describe the slope categories in acres and also graphically depict the location of each category on the topographic map.

- Where development is proposed on slopes greater than 25% grade, slopes greater than 25% grade must be preserved in their natural state.

4.4.2 Existing Slope Gradients

Figure 4-7 (following page) shows a topographic map of the existing conditions of the site, indicating that 15.57% of the project has a slope greater than 25%. Figure 4-7 is reproduced in larger scale as Plate 3, provided immediately following the text of this report.

Slopes greater than 25% grade (i.e., of 4:1 (horizontal : vertical)), are indicated in Figure 4-7 in yellow and red. Slopes indicated in yellow have gradients of 25% to 40%, and slopes indicated in red have gradients of 40% or more.

4.4.3 Review of Historical Grading

<u>General</u>

NOVA reviewed aerial photography that depicts earthwork-related development of the site over the period 1947 to 1980. Additionally, earthwork initiated in 2019 that is associated with development of the adjacent Encinitas Beach Resort is also considered.

After performing background review of aerial photography available for this site, it is NOVA's judgment that the slopes indicated on Figure 4-7 (Also included as Plate 3 of this report) are manufactured slopes that are the direct result of grading activities. The following subsections detail NOVA's review.

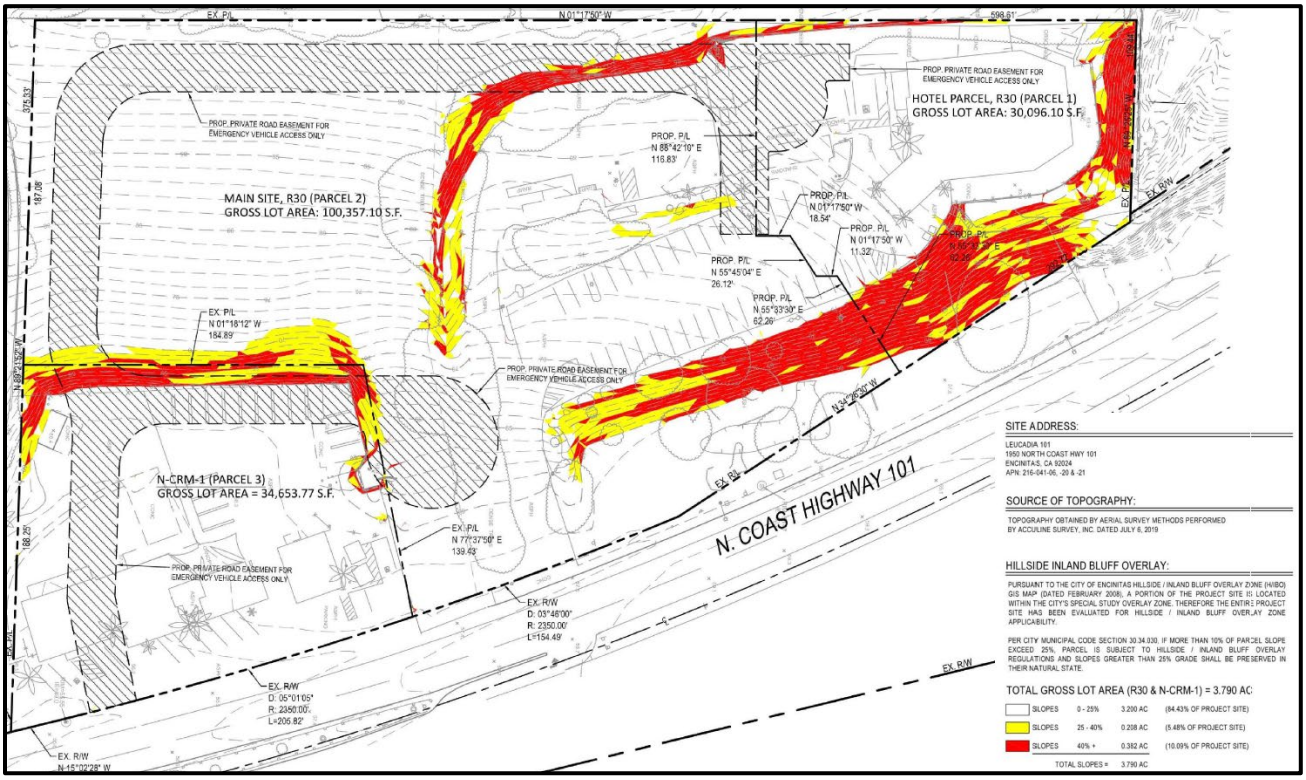


Figure 4-7. Site-Specific Slope Analysis
(source: PSLA 2021)

Site Condition in 1947

Figure 4-8 depicts the site in 1947. The property is mostly unimproved, natural terrain. The three buildings that exist today are shown in the southeast of the property.

Figure 4-8. 1947 Aerial Photo

Site Condition in 1964

Figure 4-9 shows the site condition in 1964. Evident in review of this figure is that the parking lot behind the buildings on the southeast corner of the site was expanded by cutting into the slope to the west.

Figure 4-9. 1964 Aerial Photo

In addition to the parking lot cuts, in the northern portion of the site adjacent to Highway 101, the photo indicates cutting of the lower lying area between the road and the ascending slope to the west. This area is the existing right-of-way with wet and dry utilities installed within it.

By cutting this area flat, a slope greater than 25% above Highway 101 was formed.

Site Condition in 1980

Figure 4-10 shows the site in 1980. Evident in this figure is the southeast parking lot graded to the present day configuration with cut slopes exceeding 25%. Also evident in the north, are two parking lots serving the restaurant in the northern portion of the site that were cut into the natural slope, creating manmade cut slopes steeper than 25% in order to accommodate parking.

Figure 4-10. 1980 Aerial Photo

Figure 4-10 may be compared to Figure 4-7 (and Plate 3), from which it can be seen that the graded slopes are those identified in Figure 4-7 as having grades exceeding 25%.

For further comparison, Figure 4-11a and Figure 4-11b (following page) juxtapose 1947 and 1980 photos for the purpose of presenting 'before grading' and 'after grading' site conditions. It appears clear that grading has altered the site over the period 1947 to 1980.

Figure 4-11a. 1947 Site Condition

Figure 4-11b. 1980 Site Condition

2019 Grading

In 2019, grading for the Encinitas Beach Resort required a large back cut which encroached into the north end of the subject site to accommodate the resort structures. Figure 4-12 presents this portion of the Encinitas Beach Resort Grading Plan next to the Slope Analysis figure. The red dotted line on the grading plan indicates the top of the back cut on the subject property. This back cut had been made by the time the topographic map was created for the Slope Analysis, and the area on the north end of the property exceeding 25% slope was made by this back cut. It is apparent by review of the 1947 aerial photo (Figure 4-11a), that this steep slope is not a natural feature.

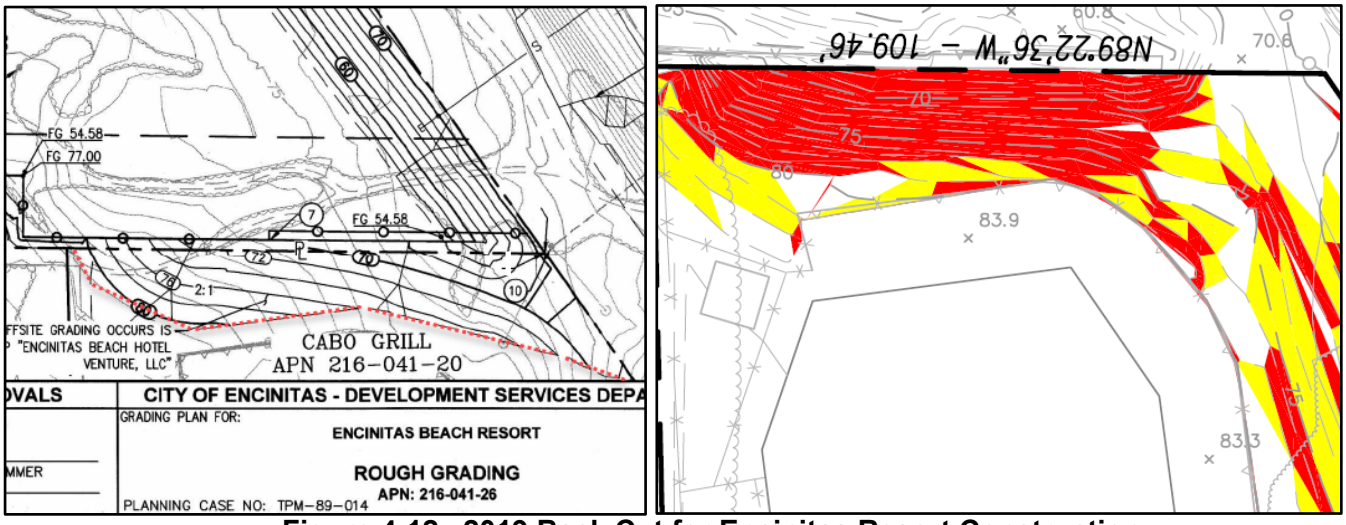


Figure 4-12. 2019 Back Cut for Encinitas Resort Construction

5.0 REVIEW OF GEOLOGIC, SOIL AND SITING HAZARDS

5.1 Overview

This section provides a review of geologic, soil, and siting-related hazards common to this region of California, considering each for its potential to affect the planned development.

The primary hazard identified by this review is that the site is at risk for moderate-to-severe ground shaking in response to a large-magnitude earthquake during the lifetime of the planned development. While strong ground motion could affect the site, there is little risk of liquefaction or related seismic phenomena. The expectation of strong ground motion is common to all civil works in this area of California.

The following subsections describe NOVA's review of soil and geologic hazards.

5.2 Geologic Hazards

5.2.1 Strong Ground Motion

The site is not located within a currently designated Alquist-Priolo Earthquake Zone (Hart and Bryant, 2007). No known active faults are mapped as crossing the site area. The nearest known active faulting is in the Rose Canyon fault system, located approximately 3.5 miles west of the site. This system has the potential to be a source of strong ground motion.

The seismicity of the site was evaluated utilizing a web-based analytical tool provided by the USGS. This evaluation shows the site may be subjected to a Magnitude 7 seismic event, with a corresponding risk-based Peak Ground Acceleration (PGA_M) of PGA_M ~ 0.57 g.

5.2.2 Fault Rupture

No evidence of faulting was observed during NOVA's geologic reconnaissance of the site. There are no known active faults underlying the property. The site is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Studies Zone). No active or potentially active faults are mapped within the City of Encinitas (Encinitas, 2018).

Because of the lack of known active faults on the site, the potential for surface rupture at the site is considered low. Shallow ground rupture due to shaking from distant seismic events is not considered a significant hazard, although it is a possibility at any site.

Figure 5-1 (following page) maps faulting in the site vicinity.

Figure 5-1. Faulting in the Site Vicinity

5.2.3 Landslide

As used herein, ‘landslide’ describes downslope displacement of a mass of rock, soil, and/or debris by sliding, flowing, or falling. Such mass earth movements are greater than about 10 feet thick and larger than 300 feet across. Landslides typically include cohesive block glides and disrupted slumps that are formed by translation or rotation of the slope materials along one or more slip surfaces. These mass displacements can also include similarly larger-scale, but more narrowly confined modes of mass wasting such as ‘mud flows’ and ‘debris flows’.

The causes of classic landslides start with a preexisting condition - characteristically, a plane of weak soil or rock inherent within the rock or soil mass. Thereafter, movement may be precipitated by earthquakes, wet weather, and changes to the structure or loading conditions on a slope (e.g., by erosion, cutting, filling, release of water from broken pipes, etc.).

Geologic reconnaissance and review of aerial photography indicated no evidence of active or dormant landsliding. Clues to landslide hazards can also be obtained by review of mapping that depicts both historic landslides and landslide-prone topography. Figure 5-2 reproduces such mapping for the site area. The mapping indicates that the site is in an area judged to be ‘generally susceptible’ to landsliding.

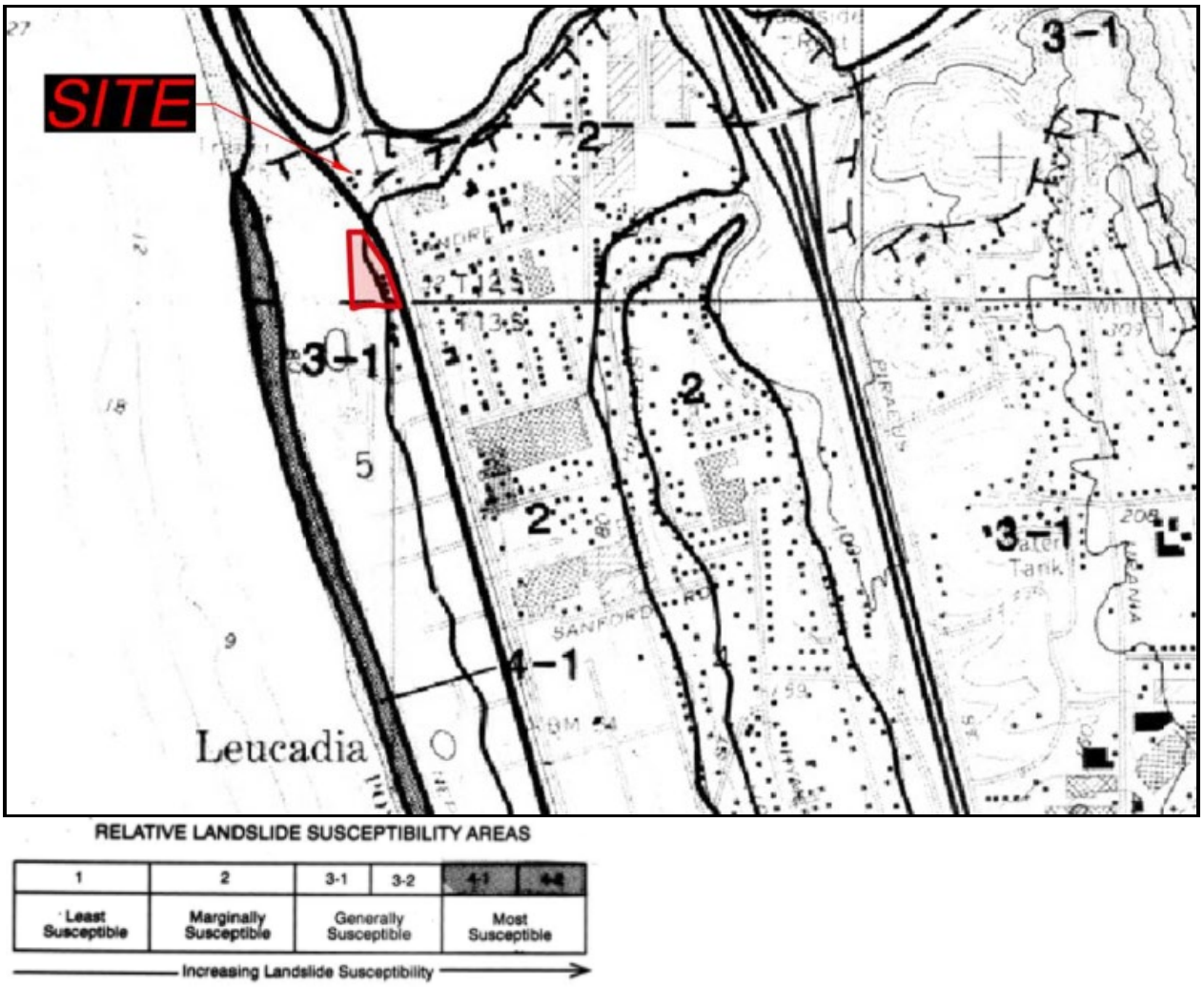


Figure 5-2. Landslide Susceptibility Mapping of the Site Area

In consideration of the shallow existing ground slopes and proposed grades at the project, NOVA considers the landslide hazard at the site to be ‘negligible’ for the site and the surrounding areas. The proposed development will not affect the landslide hazard characterization.

5.3 Soil Hazards

5.3.1 Embankment Stability

As used herein, ‘embankment stability’ is intended to mean the safety of localized natural or man-made embankments against failure. Unlike landslides described above, embankment stability can include smaller scale slope failures such as erosion-related washouts and more subtle, less evident processes such as soil ‘creep’.

New slopes planned as part of the future site development will be stabilized with retaining walls. There is no concern regarding embankment stability at this site.

5.3.2 Seismic

Liquefaction

'Liquefaction' refers to the loss of soil strength during a seismic event. The phenomenon is observed in areas that include geologically 'younger' soils (i.e., soils of Holocene age), shallow water table (less than about 60 feet depth), and cohesionless (i.e., sandy and silty) soils of looser consistency. The seismic ground motions increase soil water pressures, decreasing grain-to-grain contact among the soil particles, which causes the soils to lose strength.

Resistance of a soil mass to liquefaction increases with increasing density, plasticity (associated with clay-sized particles), geologic age, cementation, and stress history. The cemented, dense (see Section 4) and geologically 'older' Unit 2 paralic deposits have no potential for liquefaction.

Seismically Induced Settlement

Apart from liquefaction, a strong seismic event can induce settlement within loose to moderately dense, unsaturated granular soils. The cemented, dense Unit 2 paralic deposits (with Vs > 1,000 feet/second) will not be prone to seismic settlement.

Lateral Spreading

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move downslope on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, a liquefiable soil zone must be laterally continuous and unconstrained, free to move along sloping ground.

Due to the absence of a potential for liquefaction and relatively flat surrounding topography, there is no potential for lateral spreading.

5.3.3 Expansive Soil

Expansive soils are clayey soil characterized by their ability to undergo significant volume changes (shrinking or swelling) due to variations in moisture content, the magnitude of which is related to both clay content and plasticity index. These volume changes can be damaging to structures. Nationally, the annual value of real estate damage caused by expansive soils is exceeded only by that caused by termites.

The predominately sandy soils of Units 1-2 are not potentially expansive.

5.3.4 Hydro-Collapsible Soils

Hydro-collapsible soils are common in the arid climates of the western United States in specific depositional environments- principally, in areas of young alluvial fans, debris flow sediments, dune sands, and loess (wind-blown sediment) deposits. These soils are characterized by low *in situ* density, low moisture contents, and relatively high unwetted strength.

The soil grains of hydro-collapsible soils were initially deposited in a loose state (i.e., high initial ‘void ratio‘) and thereafter lightly bonded by water sensitive binding agents (e.g., clay particles, low-grade cementation, etc.). While relatively strong in a dry state, the introduction of water into these soils causes the binding agents to fail. Destruction of the bonds/binding causes relatively rapid densification and volume loss (collapse) of the soil. This change is manifested at the ground surface as subsidence or settlement. Ground settlements from the wetting can be damaging to structures and civil works.

The geologic age and depositional history of the Unit 1 and Unit 2 soils are such that these soils are not potentially hydro-collapsible.

5.3.5 Corrosive Soils

Chemical testing of the near-surface soils indicates the soils contain low concentrations of soluble sulfates and chlorides. These soils will not be corrosive to embedded concrete, but based on resistivity measurements, may be considered mildly to moderately corrosive to buried metals. Section 6 addresses this consideration in more detail.

5.4 Siting Hazards

5.4.1 Effect on Adjacent Properties

The proposed project will not affect the structural integrity of adjacent properties or existing public improvements and street right-of-ways located adjacent to the site if the recommendations of this report are incorporated into project design.

As building locations are finalized on the north end of the project, care should be taken that proposed structures do not load the retaining wall to the north. Section 6.5.4 addresses foundation setback requirements in more detail.

5.4.2 Flood

The project site is located within a FEMA-designated flood zone, designated as Flood “Zone X” Zone X is an “*area of minimal flood hazard*.” Figure 5-3 (following page) reproduces this mapping.

5.4.3 Tsunami

Tsunamis are seismic sea waves with a long wavelength (long compared to the ocean depth) generated by sudden movements of the ocean bottom during earthquakes, landslides, or volcanic activity. Review of published mapping of inundation potential indicates the site will not be affected.

Figure 5-4 (following page) maps potential tsunami inundation in the site area. As may be seen by review of this graphic, the site is not at risk for inundation by a tsunami.

Figure 5-3. Flood Mapping of the Site Area
(source: adapted from FEMA Map 06073C19037G, May 2012)

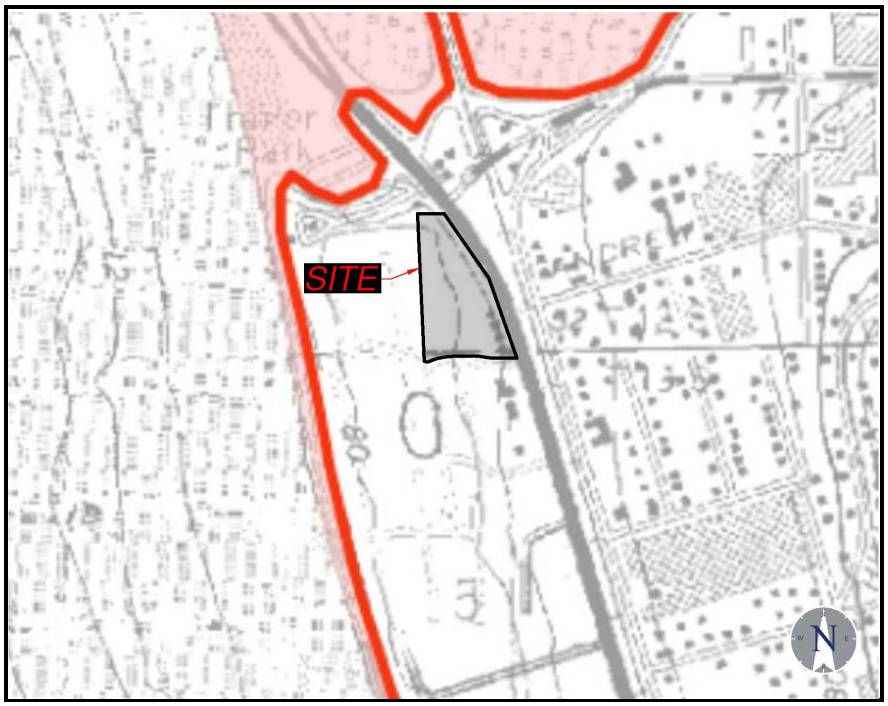


Figure 5-4. Tsunami Inundation Mapping of the Site Area
(source: CEMA, 2009)

6.0 EARTHWORK AND FOUNDATIONS

6.1 Overview

6.1.1 Review of Site Hazards

Section 5 provides a review of soil and geologic hazards common to development of civil works in the project area. The primary hazard identified by that review is that the site is at risk for moderate-to-severe ground shaking in response to a large-magnitude earthquake during the lifetime of the planned development. While strong ground motion could affect the site, there is no risk of liquefaction or related seismic phenomena. The expectation of strong ground motion is common to all civil works in this area of California.

Section 6.2 addresses design parameters to adapt structures to seismic shaking.

6.1.2 Site Suitability

Based upon the indications of the field and laboratory data developed for this investigation, as well as review of previously developed subsurface information, it is the opinion of NOVA that the site is suitable for development utilizing shallow foundations, provided the geotechnical recommendations described herein are followed.

Development as presently envisioned will not affect the structural integrity of adjacent properties or existing public improvements and street right-of-ways located adjacent to the site if the recommendations of this report are incorporated into project design.

6.1.3 Review and Surveillance

The subsections following provide geotechnical recommendations for the planned development as it is now understood. It is intended that these recommendations provide sufficient geotechnical information to develop the project in general accordance with the 2019 California Building Code (CBC) requirements.

NOVA should be given the opportunity to review the grading plan, foundation plan, and geotechnical-related specifications as they become available to confirm that the recommendations presented in this report have been incorporated into the plans prepared for the project. All earthwork related to site and foundation preparation should be completed under the observation of NOVA.

6.2 Seismic Design Parameters

6.2.1 Site Class

The shear wave testing described in Section 3 and Section 4 shows that the average shear wave velocity of the upper 100 feet of the subsurface (V_{100}) averages 1,077.6 feet per second. This average shear wave velocity meets the criterion for Site Class D per ASCE 7-16 (Table 20.3-1).

6.2.2 Seismic Design Parameters

Per Chapter 11 of ASCE 7-16, because the site is Site Class D, a site-specific risk-targeted maximum considered earthquake ground motion hazard analysis was performed in accordance with Chapter 21 of ASCE 7-16. Appendix G presents detailed documentation of the procedures and findings of this analysis. Table 6-1 presents the seismic design parameters resulting from this analysis.

Table 6-1. Seismic Design Parameters, ASCE 7-16

Parameter	OSHPD and Table 11.4.6	Site Specific
Site Class	D	
Site Latitude (decimal degrees)	33.080933°N	
Site Longitude (decimal degrees)	-117.308435°W	
Site Coefficient, F_a	1.07	N/A
Site Coefficient, F_v	1.88	N/A
Mapped Short Period Spectral Acceleration, S_S	1.18 g	1.18
Mapped One-Second Period Spectral Acceleration, S_1	0.42 g	0.42
Short Period Spectral Acceleration Adjusted For Site Class, S_{MS}	1.26 g	1.38
One-Second Period Spectral Acceleration Adjusted For Site Class, S_{M1}	0.79 g	1.15
Design Short Period Spectral Acceleration, S_{DS}	0.84 g	0.92
Design One-Second Period Spectral Acceleration, S_{D1}	0.53 g	0.77

Source: *OSHPD Seismic Design Maps:* https://www.seismicmaps.org/

6.3 Corrosivity and Sulfates

6.3.1 Summary of Testing

Electrical resistivity, chloride content, and pH level are all indicators of the soil's tendency to corrode ferrous metals and/or attack embedded concrete. Levels of water-soluble sulfates correlate with the potential for a soil to attack embedded concrete. Chemical testing for these parameters were performed on representative samples. Records of this testing are provided in Appendix D. Table 6-2 summarizes the results.

Table 6-2. Summary of Corrosivity Testing

Parameter	Units	B-5 @ 2 – 5'	B-8 @ 2.5 – 7.5'
pH	standard unit	7.4	7.4
Resistivity	Ω-cm	1200	10000
Water-Soluble Chloride	ppm	170	32
Water Soluble Sulfate	ppm	64	33

6.3.2 Metals

Caltrans considers a soil to be corrosive if one or more of the following conditions exist for representative soil and/or water samples taken at the site:

- chloride concentration is 500 parts per million (ppm) or greater;
- sulfate concentration is 2,000 ppm (0.2%) or greater; or,
- the pH is 5.5 or less.

Based on the Caltrans criteria, the soils would not be considered corrosive to buried metals. Appendix D provides records of the chemical testing that include estimates of the life expectancy of buried metal culverts of varying gauge.

In addition to the above parameters, the risk of soil corrosivity buried metals is considered by determination of electrical resistivity (ρ). Soil resistivity may be used to express the corrosivity of soil only in unsaturated soils. Corrosion of buried metal is an electrochemical process in which the amount of metal loss due to corrosion is directly proportional to the flow of DC electrical current from the metal into the soil. As the resistivity of the soil decreases, the corrosivity generally increases. A common qualitative correlation (cited in Romanoff 1989, NACE 2007) between soil resistivity and corrosivity to ferrous metals is tabulated below.

Table 6-3. Soil Resistivity and Corrosion Potential

Minimum Soil Resistivity (Ω-cm)	**Qualitative Corrosion Potential**
0 to 2,000	Severe
2,000 to 10,000	Moderate
10,000 to 30,000	Mild
Over 30,000	Not Likely

Despite the relatively benign environment for corrosivity indicated by pH and water-soluble chlorides, the resistivity testing suggests that design should consider that the soils may be moderately corrosive to embedded ferrous metals.

Typical recommendations for mitigation of such corrosion potential in embedded ferrous metals include:

- a high-quality protective coating such as an 18-mil plastic tape, extruded polyethylene, coal tar enamel, or Portland cement mortar;
- electrical isolation from above grade ferrous metals and other dissimilar metals by means of dielectric fittings in utilities and exposed metal structures breaking grade; and,
- steel and wire reinforcement within concrete having contact with the site soils should have at least 2-inches of concrete cover.

If extremely sensitive ferrous metals are expected to be placed in contact with the site soils, it may be desirable to consult a corrosion specialist regarding choosing the construction materials and/or protection design for the objects of concern.

6.3.3 Sulfate Attack

As shown on Table 6-2, the soil sample tested indicated water-soluble sulfate (SO_4) content of 170 parts per million ('ppm,' 0.017% by weight). With $SO_4 < 0.10$ percent by weight, the American Concrete Institute (ACI) 318-08 considers a soil to have no potential (S0) for sulfate attack. Table 6-4 reproduces the Exposure Categories considered by ACI.

Table 6-4. Exposure Categories and Requirements for Water-Soluble Sulfates

Exposure Category	Class	Water-Soluble Sulfate (SO_4) In Soil	Cement Type (ASTM C150)	Max Water-Cement Ratio	Min. f'_c (psi)
Not Applicable	S0	$SO_4 < 0.10$	-	-	-
Moderate	S1	$0.10 \leq SO_4 < 0.20$	II	0.50	4,000
Severe	S2	$0.20 \leq SO_4 \leq 2.00$	V	0.45	4,500
Very severe	S3	$SO_4 > 2.0$	V + pozzolan	0.45	4,500

Adapted from: ACI 318-08, Building Code Requirements for Structural Concrete

6.3.4 Limitations

Testing to determine several chemical parameters that indicate a potential for soils to be corrosive to construction materials are traditionally completed by the Geotechnical Engineer, comparing testing results with a variety of indices regarding corrosion potential. Like most geotechnical consultants, NOVA does not practice in the field of corrosion protection, since this is not specifically a geotechnical issue. Should you require more information, a specialty corrosion consultant should be retained to address these issues.

6.4 Earthwork

6.4.1 General

Based on the known condition at the site and the conceptual project plans, NOVA expects that earthwork at the site will include (i) general clearing and grubbing measures with localized deeper excavation of tree roots in areas with mature trees; (ii) remedial grading in the locations of building pads on existing fill, building pads with cut/fill transition conditions, flatwork, and retaining wall footings; (iii) excavation and shoring of subterranean parking structure; (iv) construction of building and retaining wall footings; (v) retaining wall construction, and backfill; (vi) flatwork and pavement subgrade preparation, and (vii) the installation and backfill of wet and dry utilities.

Earthwork should be performed in accordance with Section 300 of the most recent approved edition of the "*Standard Specifications for Public Works Construction*" and "*Regional Supplement Amendments*."

6.4.2 Site Preparation

Prior to the start of earthwork, the site should be cleared of existing brush, trees and root systems, pavements, foundations and utilities from the existing site use. The deleterious materials should be disposed of in approved off-site locations.

At the outset of site work, the Contractor should establish construction Best Management Practices ('BMPs') to prevent erosion of graded/excavated areas until such time as permanent drainage and erosion control measures have been installed.

6.4.3 Excavation Characteristics

As is discussed in Section 2, Unit 2 paralic deposits will generally be readily excavated by earthwork equipment usual for developments of this nature. No special excavation techniques will be required for the majority of the sandstones encountered within the planed limits of excavation.

As is discussed in Section 4, the Unit 2 paralic deposits include friable poorly-graded sandy zones that may affect construction. The Contractor should anticipate that localized cohesionless sand layers in Unit 2 may be readily excavated, but difficult to control once exposed. Sloughing sand can occur because of this condition.

Construction complications resulting from sloughing and loss of ground occurred at the nearby Oceanside Beach Resort construction site. Slope failures, utility trench instability and related issues can occur in these clean (i.e., free of silt and clay-sized particles), uncemented sands.

6.4.4 Select Fill

General

All fill for structures or pavements should be Select Fill.

Materials

Select Fill should be a mineral soil free of organics and regulated constituents with the characteristics listed below.

- At least 40% by weight finer than ¼-inches in size.
- Maximum particle size of 3-inches.
- Expansion index (EI) of less than 30 (i.e., EI < 30, after ASTM D 4829).

Unit 1 and Unit 2 soils will conform to the above criteria.

Placement

All fill should be moisture conditioning to at least 2% above the optimum moisture content then densified to a minimum of 90% relative compaction after ASTM D1557 (the 'modified Proctor').

Fill should be placed in loose lifts no thicker than the ability of the compaction equipment to thoroughly densify the lift. For most self-propelled construction equipment, this will limit loose lifts to on the order of 10-inches or less. Lift thickness for hand-operated equipment (tampers, walked behind compactors, etc.) will be limited to on the order of 4-inches or less.

Equipment employed for densification should be purpose-built. This will require the use of vibratory equipment to effect thorough compaction. Kneading and/or static compaction should not be accepted.

6.4.5 Remedial Grading

Buildings A, C, and the multi-family residential structure are anticipated to be founded entirely on competent formational materials, and are not anticipated to require remedial grading.

Undocumented Fill

As is discussed in Section 4, undocumented fill is assumed to underlie the existing structures on the property. This fill was encountered within Borings B-1, B-3, and Boring B-6, extending to depths of 2 feet to 5 feet. The fill may be thicker in other areas of the site not explored by our borings. The fill is an orange-brown silty sand of medium dense consistency.

Consistent with the policy of the City of Encinitas, all undocumented fill must be removed and replaced with Select Fill per Section 6.4.4.

Over-excavation

Structures and site retaining walls proposed in locations of existing undocumented fill, should be over-excavated to a minimum depth of 2 feet below the bottom of the proposed footings and on-grade slabs. Mixed-use Buildings B, D, E, and F are proposed in locations where existing fill or desiccated and disturbed formation was encountered and should be over-excavated such that the foundation will bear on a uniformly compacted fill blanket. Over-excavations should extend a minimum of 5 feet outside of the footprint of the structure.

Transition Conditions

Based on the conceptual design, the proposed hotel structure in the northern portion of the site has 2 feet of cut to grade on the northern edge of the structure and 6 feet of fill below the southern edge to achieve finish pad grade. Foundations for this structure should be entirely founded on engineered fill in order to mitigate potential effects of differential settlement resulting from spanning bedrock and fill.

The building should be over-excavated such that there is a minimum of three feet of engineered fill below the bottom of footings. In addition, any undocumented fill should be removed to contact with Unit 2 paralic deposits prior to placing new fill.

6.4.6 Processing Removal Bottoms

Once excavation is complete, the exposed surface should be inspected for areas of unusual softness, wetness or disturbance. Prior to placing new fill, the bottom of the excavations should be moisture conditioning to at least 3% above the optimum moisture content and compacted to a minimum of 90 percent relative compaction after ASTM D1557 (the ‘modified Proctor’).

6.4.7 Foundation Preparation

Soils loosened by excavation to the foundation level should be re-densified and verified by inspection by a representative of the GEOR that this preparation is adequate. The following general approach should be employed.

1. Step 1, Moisture Conditioning. The exposed soils should be moisture conditioned to 2% above optimum moisture content (with reference to ASTM D1557) to a depth of 12-inches.

2. Step 2, Densification. Moisture conditioned Unit 2 soils should be densified by compaction using vibratory compaction equipment, effecting thorough compaction to a minimum of 12- inches depth. Quality control testing should be undertaken to confirm that the upper 12- inches of foundation soil is densified to at least 90% relative compaction after ASTM D1557.

3. Step 3, Proof-Rolling of Slab Areas. The entire area of exposed, densified Unit 2 soil in slab areas should be proof-rolled by a heavy vehicle (for example, a loaded dump truck). Areas that appear soft/loose during the proof rolling process should be re-densified.

6.4.8 Trenching and Backfilling for Utilities

Excavation for utility trenches must be performed in conformance with OSHA regulations contained in 29 CFR Part 1926.

Utility trench excavations have the potential to degrade the properties of the adjacent soils. Utility trench walls that are allowed to move laterally will reduce the bearing capacity and increase settlement of adjacent footings and overlying slabs.

Special care should be given to utility trenches excavated in the Unit 2 paralic deposits, where zones of loose, clean, and uncemented sand are likely to be encountered and may readily slough. Per OSHA guidelines, slopes created during temporary trenching for utilities should not be exposed for more than 24 hours. The maximum slope should not exceed 1.5:1 (H:V), and where possible, should be laid back on the order of 3:1. All excavations with vertical sides should be shielded or supported to a height at least 18 inches above the top of the vertical side.

Backfill for utility trenches is as important as the original subgrade preparation or engineered fill placed to support either a foundation or slab. Backfill for utility trenches must be placed to meet the project specifications for the engineered fill of this project. Unless otherwise specified, the backfill for the utility trenches should be placed in 4- to 6-inch loose lifts and compacted to a minimum of 90% relative compaction after ASTM D 1557 (the ‘modified Proctor’) at soil moisture +2% of the optimum moisture content. Up to 4-inches of bedding material placed directly under the pipes or conduits placed in the utility trench can be compacted to 90% relative compaction with respect to the Modified Proctor.

Compaction testing should be performed for every 20 cubic yards of backfill placed or each lift within 30 linear feet of trench, whichever is less.

6.4.9 Pavement Subgrades

The upper 12-inches of all pavement subgrades should be moisture conditioned to at least 2% above the optimum moisture content and replaced to at least 95% relative compaction after ASTM D1557 (the 'modified Proctor').

6.4.10 Flatwork

Prior to casting exterior flatwork, the upper 1 foot of subgrade soils should be removed and replaced to at least 90% relative compaction after ASTM D1557.

6.5 Shallow Foundations

6.5.1 General

Structures can be supported on shallow foundations embedded in either compacted fill or the Unit 2 sandstone provided the earthwork is completed as described in Section 6.4. The following subsections provide recommendations for shallow foundations. It is recommended that all foundation elements, including any grade beams, be reinforced top and bottom. The actual reinforcement should be designed by the Structural Engineer.

6.5.2 Shallow Foundations Supported on Compacted Fill

<u>Minimum Dimensions and Reinforcing</u>

Continuous footings should be at least 24 inches wide and have a minimum embedment of 24 inches below lowest adjacent grade. Isolated square or rectangular footings should be a minimum of 30 inches wide, embedded at least 24 inches below surrounding grade.

<u>Allowable Contact Stress</u>

Continuous and isolated footings constructed as described in the preceding sections and supported on compacted fill may be designed using an allowable (net) contact stress of 2,500 pounds per square foot (psf). An allowable increase of 500 psf for each additional 12 inches in depth may be utilized, if desired.

In no case should the maximum allowable contact stress should be greater than 3,500 psf. The maximum bearing value applies to combined dead and sustained live loads (DL + LL). The allowable bearing pressure may be increased by one-third when considering transient live loads, including seismic and wind forces.

<u>Lateral Resistance</u>

Resistance to lateral loads will be provided by a combination of (i) friction between the soils and foundation interface; and, (ii) passive pressure acting against the vertical portion of the footings. Passive pressure may be calculated at 250 psf per foot of depth. A frictional coefficient of 0.35 may be used. No reduction is necessary when combining frictional and passive resistance.

Settlement

Structure supported on shallow foundations as recommended above will settle on the order of 0.5 inch or less, with about 50% of this settlement occurring during the construction period.

Angular distortion due to differential settlement of adjacent, unevenly loaded footings should be less than 1 inch in 40 feet (i.e., Δ/L less than 1:480).

6.5.3 Shallow Foundations Supported on Unit 2 Sandstone

The Unit 2 sandstones will provide high-capacity foundation support for shallow foundations. NOVA recommends use of conventional foundations, consisting of isolated and continuous footings, as described below.

Isolated Foundations

Isolated foundations for interior columns may be designed for an allowable contact stress of 4,500 psf for dead and commonly applied live loads (DL+LL). These foundation units should have a minimum width of 30 inches, embedded a minimum of 24 inches into sound Unit 2 sandstones. This bearing value may be increased by one-third for transient loads such as wind and seismic.

Continuous Foundations

Continuous foundations may be designed for an allowable contact stress of 4,000 psf for dead and commonly applied live loads (DL+LL). These footings must be a minimum of 24 inches in width and embedded a minimum of 24 inches into the Unit 2 sandstones.

This bearing value may be increased by one-third for transient loads such as wind and seismic.

Resistance to Lateral Loads

Lateral loads to shallow foundations cast ‘neat’ against Unit 2 sandstones may be resisted by passive earth pressure against the face of the footing, calculated as a fluid density of 300 psf per foot of depth, neglecting the upper 1 foot of soil below surrounding grade in this calculation. Additionally, a coefficient of friction of 0.35 between soil and the concrete base of the footing may be used with dead loads.

Settlement

Supported as recommended above, the structure will settle on the order of 0.5 inch or less. This movement will occur elastically, as dead load (DL) and permanent live loads (LL) are applied.

In usual circumstance, about 50% of this settlement will occur during the construction period. Angular distortion due to differential settlement of adjacent, unevenly loaded footings should be less than 1 inch in 40 feet (i.e., Δ/L less than 1:480).

6.5.4 Ground Supported Slabs

The ground level of the garage structures may employ conventional on-grade (ground-supported) slab designed using a modulus of subgrade reaction (k) of 120 pounds per cubic inch (i.e., k = 120 pci) for compacted fill and180 pci for Unit 2 sandstones.

The actual slab thickness and reinforcement should be designed by the Structural Engineer. NOVA recommends the slab be a minimum 5-inches thick, reinforced by at least #3 bars placed at 16-inches on center each way within the middle third of the slabs by supporting the steel on chairs or concrete blocks ("dobies").

Minor cracking of concrete after curing due to drying and shrinkage is normal. Cracking is aggravated by a variety of factors, including high water/cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, and rapid moisture loss due during curing. The use of low-slump concrete or low water/cement ratios can reduce the potential for shrinkage cracking.

To reduce the potential for excessive cracking, concrete slabs-on-grade should be provided with construction or 'weakened plane' joints at frequent intervals. Joints should be laid out to form approximately square panels and never exceeding a length to width ratio of 1.5 to 1. Proper joint spacing and depth are essential to effective control of random cracking. Joints are commonly spaced at distances equal to 24 to 30 times the slab thickness. Joint spacing that is greater than 15 feet should include the use of load transfer devices (dowels or diamond plates). Contraction/ control joints must be established to a depth of ¼ the slab thickness as depicted in Figure 6-1.

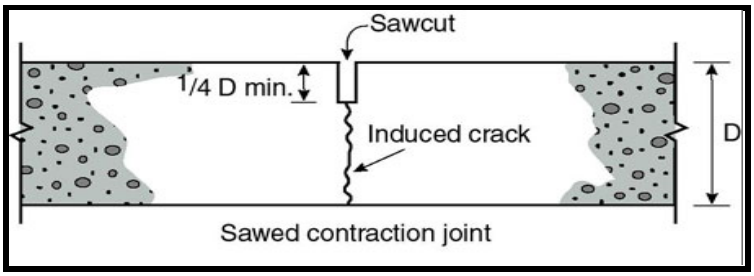


Figure 6-1. Sawed Contraction Joint

6.5.5 Setbacks From Slopes and Walls

The face of shallow foundations and slabs should be set back at least one third the height (H) of any slope from the face ('daylight') of that slope.

New structures may approach a permanent retaining wall at the north end of the site. Foundations should be located such that there is no new load placed on these walls.

The face of foundations adjacent to slopes must be located such that there is a minimum of 7 horizontal feet to daylight.

6.6 Capillary Break and Underslab Vapor Retarder

6.6.1 Capillary Break

NOVA recommends that the requirements for a capillary break ('sand layer') be determined in accordance with ACI Publication 302 "*Guide for Concrete Floor and Slab Construction*." A

"capillary break" may consist of a 4-inch thick layer of compacted, well-graded sand should be placed below the floor slab. This porous fill should be clean coarse sand or sound, durable gravel with not more than 5% coarser than the 1-inch sieve or more than 10% finer than the No. 4 sieve, such as AASHTO Coarse Aggregate No. 57.

6.6.2 Vapor Retarder

Soil moisture vapor that penetrates ground-supported concrete slabs can result in damage to moisture-sensitive floors, some floor sealers, or sensitive equipment in direct contact with the floor. It is not the responsibility of the geotechnical consultant to provide recommendations for vapor retarders to address this concern. This responsibility usually falls to the Architect. Decisions regarding the appropriate vapor retarder are principally driven by the nature of the building space above the slab, floor coverings, anticipated penetrations, concerns for mold or soil gas, and a variety of other environmental, aesthetic, and materials factors known only to the Architect.

A variety of specialty polyethylene (polyolefin)-based vapor retarding products are available to retard moisture transmission into and through concrete slabs. This remainder of this section provides an overview of design and installation guidance, and considers the use of vapor retarders in the building construction in the San Diego area.

Detail to support selection of vapor retarders and to address the issue of moisture transmission into and through concrete slabs is provided in a variety of publications by the American Society for Testing and Materials (ASTM) and the American Concrete Institute (ACI). A partial listing of those publications is provided below.

- ASTM E1745-97 (2009). Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- ASTM E154-88 (2005). Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.
- ASTM E96-95 (2005). Standard Test Methods for Water Vapor Transmission of Materials.
- ASTM E1643-98 (2009). Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
- ACI 302.2R-06. Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.

Vapor retarders employed for ground supported slabs in the San Diego are commonly specified as minimum 10 mil polyolefin plastic that conforms to the requirements of ASTM E1745 as a Class A vapor retarder (i.e., a maximum vapor permeance of 0.1 perms, minimum 45 lb/in tensile strength and 2,200 grams puncture resistance). Among the commercial products that meet this requirement are the series of Yellow Guard® vapor retarders vended by Poly-America, L.P.; the Perminator® products by W. R. Meadows; and, Stego®Wrap products by Stego Industries, LLC.

The person responsible for design of the vapor barrier should consult with product vendors to ensure selection of the vapor retarder that best meets the project requirements. For example, concrete slabs with particularly sensitive floor coverings may require lower permeance or other performance-related factors are specified by the ASTM E1745 class rating.

The performance of vapor retarders is particularly sensitive to the quality of installation. Installation should be performed in accordance with the vendor's recommendations under full-time surveillance.

6.7 Control of Moisture Around Foundations

6.7.1 General

Design for the structure should include care to control accumulations of moisture around and below foundations. Such design will require coordination from among the Design Team - at a minimum to include the Architect, the Civil Engineer, and the Landscape Architect.

6.7.2 Erosion and Moisture Control During Construction

Surface water should be controlled during construction, via berms, gravel/sandbags, silt fences, straw wattles, siltation basins, positive surface grades, or other methods to avoid damage to the finish work or adjoining properties. The Contractor should take measures to prevent erosion of graded areas until such time as permanent drainage and erosion control measures have been installed. After grading, all excavated surfaces should exhibit positive drainage and eliminate areas where water might pond.

6.7.3 Design

Civil, structural, architectural and landscaping design for the areas around foundations should be undertaken with a view to the maintenance of an environment that encourages drainage away from below-grade walls. Roof and surface drainage, landscaping, and utility connections should be designed to limit the potential for mounding of water near subterranean walls. In particular, rainfall to roofs should be collected in gutters and discharged away from foundations.

Proper surface drainage will be required to minimize the potential of water seeking the level of the garage walls and pavements. In areas where sidewalks or paving do not immediately adjoin the structure, protective slopes should be provided with a minimum grade (away from the structure) of approximately 3% for at least 5 feet. A minimum gradient of 1% is recommended in hardscape areas.

6.8 Walls

6.8.1 Lateral Pressures

Lateral earth pressures to retaining walls are related to the type of backfill, drainage conditions, slope of the backfill surface, and the allowable rotation of the wall. It is expected that the garage walls will be unyielding, designed to resist 'at rest' soil loads. Table 6-5 provides recommendations for lateral soil for varying conditions of wall yield. Groundwater level will be well below the wall levels.

If footings or other surcharge loads are located a short distance outside the wall, these influences should be added to the lateral stress considered in the design of the wall. Surcharge loading should consider wall loads that may develop from adjacent roads and sidewalks. To account for such potential loads, a surcharge pressure of 75 psf can be applied uniformly over the wall to a depth of about 12 feet.

Table 6-5. Wall Lateral Loads from Soil

Condition	Equivalent Fluid Pressure (psf/foot)	
	Level Backfill	2:1 Backfill Sloping Upwards
Active	35	55
At Rest	55	80
Passive	350	350

6.8.2 Seismic Increment to Non-Yielding Garage Walls

The lateral seismic thrust acting on a non-yielding retaining walls greater than 6 feet in height should be estimated by the dynamic (seismic) thrust, ΔP_E. Dynamic thrust is approximated as:

$\Delta P_E = k_h H^2 \gamma$ where,

- k_h , pseudostatic horizontal earthquake coefficient, equal to $S_{DS}/2.5$
- H is the height of the wall in feet from the footing to the point of fixity
- γ is the unit weight of the backfill, about 120 lb/ft^3

The resultant dynamic thrust acts at a distance of 0.33H above the base of the wall.

6.8.3 Elevator Pits

The parking garage will include elevators. Elevators may require pits that extend below the lowest slab level. An elevator pit slab and related retaining wall footings will derive suitable support from the Unit 2 sandstones around them.

Design for the elevator pit walls should consider the circumstances and conditions described below.

1. Wall Yield. Proper function of elevator pits should not allow yielding of the elevator pit walls. As such, walls should be designed to resist 'at rest' lateral soil pressures and seismic pressures provided above, also allowing for any structural surcharge.

2. Construction. Design of the elevator pit walls should include consideration for surcharge conditions that will occur during and after construction.

6.9 Temporary Slopes

It is the sole responsibility of the Contractor to provide safe temporary slopes during construction. Special care should be given to temporary slopes excavated in the Unit 2 paralic deposits, where zones of loose, clean, and uncemented sand are likely to be encountered and may readily slough. Per OSHA guidelines for Type C soils, slopes created during temporary

trenching for utilities should not be exposed for more than 24 hours. The maximum slope should not exceed 1.5:1 (H:V), and where possible, should be laid back on the order of 3:1. All excavations with vertical sides should be shielded or supported to a height at least 18 inches above the top of the vertical side.

7.0 TEMPORARY SHORING

7.1 General

It is the sole responsibility of the Contractor to provide an excavation that is safe, with deflections that do not damage nearby structures or utilities. To this end, the Contractor should retain a qualified Shoring Engineer for design of temporary shoring for larger excavations. The Shoring Engineer should be solely responsible for the design, utilizing the indications of subsurface conditions provided in the geotechnical reporting.

The following subsections provide guidance for the Owner, the Design Team, and the Shoring Engineer in development of these designs.

7.2 Design Conditions for Soldier Pile Wall

7.2.1 General

The Owner and the Design Team should consider that design for braced/retained excavation may address two broad conditions of wall loading as described below.

1. Condition 1, 'At Rest.' Design for the retaining wall should consider the use of 'at-rest' soil pressures at locations where wall deflections may affect potentially damaging settlement to utilities or structures. In such instances, design for walls should be designed to resist 'at rest' lateral soil pressures.

2. Condition 2, 'Active.' Design for the walls that are not located near sensitive structures or utilities should consider design to resist 'active' earth pressures. Based on review of the site area, it appears that this condition may be more appropriate for temporary walls that would be used for the planned development.

7.2.2 Method of Temporary Shoring

Designed to resist the Condition 1 'at rest' (i.e., 'K_o') earth pressures employs a rectangular wall pressure distribution that is more conservative than the Condition 2 loading. Figure 7-1 (following page) provides this load distribution, reproducing published guidance of relevance to this design circumstance.

Design for the 'at rest' wall pressure diagram depicted in Figure 7-1 using the parameters would yield:

$P\ (psf) = 0.45\ (K_o)\ (\gamma)\ (H)$ where,

$K_o = 1 - \sin\phi \quad \phi = 35°$, and $K_o = (1 - 0.57) = 0.43$

$\gamma = 120\ lb/ft^3$

H = wall height

$P = 0.45 \times 0.43 \times 120 \times H = 23H$

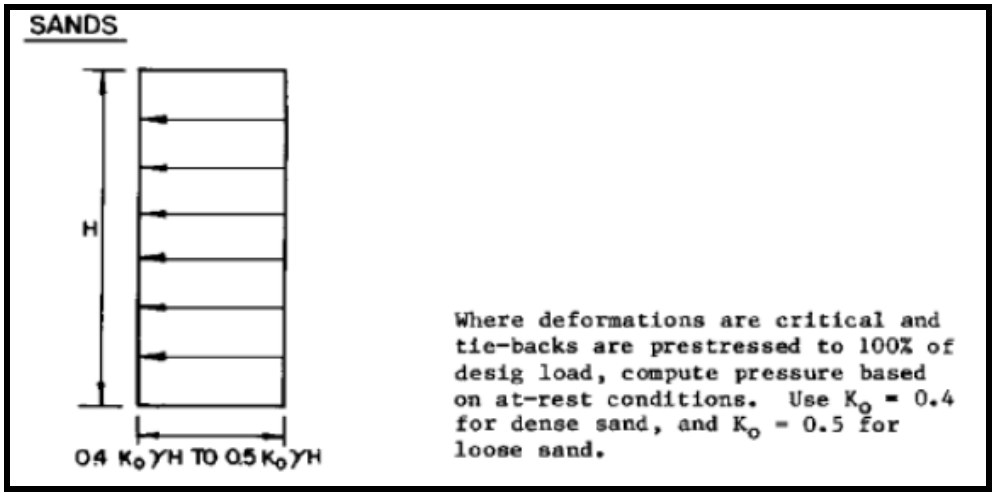


Figure 7-1. 'At Rest' Wall Pressure Distribution in Sands
(source: NAVFAC 1986)

The Shoring Engineer should also consider additional lateral pressure due to the surcharging effects of adjacent structures or traffic loads should be considered by the Shoring Engineer, as appropriate. These loads will act as a surcharge to the temporary wall.

7.2.3 Condition 2, 'Active'

Based on review of aerial photography of the area, it is the judgment of NOVA that the site is favorable for design for less conservative wall pressures than those driven by Condition 1. That is, there is no indication that the project bounds an area where wall deflections will immediately threaten structures or utilities.

As such, NOVA recommends that wall design be completed using active earth pressures as described by the trapezoidal active earth pressure distribution of Figure 7-2(a) (following page). The magnitude of the maximum trapezoidal pressure may be calculated as:

$P\ (psf) = 0.65\ (K_a)\ (\gamma)\ (H)$ where,

$K_a = (1 - \sin\phi) / (1 + \sin\phi)$ $\phi = 35°$, $K_a = 0.27$

$\gamma = 120\ lb/ft^3$

H = wall height

For a variety of assumptions regarding γ, ϕ, and K_a, NOVA estimates that the maximum magnitude of lateral pressure for a tied back soldier beam and lagging wall system will normalize to be in the range 19H to 24H, where 'H' is the height of the wall in feet.

NOVA recommends employing the trapezoidal distribution of Figure 7-2(a), using 21H for determination of the maximum wall pressure.

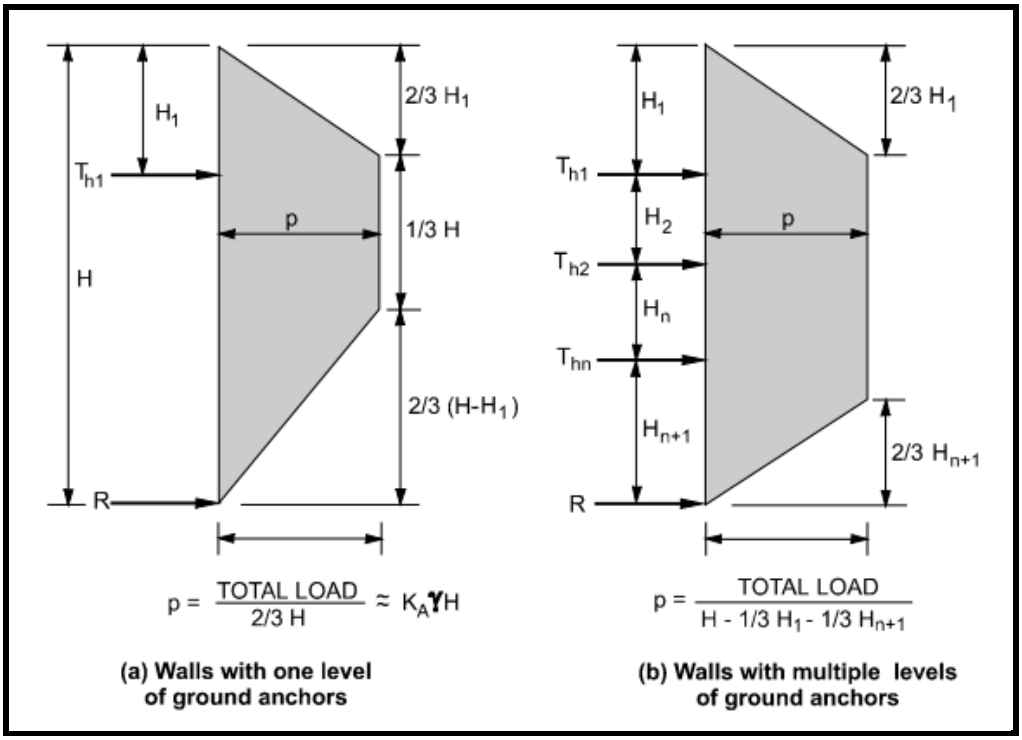


Figure 7-2. 'Active' Lateral Earth Pressures
(source: FHWA 1999)

It should be noted that the pressure distribution of Figure 7-2(a) are empirical, derived from experience. As may be seen by review of Figure 7-2(a), the recommendation for this pressure distribution follows guidance provided by FHWA 1999. It should be understood that other empirical pressure distributions may be preferred by others. However, it is NOVA's experience that the pressure distribution of Figure 6 works well to predict wall loads/anchor loads in this area.

7.2.4 Passive Resistance to Soldier Piles

It is expected that soldier beams will be set in pre-drilled holes and backfilled with lean concrete or a sand cement slurry with a compressive strength of at least 700 psf. Passive resistance to embedment of a temporary wall may be calculated using an 'equivalent fluid wall pressure' distribution, where the maximum equivalent fluid pressure (P) may be calculated as:

$P\ (psf) = (K_p)\ (\gamma)\ (D)$ where,

$K_p = (1 + \sin \phi) / (1 - \sin \phi)$ $\phi = 35°$, $K_p = 2.6$

$\gamma = 120\ lb/ft^3$

D = depth of wall embedment

$P = 3.6 \times 120 \times D = 440\ D$ (ultimate)

7.2.5 Rakers

If rakers (inclined struts) are employed for the taller portions of the excavation, these units will gain lateral resistance from either (i) temporary foundations or (ii) the central part of the basement level slab. In the latter case, the excavation would first be carried in full depth at its center, so that the basement level slab could be placed. Thereafter, the slab could provide resistance to rakers loads.

If temporary foundations are utilized to support the rakers inclined at 40° or steeper, mass concrete heel blocks, embedded a minimum of 3 feet below surrounding grade will provide ultimate passive resistance of 500 psf over the face of the heel block. Alternatively, a steel section may be embedded in a predrilled hole to provide lateral resistance similar to that described above for soldier piles.

7.3 Tieback Anchors

7.3.1 Failure Wedge

Design should assume that the failure wedge adjacent to the shoring is defined by a plane drawn at 29° from the vertical from the toe of the wall. Figure 7-3 depicts this wedge graphically.

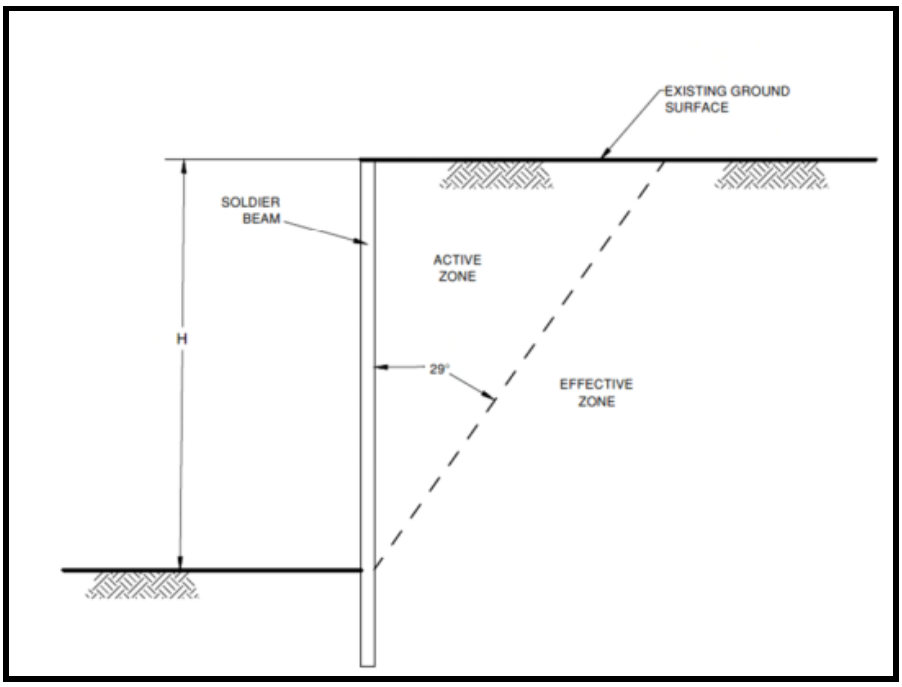


Figure 7-3. Recommended Effective Zone for Tieback Anchors

Tieback anchors should extend at least 20 feet beyond the failure wedge (i.e., the “bonded” zone) depicted in Figure 7-3. The intent of this provision is to provide global stability for the shored wall. The bonded length should commence at least 5 feet beyond the failure wedge).

7.3.2 Anchor Installation

The anchors may be installed at angles of 15° to 35° below the horizontal. The anchors should be filled with concrete placed by pumping from the tip of the anchor to the failure wedge (i.e., over the bonded zone). The portion of the anchor tendons outside of the bonded length should be sleeved in plastic (i.e., over the unbonded zone). If the anchor tendons are sleeved, it is acceptable to concrete the entire length of the anchor.

7.3.3 Bond Stress

It is usual that tiebacks are installed using 'post-grouted' construction. The Shoring Engineer should be solely responsible for determination of allowable bond stresses on pressure-concreted ('post-grouted') anchors. Based upon experience at similar sites, NOVA expects that an allowable bond stress of at least 3,500 psf should be achievable.

Only the resistance developed beyond the failure wedge should be used in resisting lateral loads. If the anchors are spaced at least 6 feet on center, no reduction in the capacity of the anchors need be considered due to group action. In no event should the anchors extend less than the minimum length beyond the potential failure wedge as given above.

As a tie-back anchor system is intended for temporary use, provisions should be made in the design to de-tension and abandon the tie-backs when the basement walls are able to support the lateral loads.

7.3.4 Performance Testing

Wall design should provide for (i) performance testing, (ii) proof testing, and (iii) creep testing of wall anchors. In this regard, it is recommended that guidance provided in FHWA 1999 be utilized. Guidance for proof testing for all anchors provides for loading to a single cycle and load hold at the test load. The guidance provides that loading be applied pre-provided in load increments of 0.25DL, 0.50DL, 1.00DL, 1.20DL and 1.33DL (the 'test load').

All of the production anchors should be tested to at least 130% of the design load; the total deflection during the tests should not exceed 1.5-inches. The rate of creep under the 130% test should not exceed 0.1-inch over a 15-minute period for the anchor to be approved for the design loading.

7.4 Miscellaneous Wall Design Considerations

End bearing for soldier piles will be negligible and should not be considered. As noted previously, it is expected that soldier beams will be set in pre-drilled holes and backfilled with lean concrete or a sand cement slurry with a compressive strength of at least 700 psf. The soil-pile bond will be on the order of 400 psf or greater.

The coefficient of friction (μ) between the wall and surrounding soils is μ = 0.35.

7.5 Construction

7.5.1 General

NOVA expects that a soldier beam and lagging wall can be designed with a single level of tiebacks. A wall retaining a 25-foot excavation with a tieback set at about 8 feet depth will develop individual tieback loads on the order of 130 kips.

Walls will be constructed by first setting the soldier beams. Thereafter, the pace of the excavation will be limited by the establishment of lagging. Excavation should not be advanced deeper than about 3 feet below the bottom of the lagging at any time. These gaps of up to 3 feet should only be allowed to stand for short periods of time in order to decrease the potential for sloughing/caving. Backfilling should be conducted when necessary between the back of the lagging and excavation sidewalls to reduce any sloughing in this zone.

The Contractor should also recognize that temporary wall construction at a nearby site with similar subsurface conditions was affected by sloughing sands. According to a conversation NOVA had with the general contractor constructing that site, the site proforma was calculated assuming 5-foot excavations for shoring; however, when the lower zone of friable sandstone was encountered, excavations were reduced from 5 feet to 1-foot in order to mitigate caving.

7.5.2 Expected Wall Movements

Actual wall movement and related ground settlement are related to a variety of factors, most significantly (i) subsurface conditions, including effective dewatering; and, (ii) workmanship in wall construction.

The formational sandstones are favorable for sound wall construction. The Geotechnical Engineer-of-Record (GEOR) should coordinate with the Shoring Engineer to ensure that good workmanship prevails throughout wall construction. The combination of workmanship and favorable subsurface conditions will result in good wall performance. Additionally, ground and wall movement monitoring should be employed to detect any unusual wall movement before the condition becomes problematic.

Design for a Condition 1 wall will limit wall movement, though the ‘at rest’ wall condition will not eliminate all wall movement. Because of the reliance on a wide variety of parameters, including workmanship, it is difficult to rigorously predict wall performance during the design stage. Expectations in this regard are primarily empirical. Figure 7-4 (following page) provides a published summary of project experiences.

A wall designed for Condition 1 might expect to have a horizontal movement (δ_{Hm}) of about 0.2% of the wall height (H). Assuming H ~25 feet, the design might anticipate δ_{Hm} ~ 0.5-inch.

Walls designed for Condition 2 will likely limit deflection of the top of the wall to about 1-inch or less. This wall movement will limit ground settlement immediately behind the shoring system to a similar amount or less. This movement should be imperceptible beyond a distance of about 20 feet from the wall.

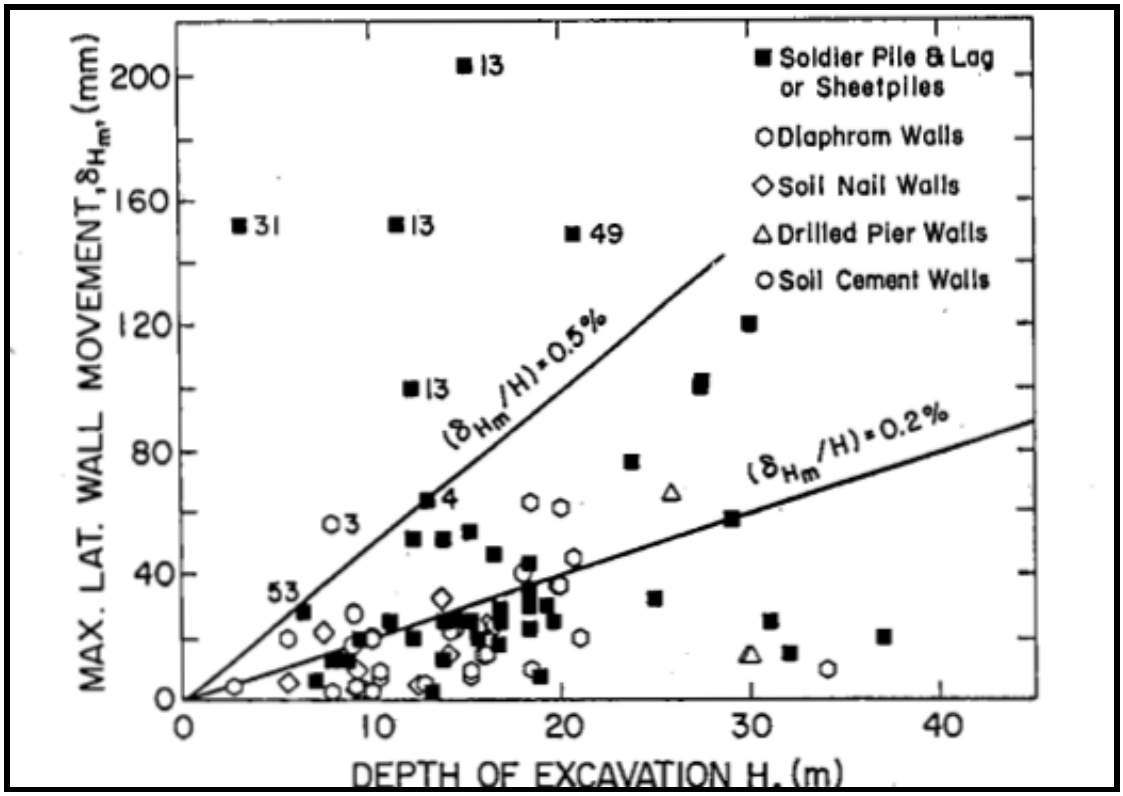


Figure 7-4. Observed Maximum Lateral Movements for In Situ Walls in Stiff Clays, Residual Soils and Sands
(source: Clough and O'Rourke 1990)

8.0 STORMWATER INFILTRATION

8.1 Overview

Based upon the indications of the field exploration and laboratory testing reported herein, NOVA has evaluated the site based on guidance contained in the City of Encinitas BMP Design Manual, (hereafter, 'the BMP Manual').

Section 3.4 provides a description of the field work undertaken to complete the testing. Figure 3-1 depicts the location of the testing. This section provides the results of that testing and related recommendations for management of stormwater in conformance with the BMP Manual.

As is well-established by the BMP Manual, the feasibility of stormwater infiltration is principally dependent on geotechnical and hydrogeologic conditions at the project site. This section provides NOVA's assessment of the feasibility of stormwater infiltration BMPs utilizing the information developed by the field exploration described in Section 3.4, as well as other elements of the site assessment.

8.2 Infiltration Rate

The percolation rate of a soil profile is not the same as its infiltration rate ('I'). Therefore, when percolation rates are established by field testing, the measured/calculated field percolation rate is converted to an estimated infiltration rate utilizing the Porchet Method in accordance with guidance contained in the BMP Manual.

Table 8-1 provides a summary of the infiltration rate determined by the percolation testing. The measured infiltration rates range from I = 1.51 to I = 1.74 inches per hour using a preliminary factor of safety (F) of F = 2.

Table 8-1. Infiltration Rate Determined by Percolation Testing

Boring	Approximate Ground Elev. (feet, msl)	Depth of Test (feet)	Approximate Test Elev. (feet, msl)	Percolation Rate (inches/hour)	Infiltration Rate (inches/hour)	Design Infiltration Rate (in/hour, F=2*)
P-1	+55	+50	5.0	58.32	3.02	1.51
P-2	+76	+71	5.0	77.04	3.49	1.74

Note: 'F' indicates 'Factor of Safety'

8.3 Review of Geotechnical Feasibility Criteria

8.3.1 Overview

Section C.2 of Appendix C of the BMP Manual provides seven factors that should be considered by the project geotechnical professional while assessing the feasibility of infiltration related to geotechnical conditions. These factors are listed below.

- C.2.1 Soil and Geologic Conditions
- C.2.2 Settlement and Volume Change
- C.2.3 Slope Stability and Coastal Bluff Stability

- C.2.4 Utility Considerations
- C.2.5 Groundwater Mounding
- C.2.6 Retaining Walls and Foundations
- C.2.7 Other Factors

The above geotechnical feasibility criteria are reviewed in the following subsections.

8.3.2 Soil and Geologic Conditions

The soil borings and percolation test borings completed for this assessment disclose the sequence of soil units described below.

1. Unit 1, Fill (Qaf). Fill is assumed to underlie the structures on the property, and was encountered within Boring B-6 and Boring B-3, extending a depth of approximately 2 to 5 feet. The fill is an orange brown silty sand of medium dense consistency.

2. Unit 2, Old Paralic Deposits (Qop6-7). The entire site is underlain by marine terrace deposits. The upper 15 to 20 feet of this unit is slightly cemented, with the consistency of a dense silty fine to medium sand. At depth, cementation weakens as the unit grades down to dense, poorly-graded ('well-sorted') sandstone with only a trace amount of fines present.

8.3.3 Settlement and Volume Change

The Unit 1 and 2 soils are not prone to substantial swelling upon wetting and shrinkage upon drying. Introduction of water to this unit will likely not create damaging foundation movement.

8.3.4 Slope Stability and Coastal Bluff Stability

Infiltration of water has the potential to result in an increased risk of slope failure of existing slopes and coastal bluff zones. As such, BMPs are not suitable for any location on site.

8.3.5 Utilities

Stormwater infiltration BMPs should not be sited within 10 feet of underground utilities.

8.3.6 Groundwater Mounding

In consideration of the measured percolation rates, it is unlikely that groundwater mounding will occur if stormwater infiltration is attempted.

8.3.7 Retaining Walls and Foundations

Stormwater infiltration BMPs should not be sited within 10 feet from retaining walls and foundations.

8.3.8 Other Factors

NOVA does not know of other factors that could affect implementation of stormwater infiltration BMPs.

8.4 Suitability of the Site for Stormwater Infiltration

It is NOVA's judgment that the site is not suitable for development of stormwater infiltration BMPs. This judgment is based upon consideration of the variety of factors detailed above; most significantly the risk of coastal bluff failure.

Appendix E provides completed forms related to stormwater infiltration.

9.0 PAVEMENTS

9.1 General

9.1.1 Control of Moisture

Moisture must be controlled around and beneath pavements. Moreover, where standing water develops either on the pavement surface or within the base course, softening of the subgrade and other problems related to the deterioration of the pavement can be expected. Furthermore, good drainage should minimize the risk of the subgrade materials becoming saturated and weakened over a long period of time.

The following recommendations should be considered to limit the amount of excess moisture which can reach the subgrade soils:

- maintain surface gradients at a minimum 2% grade away from the pavements;
- compact utility trenches for landscaped areas to the same criteria as the pavement subgrade;
- seal all landscaped areas in or adjacent to pavements to minimize or prevent moisture migration to subgrade soils;
- planters should not be located next to pavements (otherwise, subdrains should be used to drain the planter to appropriate outlets);
- place compacted backfill against the exterior side of curbs and gutters; and,
- concrete curbs bordering landscaped areas should have a deepened edge to provide a cutoff for moisture flow beneath pavements (generally, the edge of the curb can be extended an additional 12-inches below the base of the curb).

9.1.2 Planning for Preventive Maintenance

Preventative maintenance should be planned and provided for. Preventative maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment. Preventative maintenance consists of both localized maintenance (e.g. crack sealing and patching) and global maintenance (e.g. surface sealing). Preventative maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements.

9.2 Subgrade Preparation

9.2.1 Rough Grading

Grading for paved areas should be as described in Section 6.4, completely removing the Unit 1 undocumented fill, and replacing the soil to design grade with select fill. Any replacement filling should be done in lifts (i) not to exceed 10-inches thickness or (ii) the ability of the compaction equipment employed to densified through a complete lift, whichever is less.

Prior to constructing pavements, inspection should ensure that at least the upper 12” of subgrade soils are either (i) Unit 2 soil; or (ii) sandy Unit 1 fill densified to at least 95% relative compaction after ASTM D 1557, following moisture conditioning to at least 2% above the optimum moisture content.

9.2.2 Proof-Rolling

After the completion of compaction/densification, or excavation to the design subgrade level, areas to receive pavements should be proof-rolled. A loaded dump truck or similar should be used to aid in identifying localized soft or unsuitable material.

Any soft or unsuitable materials encountered during this proof-rolling should be removed, replaced with an approved backfill, and compacted. The Geotechnical Engineer can provide alternative options such as using geogrid and/or geotextile to stabilize the subgrade at the time of construction, if necessary.

9.2.3 Moisture Control

Construction should be managed such that preparation of the subgrade immediately precedes placement of the base course. Proper drainage of the paved areas should be provided to reduce moisture infiltration to the subgrade.

9.2.4 Surveillance

The preparation of roadway and parking area subgrades should be observed on a full-time basis by a representative of NOVA to confirm that any unsuitable materials have been removed and that the subgrade is suitable for support of the proposed driveways and parking areas.

9.3 Flexible Pavements

The structural design of flexible pavement depends primarily on anticipated traffic conditions, subgrade soils, and construction materials. Table 9-1 (following page) provides preliminary flexible pavement sections using an R-value of 35. This R-value was indicated by laboratory testing described in Section 3.

9.4 Rigid Pavements

9.4.1 General

Concrete pavement sections should be developed in the same manner as undertaken for all other slabs and pavements - removal of the Unit 1 fill and replacement of that material in an engineered manner as described in Section 9.2.

Concrete pavement sections consisting of 7 inches of Portland cement concrete over a base course of 6 inches and a properly prepared subgrade support a wide range of traffic indices.

Where rigid pavements are used, the concrete should be obtained from an approved mix design with the minimum properties of Table 9-2 (following page).

Table 9-1. Preliminary Flexible Pavement Sections, R = 35

Area	Traffic Index	Asphalt Thickness (inches)	Base Thickness (inches)
Passenger Car Driveways	5.0	4	6
		4	6
Heavy Duty Driveways	6.0	3	7.5
		4	6

1. The above sections assume properly prepared subgrade consisting of at least 12-inches of subgrade compacted to a minimum of 95% relative compaction after ASTM D1557, with EI <30.

2. The aggregate base materials should be placed at a minimum of 95% relative compaction after ASTM D1557.

Table 9-2. Recommended Concrete Requirements for Pavements

Property	Recommended Requirement
Compressive Strength @ 28 days	3,250 psi minimum
Strength Requirements	ASTM C94
Minimum Cement Content	5.5 sacks/cu. yd.
Cement Type	Type I Portland
Concrete Aggregate	ASTM C33 and Caltrans Section 703
Aggregate Size	1-inch maximum
Maximum Water Content	0.50 lb/lb of cement
Maximum Allowable Slump	4-inches

9.4.2 Jointing and Reinforcement

Longitudinal and transverse joints should be provided as needed in concrete pavements for expansion/contraction and isolation. Sawed joints should be cut within 24-hours of concrete placement, and should be a minimum of 25% of slab thickness plus ¼-inch. All joints should be sealed to prevent entry of foreign material and doweled where necessary for load transfer.

Load transfer devices, such as dowels or keys are recommended at joints in the paving to reduce possible offsets. Where dowels cannot be used at joints accessible to wheel loads, pavement thickness should be increased by 25% at the joints and tapered to regular thickness in 5 feet.

9.5 Grasscrete Pavements and Interlocking Pavers

9.5.1 Location

Vehicular grasscrete pavements are proposed at the northwest end of the site to support the fire lane. Figure 9-1 locates this feature. Interlocking pavers are proposed throughout the driveways of the site.

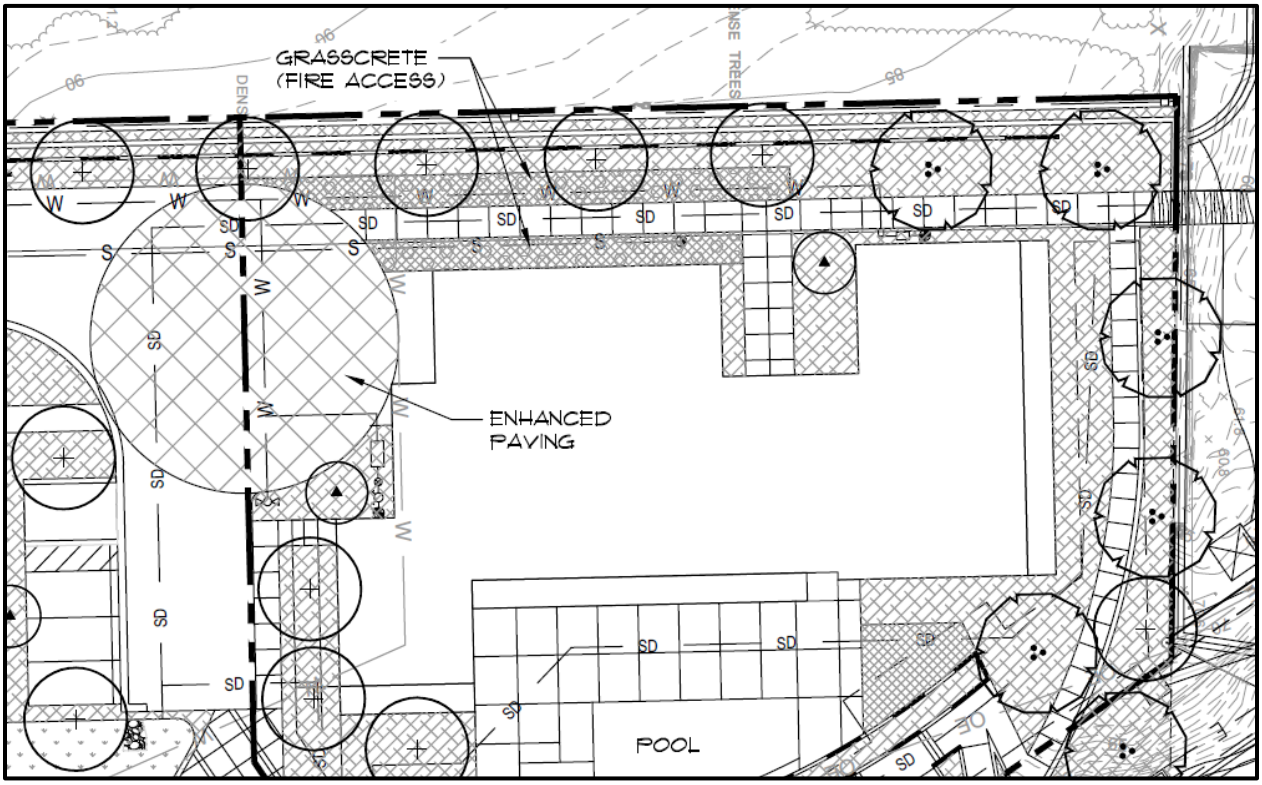


Figure 9-1. Location of Proposed Grasscrete Pavements
(source: SDA 2020)

9.5.2 General

The geotechnical recommendations for pavers provided herein have been developed in general conformance with (i) guidelines of the Interlocking Concrete Pavement Institute (ICPI), Technical Specification No. 4, February 2020; and, (ii) details for Grasspave2 by Invisible Structures Inc., January 2018.

Grasscrete pavement sections and interlocking concrete pavers should be developed in the same manner as undertaken for all other slabs and pavements - removal of the Unit 1 fill and replacement of that material in an engineered manner as described in Section 9.2.

9.5.3 Grasscrete Pavements

The structural design of porous grass pavers depends primarily on anticipated traffic conditions, subgrade soils, and construction materials.

Table 9-3 provides preliminary porous pavement sections for design purposes using an R-value of 35. An R-value test of the subgrade soils can be performed after the grading operations are complete in order to provide a final pavement section.

Table 9-3. Preliminary Recommendations for Porous Grass Pavers, R = 35

Area	Estimated Subgrade R-Value	Ring Thickness (in)	Base Course Thickness (in)
Fire Lanes	35	1*	18

Notes: (*) Assumed ring height

The grasscrete pavements should be underlain with at least 18-inches of Caltrans Class II base, moisture conditioned to slightly above the optimum moisture content and densified to at least 95 percent of the maximum dry density determined by ASTM D1557 (the 'modified Proctor').

9.5.4 Interlocking Concrete Pavers

Concrete paver units should be at least 80 millimeters (3 ⅛-inches) thick for vehicular concrete pavers. Interlocking concrete pavement can be constructed by placing the concrete paver units over a 1-inch bedding sand layer generally conforming to ASTM C-33 sand.

<u>Bedding and Joint Sand Gradation</u>

Table 9-4 summarizes bedding sand gradation recommendations and recommended joint sand gradation. The joint sand should comply with ASTM C144 with a maximum 100 percent passing the No. 16 sieves and no more than 5 percent passing the No. 200 sieve.

Bedding sand may be used as joint sand; however, additional effort may be required due to its coarser gradation.

Table 9-4. Gradation of Sand for Paver Systems

Sieve Size	Percent Passing	
	Bedding Sand	Joint Sand
3/8 – inch	100	-
No. 4	95 - 100	100
No. 8	80 - 100	95 - 100
No. 16	50 - 85	70 - 100
No. 30	25 - 60	40 - 75
No. 50	5 - 30	20 - 40
No. 100	0 - 10	10 - 25
No. 200	0 - 1	0 - 5

Base and Subgrade

The bedding sand should be underlain with at least 10 inches of Class II base compacted to at least 95 percent of the maximum dry density at or slightly above optimum moisture content as determined by ASTM D 1557.

The upper 12 inches of the subgrade soil should be scarified; moisture conditioned as necessary, and compacted to a dry density of at least 95 percent of the laboratory maximum dry density at or slightly above optimum moisture content as determined by ASTM D1557.

9.5.5 Control of Infiltration

An impermeable liner (e.g., 30-mil PVC or equivalent) should be placed surrounding the grasscrete and concrete pavers to prevent soil subgrade saturation and lateral water migration. The liner should extend up to the top of the aggregate base layer and adhered to the edge restraint.

Water retained by the liner can be collected by a subdrain. The lined subgrade soils should be sloped at least one percent towards the subdrain. A 4-inch diameter, Schedule 40, perforated PVC pipe encapsulated with Caltrans Class II permeable base (or equivalent) should be suitable as a subdrain. This piping should connect to solid PVC pipe to convey the stormwater to a suitable outlet structure, i.e. area drain or storm drain structure.

Figure 9-2 depicts a design to control infiltrating surface water that reflects the above recommendations.

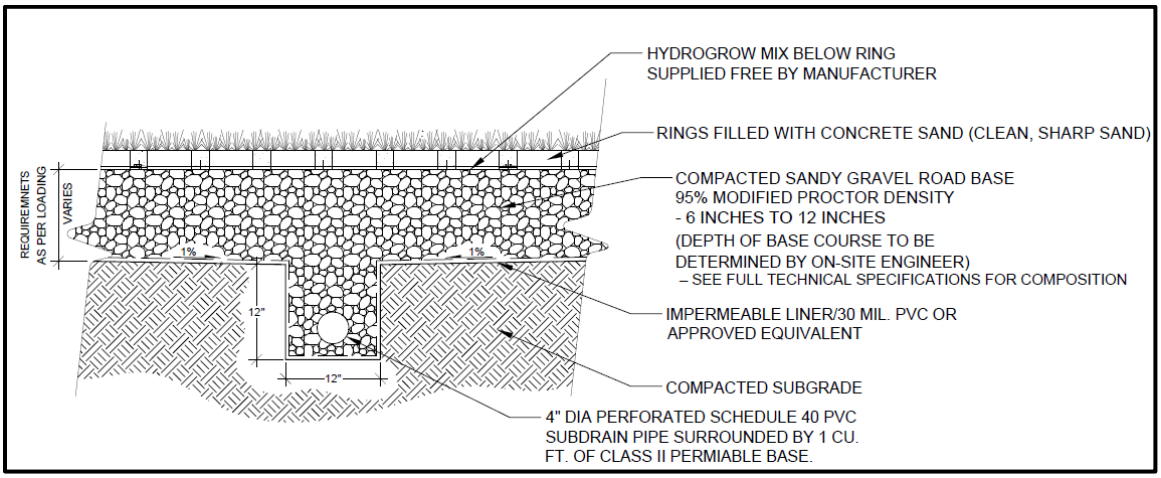


Figure 9-2. Design to Control Infiltration
(source adapted from IS 2018)

9.5.6 Installation

Grasscrete pavement and concrete paver installation should be performed in accordance with the manufacturer's and ICPI guidelines. Stable edge restraints such as concrete edge bands and curbs are essential to maintain horizontal interlock while the paver units are subjected to repeated vehicular loads.

9.5.7 Edge Restraint

The edge restraint may consist of a concrete pavement section. Other edge restraint recommendations can be found in the ICPI technical guidelines and in the manufacturer's literature.

A concrete edge restraint pavement section may be designed in general conformance with the procedure recommended by the American Concrete Institute report ACI 330R-08 *Guide for Design and Construction of Concrete Parking Lots* using the following parameters:

Modulus of subgrade reaction, k = 100 pci
Modulus of rupture for concrete, MR= 500 psi
Traffic Category = B
Average daily truck traffic, ADTT (assumed) = 30

Based on the criteria presented above, concrete pavement should consist of a minimum of 7 inches of PCC placed over a 6-inch base course. The base and subgrade soil should be compacted to a dry density of at least 95 percent of the laboratory maximum dry density near to slightly above optimum moisture content. This pavement section is based on a minimum concrete compressive strength of approximately 3,250 psi (pounds per square inch).

No reinforcing steel will be necessary within the concrete for geotechnical purposes.

9.5.8 Maintenance

A maintenance schedule consisting of inspecting the pavement sections should be established. Periodic removal, replacement, and re-leveling of individual pavers may be required.

10.0 GEOTECHNICAL REVIEW, OBSERVATION, AND TESTING

10.1 Overview

As is discussed in Section 1, the recommendations contained in this report are based upon a limited number of borings and reliance, tempered with judgment, upon the continuity of subsurface conditions between borings.

The recommendations provided in both NOVA's proposal for this work and this report assume that NOVA will be retained to provide consultation and review during the design phase, to interpret this report during construction, and to provide construction monitoring in the form of testing and observation.

10.2 Design Phase Review

NOVA should be retained to provide review of final grading and foundation plans. This review is provided for in NOVA's proposal for this work.

10.3 Construction Observation and Testing

10.3.1 General

Special inspections should be provided per Section 1705 of the California Building Code. The soils special inspector should be a representative of NOVA as the Geotechnical Engineer-of-Record (GEOR).

NOVA should be retained to provide construction-related services abstracted below.

- Surveillance during site preparation, grading, and foundation excavation.
- Inspection of soil densification/compaction during grading.
- Soil special inspection during grading.

A program of quality control should be developed prior to the beginning of earthwork. It is the responsibility of the Owner, Contractor, and/or Construction Manager to determine any additional inspection items required by the Architect/Engineer or the governing jurisdiction.

10.3.2 Continuous Soils Special Inspection

The earthwork operations listed below should be the object of continuous soils special inspection.

- Over-excavation for remedial grading, including scarification and re-compaction.
- Fill placement and compaction.
- Pavement subgrade preparation and base course compaction.

10.3.3 Periodic Soils Special Inspection

The earthwork operations listed below should be the object of periodic soils special inspection, subject to approval by the Building Official.

- Site preparation and removal of existing development features.
- Placement and compaction of utility trench backfill.
- Observation of foundation excavations.
- Building pad moisture conditioning.

10.3.4 Testing During Inspections

A preconstruction conference among representatives of the Owner, Contractor, and/or Construction Manager and Geotechnical Engineer is recommended to discuss the planned construction procedures and quality control requirements.

The locations and frequencies of compaction test should be determined by the geotechnical engineer at the time of construction. Test locations and frequencies may be subject to modification by the geotechnical engineer based upon soil and moisture conditions encountered, the size and type of compaction equipment used by the Contractor, the general trend of compaction test results, and other factors.

Of particular concern to NOVA during earthwork operations will be good practices in moisture conditioning, loose soil placement and soil compaction. In particular, NOVA will be vigilant with regard to the use compaction equipment appropriate to the full lift thickness of the type of soil being compacted. Successful compaction at this site will require proper moisture conditioning and the use of vibratory compaction equipment. Reliance on construction traffic (for example, loaders or dump trucks) to achieve compaction will not be approved.

11.0 REFERENCES

11.1 Site Specific

Acculine Survey, Inc., 2019, *Topographic Survey, 1950 North Coast Highway 101, Encinitas, CA 92024*, Job No. PLSA 3090, 06 July 2019.

City of Encinitas, Municipal Code Chapter 30.34: *Special Purpose Overlay Zones*. 30.34.030: Hillside/Inland Bluff Overlay Zone.

City of Encinitas Development Services Department, 2020, *First Review Cycle Comments, Plan Case No. Multi-003780-2020, BADJ-003787-2020, CDP-003788, DR-003786-2020, Attachment H: Geotechnical Third-Party Review Comments, dated July 21, 2020.*

Historic Aerials Website: www.historicalaerials.com, accessed March 2020, Aerial Photos Referenced are from 1947, 1964, and 1980.

Pasco Laret Suiter & Associates (PLSA), 2021, *Slope Analysis & Lot Areas, Fenway N. Hwy 101,* dated April 14, 2021.

Stephen Dalton Architects (SDA), 2019, *Concept Plan 3*, *Fenway Hwy 101, Encinitas*, dated 26 August 2019.

11.2 Geologic and Site Setting

Bryant, W.A. and Hart, E.W., 2007, Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps: California Geological Survey Special Publication 42, 42p.

California Division of Mines and Geology (CDMG), 2001, *State of California Seismic Hazard Zones*, San Diego Quadrangle, January 2001.

California Emergency Management Agency, June 1, 2009, *Tsunami Inundation Map for Emergency Planning, State of California, County of San Diego, Encinitas Quadrangle.*

City of Encinitas, 2018, *2013-2021 Housing Element Update, Chapter 4.5 Geology and Soils*, dated May 2018.

Jennings, C. W. and Bryant, W. A., 2010 Fault Activity Map of California, California Geological Survey, Geologic Data Map No. 6.

United States Federal Emergency Management Agency (FEMA), 2012, Flood Insurance Rate Map (FIRM), Map Number 06073C1725G, Panel 1725 of 2375: effective date May 16.

United States Geological Survey, Ground Motion Parameter Calculator v. 5.1.0, USGS web site http://earthquake.usgs.gov/research/hazmaps/design/

United States Geological Survey and California Geological Survey, 2011, Quaternary Fault and Fold database for the United States, found at: http://earthquake.usgs.gov/regional/qfaults/

11.3 Design

American Concrete Institute, 2002, *Building Code Requirements for Structural Concrete* (ACI 318-02) and Commentary (ACI 318R-02).

American Concrete Institute, 2015, *Guide to Concrete Floor and Slab Construction,* ACI Publication 302.1R-15.

American Concrete Institute, 2016, *Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials* (ACI 302.2R-06).

American Society of Civil Engineers, Minimum Design Load for Buildings and Other Structures, ASCE7-10.

American Society of Civil Engineers, *ASCE 7 Hazard Tool*, found at: https://asce7hazardtool.online/.

California Code of Regulations, Title 24, 2019 California Building Standards Code.

California Department of Transportation (Caltrans), 2003, *Corrosion Guidelines*, Version 1.0, found at http://www.dot.ca.gov/hq/esc/ttsb/corrosion/pdf/2012-11-19-Corrosion-Guidelines.pdf.

Clough, G.W., and O'Rourke, T.D., 1990, *Construction Induced Movements of In Situ Walls*, Design and Performance of Earth Retaining Structures, ASCE Special Publication 25, Pg. 439-470.

FHWA, 1999, *Ground Anchors and Anchored Systems,* Geotechnical Engineering Circular No 4, US Department of Transportation, Federal Highway Administration, June 1999.

FHWA, 2015, *Soil Nail Walls Reference Manual,* US Department of Transportation, Federal Highway Administration, Publication FHWA- NHI-14-007, FHWA GEC 007, February 2015.

NACE International, 2007, *Standard Practice, Control of External Corrosion on Underground or Submerged Metallic Piping Systems,* SPO169-2007.

NAVFAC DM-7.2, 1986, Naval Facilities Engineering Command, Figure 29, p.102.

NAVFAC DM 7.01, *Soil Mechanics,* Department of the Navy, Washington DC, September 1986, Fig 6, p 7.1-219.

OSHA Technical Manual, *Excavations: Hazard Recognition in Trenching and Shoring,* OSHA Instruction TED 01-00-015, Section V, Chapter 2. Found at: https://www.osha.gov/dts/osta/otm/otm_v/ otm_v_2.html#1

Romanoff, Melvin. *Underground Corrosion*, NBS Circular 579. Reprinted by NACE, Houston, 1989.

Standard Specifications for Public Works Construction (Green Book).

Terzaghi, Karl, *Evaluating Coefficients of Subgrade Reaction,* Geotechnique, Vol 5, 1955, pp 297-326.

PLATES

TOPOGRAPHIC SURVEY
1950 NORTH COAST HWY. 101
ENCINITAS, CA 92024

LICENSED LAND SURVEYOR RUDY P. PACHECO Exp. 09/30/19 No. LS 5717 STATE OF CALIFORNIA

DATE: JULY 6, 2019
RUDY P. PACHECO, L.S. 5717
MY LICENSE EXPIRES 9/30/2019

ACCULINE SURVEY, INC.
1919 GRAND AVE. SUITE 1G,
SAN DIEGO, CA 92109.
(858) 483-6885 FAX(858) 483-6056

DATE OF PLOT 07/06/2019
FILE NO. 2037-TOPO-19

KEY TO SYMBOLS

Qaf	FILL
Qop	OLD PARALIC DEPOSITS, UNDIVIDED
B-7	LOCATION OF GEOTECHNICAL BORING
P-2	LOCATION OF PERCOLATION TEST BORING
CPT-2	LOCATION OF CPT
C C'	CROSS SECTION
	LIMITS OF GRADING
	APPROXIMATE GEOLOGIC CONTACT
SW-1	SEISMIC SURVEY LINE

REGISTERED PROFESSIONAL ENGINEER GARRO JARDIAN No. 68436 Exp. 6/30/19 CIVIL STATE OF CALIFORNIA

CITY OF ENCINITAS - DEVELOPMENT SERVICES DEPARTMENT

ENCINITAS BEACH RESORT

APN 216-041-26

PLANNING CASE NO: TPM-89-014

DRAWING NO. 6394-G

SHEET 19A OF 41

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA

858-292-7575
858-292-7570 (FAX)

WWW.USA-NOVA.COM

LEUCADIA MIXED-USE

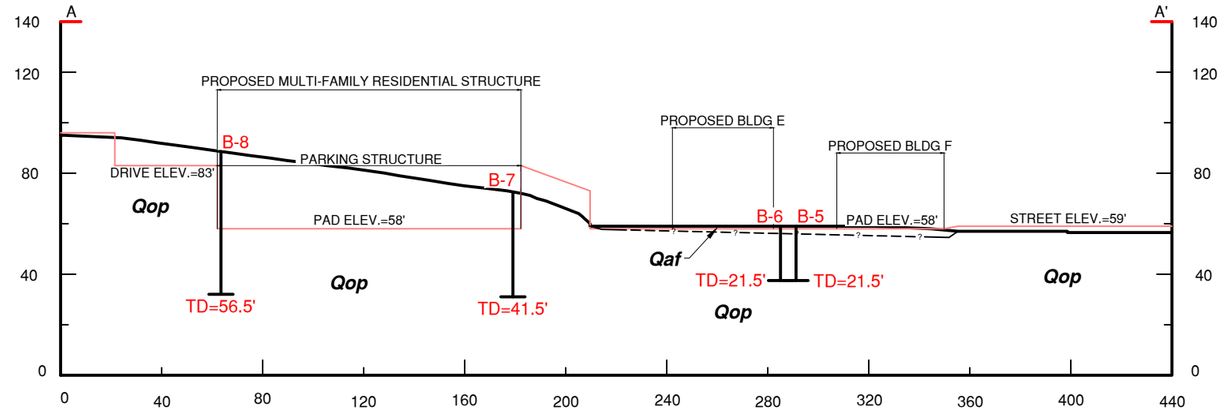
1900-1950 NORTH COAST HWY 101
ENCINITAS, CA

PROJECT NO:	2019189
DATE:	APR 2021
DRAWN BY:	DTJ
REVIEWED BY:	MS

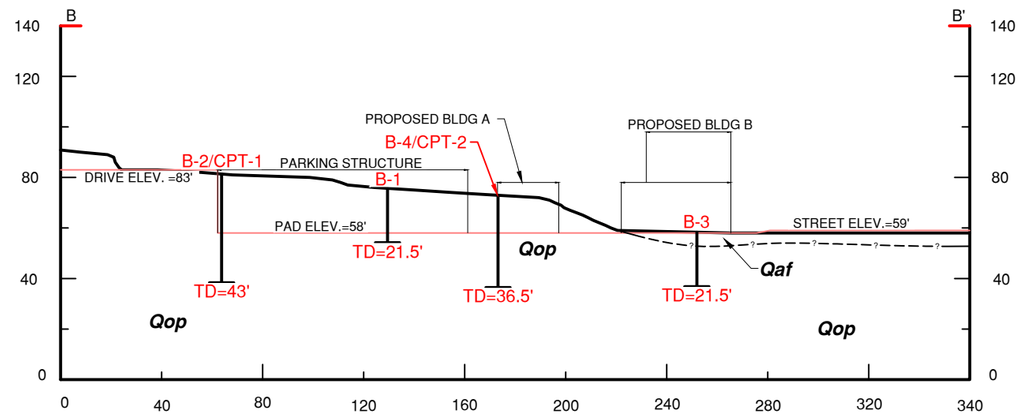
SUBSURFACE INVESTIGATION MAP

0 60' 120'

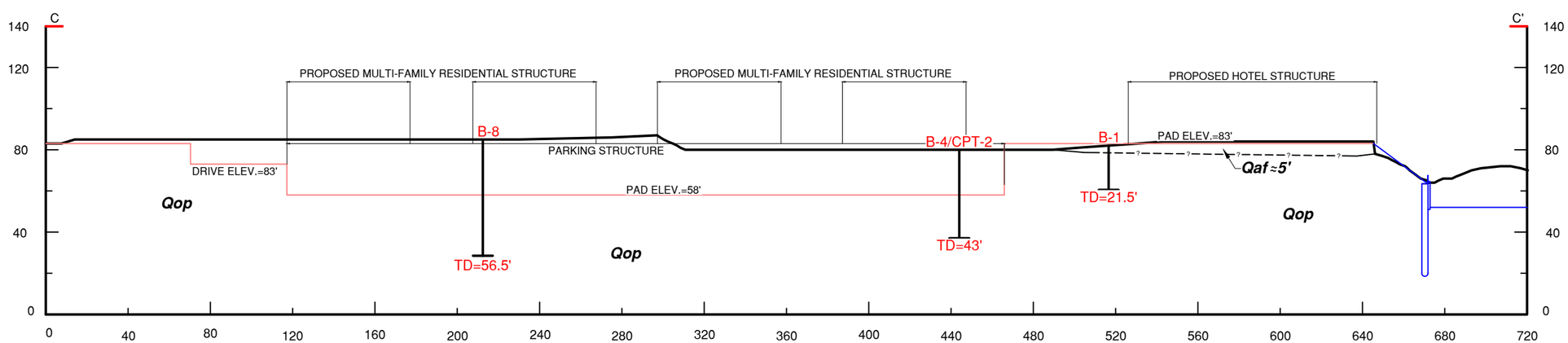
PLATE 1



SECTION AA'



SECTION BB'



SECTION CC'

KEY TO SYMBOLS

Qaf	FILL
Qop	OLD PARALIC DEPOSITS, UNDIVIDED

EXISTING GRADE

GEOLOGIC CONTACT (QUERIED WHERE INFERRED)

PROPOSED FINISH GRADE (SDA 2019)

PROPOSED FINISH GRADE AND RETAINING WALL/SOLDER BEAM (HALE 2019)

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA

858-292-7575
858-292-7570 (FAX)

WWW.USA-NOVA.COM

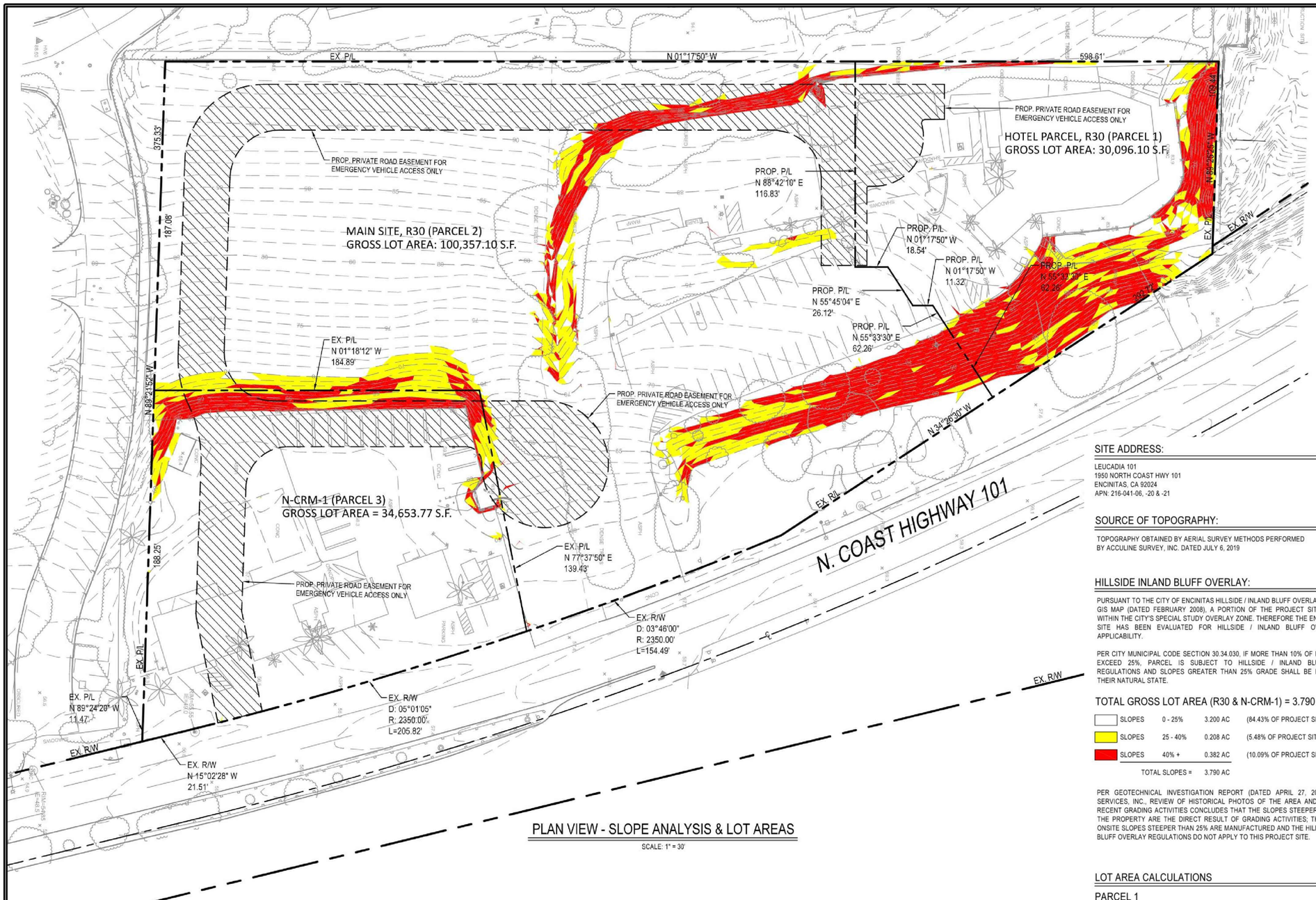
LEUCADIA MIXED-USE
1900-1950 NORTH COAST HWY 101
ENCINITAS, CA

PROJECT NO:	2019189
DATE:	APR 2021
DRAWN BY:	DTJ
REVIEWED BY:	MS

SITE SECTIONS

0 60' 120'

PLATE 2



PLAN VIEW - SLOPE ANALYSIS & LOT AREAS

SCALE: 1" = 30'

SITE ADDRESS:

LEUCADIA 101
1950 NORTH COAST HWY 101
ENCINITAS, CA 92024
APN: 216-041-06, -20 & -21

SOURCE OF TOPOGRAPHY:

TOPOGRAPHY OBTAINED BY AERIAL SURVEY METHODS PERFORMED BY ACCULINE SURVEY, INC. DATED JULY 6, 2019

HILLSIDE INLAND BLUFF OVERLAY:

PURSUANT TO THE CITY OF ENCINITAS HILLSIDE / INLAND BLUFF OVERLAY ZONE (H/IBO) GIS MAP (DATED FEBRUARY 2008), A PORTION OF THE PROJECT SITE IS LOCATED WITHIN THE CITY'S SPECIAL STUDY OVERLAY ZONE. THEREFORE THE ENTIRE PROJECT SITE HAS BEEN EVALUATED FOR HILLSIDE / INLAND BLUFF OVERLAY ZONE APPLICABILITY.

PER CITY MUNICIPAL CODE SECTION 30.34.030, IF MORE THAN 10% OF PARCEL SLOPE EXCEED 25%, PARCEL IS SUBJECT TO HILLSIDE / INLAND BLUFF OVERLAY REGULATIONS AND SLOPES GREATER THAN 25% GRADE SHALL BE PRESERVED IN THEIR NATURAL STATE.

TOTAL GROSS LOT AREA (R30 & N-CRM-1) = 3.790 AC

SLOPES	0 - 25%	3.200 AC	(84.43% OF PROJECT SITE)
SLOPES	25 - 40%	0.208 AC	(5.48% OF PROJECT SITE)
SLOPES	40% +	0.382 AC	(10.09% OF PROJECT SITE)
	TOTAL SLOPES =	3.790 AC	

PER GEOTECHNICAL INVESTIGATION REPORT (DATED APRIL 27, 2020) BY NOVA SERVICES, INC., REVIEW OF HISTORICAL PHOTOS OF THE AREA AND ANALYSIS OF RECENT GRADING ACTIVITIES CONCLUDES THAT THE SLOPES STEEPER THAN 25% ON THE PROPERTY ARE THE DIRECT RESULT OF GRADING ACTIVITIES; THEREFORE ALL ONSITE SLOPES STEEPER THAN 25% ARE MANUFACTURED AND THE HILLSIDE / INLAND BLUFF OVERLAY REGULATIONS DO NOT APPLY TO THIS PROJECT SITE.

LOT AREA CALCULATIONS

PARCEL 1

GROSS LOT AREA (PARCEL 1)	= 30,096 SF
LESS PRIVATE ROAD EASEMENT*	= (0) SF
NET LOT AREA (PARCEL 1)	= 30,096 SF

PARCEL 2

GROSS LOT AREA (PARCEL 2)	= 100,357 SF
LESS PRIVATE ROAD EASEMENT*	= (0) SF
NET LOT AREA (PARCEL 2)	= 100,357 SF

PARCEL 3

GROSS LOT AREA (PARCEL 3)	= 34,654 SF
LESS PRIVATE ROAD EASEMENT*	= (0) SF
NET LOT AREA (PARCEL 3)	= 34,654 SF

*PRIVATE ROAD EASEMENT FOR EMERGENCY VEHICLE ACCESS PURPOSES DOES NOT SUBTRACT FROM GROSS LOT AREA

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA

858-292-7575
858-292-7570 (FAX)

WWW.USA-NOVA.COM

LEUCADIA MIXED-USE

1900-1950 NORTH COAST HWY 101

ENCINITAS, CA

PROJECT NO:	2019189
DATE:	APR 2021
DRAWN BY:	DTJ
REVIEWED BY:	MS

PLSA SLOPE ANALYSIS

0 60' 120'

PLATE 3

APPENDIX A
USE OF THE GEOTECHNICAL REPORT

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.

ASFE
The Best People on Earth

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

Copyright 2004 by ASFE, Inc. Duplication, reproduction, or copying of this document, in whole or in part, by any means whatsoever, is strictly prohibited, except with ASFE's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of ASFE, and only for purposes of scholarly research or book review. Only members of ASFE may use this document as a complement to or as an element of a geotechnical engineering report. Any other firm, individual, or other entity that so uses this document without being an ASFE member could be commiting negligent or intentional (fraudulent) misrepresentation.

IIGER06045.0M

APPENDIX B
LOGS OF BORINGS

BORING LOG B-1

DATE EXCAVATED: SEPTEMBER 17, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 76 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0		X		SM		**FILL (Qaf):** *SILTY SAND; MEDIUM BROWN, DAMP, LOOSE, FINE TO MEDIUM GRAINED, TRACE ROOTS*	MD	
			/	SM	38	**OLD PARALIC DEPOSITS (Qop):** *SILTY SANDSTONE; MEDIUM BROWN, DAMP, DENSE, FINE TO MEDIUM GRAINED*		
5			■		45	*ORANGE BROWN, MEDIUM DENSE*		*4.6% 124.9pcf*
			/		16			
10		X	■		65	*ORANGE BROWN WITH LIGHT BROWN MOTTLING, DENSE*		
15			/		19	*ORANGE GRAY BROWN, MOIST, MEDIUM DENSE, MEDIUM GRAINED*		
20			/		19			
						BORING TERMINATED AT 21.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING.		
25								
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⧄	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.1

BORING LOG B-2

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 76 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0				SM		**OLD PARALIC DEPOSITS (Qop):** *SILTY SANDSTONE; ORANGE BROWN, DAMP, LOOSE, MEDIUM GRAINED*		
					14	*MEDIUM DENSE*		
5					29			
				SP-SM	22	*SANDSTONE WITH TRACE SILT, GRAY ORANGE, MOIST, MEDIUM DENSE, FINE TO MEDIUM GRAINED*		
10					36		DS	
15					32	*PALE ORANGE GRAY, MOIST, DENSE*	SA	
20				SP	27	*SANDSTONE; PALE ORANGE GRAY, MOIST, MEDIUM DENSE, FINE TO MEDIUM GRAINED*	SA	
25					38	*DENSE*		
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.2

CONTINUED BORING LOG B-2

DATE EXCAVATED: SEPTEMBER 17, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 76 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
30		X		SP	58	**OLD PARALIC DEPOSITS (Qop):** *(CONTINUED) SANDSTONE; PALE ORANGE GRAY, MOIST, DENSE, FINE TO MEDIUM GRAINED*		
35			/		31	*MEDIUM DENSE*		
40		X		SP-SM	50/3"	*SANDSTONE WITH TRACE SILT; BROWN WITH BLACK MOTTLING, MOIST, VERY DENSE, FINE GRAINED*		
			/		57	*DARK BROWN GRAY, FINE TO MEDIUM GRAINED*		
45						*BORING TERMINATED AT 43 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING. BACKFILLED WITH BENTONITE.*		
50								
55								
60								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.3

BORING LOG B-3

DATE EXCAVATED: SEPTEMBER 17, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 54 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0				SM		**FILL (Qaf):** *SILTY SAND; LIGHT BROWN, DRY, LOOSE TO MEDIUM DENSE, FINE TO MEDIUM GRAINED, TRACE ROOTS*		
					63	*DENSE, SOME ROOTS, SOME GLASS FRAGMENTS*		*2.2% 112.5pcf*
						SCATTERED GRAVEL		
5				SP-SM	24	**OLD PARALIC DEPOSITS (Qop):** *SANDSTONE WITH TRACE SILT; LIGHT GRAY ORANGE, MOIST, MEDIUM DENSE, FINE TO MEDIUM GRAINED*	SA	
					41			*1.4% 104.0pcf*
10					21			
15				SP	32	*POORLY-GRADED SANDSTONE; LIGHT GRAY WHITE, DENSE, FINE TO MEDIUM GRAINED*		
20					44			
						BORING TERMINATED AT 21.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING.		
25								
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.4

BORING LOG B-4

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 68 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0				SM		**OLD PARALIC DEPOSITS (Qop):** *SILTY SANDSTONE; ORANGE BROWN, MOIST, LOOSE, FINE TO MEDIUM GRAINED*		
					22	*MEDIUM DENSE*		
5					30		SA	
				SP-SM	69	*SANDSTONE WITH TRACE SILT; ORANGE BROWN WITH GRAY MOTTLING, MOIST, DENSE, MEDIUM GRAINED*		
10					18	*MEDIUM DENSE*	SA	
15					47	*LIGHT ORANGE BROWN, MOIST, DENSE, FINE TO MEDIUM GRAINED*	SA	
20				SM	32	*SILTY SANDSTONE; LIGHT ORANGE BROWN, MOIST, DENSE, FINE TO MEDIUM GRAINED*		
25				SP-SM	36	*SANDSTONE WITH TRACE SILT; ORANGE TO GRAY ORANGE, DAMP TO MOIST, MEDIUM DENSE, MEDIUM DENSE, MEDIUM GRAINED*		
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.5

CONTINUED BORING LOG B-4

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 68 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
30			■	SP-SM	57	**OLD PARALIC DEPOSITS (Qop):** *(CONTINUED) SANDSTONE WITH TRACE SILT; ORANGE GRAY, MOIST, DENSE, MEDIUM TO COARSE GRAINED*		
35		☒	■		50/5"	*VERY PALE ORANGE, DAMP, VERY DENSE, MEDIUM GRAINED*		
						BORING TERMINATED AT 36.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING.		
40								
45								
50								
55								
60								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.6

BORING LOG B-5

DATE EXCAVATED: SEPTEMBER 17, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 55 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0		X		SM		**OLD PARALIC DEPOSITS (Qop):** *SILTY SANDSTONE; ORANGE BROWN, MOIST, LOOSE, FINE TO MEDIUM GRAINED*	CR MD SA	
			■		15			*2.3% 88pcf*
5			⧄		48	*DENSE*	SA	
			■	SP-SM	61	*SANDSTONE WITH TRACE SILT; ORANGE BROWN, MOIST, DENSE, FINE TO MEDIUM GRAINED*		
10			⧄		31	*LIGHT ORANGE BROWN, MOIST, DENSE, MEDIUM GRAINED*		
15		X	⧄		48	*INTERBEDDED GRAY ORANGE AND DARK GRAY SANDSTONE LENSES, MOIST, DENSE, FINE TO MEDIUM GRAINED*		
20			■	SP	46	*SANDSTONE; LIGHT YELLOW WHITE, MOIST, DENSE, FINE TO MEDIUM GRAINED*		
25						*BORING TERMINATED AT 21.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING.*		
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
⊠	BULK SAMPLE	*	NO SAMPLE RECOVERY
⧄	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— — —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.7

BORING LOG B-6

DATE EXCAVATED: SEPTEMBER 17, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 55 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0		X		SM		**FILL (Qaf):** *SILTY SAND; ORANGE BROWN, DAMP TO MOIST, LOOSE TO MEDIUM DENSE, FINE TO MEDIUM GRAINED*		
		X		SP-SM		**OLD PARALIC DEPOSITS (Qop):** *SANDSTONE WITH TRACE SILT; ORANGE BROWN, DAMP, MEDIUM DENSE, FINE TO MEDIUM GRAINED*		
5			■		31			*5.5% 112.1pcf*
			⧄		16			
10			■		36			
			⧄		23			
15			■	SM	40	*SILTY SANDSTONE; ORANGE GRAY MOTTLED WITH ORANGE BROWN, MOIST, MEDIUM DENSE, FINE TO MEDIUM GRAINED*		
20			⧄		52	*VERY DENSE, MEDIUM GRAINED*		
						BORING TERMINATED AT 21.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING.		
25								
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
⊠	BULK SAMPLE	*	NO SAMPLE RECOVERY
⧄	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.8

BORING LOG B-7

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 71 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0		X		SM		**OLD PARALIC DEPOSITS (Qop):** *SANDSTONE WITH TRACE SILT; ORANGE BROWN, MOIST, LOOSE TO MEDIUM DENSE, FINE TO MEDIUM GRAINED*		
			■		21	*MEDIUM DENSE*	DS	
5			⧄	SP-SM	14	*POORLY-GRADED SANDSTONE-SILTY SANDSTONE; LIGHT YELLOW ORANGE BROWN, DAMP TO MOIST, MEDIUM DENSE, FINE TO MEDIUM GRAINED*	SA	
			■		71	*DENSE*	DS	
10			⧄	SM	28	*SILTY SANDSTONE; LIGHT ORANGE BROWN, MOIST, MEDIUM DENSE, FINE TO MEDIUM GRAINED*	SA	
15			■	SP	59	*SANDSTONE; ORANGE MEDIUM BROWN, MOIST, DENSE, MEDIUM GRAINED*		
20			⧄		34	*LIGHT ORANGE WITH ORANGE BROWN CROSS BEDDING, FINE GRAINED*		
25			■		65	*LIGHT ORANGE BROWN WITH ORANGE STAINING, DENSE*		
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⧄	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.9

CONTINUED BORING LOG B-7

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 71 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
30			☒	SP	34	**OLD PARALIC DEPOSITS (Qop):** *(CONTINUED) SANDSTONE WITH TRACE SILT; LIGHT ORANGE BROWN, MOIST, DENSE, FINE GRAINED*		
35		☒	■		50/6"	*6" ORANGE WHITE LENSE* *DARK ORANGE WITH BLACK SPECS, VERY DENSE*	SA	
40			☒		55	*LIGHT ORANGE WHITE, DRY, MEDIUM GRAINED*		
45						*BORING TERMINATED AT 41.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING. BACKFILLED WITH BENTONITE*		
50								
55								
60								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
☒	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.10

BORING LOG B-8

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 87 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0				SP-SM		**OLD PARALIC DEPOSITS (Qop):** *SANDSTONE WITH TRACE SILT; ORANGE BROWN, DAMP, LOOSE, FINE TO MEDIUM GRAINED*		
					8	*LOOSE*	SA CR RV	
5				ML		*6-INCH SILTSTONE LENSE, MEDIUM BROWN*		
				SP-SM	20	*SANDSTONE WITH TRACE SILT, ORANGE BROWN, DAMP, MEDIUM DENSE, FINE TO MEDIUM GRAINED*		
					23		SA	
10					46	*DENSE*	DS	
15					19	*ORANGE BROWN MOTTLED WITH GRAY*	SA	
20					45	*POORLY-GRADED SANDSTONE, LIGHT ORANGE GRAY, DAMP, MEDIUM DENSE, MEDIUM GRAINED*		*DISTURBED SAMPLE*
25					34		SA	
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.11

CONTINUED BORING LOG B-8

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 87 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
30			■	SP-SM	75	**OLD PARALIC DEPOSITS (Qop):** *(CONTINUED) SANDSTONE WITH TRACE SILT; LIGHT ORANGE GRAY, DAMP, DENSE, MEDIUM GRAINED*		
35			⊘		33	*FINE GRAINED*		
40			■		50/2"	*VERY DENSE*		
45			⊘		31	*ORANGE BROWN, MOIST, DENSE, FINE TO MEDIUM GRAINED, DARK ORANGE, CROSS BEDDING*	SA	
50		☒	■		50/5"	*LIGHT ORANGE BROWN, DAMP, VERY DENSE, FINE TO MEDIUM GRAINED*	SA	
55		☒	⊘	SW	42	*WELL-GRADED SANDSTONE; VERY PALE ORANGE, DAMP, DENSE, FINE TO VERY COARSE GRAINED*		
60						*BORING TERMINATED AT 56.5 FT. NO GROUNDWATER ENCOUNTERED. NO CAVING. BACKFILLED WITH BENTONITE.*		

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.12

BORING LOG P-1

DATE EXCAVATED: SEPTEMBER 17, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 54 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0				SM		**FILL (Qaf):** *SILTY SAND; LIGHT BROWN, DRY, LOOSE TO MEDIUM DENSE, FINE TO MEDIUM GRAINED, TRACE ROOTS* *DENSE, SOME ROOTS, SOME GLASS FRAGMENTS* *SCATTERED GRAVEL*		
5						*BORING TERMINATED AT 5 FT AND CONVERTED TO A PERCOLATION WELL.*		
10								
15								
20								
25								
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

APPENDIX B.13

BORING LOG P-2

DATE EXCAVATED: SEPTEMBER 18, 2019 **EQUIPMENT:** CME 95

EXCAVATION DESCRIPTION: 8-INCH DIAMETER AUGER BORING **GPS COORD.:** N/A

GROUNDWATER DEPTH: GROUNDWATER NOT ENCOUNTERED **ELEVATION:** ± 76 FT MSL

LAB TEST ABBREVIATIONS

CR	CORROSIVITY
MD	MAXIMUM DENSITY
DS	DIRECT SHEAR
EI	EXPANSION INDEX
AL	ATTERBERG LIMITS
SA	SIEVE ANALYSIS
RV	RESISTANCE VALUE
CN	CONSOLIDATION
SE	SAND EQUIVALENT

DEPTH (FT)	GRAPHIC LOG	BULK SAMPLE	CAL/SPT SAMPLE	SOIL CLASS. (USCS)	BLOWS PER 12-INCHES	SOIL DESCRIPTION *SUMMARY OF SUBSURFACE CONDITIONS (USCS; COLOR, MOISTURE, DENSITY, GRAIN SIZE, OTHER)*	LABORATORY	REMARKS
0				SM		**OLD PARALIC DEPOSITS (Qop):** *SILTY SANDSTONE; ORANGE BROWN, DAMP, LOOSE, MEDIUM GRAINED* *MEDIUM DENSE*		
5						*BORING TERMINATED AT 5 FT AND CONVERTED TO A PERCOLATION WELL.*		
10								
15								
20								
25								
30								

KEY TO SYMBOLS

▼/▽	GROUNDWATER / STABILIZED	#	ERRONEOUS BLOW COUNT
☒	BULK SAMPLE	*	NO SAMPLE RECOVERY
⊘	SPT SAMPLE (ASTM D1586)	———	GEOLOGIC CONTACT
■	CAL. MOD. SAMPLE (ASTM D3550)	— – —	SOIL TYPE CHANGE

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

LOGGED BY:	GAN	DATE:	APR 2021
REVIEWED BY:	MS	PROJECT NO.:	2019189

NOVA

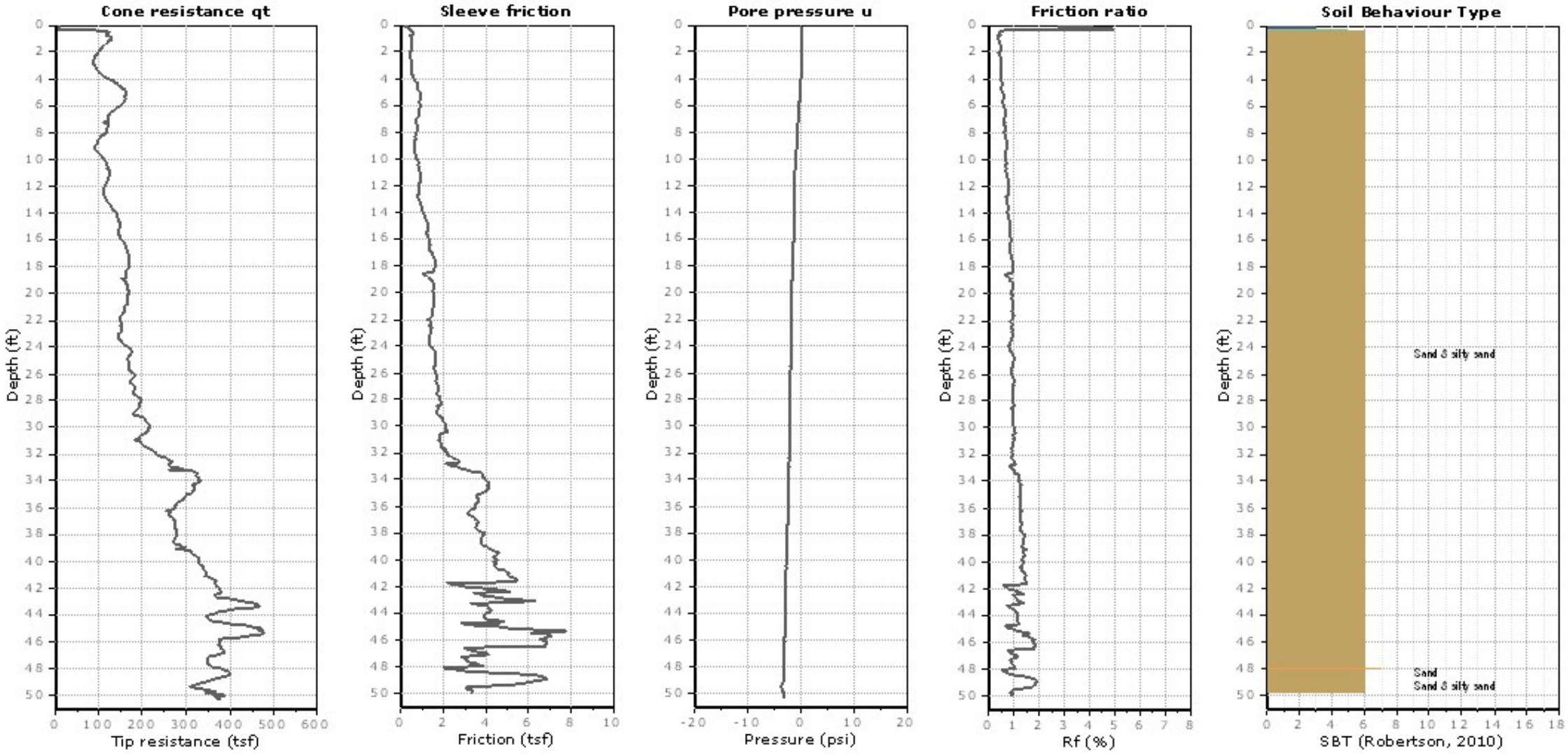
APPENDIX B.14

APPENDIX C
LOGS OF THE CPT SOUNDINGS

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **NOVA Services / Leucadia Mixed Use**
Location: **Encinitas, CA**

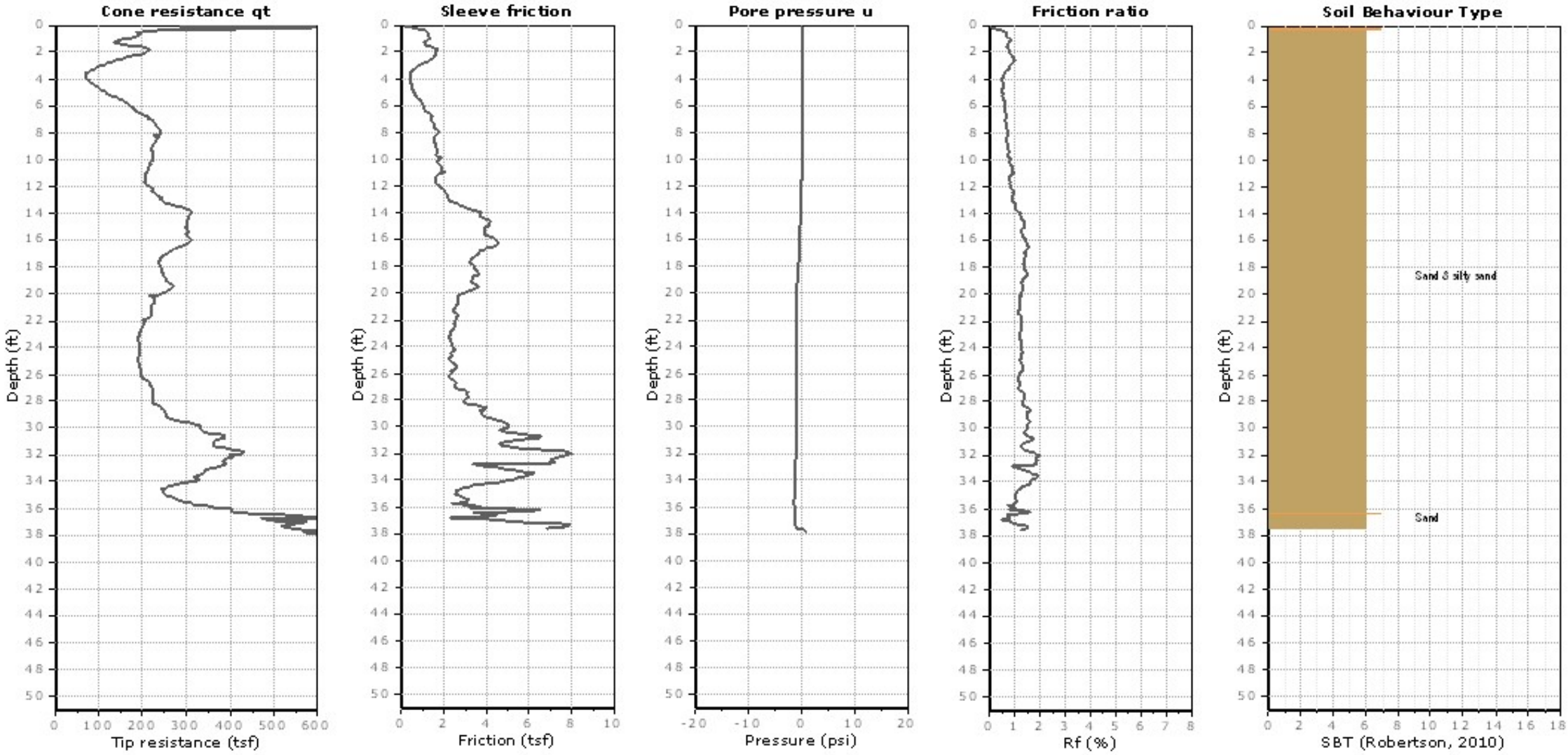
CPT-1
Total depth: 50.27 ft, Date: 10/10/2019



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **NOVA Services / Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-2
Total depth: 37.93 ft, Date: 10/10/2019



APPENDIX D
RECORDS OF LABORATORY TESTING

Laboratory tests were performed in accordance with the generally accepted American Society for Testing and Materials (ASTM) test methods or suggested procedures. Brief descriptions of the tests performed are presented below:

- **CLASSIFICATION:** *Field classifications were verified in the laboratory by visual examination. The final soil classifications are in accordance with the Unified Soils Classification System and are presented on the exploration logs in Appendix B.*

- **DENSITY OF SOIL IN PLACE (ASTM D2937):** *In-place moisture contents and dry densities were determined for representative soil samples. This information was an aid to classification and permitted recognition of variations in material consistency with depth. The dry unit weight is determined in pounds per cubic foot, and the in-place moisture content is determined as a percentage of the soil's dry weight. The results are summarized in the exploration logs presented in Appendix B.*

- **MAXIMUM DENSITY AND OPTIMUM MOISTURE CONTENT (ASTM D1557 METHOD A,B,C):** *The maximum dry density and optimum moisture content of typical soils were determined in the laboratory in accordance with ASTM Standard Test D1557, Method A, Method B, Method C.*

- **DIRECT SHEAR TEST (ASTM D3080):** *Direct shear tests were performed on remolded and relatively undisturbed samples in general accordance with ASTM D3080 to evaluate the shear stregth characteristics of selected materials. The samples were inundated during shearing to represent adverse field conditions.*

- **CORROSIVITY TEST (CAL. TEST METHOD 417, 422, 643):** *Soil PH, and minimum resistivity tests were performed on a representative soil sample in general accordance with test method CT 643. The sulfate and chloride content of the selected sample were evaluated in general accordance with CT 417 and CT 422, respectively.*

- **R-VALUE (ASTM D2844):** *The resistance Value, or R-Value, for near-surface site soils were evaluated in general accordance with California Test (CT) 301 and ASTM D2844. Samples were prepared and evaluated for exudation pressure and expansion pressure. The equilibrium R-value is reported as the lesser or more conservative of the two calculated results.*

- **GRADATION ANALYSIS (ASTM C 136 and/or ASTM D422):** *Tests were performed on selected representative soil samples in general accordance with ASTM D422. The grain size distributions of selected samples were determined in accordance with ASTM C 136 and/or ASTM D422. The results of the tests are summarized on Appendix C.3 through Appendix C.20.*

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

LAB TEST SUMMARY

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.1

Maximum Dry Density and Optimum Moisture Content (ASTM D1557)

Sample Location	Sample Depth (ft.)	Soil Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
B-1	0 - 2.5	Medium Brown Silty Sand	133.0	8.3
B-5	0 - 2.5	Orange Brown Silty Sandstone	133.8	7.3

Resistance Value (Cal. Test Method 301 & ASTM D2844)

Sample Location	Sample Depth (ft.)	Soil Description	R-Value
B-8	2.5 - 7.5	Sandstone with Trace Silt	35

DENSITY OF SOIL IN PLACE (ASTM D2937)

Sample Location	Sample Depth (ft)	Soil Description	Moisture (%)	Dry Density (pcf)
B-1	5	Orange Brown Sandstone with Silt	4.6	124.9
B-3	2.5	Light Brown Silty Sandstone	2.2	112.5
B-3	7.5	Light Gray Orange Sandstone with Silt	1.4	104.0
B-5	2.5	Orange Brown Silty Sandstone	2.3	88.0
B-6	5	Orange Brown Sandstone with Silt	5.5	112.1

Direct Shear (ASTM D3080)

Sample Location	Depth (feet)	Soil Description	Friction Angle (degrees)	Apparent Cohesion (psf)
B-7	7.5	Light Yellow Orange Brown Sandstone with Silt	26	323
B-8	10	Orange Brown Sandstone with Silt	38	307

Corrosivity (Cal. Test Method 417,422,643)

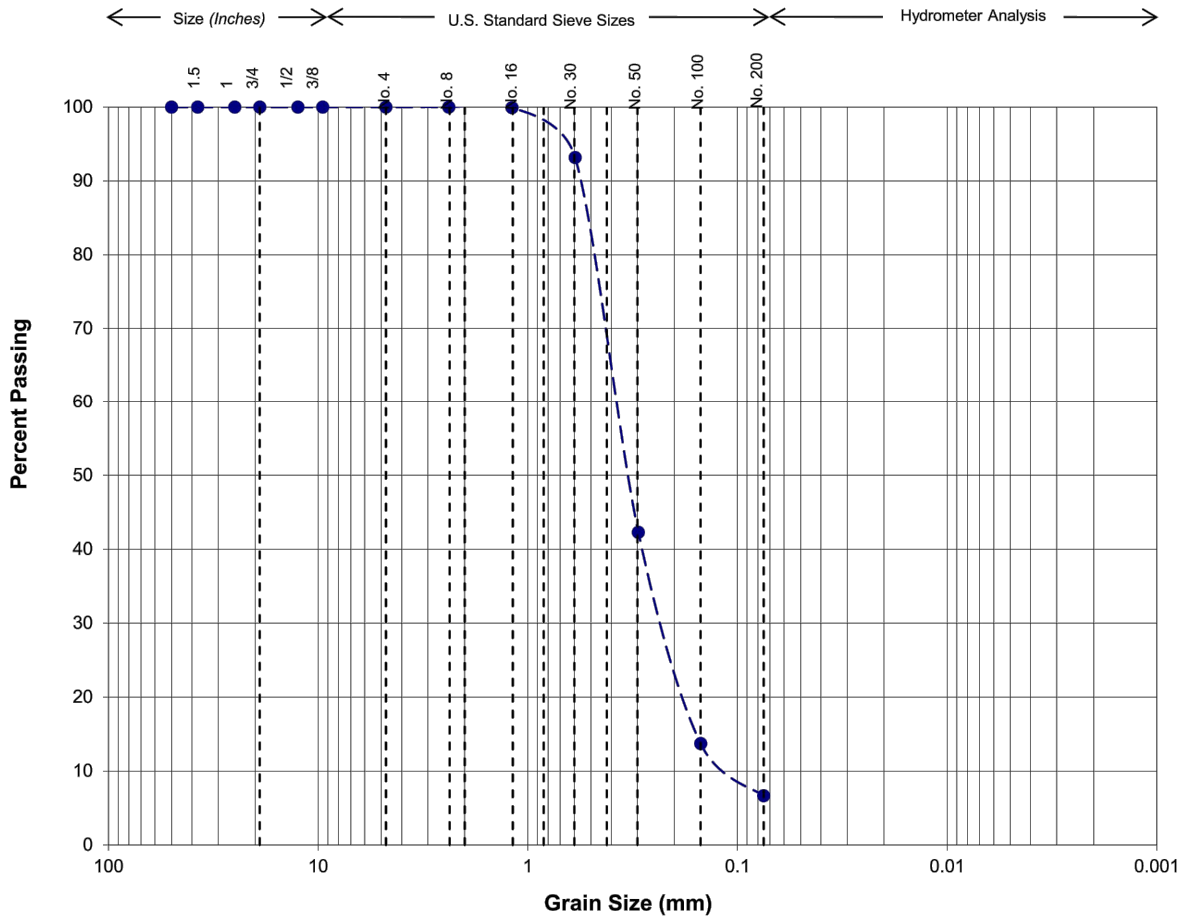
Sample Location	Sample Depth (ft.)	pH	Resistivity (Ohm-cm)	Sulfate Content (ppm)	Sulfate Content (%)	Chloride Content (ppm)	Chloride Content (%)
B-5	2 - 5	7.4	1200	64	0.006	170	0.017
B-8	2.5 - 7.5	7.4	10000	33	0.003	32	0.003

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

LAB TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.2



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

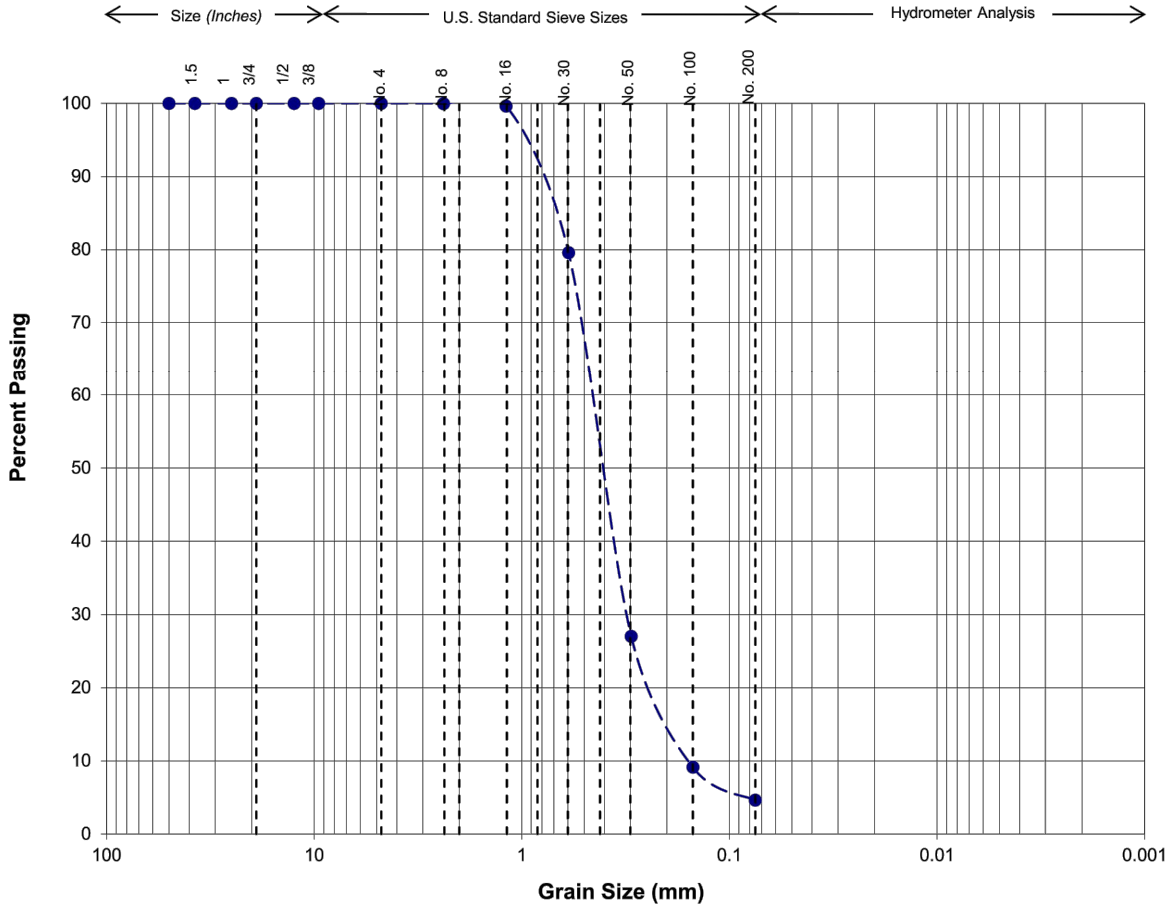
Sample Location:	B-2
Depth (ft):	15
USCS Soil Type:	SP-SM
Passing No. 200 (%):	7

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.3



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

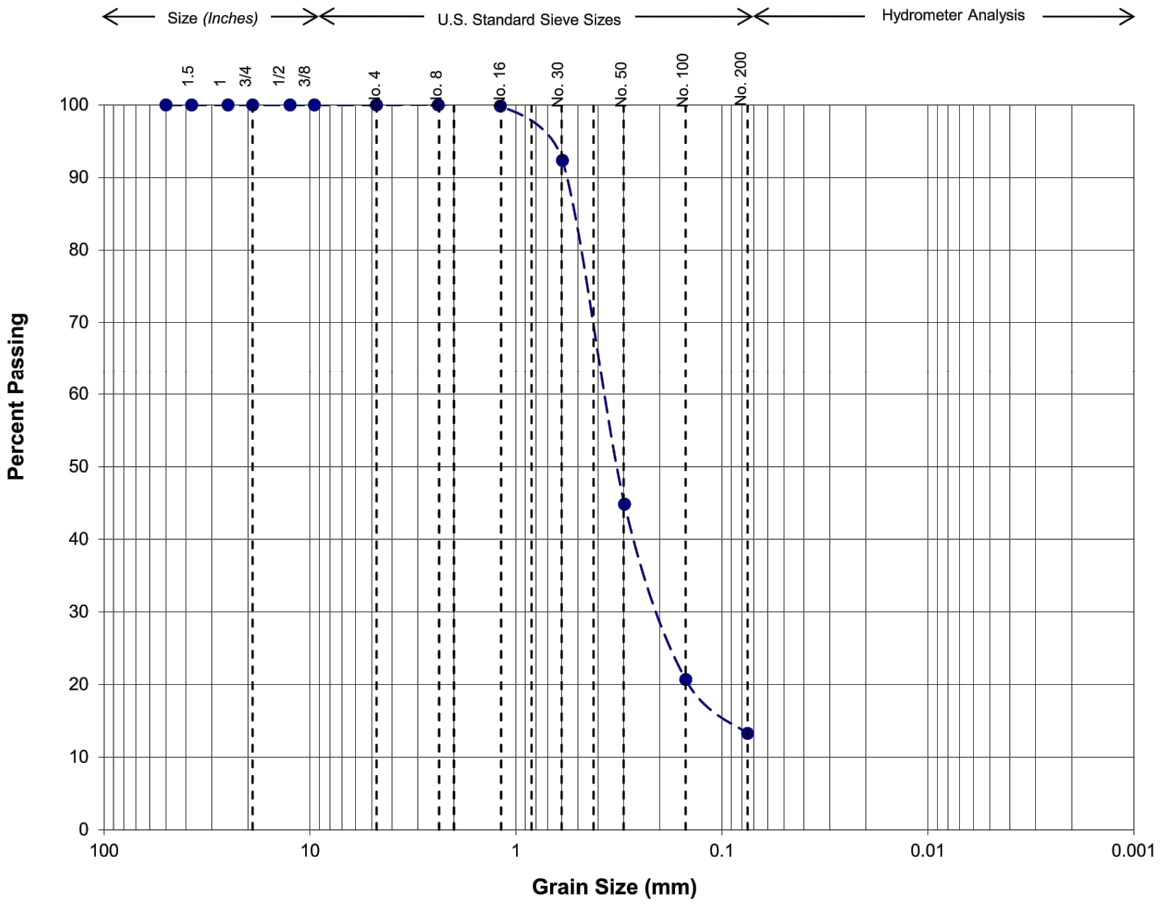
Sample Location:	B-2
Depth (ft):	20
USCS Soil Type:	SP
Passing No. 200 (%):	5

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.4



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

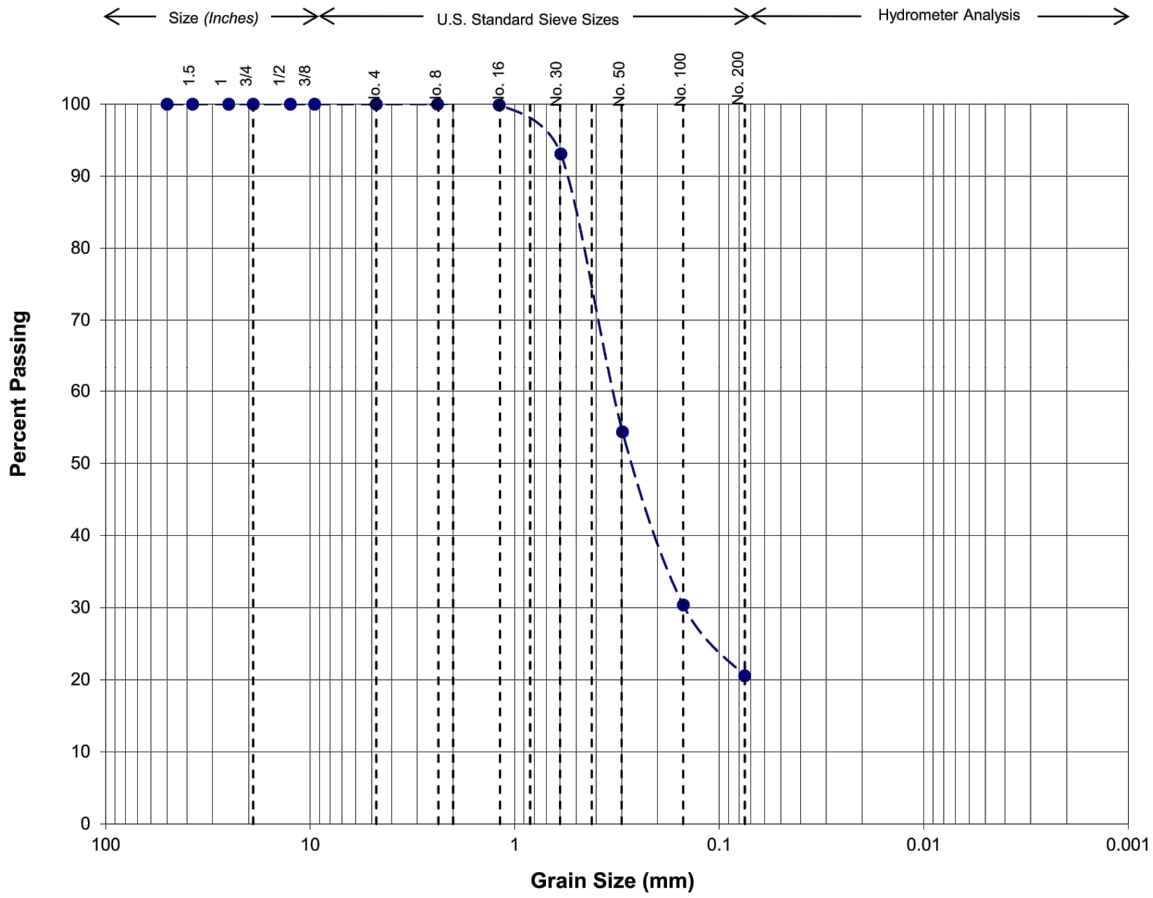
Sample Location:	B-3
Depth (ft):	5
USCS Soil Type:	SP-SM
Passing No. 200 (%):	13

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.5



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

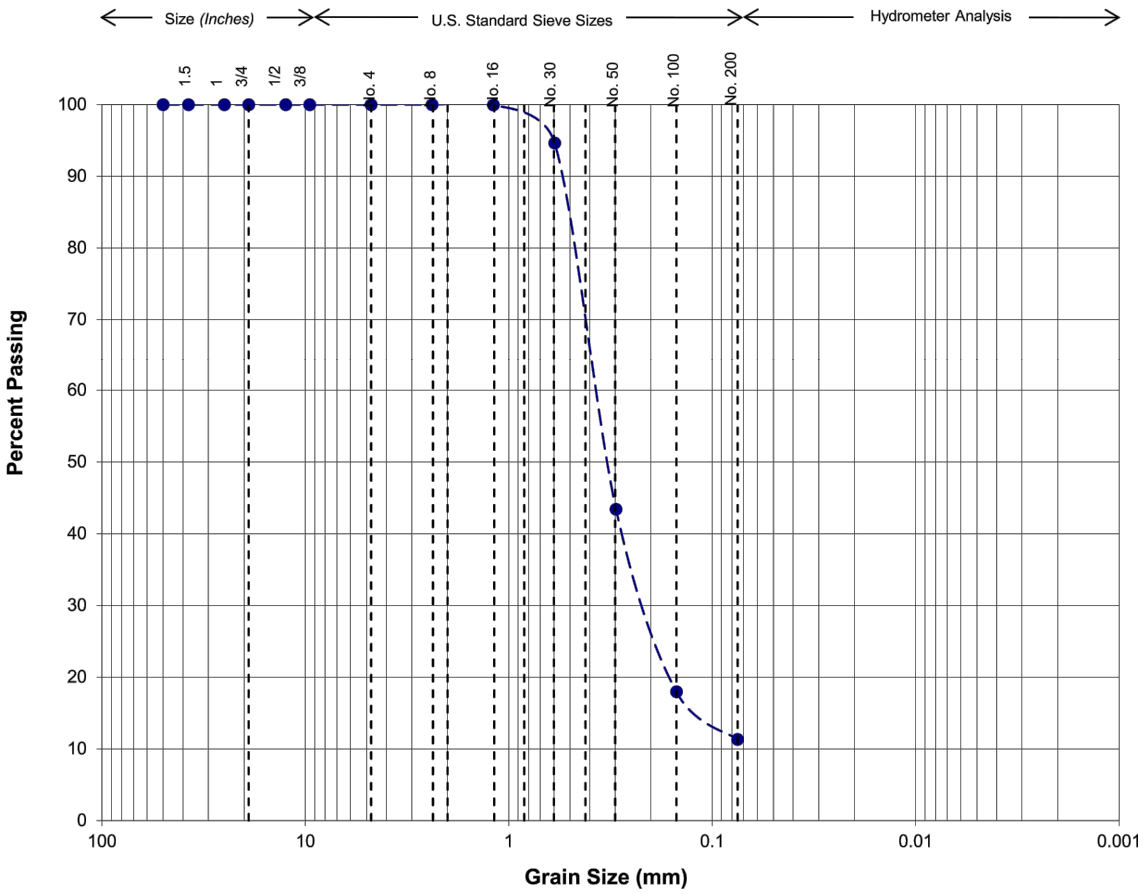
Sample Location:	B-4
Depth (ft):	5
USCS Soil Type:	SM
Passing No. 200 (%):	21

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.6



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

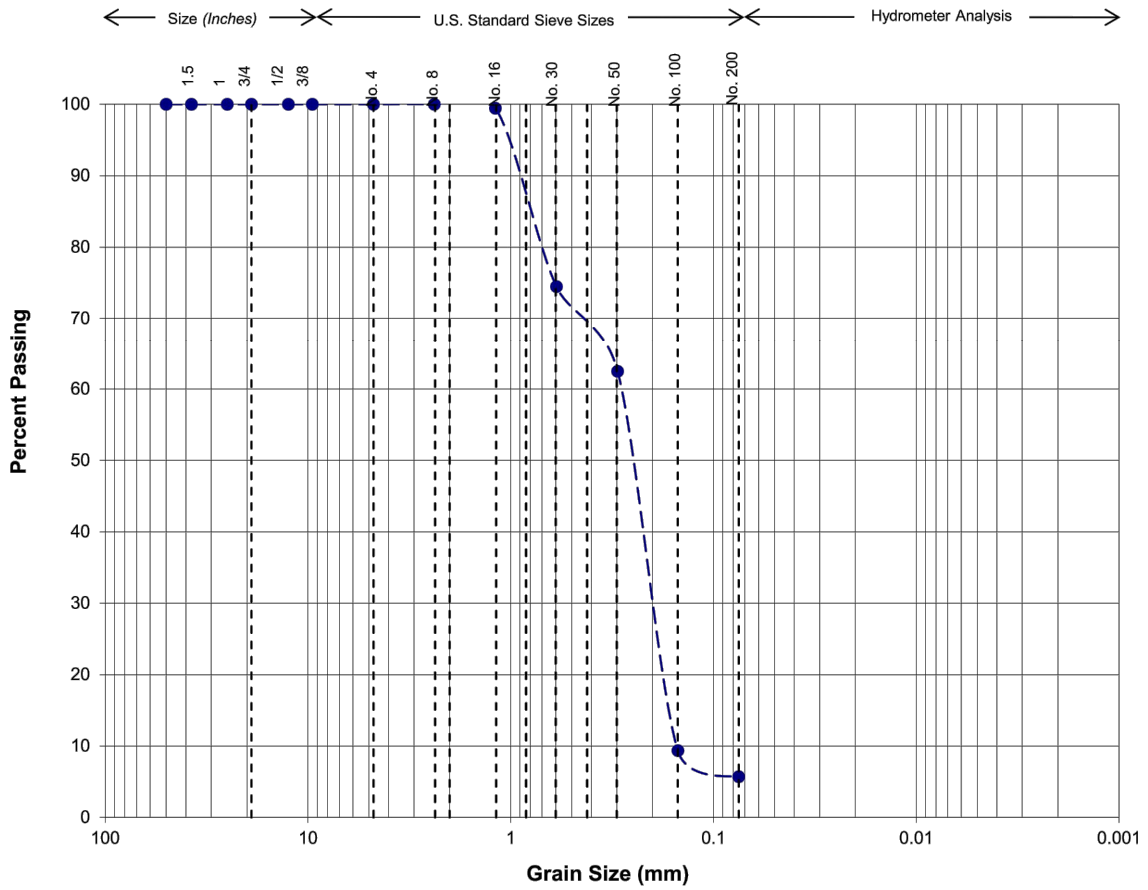
Sample Location:	B-4
Depth (ft):	10
USCS Soil Type:	SP-SM
Passing No. 200 (%):	11

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.7



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

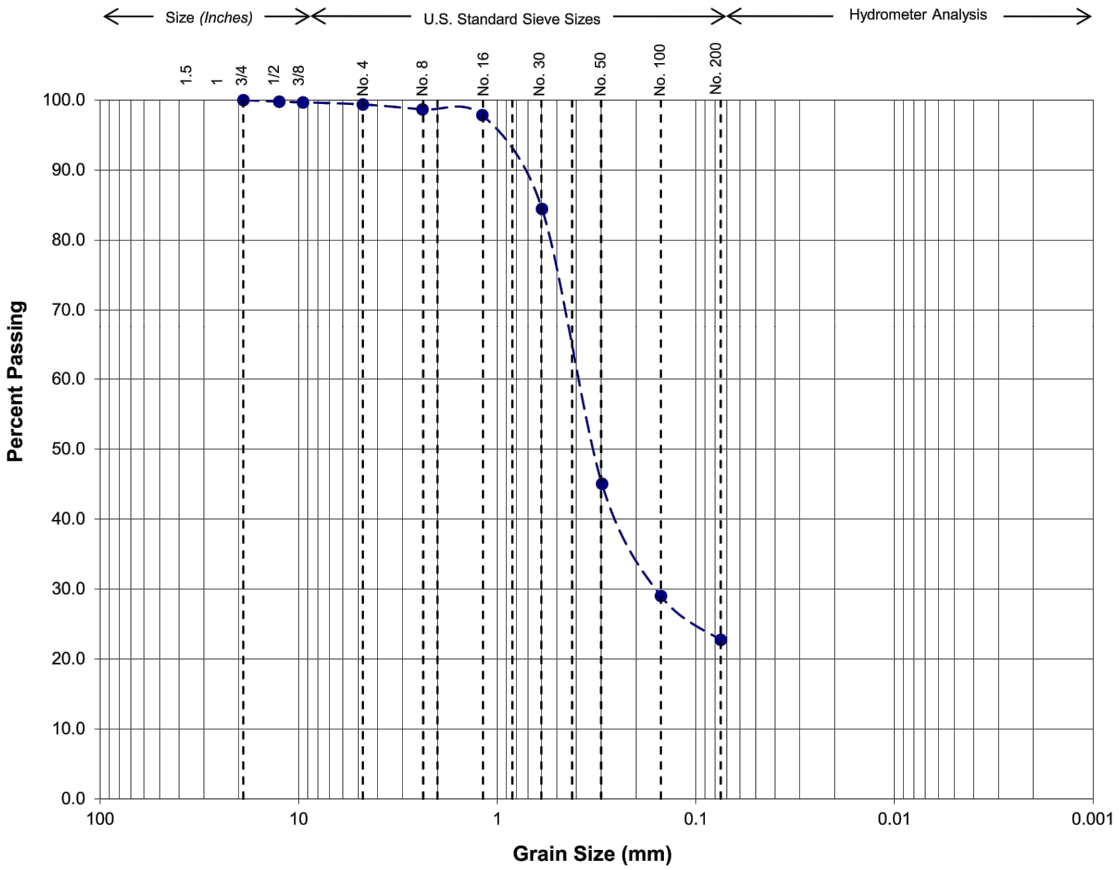
Sample Location:	B-4
Depth (ft):	15
USCS Soil Type:	SP-SM
Passing No. 200 (%):	6

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.8



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

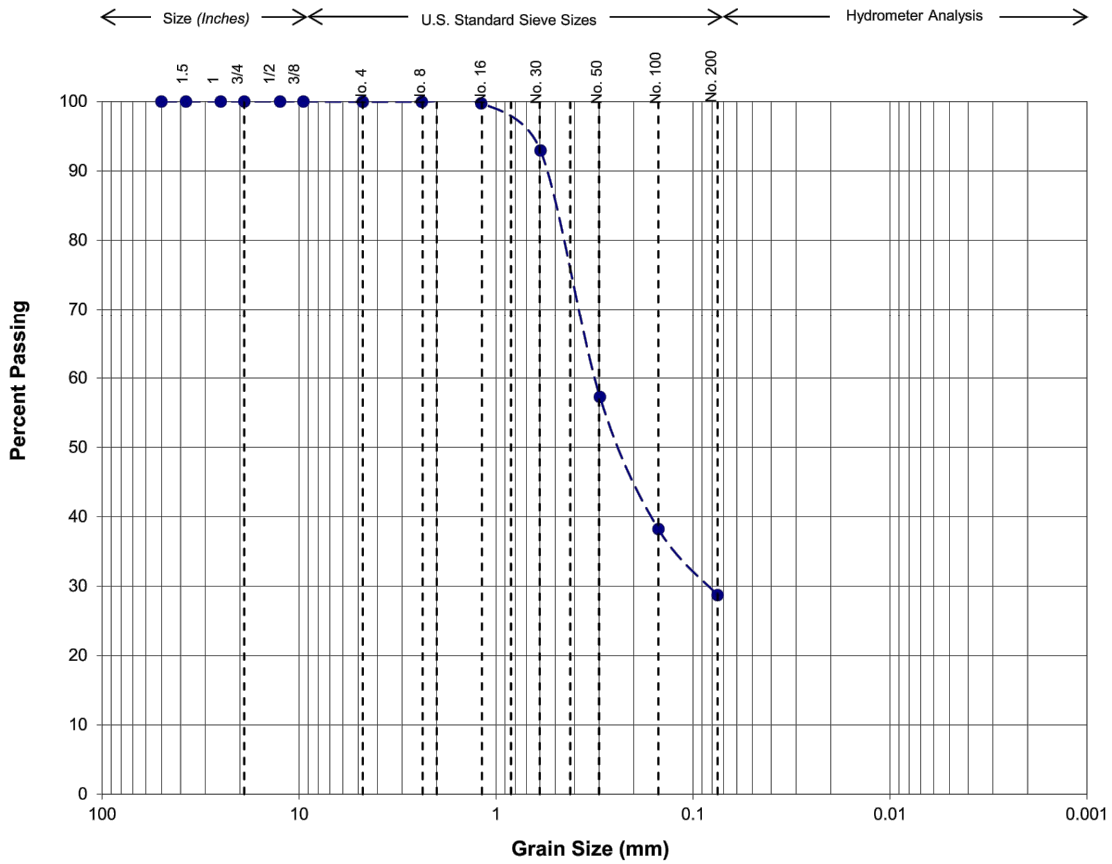
Sample Location:	B-5
Depth (ft):	0 - 2.5
USCS Soil Type:	SM
Passing No. 200 (%):	23

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.9



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

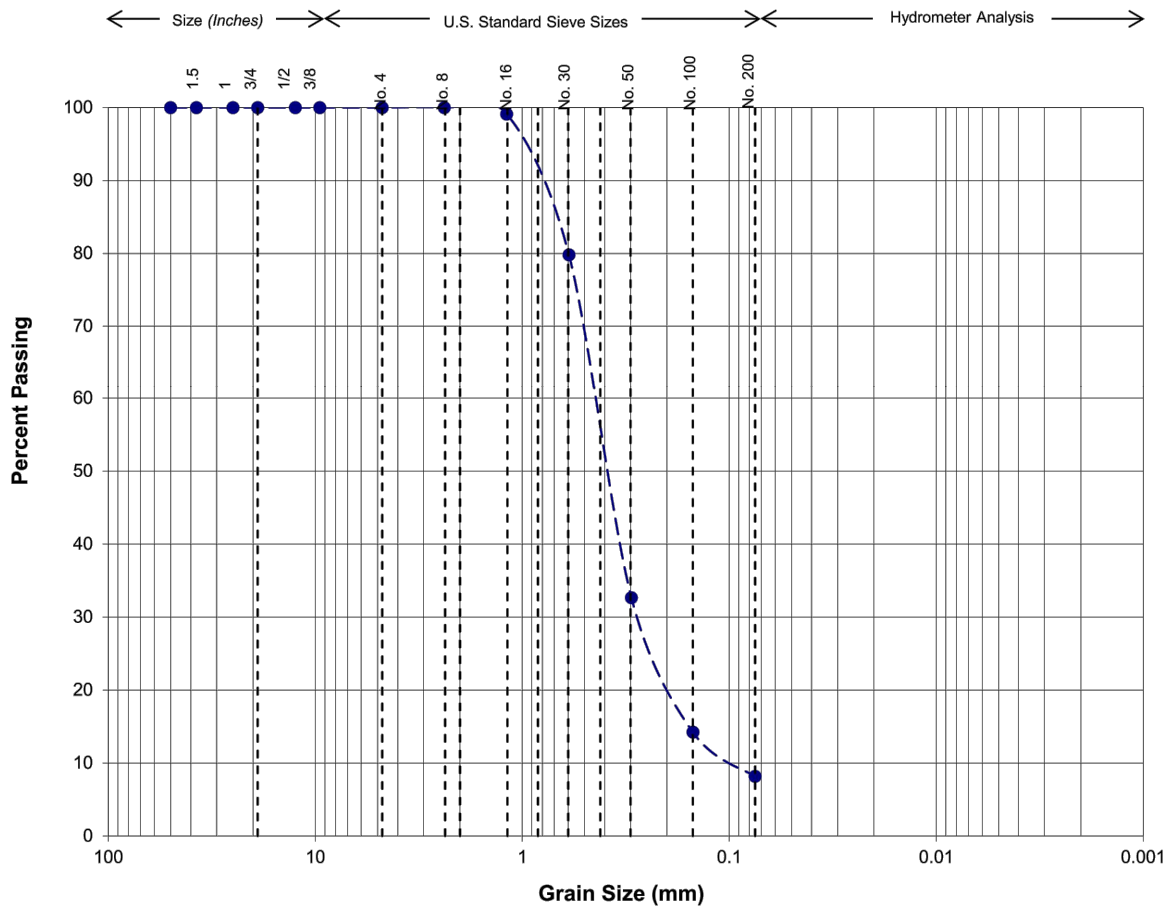
Sample Location:	B-5
Depth (ft):	5
USCS Soil Type:	SM
Passing No. 200 (%):	29

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.10



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

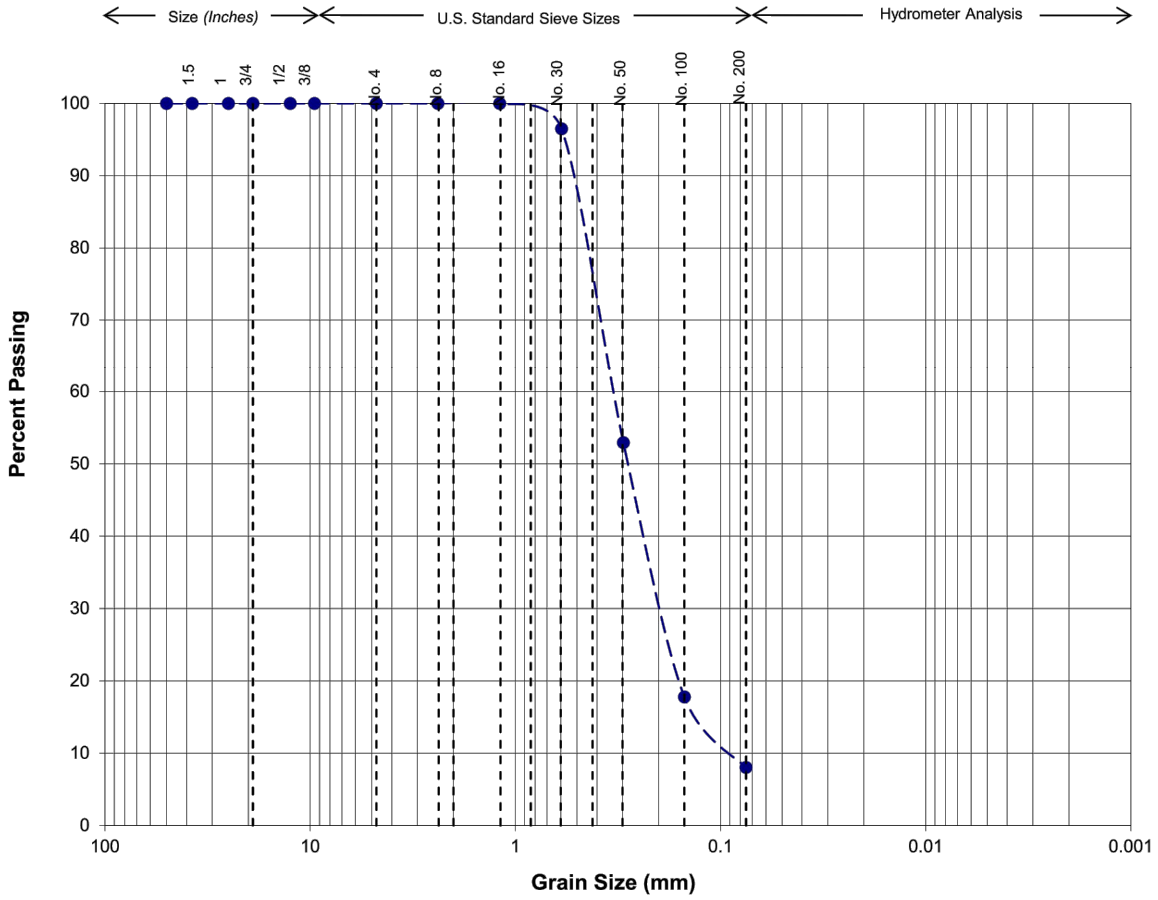
Sample Location:	B-7
Depth (ft):	5
USCS Soil Type:	SP-SM
Passing No. 200 (%):	8

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.11



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

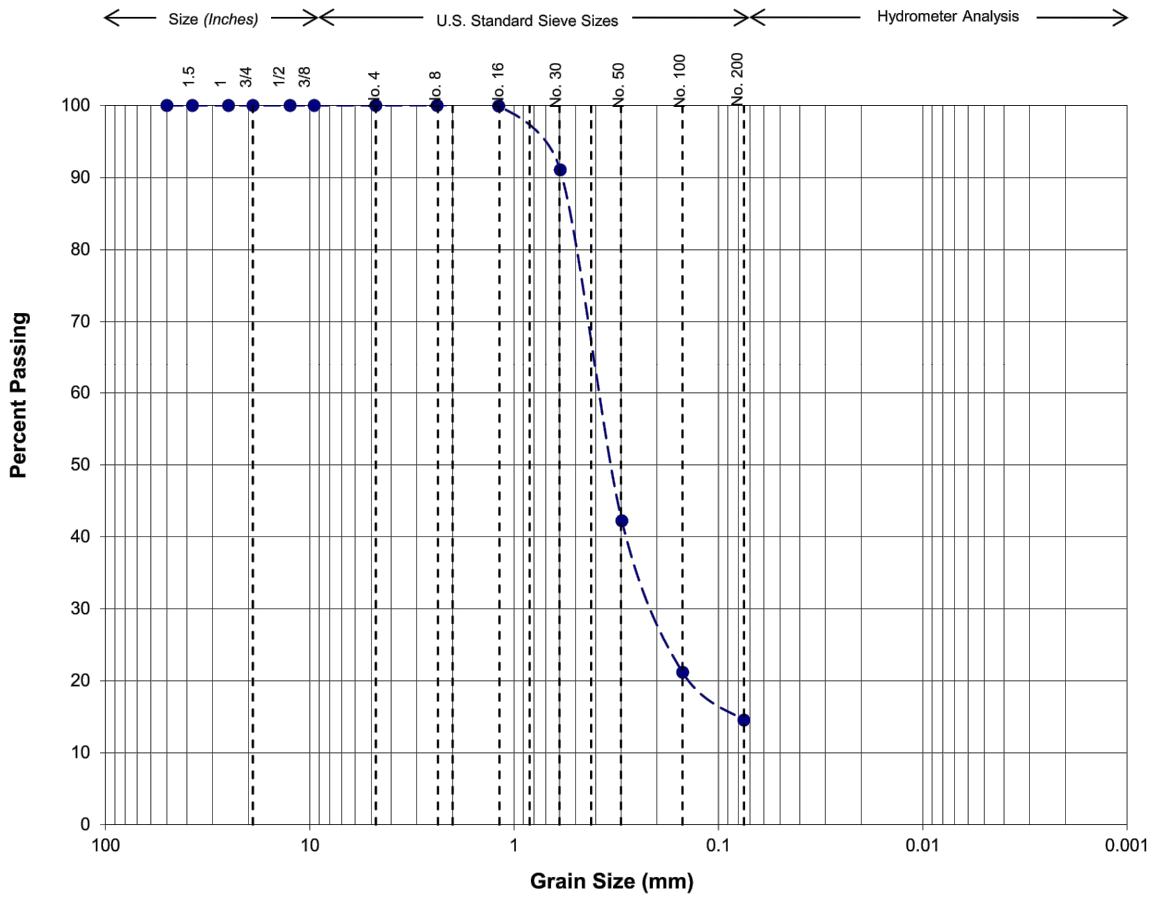
Sample Location:	B-7
Depth (ft):	7.5
USCS Soil Type:	SP-SM
Passing No. 200 (%):	8

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.12



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

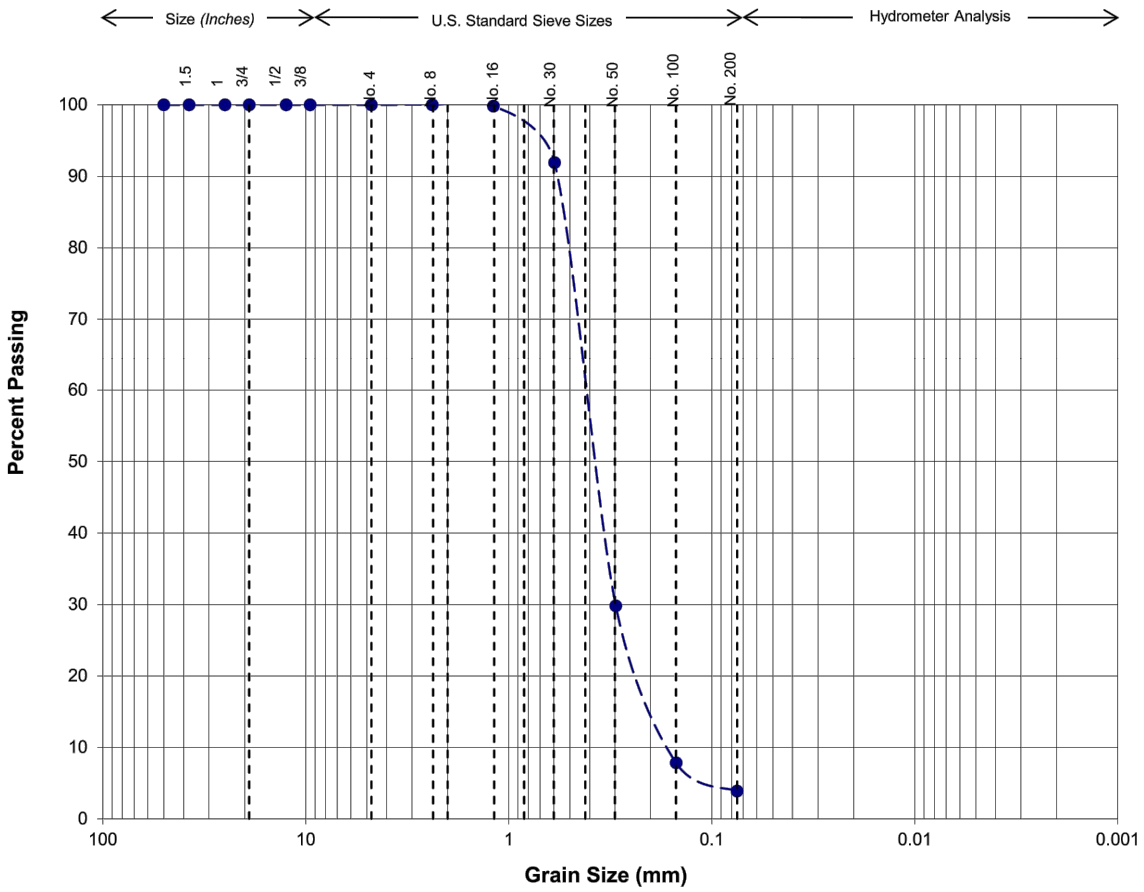
Sample Location:	B-7
Depth (ft):	10
USCS Soil Type:	SM
Passing No. 200 (%):	15

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.13



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

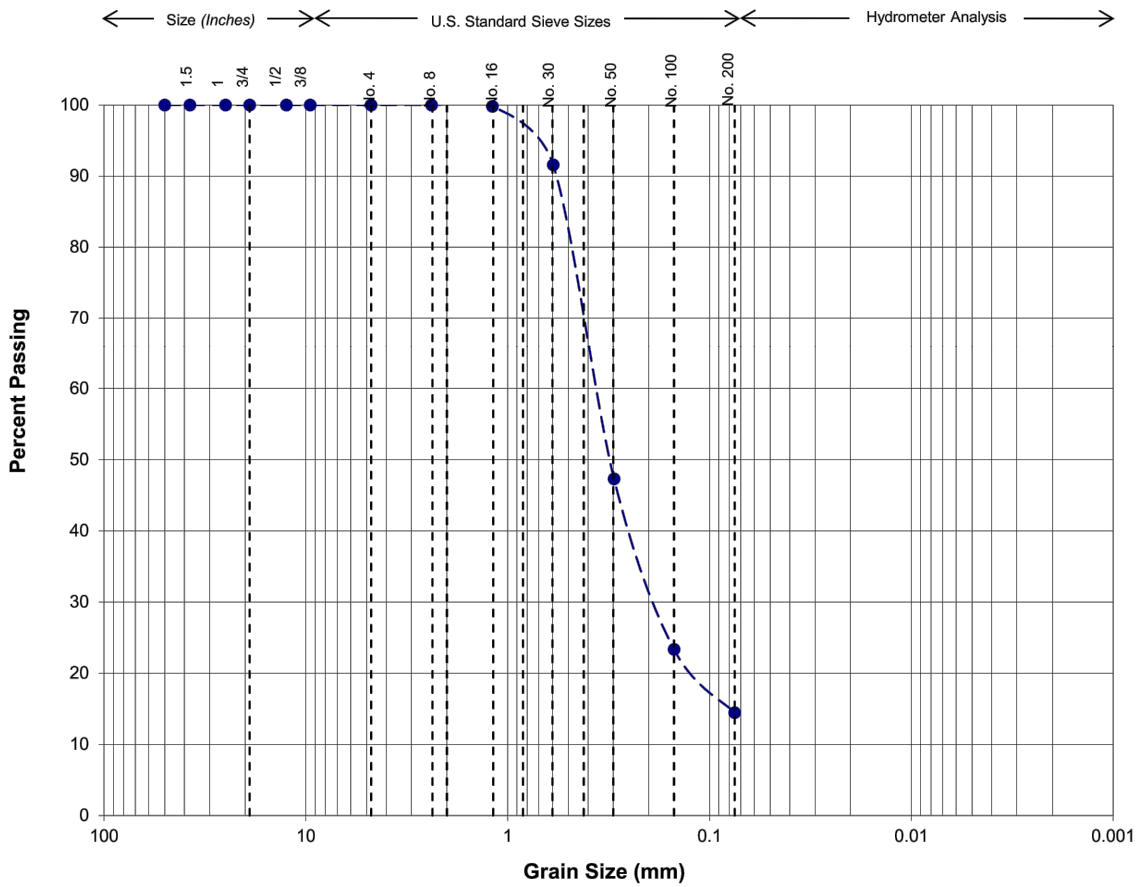
Sample Location:	B-7
Depth (ft):	35
USCS Soil Type:	SP
Passing No. 200 (%):	4

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.14



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

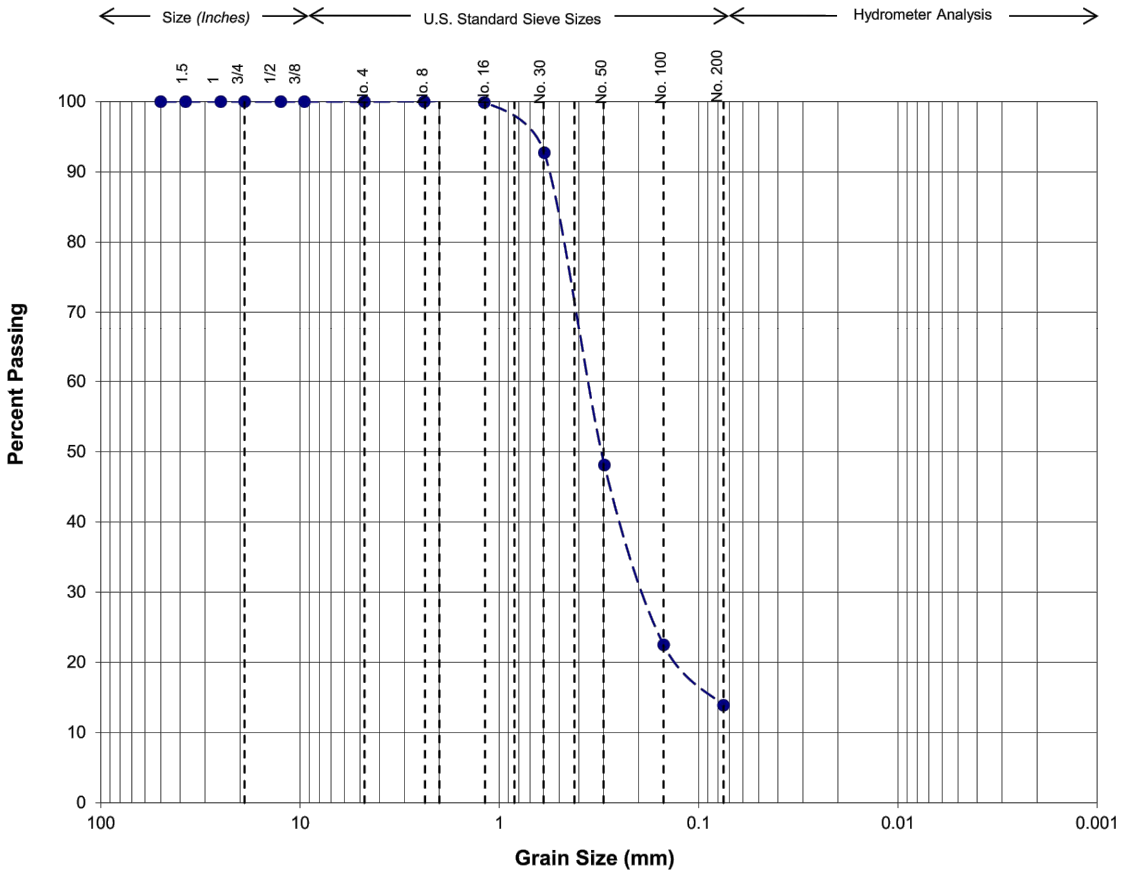
Sample Location:	B-8
Depth (ft):	2.5
USCS Soil Type:	SP-SM
Passing No. 200 (%):	14

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.15



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

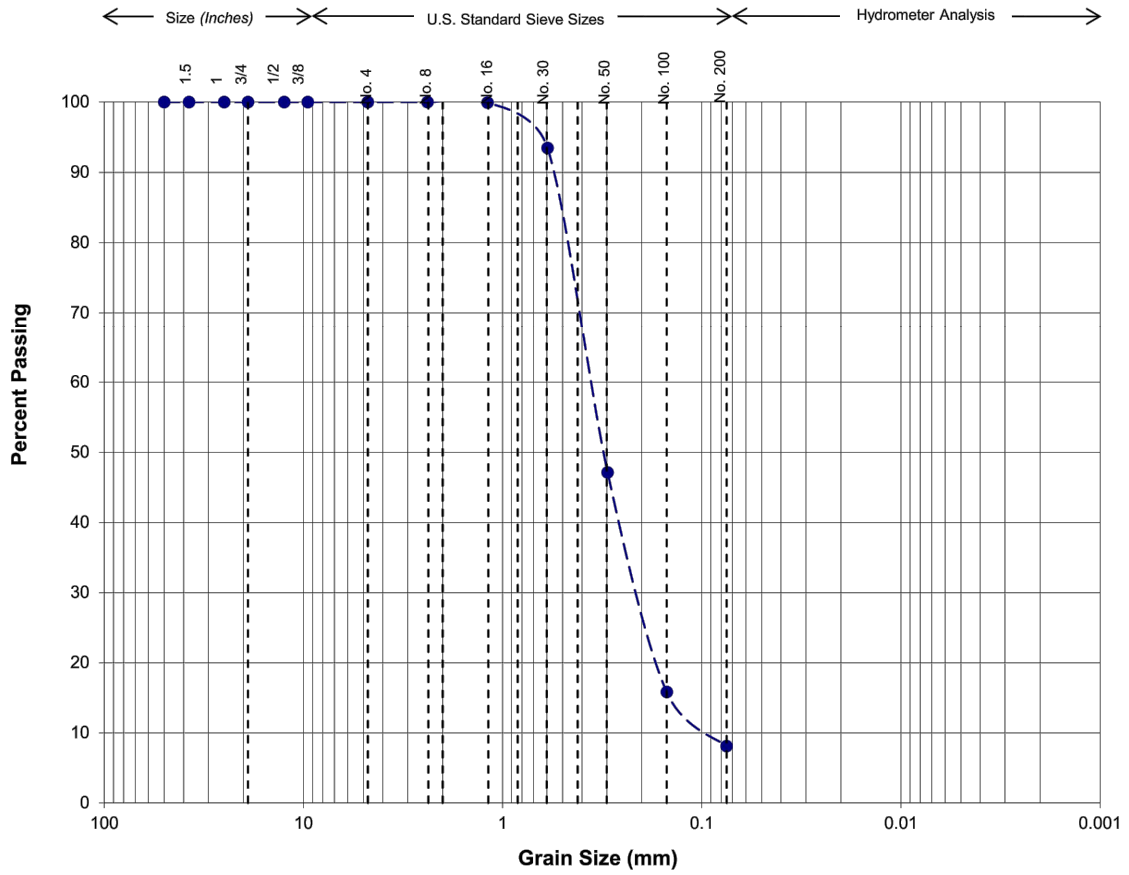
Sample Location:	B-8
Depth (ft):	7.5
USCS Soil Type:	SP-SM
Passing No. 200 (%):	14

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.16



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

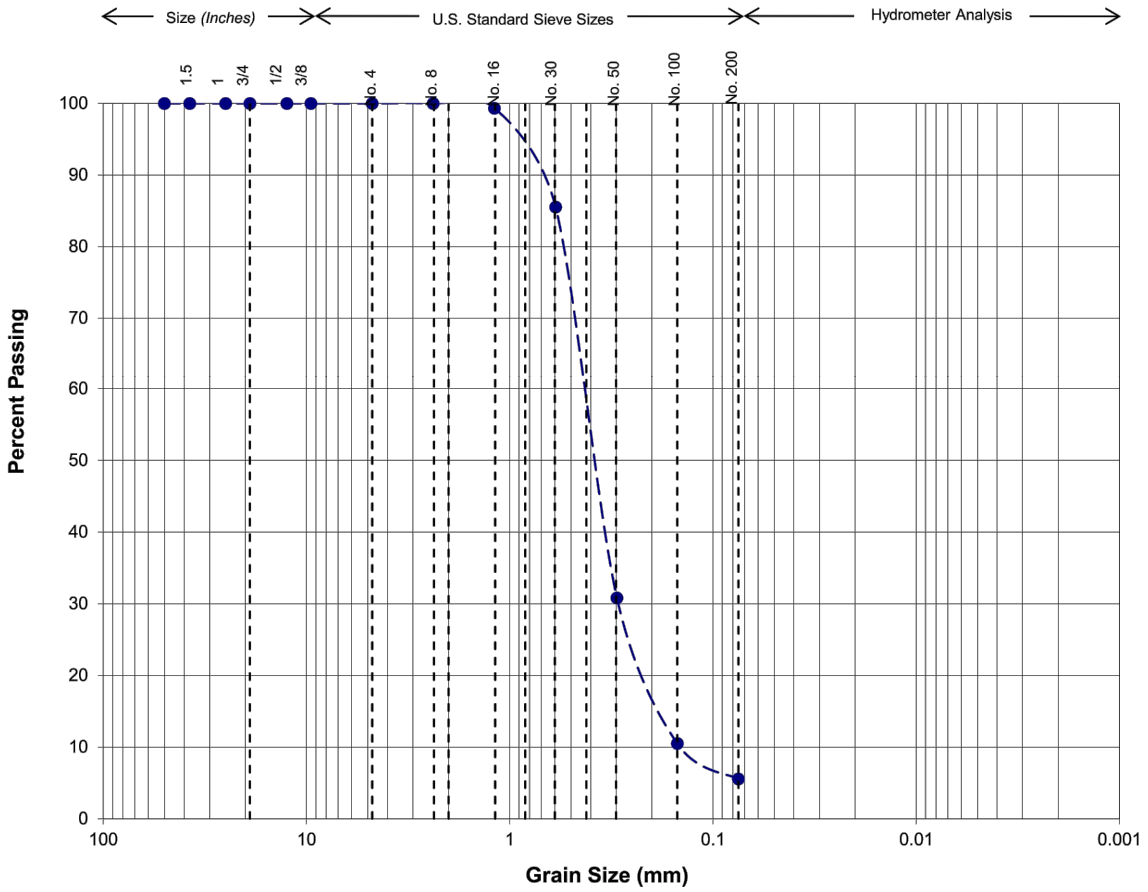
Sample Location:	B-8
Depth (ft):	15
USCS Soil Type:	SP-SM
Passing No. 200 (%):	8

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.17



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

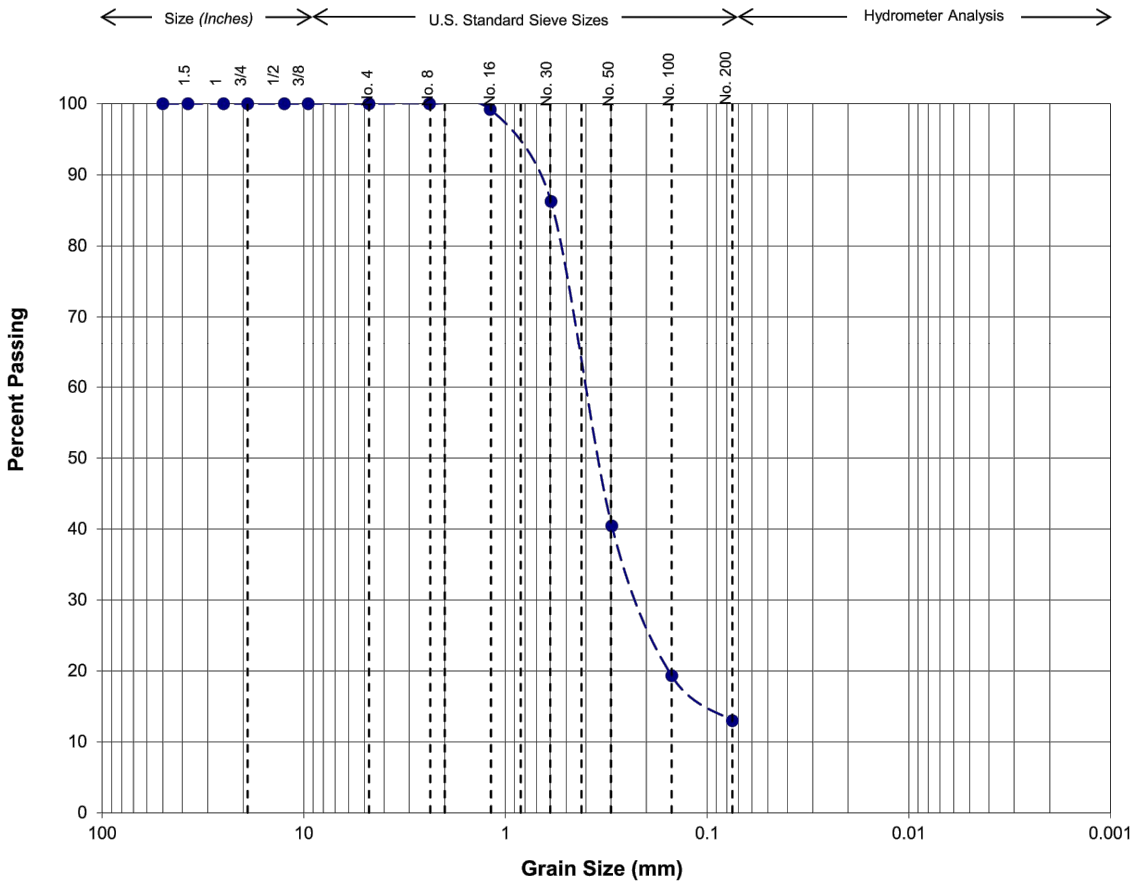
Sample Location:	B-8
Depth (ft):	25
USCS Soil Type:	SP-SM
Passing No. 200 (%):	6

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.18



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

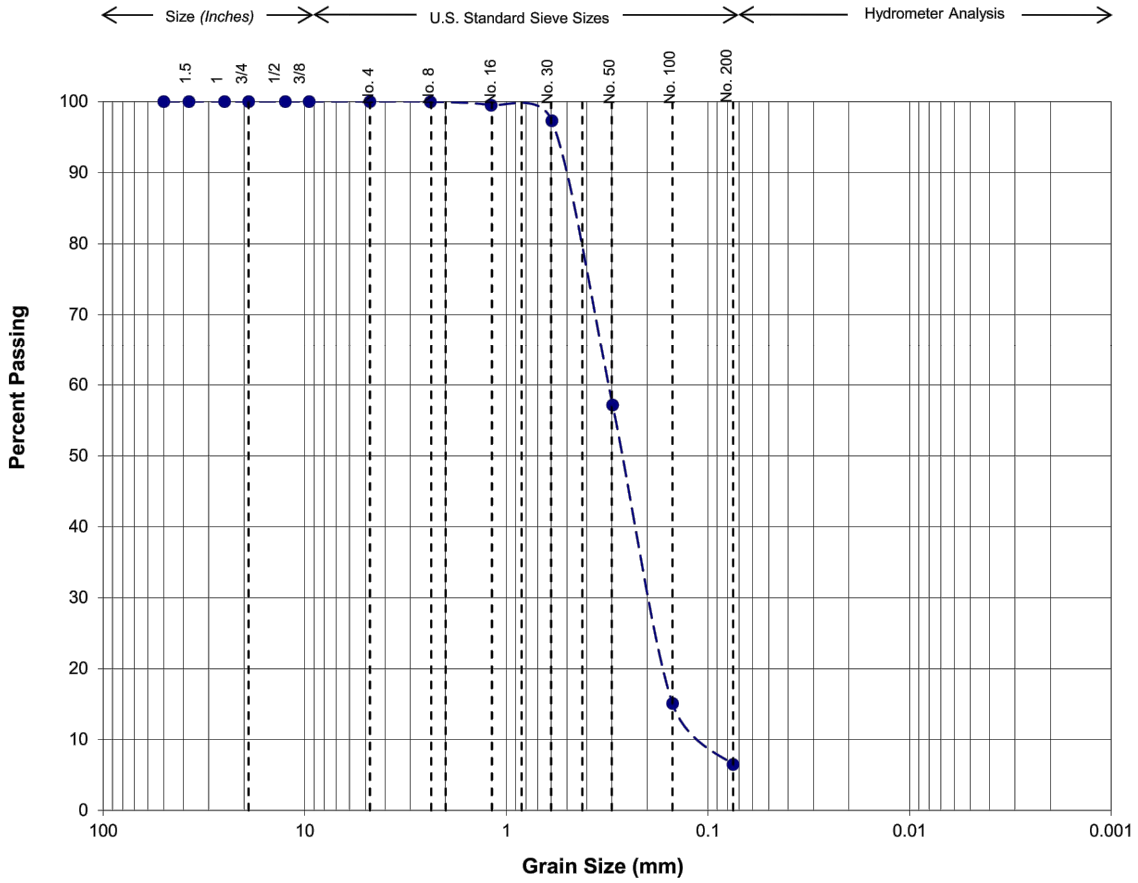
Sample Location:	B-8
Depth (ft):	45
USCS Soil Type:	SP-SM
Passing No. 200 (%):	13

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.19



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample Location:	B-8
Depth (ft):	50
USCS Soil Type:	SP-SM
Passing No. 200 (%):	6

NOVA
4373 VIEWRIDGE AVENUE, SUITE B
SAN DIEGO, CALIFORNIA
PHONE: 858-292-7575 FAX: 858-292-7570

GRADATION ANALYSIS TEST RESULTS

LEUCADIA MIXED USE
1950 N. COAST HWY 101
ENCINITAS, CALIFORNIA

BY: HAP	DATE: APR 2021	PROJECT: 2019189	APPENDIX: D.20

APPENDIX E
INFILTRATION RECORDS

Categorization of Infiltration Feasibility Condition		Form I-8	
Part 1 - Full Infiltration Feasibility Screening Criteria **Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	Yes	No
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	**X**	
Provide basis: *The infiltration rate of the existing soils for locations P-1 and P-2, based on the on-site infiltration study was calculated to be greater than 0.5 inches per hour (1.51 inches per hour and 1.74 inches per hour for P-1 and P-2, respectively) after applying a minimum factor of safety (F) of F=2.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		**X**
Infiltration of water has the potential to result in an increased risk of slope failure of existing slopes and nearby coastal bluff zones. As such, BMPs are not suitable for any location on site.			

Form I-8 Page 2 of 4			
Criteria	Screening Question	**Yes**	**No**
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, stormwater pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *Water contamination was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *The potential for water balance was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result *	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2	*Proceed to Part 2*	

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Form I-8 Page 3 of 4

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	**X**	

Provide basis:

The infiltration rate of the existing soils for locations P-1 and P-2, based on the on-site infiltration study was calculated to be greater than 0.5 inches per hour (1.51 inches per hour and 1.74 inches per hour for P-1 and P-2, respectively) after applying a minimum factor of safety (F) of F=2.

The soil and geologic conditions allow for infiltration but not without increasing the risk of geotechnical hazards.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		**X**

Provide basis:

Infiltration of water has the potential to result in an increased risk of slope failure of existing slopes and nearby coastal bluff zones. As such, BMPs are not suitable for any location on site.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

Form I-8 Page 4 of 4			
Criteria	Screening Question	**Yes**	**No**
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, stormwater pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *Water contamination was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *The potential for water balance was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result*	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		*No Infiltration*

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

APPENDIX F
SEISMIC SHEAR WAVE SURVEY

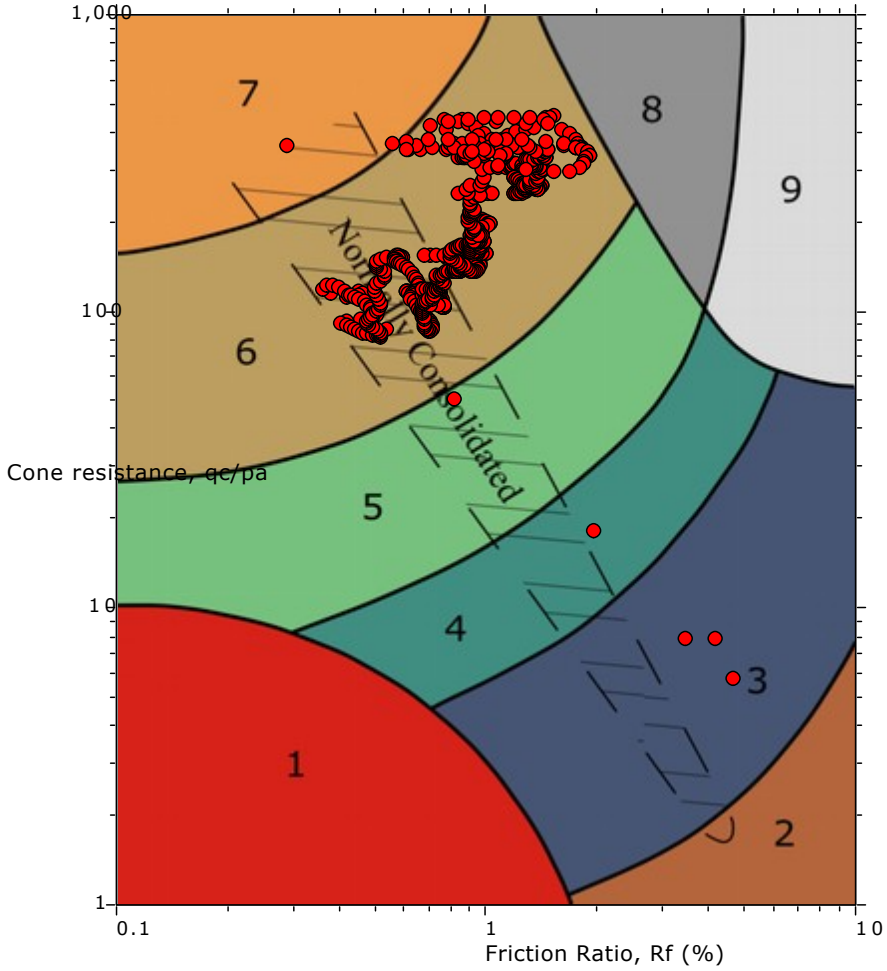
NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

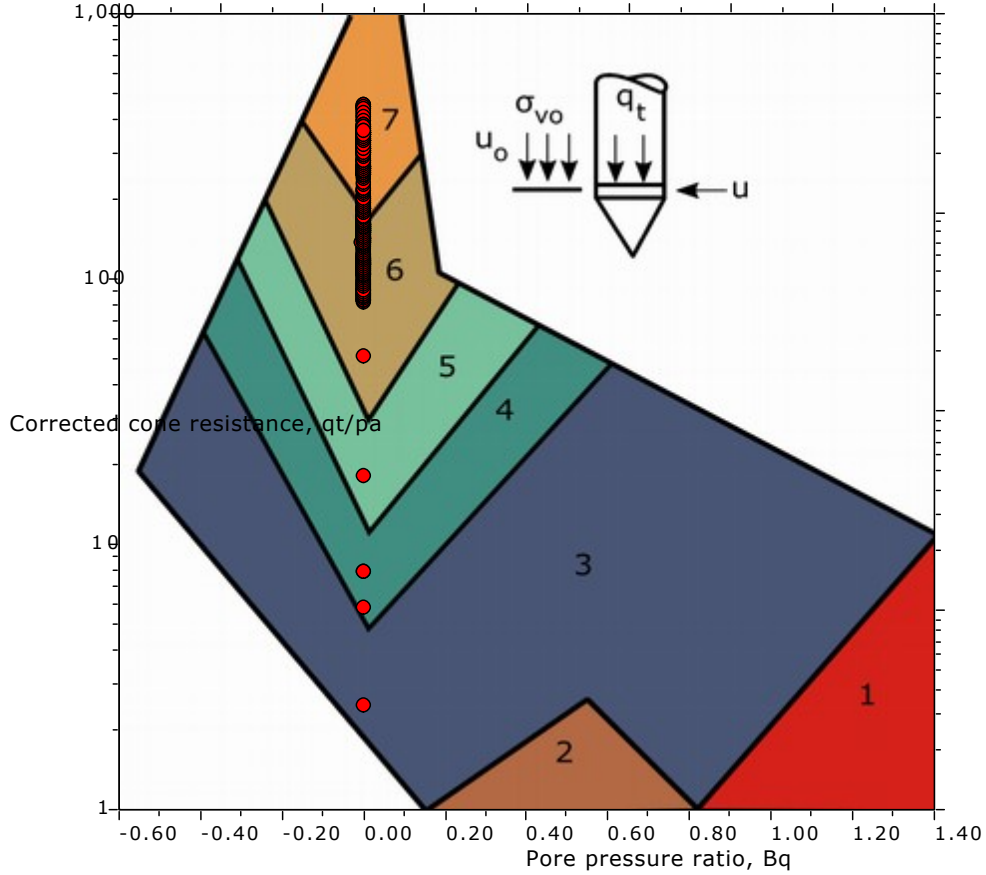
CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

SBT - Bq plots

SBT plot



Bq plot



SBT legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

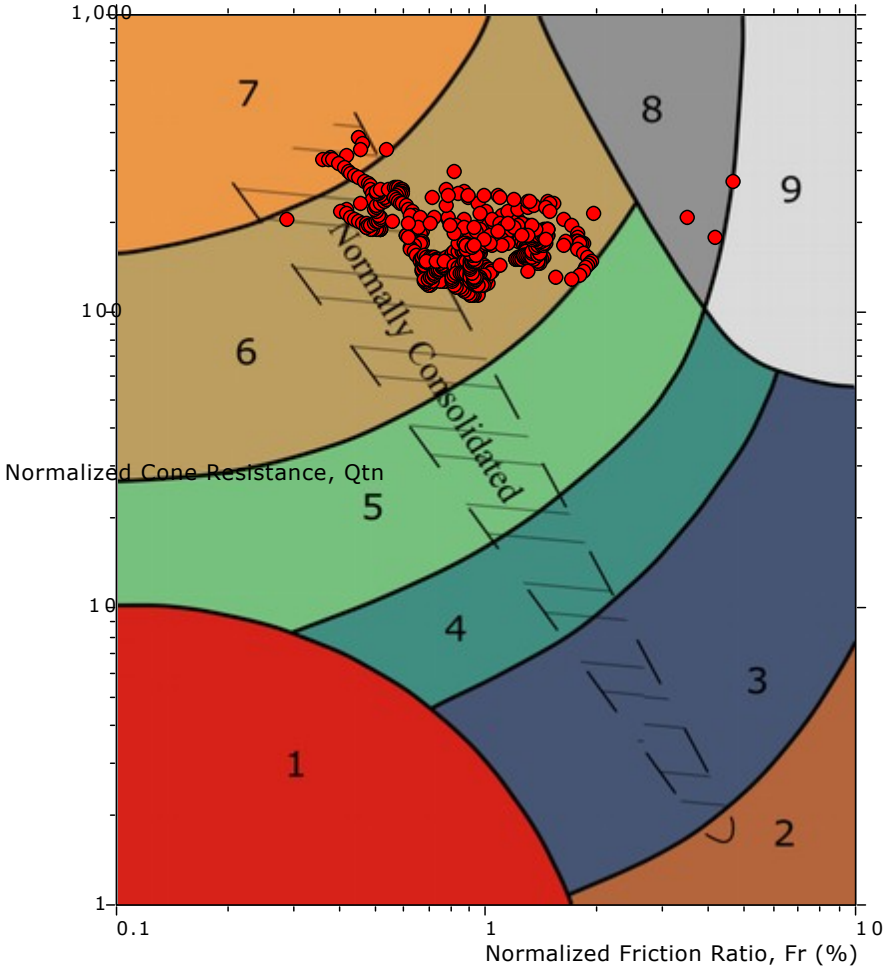
NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

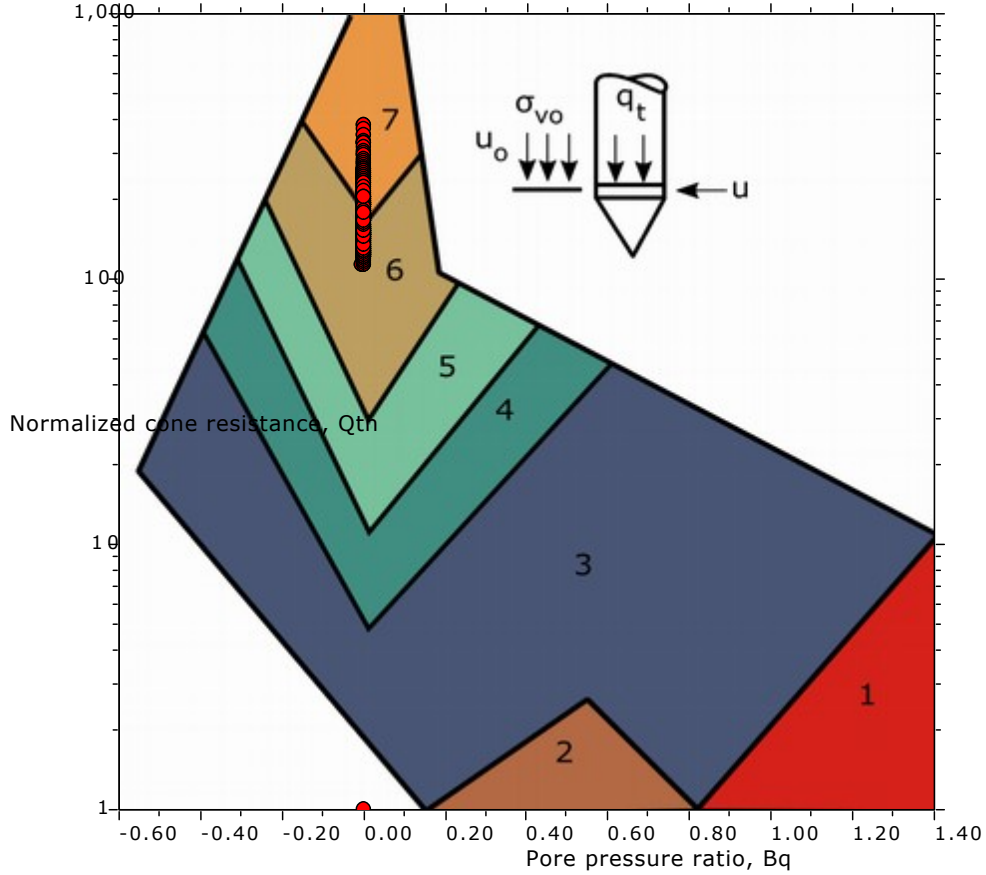
CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

SBT - Bq plots (normalized)

SBTn plot



Normalized Bq plot



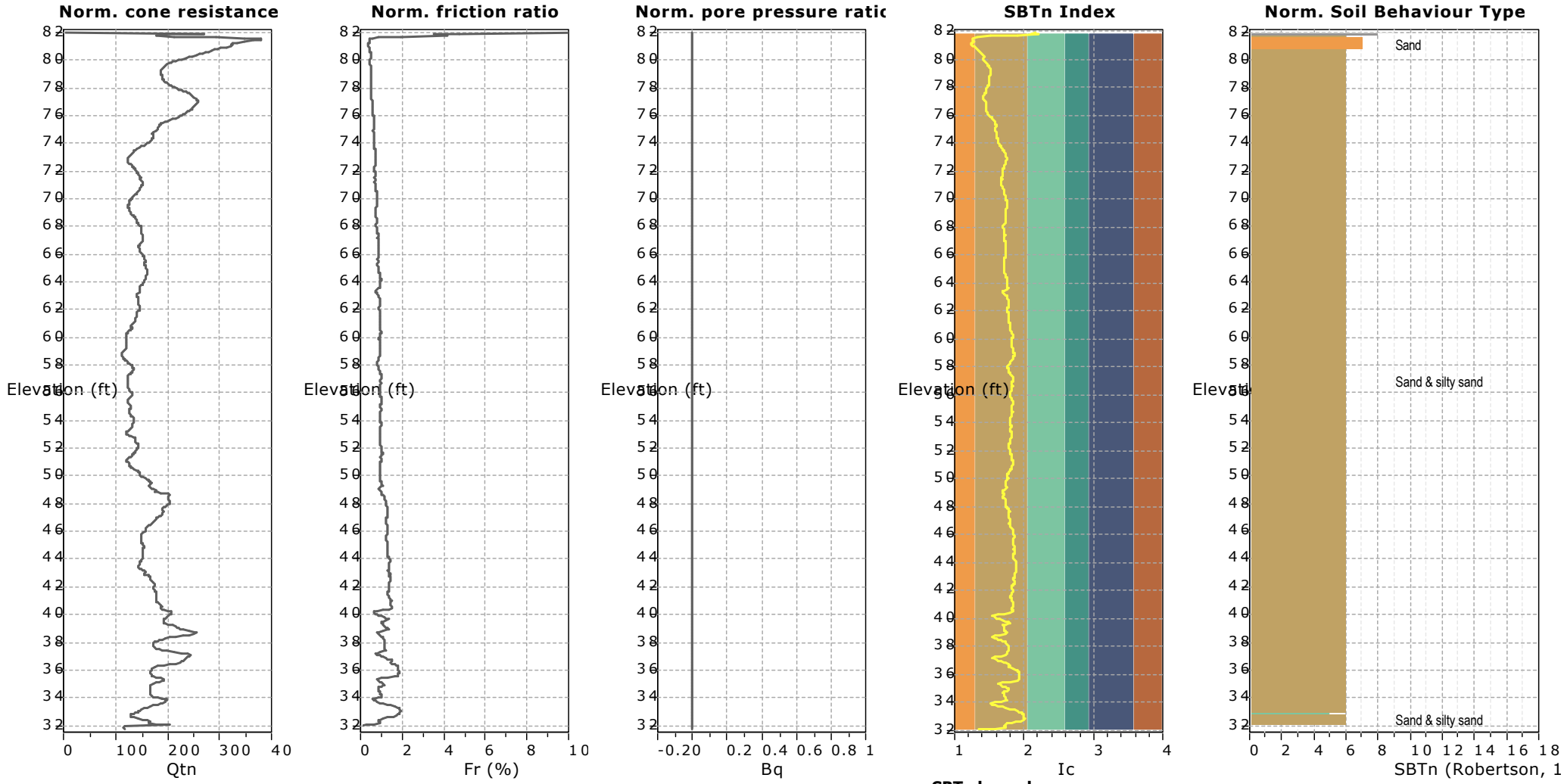
SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering



SBTn legend

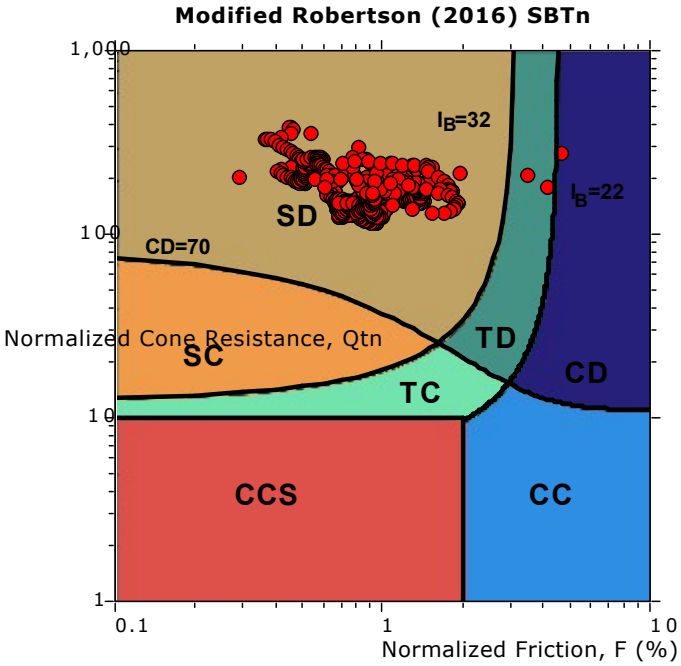
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

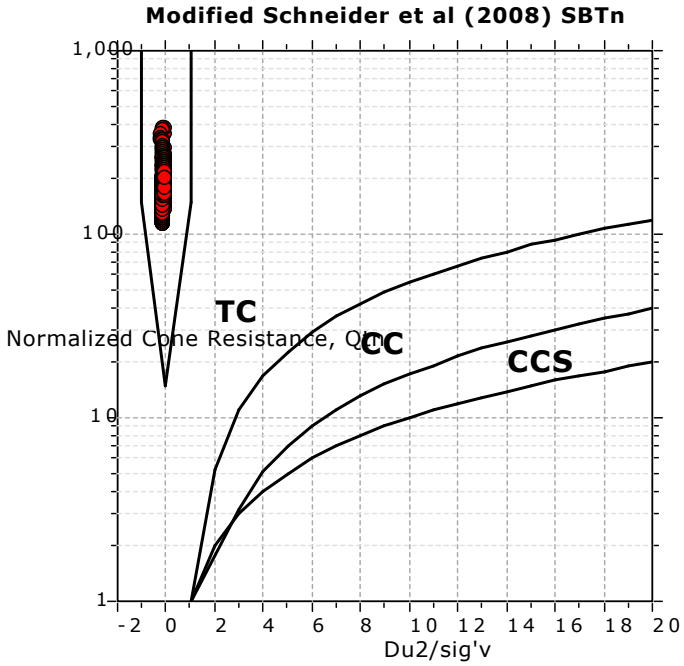
NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

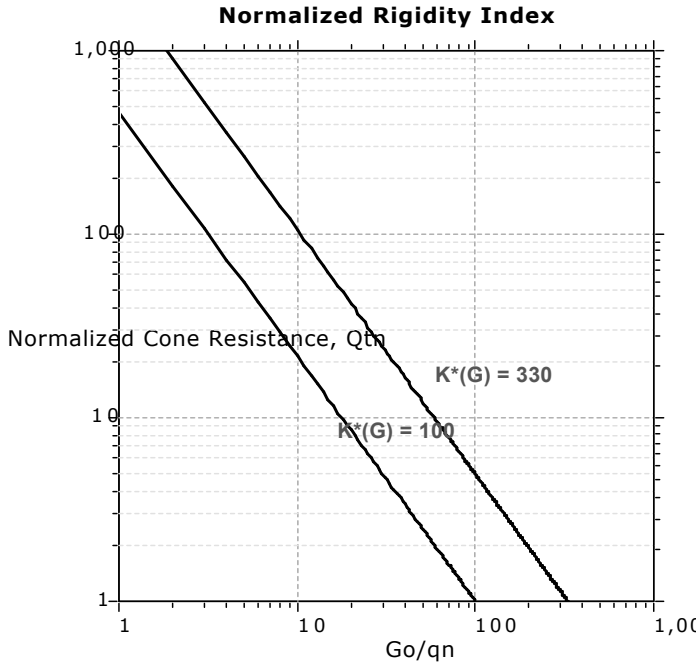
Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

Updated SBTn plots







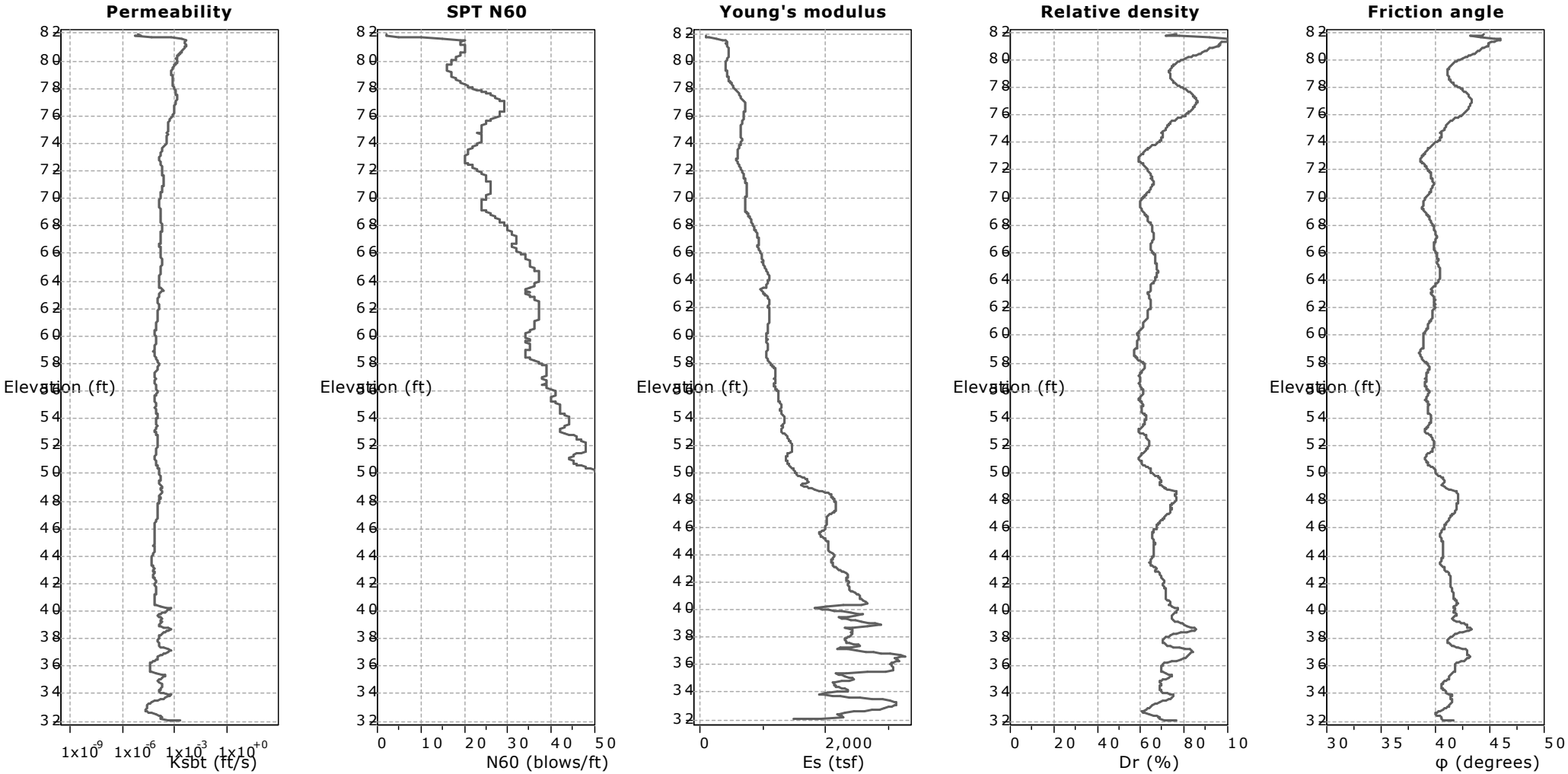
CCS: Clay-like - Contractive - Sensitive
CC: Clay-like - Contractive
CD: Clay-like - Dilative
TC: Transitional - Contractive
TD: Transitional - Dilative
SC: Sand-like - Contractive
SD: Sand-like - Dilative

K(G) > 330: Soils with significant microstructure (e.g. age/cementation)

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**



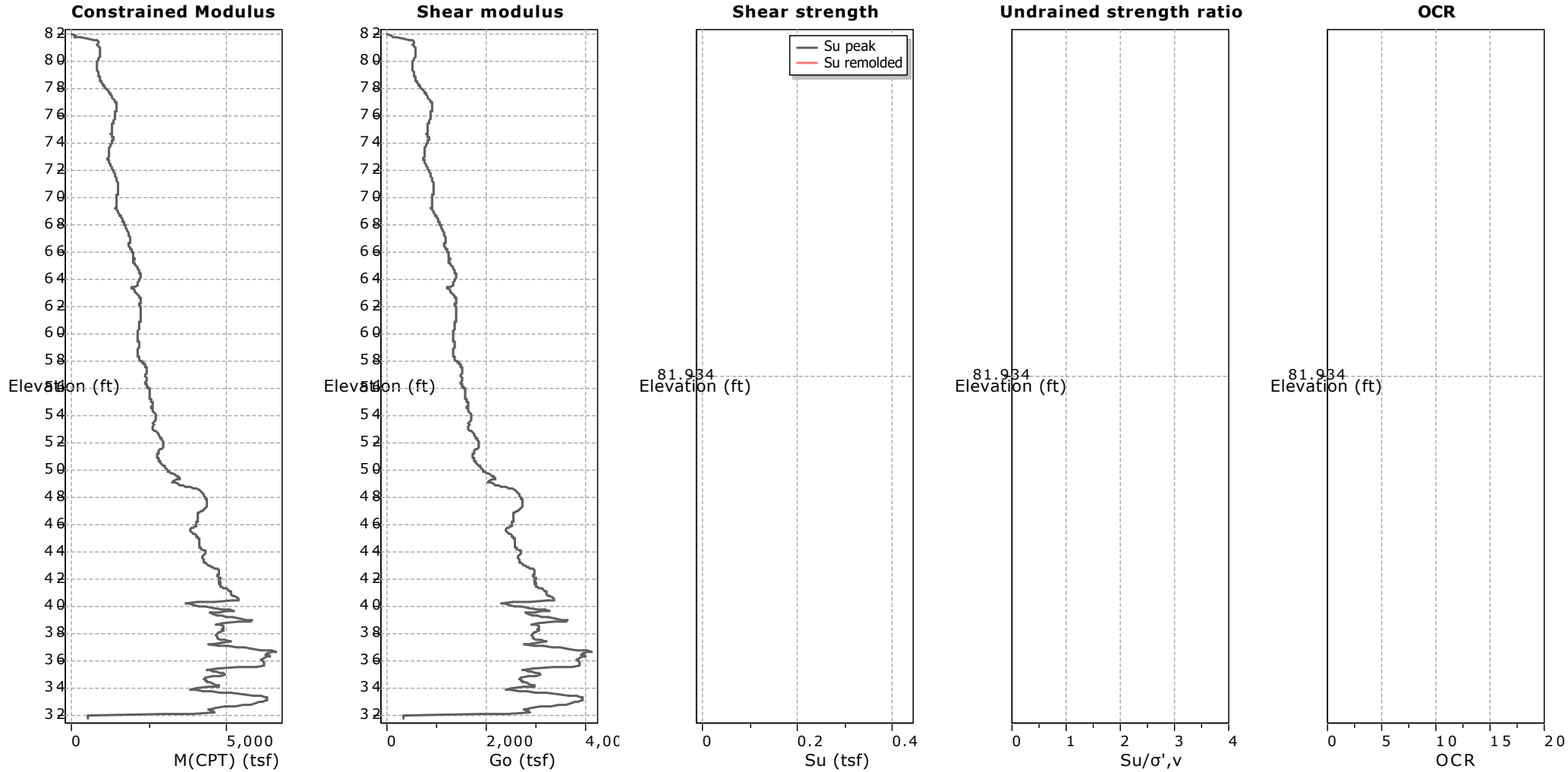
Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)
User defined estimation data

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering



Calculation parameters

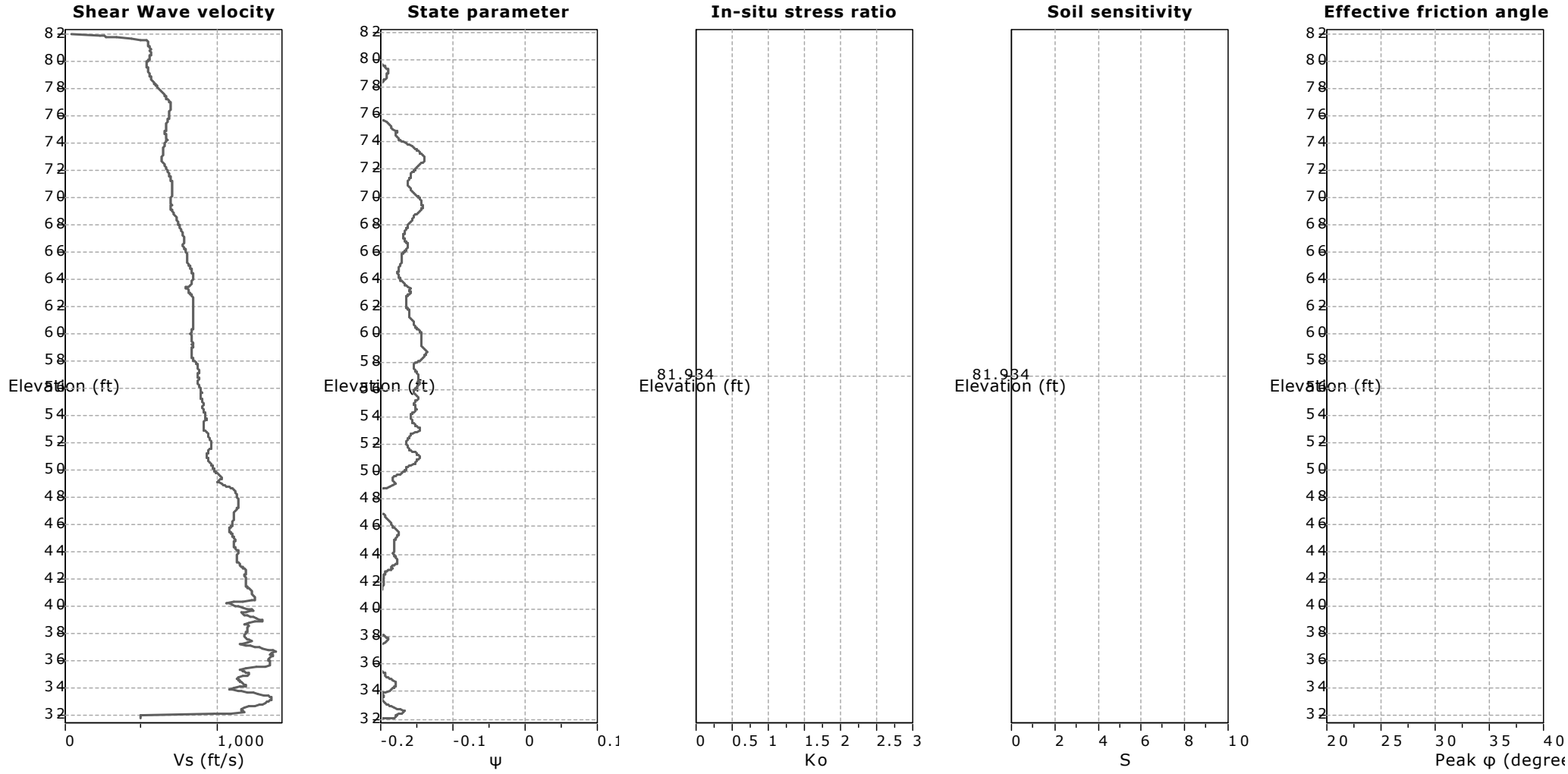
Constrained modulus: Based on variable alpha using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable alpha using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14

OCR factor for clays, N_{kt}: 0.33
User defined estimation data
Flat Dilatometer Test data

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-1
Total depth: 50.27 ft, Date: 10/10/2019
Surface Elevation: 82.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

User defined estimation data

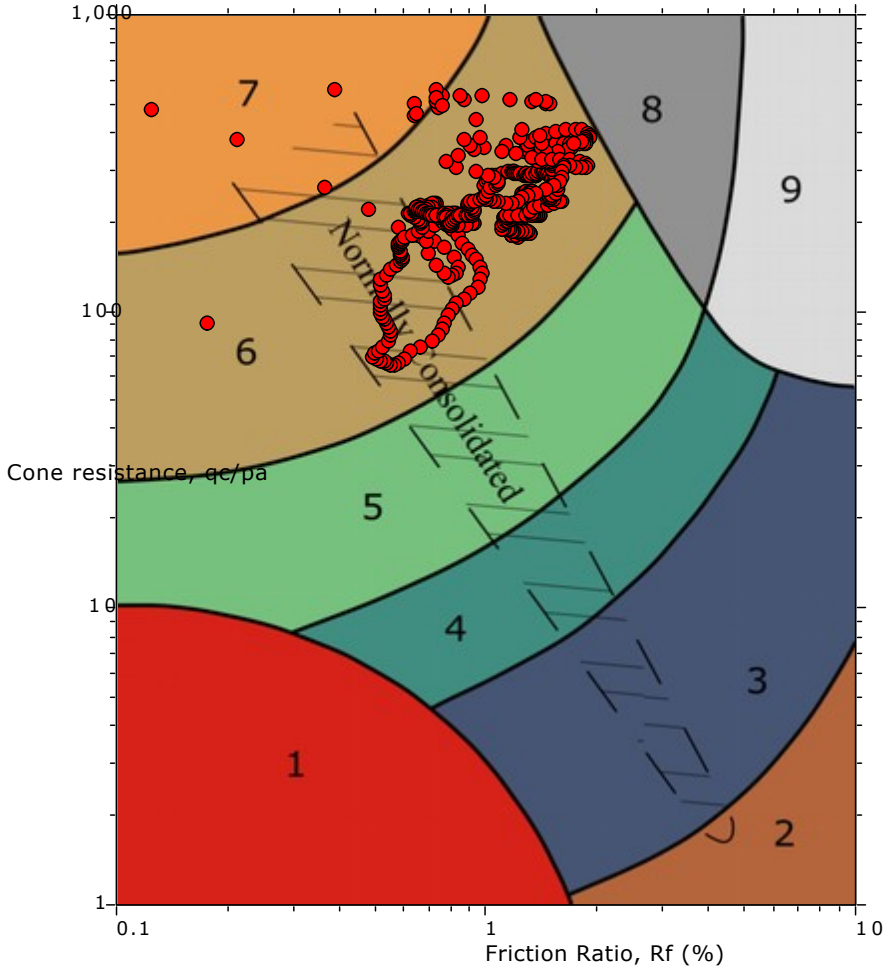
NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

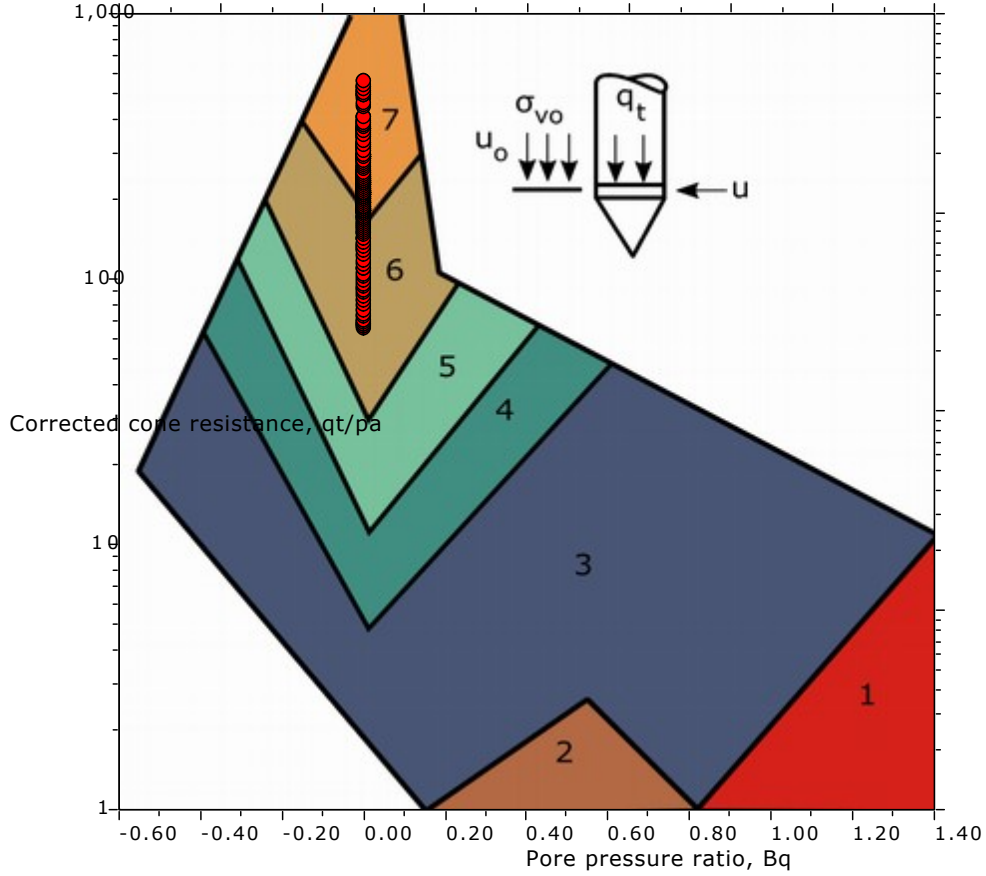
CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

SBT - Bq plots

SBT plot



Bq plot



SBT legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

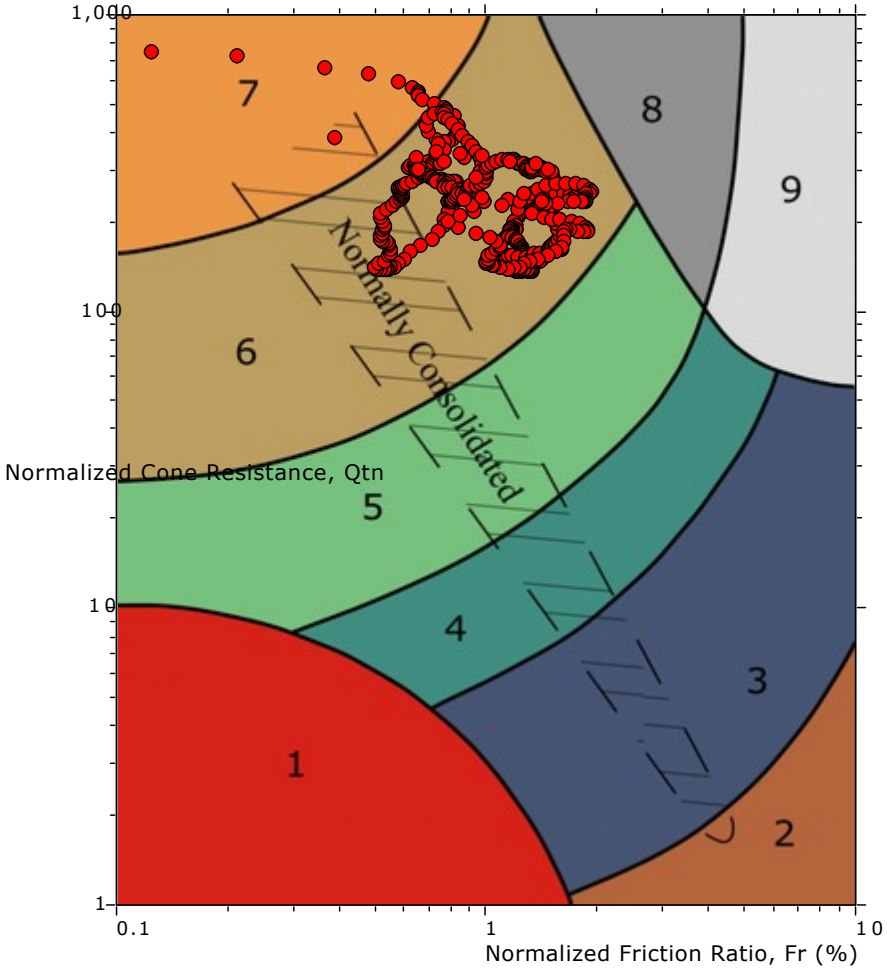
NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

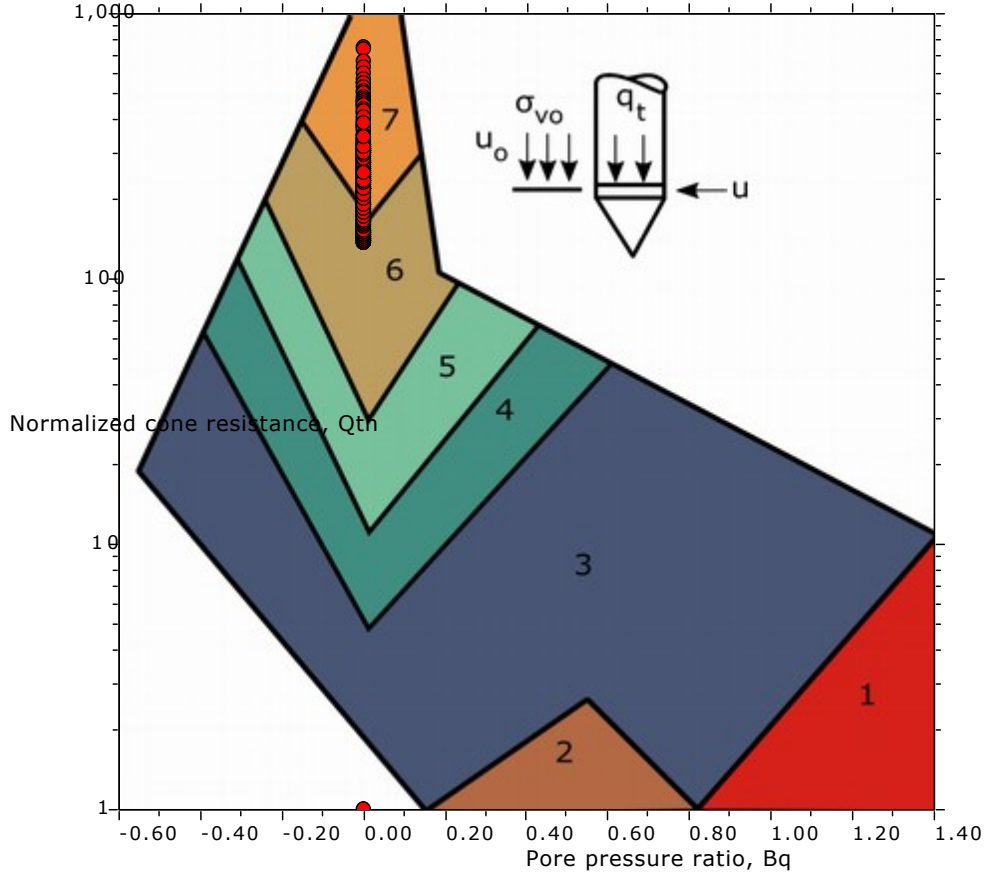
CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

SBT - Bq plots (normalized)

SBTn plot



Normalized Bq plot



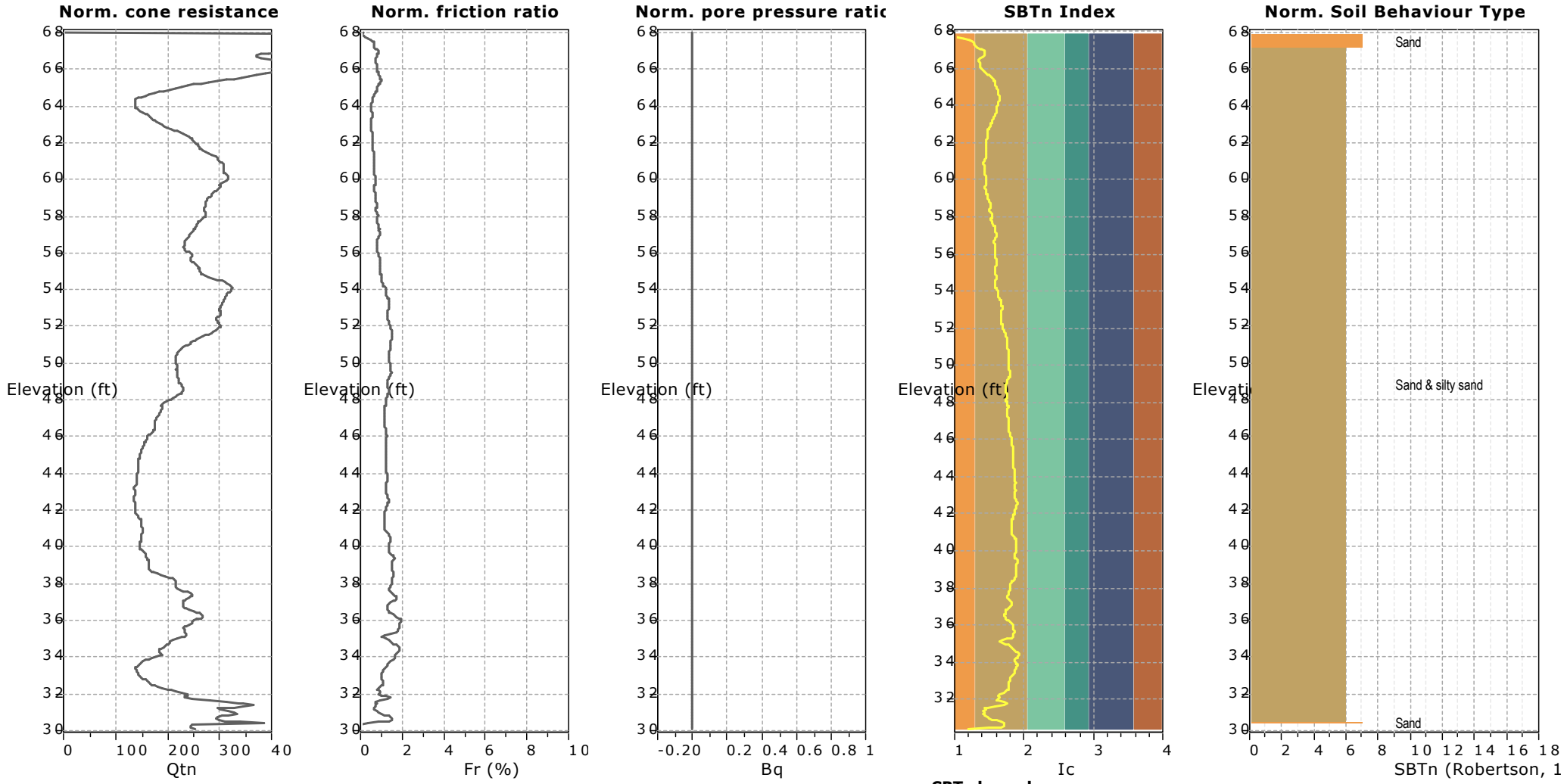
SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering



SBTn legend

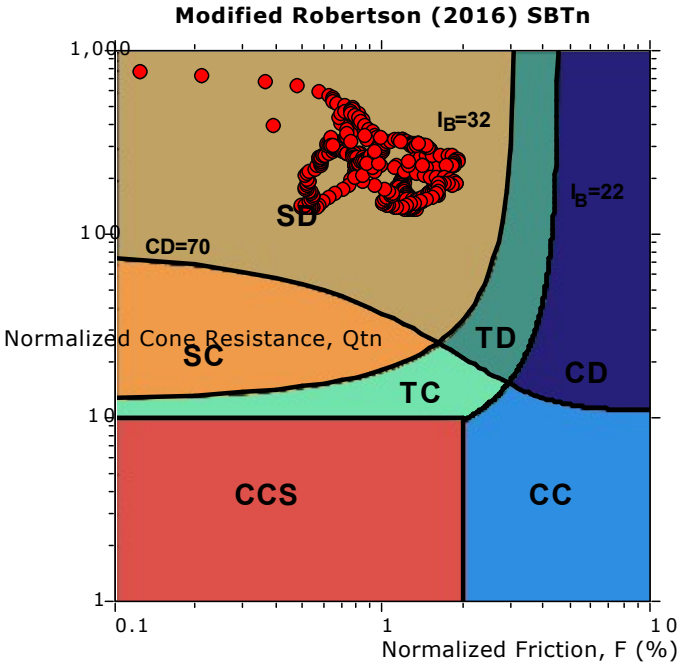
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

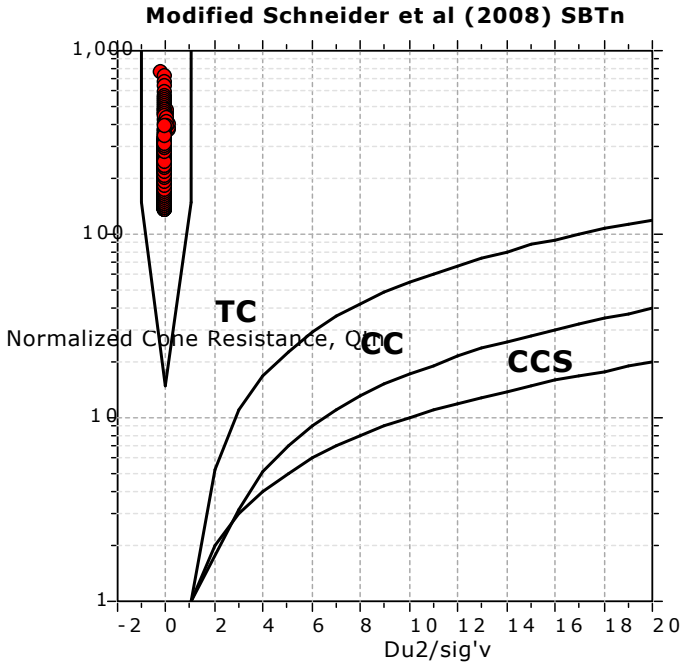
NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

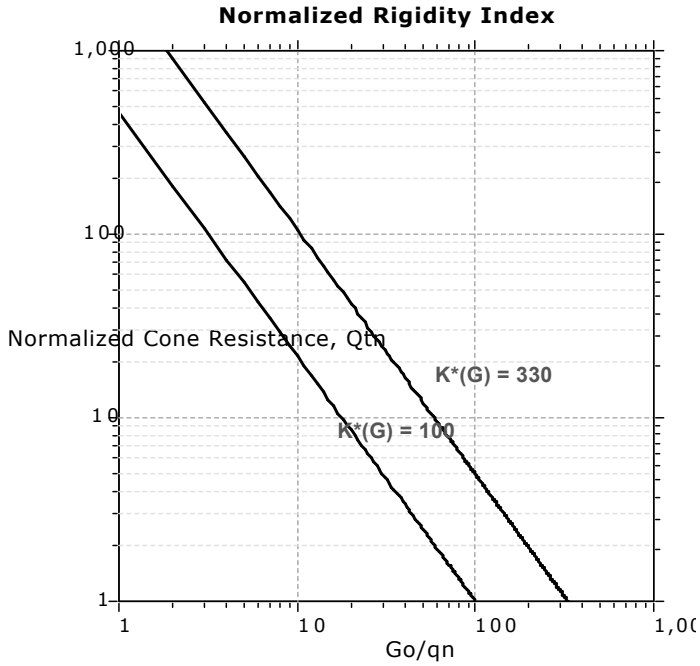
Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

Updated SBTn plots







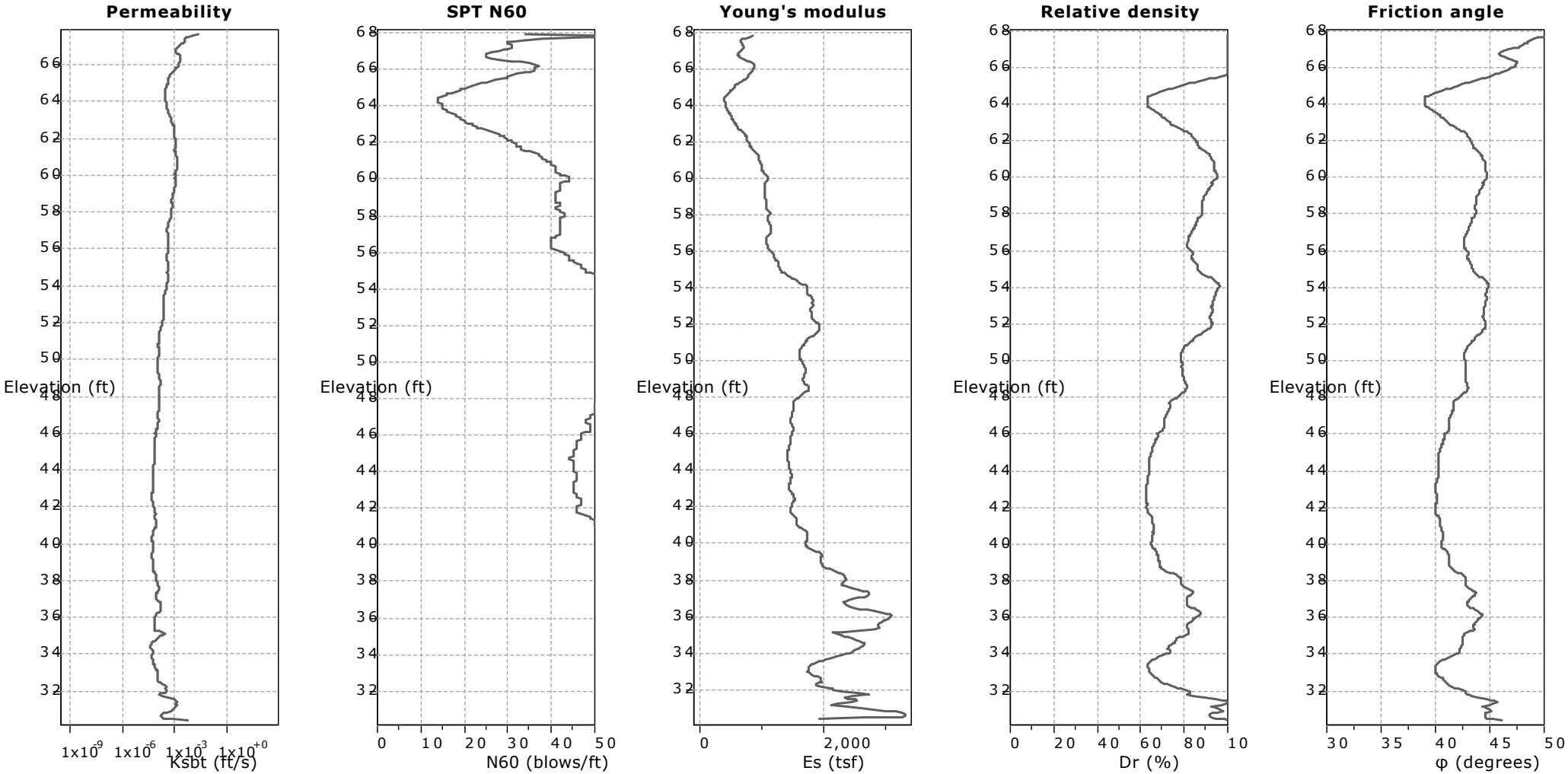
CCS: Clay-like - Contractive - Sensitive
CC: Clay-like - Contractive
CD: Clay-like - Dilative
TC: Transitional - Contractive
TD: Transitional - Dilative
SC: Sand-like - Contractive
SD: Sand-like - Dilative

K(G) > 330: Soils with significant microstructure (e.g. age/cementation)

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**

CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering



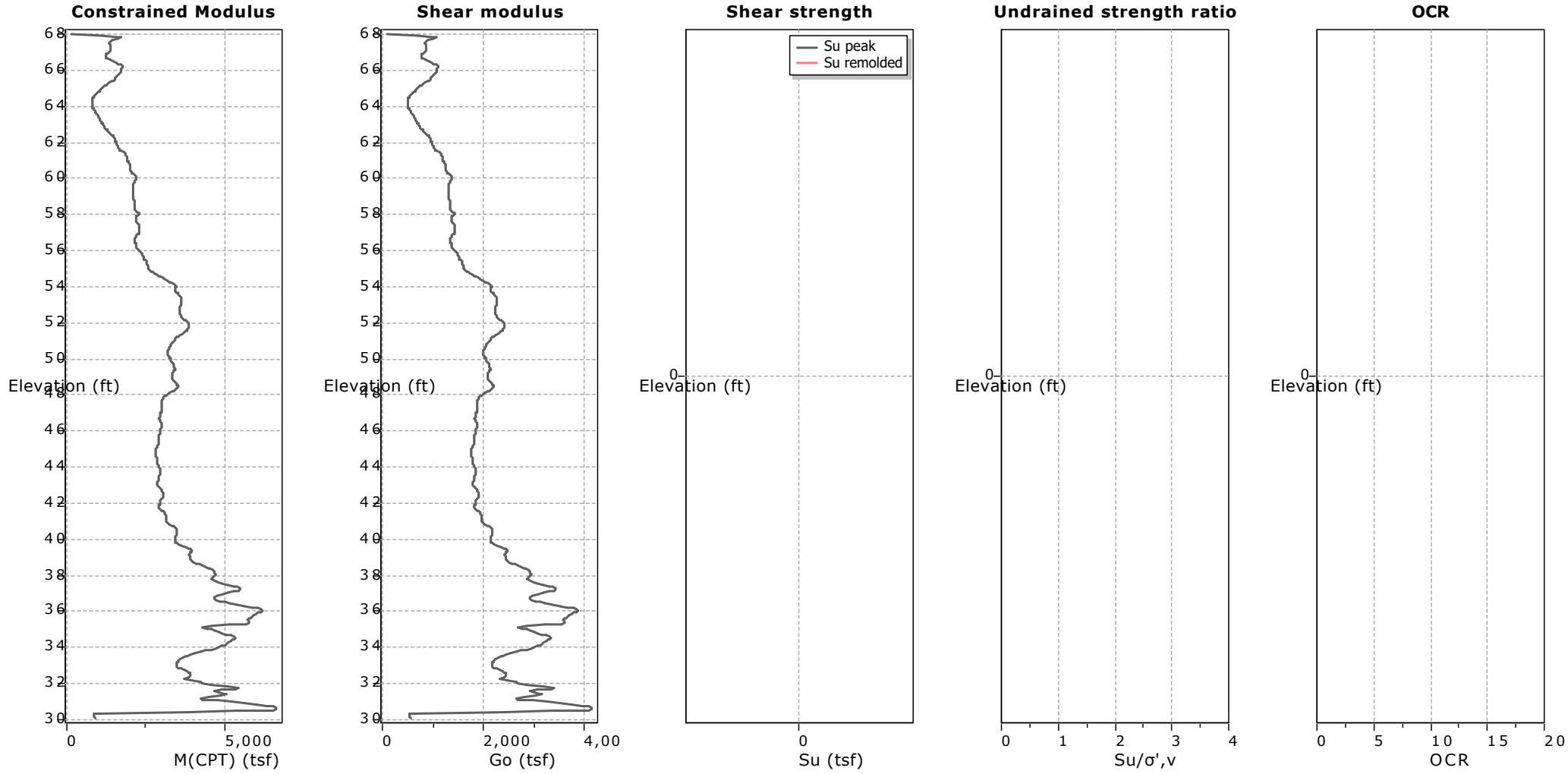
Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)
User defined estimation data

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**



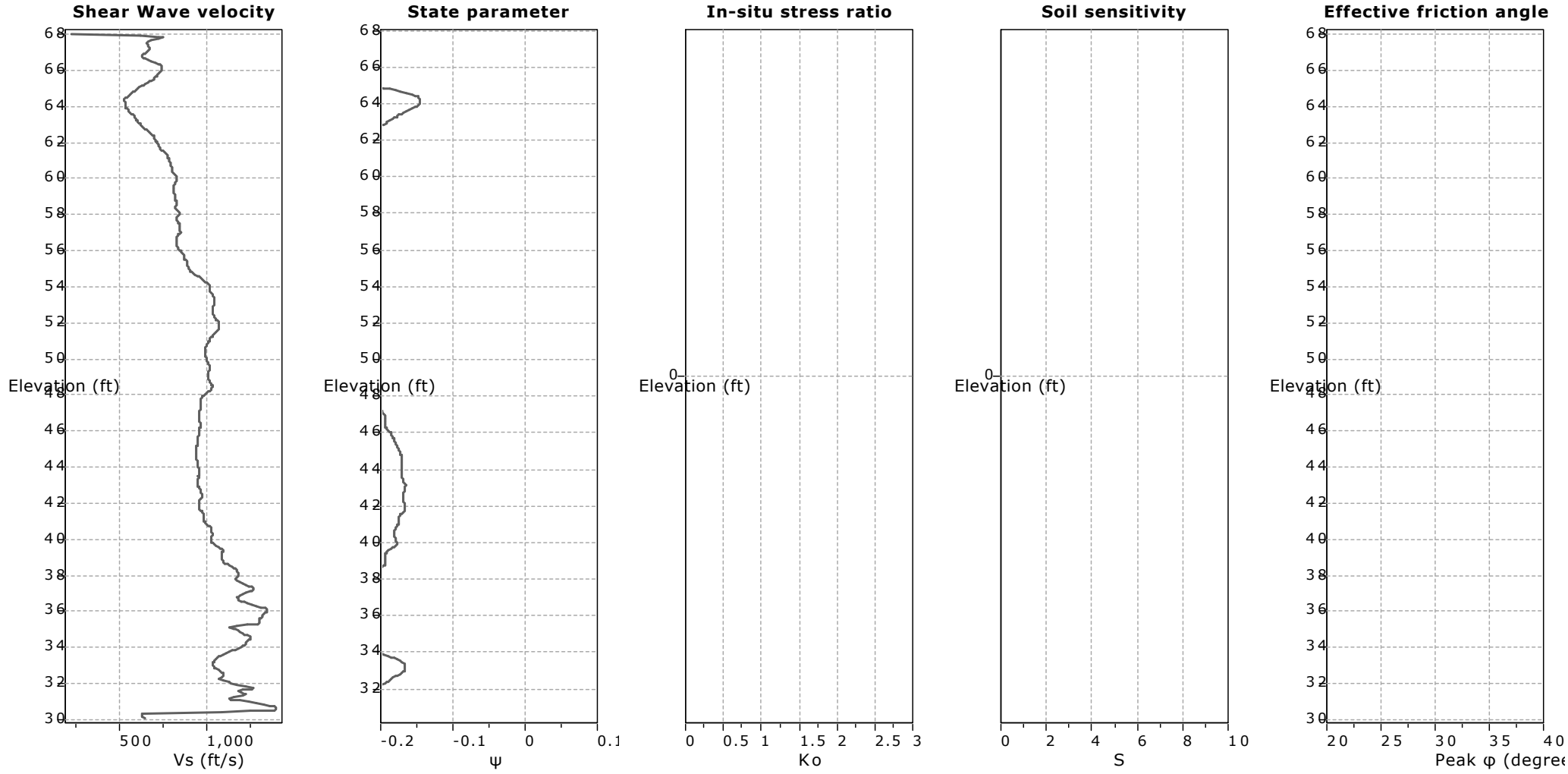
Calculation parameters

Constrained modulus: Based on variable alpha using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable alpha using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
User defined estimation data
Flat Dilatometer Test data

NOVA Services, Inc.
4373 Viewridge, Suite B
San Diego, CA 92123
858-292-7575

CPT-2
Total depth: 37.93 ft, Date: 10/10/2019
Surface Elevation: 68.00 ft
Cone Type: Vertek
Cone Operator: Kehoe Testing & Engineering

Project: **Leucadia Mixed Use**
Location: **Encinitas, CA**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

User defined estimation data

Presented below is a list of formulas used for the estimation of various soil properties. The formulas are presented in SI unit system and assume that all components are expressed in the same units.

:: Unit Weight, g (kN/m³) ::

$$g = g_w \cdot \left(0.27 \cdot \log(R_f) + 0.36 \cdot \log(\frac{q_t}{p_a}) + 1.236\right)$$

where g_w = water unit weight

:: Permeability, k (m/s) ::

$I_c < 3.27$ and $I_c > 1.00$ then $k = 10^{0.952-3.04 \cdot I_c}$

$I_c \leq 4.00$ and $I_c > 3.27$ then $k = 10^{-4.52-1.37 \cdot I_c}$

:: N_{SPT} (blows per 30 cm) ::

$$N_{60} = \left(\frac{q_c}{P_a}\right) \cdot \frac{1}{10^{1.1268-0.2817 \cdot I_c}}$$

$$N_{1(60)} = Q_{tn} \cdot \frac{1}{10^{1.1268-0.2817 \cdot I_c}}$$

:: Young's Modulus, Es (MPa) ::

$$(q_t - \sigma_v) \cdot 0.015 \cdot 10^{0.55 \cdot I_c + 1.68}$$

(applicable only to $I_c < I_{c_cutoff}$)

:: Relative Density, Dr (%) ::

$$100 \cdot \sqrt{\frac{Q_{tn}}{k_{DR}}}$$

(applicable only to SBT_n: 5, 6, 7 and 8 or $I_c < I_{c_cutoff}$)

:: State Parameter, ψ ::

$$\psi = 0.56 - 0.33 \cdot \log(Q_{tn,cs})$$

:: Peak drained friction angle, φ (°) ::

$$\varphi = 17.60 + 11 \cdot \log(Q_{tn})$$

(applicable only to SBT_n: 5, 6, 7 and 8)

:: 1-D constrained modulus, M (MPa) ::

If $I_c > 2.20$

$\alpha = 14$ for $Q_{tn} > 14$

$\alpha = Q_{tn}$ for $Q_{tn} \leq 14$

$M_{CPT} = \alpha \cdot (q_t - \sigma_v)$

If $I_c \leq 2.20$

$M_{CPT} = (q_t - \sigma_v) \cdot 0.0188 \cdot 10^{0.55 \cdot I_c + 1.68}$

:: Small strain shear Modulus, Go (MPa) ::

$$G_0 = (q_t - \sigma_v) \cdot 0.0188 \cdot 10^{0.55 \cdot I_c + 1.68}$$

:: Shear Wave Velocity, Vs (m/s) ::

$$V_s = \left(\frac{G_0}{\rho}\right)^{0.50}$$

:: Undrained peak shear strength, Su (kPa) ::

$N_{kt} = 10.50 + 7 \cdot \log(F_r)$ or user defined

$$S_u = \frac{(q_t - \sigma_v)}{N_{kt}}$$

(applicable only to SBT_n: 1, 2, 3, 4 and 9 or $I_c > I_{c_cutoff}$)

:: Remolded undrained shear strength, Su(rem) (kPa) ::

$S_{u(rem)} = f_s$ (applicable only to SBT_n: 1, 2, 3, 4 and 9 or $I_c > I_{c_cutoff}$)

:: Overconsolidation Ratio, OCR ::

$$k_{OCR} = \left[\frac{Q_{tn}^{0.20}}{0.25 \cdot (10.50 \cdot +7 \cdot \log(F_r))}\right]^{1.25}$$ or user defined

$OCR = k_{OCR} \cdot Q_{tn}$

(applicable only to SBT_n: 1, 2, 3, 4 and 9 or $I_c > I_{c_cutoff}$)

:: In situ Stress Ratio, Ko ::

$$K_O = (1 - \sin\varphi') \cdot OCR^{\sin\varphi'}$$

(applicable only to SBT_n: 1, 2, 3, 4 and 9 or $I_c > I_{c_cutoff}$)

:: Soil Sensitivity, S_t ::

$$S_t = \frac{N_S}{F_r}$$

(applicable only to SBT_n: 1, 2, 3, 4 and 9 or $I_c > I_{c_cutoff}$)

:: Effective Stress Friction Angle, φ<sun>' (°) ::

$$\varphi' = 29.5° \cdot B_q^{0.121} \cdot (0.256 + 0.336 \cdot B_q + \log Q_t)$$

(applicable for $0.10 < B_q < 1.00$)

References

• Robertson, P.K., Cabal K.L., Guide to Cone Penetration Testing for Geotechnical Engineering, Gregg Drilling & Testing, Inc., 5th Edition, November 2012

• Robertson, P.K., Interpretation of Cone Penetration Tests - a unified approach., Can. Geotech. J. 46(11): 1337–1355 (2009)

APPENDIX G
SITE-SPECIFIC GROUND MOTION HAZARD ANALYSIS

SITE - SPECIFIC SEISMIC GROUND MOTION HAZARD ANALYSIS

Subject: Report
Site - Specific Ground Motion Hazard Analysis Leucadia Mixed-Use Development, 1950 North Coast Highway 101

References: *ASCE/SEI 7-16 Minimum Design Loads and Associated Criteria for Buildings and Other Structures*, American Society of Civil Engineers, ISBN 9780784414248, 2017.

Pacific Earthquake Engineering Research Center, *Weighted Average of 2014 NGA West-2 GMPEs,* Seyhan, E., April 14, 2015.

Kramer, S., *Geotechnical Earthquake Engineering,* ISBN 978-81-317-0718-0, Pearson Education, Inc. 1996.

Pacific Earthquake Engineering Research Center (PEER), NGA-West2 Excel File of Five Horizontal Ground Motion Prediction Equations.

USGS, *Unified Hazard Tool*, found at: https://earthquake.usgs.gov/hazards/interactive/.

USGS, *Risk-Targeted Ground Motion Calculator*, found at: https://earthquake.usgs.gov/designmaps/rtgm/.

USGS, *Quaternary Fault and Fold Database of the United States*, found at: https://earthquake.usgs.gov/hazards/qfaults/.

USGS, 2013, *Open-File Report 2013-1165*, *Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3), Fault Section Data*

SEAOC/OSHPD, *Seismic Design Maps,* found at: https://seismicmaps.org/.

BACKGROUND

It has been known for some time[1] that seismic design parameters determined as described in ASCE 7-10 Chapter 11 have the potential to underestimate potential accelerations for structures founded on Site Classes D, E, and F. The recent code update of Sections 11 and 21 in ASCE 7-16 is intended to mitigate these shortcomings by requiring a Site-Specific Seismic Ground Motion Hazard Analysis (SGMHA). The SGMHA is used for quantitative estimations of ground motion characteristics at a specific site by incorporating several site-specific variables, principally distance from fault, site shear wave velocity, and fault geometry.

The SGMHA includes the following principal elements of analyses and evaluation:

- field determination of the site class of the subject site,
- Probabilistic Seismic Hazard Analysis (PSHA),
- Deterministic Seismic Hazard Analysis (DSHA), and
- determining design acceleration parameters using the resulting acceleration spectra.

[1] For example, see Kircher, C. A., *New Site-Specific Ground Motion Requirements of ASCE 7-16,* Proceedings, SEAOC Convention, 2017

The PSHA allows the uncertainties in size, location, and rate of recurrence of earthquakes and the variation of ground motion characteristics to be considered in the seismic evaluation. A DSHA involves development of an evaluation of ground motion hazard at a site based on a scenario in which an earthquake of a specified size occurring at a specified location occurs. This procedure provides a framework for evaluating worst-case ground motions (Kramer 1996).

NOVA has completed a SGMHA for the subject site in accordance with CBC 2019 and ASCE 7- 16. This report provides a summary of NOVA's procedure and results of the SGMHA for the site.

PROCEDURE

Site Classification

A seismic shear wave survey of the subject site was completed on March 7, 2020. The objective of this survey was to determine the site class based on shear wave velocities of the upper 30 meters (~100 feet) of the underlying soils, referred to as either V_{s30} or V_{100}.

The measured shear wave velocities were found to average 1,077.6 feet/second within the soils/bedrock of the upper 100 feet of the site. Results of this analysis are shown in Figure 1. Using Table 20.3-1 from ASCE 7-16, the site bedrock is determined to be Site Class D.

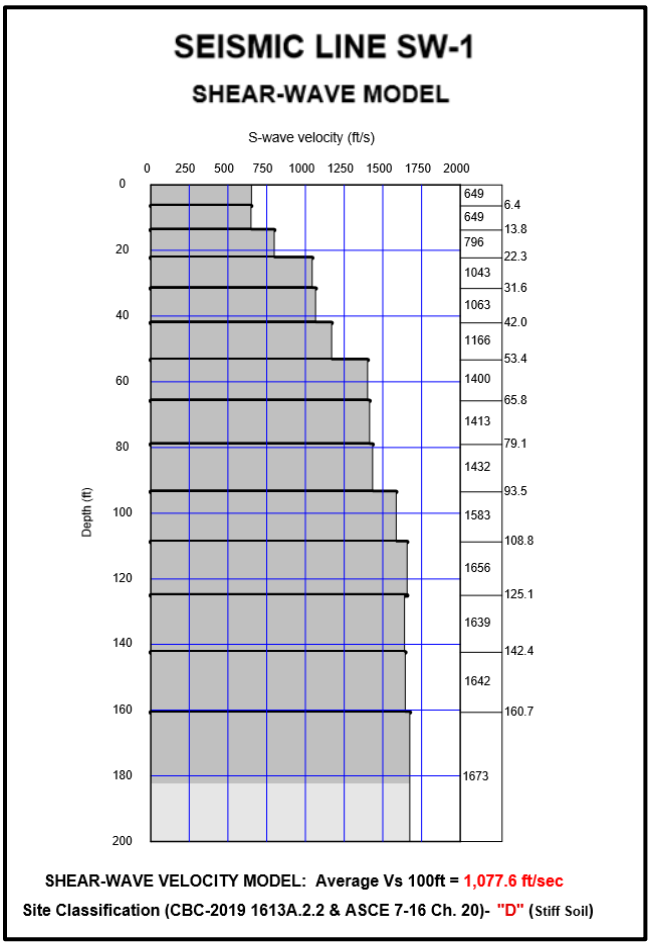


Figure 1. Shear Wave Velocities for the Subject Site

Probabilistic Hazard Analysis

The Probabilistic Seismic Hazard Analysis (PSHA) was completed using tools provided by USGS for this purpose. Site-specific parameters including site location by latitude and longitude (33.080933°N, -117.308435°W) site class, and probability of an earthquake with 2% exceedance in 50 years were input into the Unified Hazard Tool. Peak Ground Acceleration was selected for Spectral Period and the default Time Horizon of 2,475 years was used. The earthquake fault dataset selected for the calculations performed by the tool was Dynamic: Conterminous U.S. 2014 (update) (v4.2.0) Edition. Calculations provided spectral acceleration values for periods between 0 and 5 seconds.

The computed values were then input into the USGS Risk-Targeted Ground Motion (RTGM) Calculator and recorded at periods shown in Table 1. Maximum Direction Scale Factors were then applied using coefficients specified in ASCE 7-16 Section 21.2 for varying periods. Maximum Direction RTGM was then calculated as the product of RTGM and the Maximum Direction Scale Factor as shown in Table 1.

Table 1. Probabilistic Seismic Hazard Analysis Values

Period (s)	Risk Targeted GM (g)	Max Dir Scale Factor	Max Direction RTGM (g)
0	0.538	1.1	0.592
0.1	0.925	1.1	1.018
0.2	1.254	1.1	1.379
0.3	1.366	1.125	1.537
0.5	1.274	1.175	1.497
0.75	1.015	1.2375	1.256
1	0.824	1.3	1.071
2	0.425	1.35	0.574
3	0.269	1.4	0.377
4	0.186	1.45	0.270
5	0.138	1.5	0.207

Figure 2 (following page) provides the probabilistic site response based on the method described above.

Deterministic Hazard Analysis

The Deterministic Seismic Hazard Analysis (DSHA) located the nearest active fault to the site using the USGS KML fault database overlain on Google Earth. Other active faults in the region were evaluated to ensure the correct controlling fault was used in the analysis. The nearest active fault was the Silver Strand section of the Rose Canyon Fault Zone at a distance of 6.42 km from the site.

The PEER NGA-West2 excel file with five models calculating horizontal ground motion was used in the DSHA. The file provides the weighted average of peak values and the response spectra of the NGA-West2 horizontal ground motion prediction equations. NOVA used four of

the five available models in the evaluation. The following four were weighted at 25% contribution: Abrahamson et al., Boor et al., Campbell and Bozorgnia, and Chiou and Youngs.

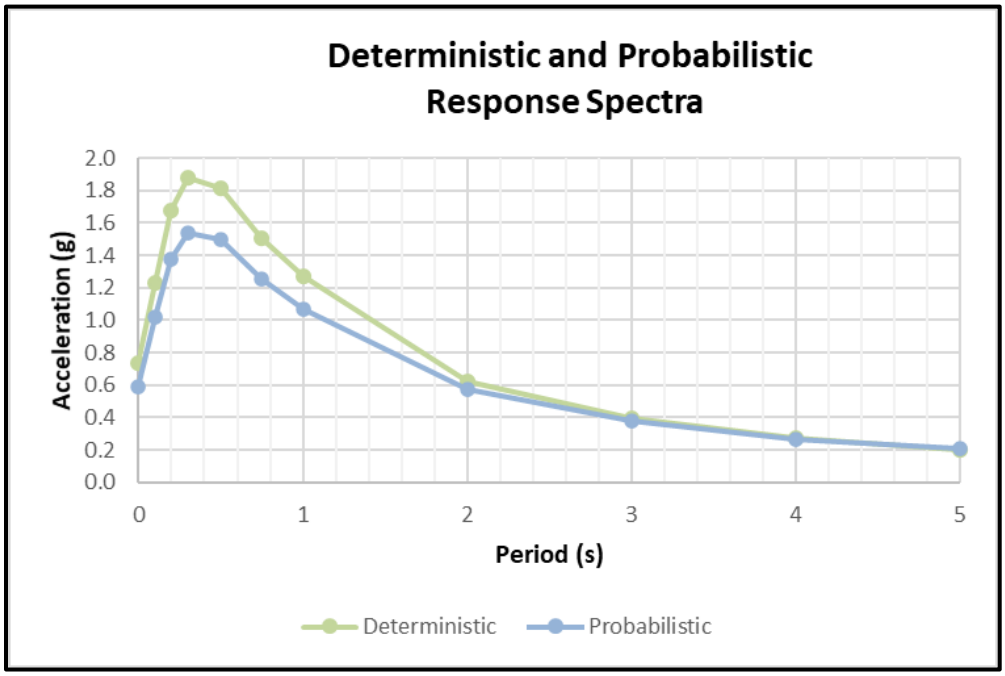


Figure 2. Probabilistic and Deterministic Seismic Accelerations

Fault-specific parameters inputted into this spreadsheet were retrieved from the USGS Fault Section Data Database (USGS 2013). Parameters specific to the Rose Canyon Fault included Lower Seismic Depth (7.7 km) and Dip Angle (90°), and Earthquake Magnitude. Earthquake magnitude was determined using deaggregation modeling provided by the USGS Unified Hazard Tool, which yielded a modal magnitude of 6.9.

Shear wave velocity in the upper 30 meters (V_{S30}), determined from the site seismic shear-wave survey, was also input into the model. The deterministic spectral response acceleration at each period was calculated as an 84th percentile 5% damped spectral response acceleration. These values were multiplied by the same Maximum Direction Scale Factors applied in the PSHA to produce the Maximum Direction Deterministic Spectral Accelerations. For simplicity of data presentation, the same periods were selected as those used in the PSHA.

The values for the deterministic accelerations are shown in Table 2. Figure 2 depicts the Deterministic and Probabilistic curves graphically. Per Section 21.2.3, the MCE_R is taken as the lesser of the spectral response accelerations from the PSHA and the DSHA; and therefore, the PSHA accelerations control for this site-specific analysis.

Table 2. Deterministic Seismic Hazard Analysis Values

Period (s)	84th Percentile 5% Dampening	Max Dir Scale Factor	Max Direction Deterministic Spectral Acceleration (g)
0	0.669	1.1	0.736
0.1	1.121	1.1	1.233
0.2	1.522	1.1	1.674
0.3	1.672	1.125	1.880
0.5	1.541	1.175	1.810
0.75	1.216	1.2375	1.505
1	0.975	1.3	1.267
2	0.458	1.35	0.619
3	0.284	1.4	0.398
4	0.189	1.45	0.274
5	0.132	1.5	0.198

Design Response Spectrum

Per ASCE 7-16 Section 21.3, the design spectral response acceleration at any period is calculated as 2/3 the MCE_R acceleration, or 2/3 of the probabilistic response spectra, in this case.

Per ASCE 7-16 Section 21.3, the spectral response calculated above, shall not be less than 80% of those determined in accordance with Section 11.4.6, where F_a is determined by Table 11.4-1, and $F_v = 2.5$ (based on Site Class D and $S_1>0.2$).

Figure 3 presents the design response spectrum and the 80% code-based design response spectrum, which confirms site-specific design accelerations exceed the 80% design response at all periods.

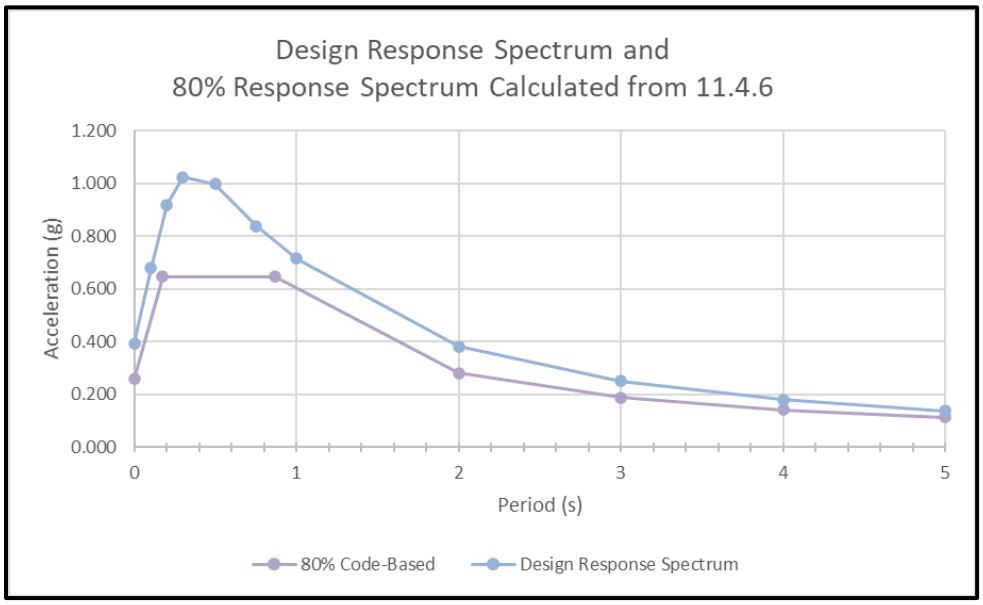


Figure 3. Design Response Spectrum and 80% Code- Based Design Response Spectrum

Design Acceleration Parameters

Following Section 21.4 of ASCE 7-16, S_{DS} was taken as 90% of the maximum spectral acceleration (S_a) from the PSHA over the periods 0.2s to 5s. S_{D1} was taken as the maximum product value of period and spectral acceleration for the period, calculated over the periods 1s through 5s. The parameters S_{MS} and S_{M1} were calculated as 1.5 times S_{DS} and S_{D1}, respectively.

The values calculated were confirmed not to be less than 80% of the values determined in accordance with Section 11.4.3 of ASCE 7-16 for S_{MS} and S_{M1} and Section 11.4.5 for S_{DS} and S_{D1}. The calculated values of S_{DS}, S_{D1}, S_{MS}, and S_{M1} are shown in Table 3.

Table 3. Site-Specific and Code-Based Design Acceleration Parameters

Parameter	Site Specific	OSHPD and Table 11.4.6
S_{MS}	1.38	1.26[1]
S_{M1}	1.15	0.79[2]
S_{DS}	0.92	0.84[3]
S_{D1}	0.77	0.53[4]
S_S	1.18	1.18[5]
S_1	0.42	0.42[5]
Fa	N/A	1.07[6]
Fv	N/A	1.88[6]

[1] Equation 11.4-1 [2] Equation 11.4-2 [3] Equation 11. 4-3
[4] Equation 11.4-4 [5] Source OSHPD Seismic Design Maps https://www.seismicmaps.org/
[6] Linear interpolation of Table 11.4.6

Maximum Considered Earthquake Geometric Mean (MCE_G) Peak Ground Acceleration

The probabilistic peak ground acceleration was determined according to Section 21.5.1 using the Risk Targeting Ground Motion Tool for the Unified Hazard Ground Motion at a period of 0s. This calculator presents the geometric mean peak ground acceleration with a 2% probability of exceedance within a 50-year period. The resulting acceleration is 0.59 g.

The deterministic peak ground acceleration was determined according to Section 21.5.2 and calculated as the largest 84th percentile geometric mean peak ground acceleration for characteristic earthquakes on all known active faults within the site region. PGA was calculated as the point in the DSHA where the period is equal to 0s, resulting in spectral acceleration of 0.67 g.

The site-specific peak ground acceleration (PGA_M) was taken as the lesser of the probabilistic and deterministic peak ground accelerations. In accordance with code, it was confirmed that PGA_M was not taken as less than 80% of PGA_M determined from Eq. 11.8-1.

Table 4. Calculated and Code Based MCE_G

Parameter	Calculated	OSHPD	80% OSHPD
MCE_G	0.59	0.58	0.46

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX G
STORMWATER INTAKE FORM AND
STORM WATER QUALITY MANAGEMENT PLAN

THIS PAGE INTENTIONALLY LEFT BLANK

CITY OF ENCINITAS
STORMWATER INTAKE FORM AND PRIORITY DEVELOPMENT PROJECT STORMWATER QUALITY MANAGEMENT PLAN (SWQMP)

FOR:

LEUCADIA 101 MIXED USE

1900 and 1950 N COAST HIGHWAY 101
ENCINITAS, CA 92024
APN 216-041-06, 20 and 21

PREPARED BY:

WILLIAM J. SUITER, RCE 68964
PASCO LARET SUITER & ASSOCIATES
535 NORTH HIGHWAY 101, SUITE A
SOLANA BEACH, CA 92075
858-259-8212

PREPARED FOR:

ENCINITAS BEACH LAND VENTURE I, LLC
674 VIA DE LA VALLE , SUITE 310
SOLANA BEACH 92075
858-436-3600

DATE OF SWQMP:

MAY 2020
REVISED: SEPTEMBER 2020
REVISED: DECEMBER 2020
REVISED: MAY 2021
REVISED: JULY 2021

GRADING PLAN PREPARED BY:

WILLIAM J. SUITER, RCE 68964
PASCO LARET SUITER & ASSOCIATES
535 NORTH HIGHWAY 101, SUITE A
SOLANA BEACH, CA 92075
858-259-8212

TABLE OF CONTENTS

TABLE OF CONTENTS 1
PREPARER'S CERTIFICATION 3
PROJECT OWNER'S CERTIFICATION 4
SUBMITTAL RECORD 5
PROJECT IDENTIFICATION 6
DETERMINATION OF PROJECT STATUS AND REQUIREMENTS 6
SITE INFORMATION CHECKLIST 9
SOURCE CONTROL BMP CHECKLIST 17
SITE DESIGN BMP CHECKLIST 18
PDP STRUCTURAL BMPS 19
STRUCTURAL BMP SUMMARY INFORMATION 20
ATTACHMENT 1 - BACKUP FOR PDP POLLUTANT CONTROL BMPS 31
ATTACHMENT 3 - STRUCTURAL BMP MAINTENANCE INFORMATION 34
ATTACHMENT 4 - COPY OF PLAN SHEETS SHOWING PERMANENT STORM WATER BMPS 36

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the Priority Development Project (PDP) requirements of the City of Encinitas BMP Design Manual, which is a design manual for compliance with local City of Encinitas and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the City Engineer has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP Storm Water Quality Management Plan (SWQMP) by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

Engineer's Seal

Engineer of Work's Signature, PE Number

William J. Suiter, RCE 68964
Print Name

Pasco, Laret, Suiter & Associates
Company

7/21/2021
Date

PROJECT OWNER'S CERTIFICATION

This PDP SWQMP has been prepared for Encinitas Beach Land Venture I, LLC by Pasco Laret Suiter & Associates. The PDP SWQMP is intended to comply with the PDP requirements of the City of Encinitas BMP Design Manual, which is a design manual for compliance with local City of Encinitas and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

Project Owner's Signature

Lawrence Jedel

Print Name

Encinitas Beach Land Venture I, LLC

Company

3/9/21

Date

SUBMITTAL RECORD

Use this table to keep a record of submittals of this PDP SWQMP. Each time the PDP SWQMP is re-submitted, provide the date and status of the project. In the fourth column, summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Summary of Changes
1	May 2020	☑ Preliminary Design / ☐ Planning/ CEQA ☐ Final Design	
2	Sept 2020	☑ Preliminary Design / Planning/ CEQA Final Design	
3	Dec 2020	☑ Preliminary Design / Planning/ CEQA Final Design	
4	May 2021	☑ Preliminary Design / Planning/ CEQA Final Design	
5	July 2021	☑ Preliminary Design / Planning/ CEQA Final Design	

PROJECT IDENTIFICATION

Project/Applicant Name: Encinitas Beach Land Venture I, LLC	
Permit/Application Number:	Date: July 2021
Site Address: 1900 and 1950 N Coast Hwy 101, Encinitas CA 92024	APN: 216-041-06, 20 and 21

Scope of work/project description:

The project proposes to demolish the existing development and construct a new apartment complex with approximately 94 units, boutique hotel, retail units, structured parking, access drive, hardscape and landscape, and associated improvements including storm water biofiltration basins to meet the requirements for pollutant control and an underground storage vault to comply with hydromodification management flow control and to mitigate the 100-year storm event peak discharge rate.

Due to the timing of construction, the right-of-way improvements directly in front of the project site, per the plans prepared by Michael Baker International, will be built by Encinitas Beach Land Venture I, LLC. Plans prepared by Michael Baker International Inc. at this time do not indicate a clear strategy on how to treat all the street runoff for the portion of right-of-way improvements this project proposes to build. Other areas of the City of Encintas' capital improvement project, 101 Streetscape, proposes to utilize a Green Streets design strategy. Due to conflicts with existing utilities, the project proposes to install two Modular Wetlands System units to treat the street runoff, in lieu of Green Streets improvements.

DETERMINATION OF PROJECT STATUS AND REQUIREMENTS

This form will identify permanent, post construction BMP requirements. Refer to City of Encinitas Stormwater BMP Design Manual for guidance.

Step 1: Is the project a "development project"? Development projects are defined as "construction, rehabilitation, redevelopment, or reconstruction of any public or private projects". See Section 1.3 and Table 1-2 of the manual for guidance. For example, interior remodels, roof replacements, and electrical and plumbing work are not development projects.	☑Yes	***Go to Step 2.***
	☐ No	***Stop.*** Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.

If "No", provide discussion / justification explaining why the project is not a "development project":

Step 2: Complete questions below for Project Type Determination.

The project is (select one): ☐ New Development ☑ Redevelopment

The total proposed, newly created and/or replaced impervious area is: 169,082 ft^2

Is the project in any of the following categories, (a) through (f) below?			
Yes ☑	No ☐	(a)	New development projects or redevelopment projects that create and/or replaced 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects.
Yes ☑	No ☐	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects.
Yes ☑	No ☐	(c)	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ☐	No ☑	(d)	New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharge directly to an Environmentally Sensitive Area (ESA). "Discharge directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and SDRWQCB; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and SDRWQCB; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See manual Section 1.4.2 for additional guidance.
Yes ☐	No ☑	(e)	New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (ii) Retail gasoline outlets. This category includes retail gasoline outlets that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic of 100 or more vehicles per day.
Yes ☑	No ☐	(f)	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. *Note: See manual Section 1.4.2 for additional guidance.*

Does the project meet the definition of one or more of the PDP categories (a) through (f) listed above?

☑ Yes – **The project is a <u>Priority Development Project</u>, the applicant shall provide PDP Post Construction BMPs and *continue to Step 3*.**

□No – **The project is a <u>Standard or Basic Project</u>. *Stop here and complete the "City of Encinitas Stormwater Intake Form for All Developments and Standard Projects SWQMP".***

The following is for *<u>redevelopment PDPs</u>* only:
The area of existing (pre-project) impervious area at the project site is: <u>76,819</u> ft^2 (A)
The total proposed newly created or replaced impervious area is: <u>143,659</u> ft^2 (B)
Percent impervious surface created or replaced (B/A)*100: <u>187 %</u>
The percent impervious surface created or replaced is (select one based on the above calculation):

□ Less than or equal to fifty percent (50%) – only new and/or replaced impervious areas are considered PDP subject to treatment and HMP criteria
OR

☑ Greater than fifty percent (50%) – the entire site is a PDP; treatment and HMP criteria apply to entire site regardless of whether it is replaced

<u>Step 3 (PDPs only):</u> Do hydromodification control requirements apply? See Section 1.6 of the BMP Design Manual for guidance.	☑ Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). ***Go to Step 4.***
	□ No	PDP structural BMPs required for pollutant control (Chapter 5) only. Provide brief discussion of exemption to hydromodification control below. ***Go to "Site Information Checklist"***

Discussion / justification if hydromodification control requirements do <u>not</u> apply:

<u>Step 4 (PDPs subject to treatment and hydromodification controls):</u> Does protection of critical coarse sediment yield areas apply based on review of City of Encinitas Potential Critical Coarse Sediment Yield Area Map? See Section 6.2 of the BMP Design Manual for guidance.	□ Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). ***Go to "Site Information Checklist"***
	☑ No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. ***Go to "Site Information Checklist"***

Discussion / justification if management measures <u>not</u> required for protection of critical coarse sediment yield areas:

Pursuant to the City of Encinitas Potential Critical Coarse Sediment Yield Area GIS layer, there are no potential critical coarse sediment yield areas on or upstream of the project site. Refer to the exhibit located in Attachment 2b.

SITE INFORMATION CHECKLIST

Project's Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	Carlsbad HU, San Marcos HA, Batquitos HSA, 904.51
Parcel Area (Total area of Assessor's Parcel(s) associated with the project)	3.79 Acres (165,107 Square Feet)
Area to be Disturbed by the Project (Project Area)	4.56 Acres (198,534 Square Feet)
Project Proposed Impervious Area (Subset of Project Area)	3.66 Acres (159,288 Square Feet)
Project Proposed Pervious Area (Subset of Project Area)	0.90 Acres (39,246 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

Description of Existing Site Condition

Current status of the site (select all that apply):

☑ Existing development
☐ Previously graded but not built out
☐ Demolition completed without new construction
☐ Agricultural or other non-impervious use
☐ Vacant, undeveloped/natural

Description / Additional Information:

The existing site is currently developed and consists of commercial buildings, paved access drives and parking, open space, hardscape and landscape.

Existing Land Cover includes (select all that apply):

☑ Vegetative Cover
☑ Non-Vegetated Pervious Areas
☑ Impervious Areas

Description / Additional Information:

Underlying soil belongs to Hydrologic Soil Group (select all that apply):

☐ NRCS Type A
☑ NRCS Type B
☐ NRCS Type C
☐ NRCS Type D

Approximate Depth to Groundwater (GW):

☐ GW Depth < 5 feet

☐ 5 feet < GW Depth < 10 feet

☐ 10 feet < GW Depth < 20 feet

☑ GW Depth > 20 feet

Existing Natural Hydrologic Features (select all that apply):

☐ Watercourses

☐ Seeps

☐ Springs

☐ Wetlands

☑ None

Description / Additional Information:

Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

1) Is existing drainage conveyance natural or urban?
2) Is runoff from offsite conveyed through the site? If yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site.
3) Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels. And
4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

In the existing condition, storm water runoff from the site generally flows overland and in onsite storm drain easterly to North Coast Highway 101. There is offsite run-on from the hillside along the westerly and southerly boundaries.

An existing high point in North Coast Highway 101 is located approximately at the midpoint of the property's easterly boundary. Surface runoff from the property that enters the right-of-way north of the high point will continue to surface flow northerly and enters the public storm drain system within the La Costa Avenue and North Coast Highway 101 intersection. The storm drain system then conveys captured flows to the east side Carlsbad Boulevard into the Batiquitos Lagoon and ultimately the Pacific Ocean. Surface runoff from the property that enters the right-of-way south of the high point will surface flow southerly and enters a separate public storm drain system that conveys captured flow northerly to an extended detention basin located on the west side of Carlsbad Boulevard which discharges to Batiquitos Lagoon and ultimately the Pacific Ocean. The onsite storm drain connects to the public storm drain located on the west side of North Coast Highway 101 which also drains to the extended detention basin on the west side of Carlsbad Boulevard which discharges to Batiquitos Lagoon and ultimately the Pacific Ocean.

Drainage Basin	Area (ac)	Q100 (cfs)
POC-1	4.13	14.65

Refer to the "Preliminary Hydrology Study for Leucadia 101 Mixed Use" prepared by Pasco Laret Suiter & Associates dated July 2021.

Description of Proposed Site Development

Project Description / Proposed Land Use and/or Activities:

The project proposes to demolish the existing development and construct a new apartment complex with approximately 94 units, boutique hotel, retail units, structured parking, access drive, hardscape and landscape, and associated improvements including storm water biofiltration basins to meet the requirements for pollutant control and an underground storage vault to comply with hydromodification management flow control and to mitigate the 100-year storm event peak discharge rate.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

Proposed impervious features include the buildings, parking areas, access drive and hardscape.

List/describe proposed pervious features of the project (e.g., landscape areas):

Proposed pervious features include landscape areas and biofiltration basins.

Does the project include grading and changes to site topography?

☑ Yes
☐ No

Description / Additional Information:

The project site will be graded to create pads suitable for the construction of structures, improvements and associated underground utilities.

Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

☑ Yes
☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

In the proposed condition, storm water runoff will be collected by proposed storm drain and conveyed to biofiltration basins located throughout the site. Discharge from the biofiltration basins will flow to the proposed underground storage vault located in the northeastern corner of the project site. The vault will discharge to a proposed 18" RCP which will connect to the back of the existing curb inlet located north of the project along North Coast Highway 101. The existing curb outlets to an 18" RCP then transitions to a 24" RCP that conveys flows northerly and into the Batiquitos Lagoon on the east side of Carlsbad Boulevard. Offsite storm water that runs onto the site along the westerly boundary will be intercepted via a new concrete ditch and routed to proposed storm drain which runs along the northern boundary of the site and connects to the underground vault outlet pipe and continues as described above. Offsite run-on along the southern boundary will be captured in a new concrete ditch and discharged to North Coast Highway 101 via sidewalk underdrain which will enter the public storm drain system and be conveyed to the extended detention basin on the west side of Carlsbad Boulevard as in the existing condition.

The biofiltration basins and underground storage vault are designed to provide pollutant control treatment and hydromodification management flow control to meet the requirements of the California Regional Water Quality Control Board San Diego Region municipal storm water permit (Order No. R9-2013-0001, referred to as the MS4 Permit). The underground storage vault will also provide mitigation for the 100-year storm event peak discharge rate.

Drainage Basin	Existing Condition		Proposed Detained Condition	
	Area (ac)	Q100 (cfs)	Area (ac)	Q100 (cfs)
POC-1	4.13	14.65	4.13	1.17

Refer to the "Preliminary Hydrology Study for the Leucadia 101 Mixed Use" prepared by Pasco Laret Suiter & Associates dated July 2021.

In the proposed condition, storm water runoff in the right-of-way will be collected by proposed curb inlet type Modular Wetlands System units. Discharge from the southerly Modular Wetlands System unit will flow to an existing curb inlet which conveys flow northerly towards the existing extended basin on the west side of Carlsbad Boulevard. The northerly Modular Wetlands System unit will flow to the proposed 18" RCP serving as the outlet for the proposed on-site underground storage vault and towards the east side of Carlsbad Boulevard (as described below).

Identification and Narrative of Receiving Water and Pollutants of Concern
Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable): On-site storm water runoff confluences with off-site run-on collected from the westerly boundary and discharges through a single point at the northeast corner of the project site to N Coast Highway 101. The discharge will flow through a new 18" storm drain and connects to the back of an existing concrete curb inlet (constructed per Drawing No. 6169-I) located at the southwest corner of the La Costa Avenue and N. Coast Highway 101 intersection. Discharge entering the curb inlet flows to the east through an 18" storm drain into a second curb inlet in the center median of N. Coast Highway 101. Discharge then flows to the north through an 18" storm drain which upsizes to a 24" before it discharges on the east side of Carlsbad Boulevard to Batiquitos Lagoon and ultimately the Pacific Ocean. Offsite run-on along the southern boundary will be captured in a new concrete ditch and discharged to North Coast Highway via sidewalk underdrain which will enter the public storm drain system and be conveyed to the existing extended basin on the west side of Carlsbad Boulevard which discharges to the Batiquitos Lagoon and ultimately the Pacific Ocean.
List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs / WQIP Highest Priority Pollutant
Batiquitos Lagoon	Toxicity	TMDL Estimated 2027

Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

Pollutant	Not Applicable to the Project Site	Expected from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment			
Nutrients			
Heavy Metals			
Organic Compounds			
Trash & Debris			

Oxygen Demanding Substances			
Oil & Grease			
Bacteria & Viruses			
Pesticides			

Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)?

☑ Yes, hydromodification management flow control structural BMPs required.

☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.

☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.

☐ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.

Description / Additional Information (to be provided if a 'No' answer has been selected above):

Critical Coarse Sediment Yield Areas*

*This section only required if hydromodification management requirements apply

Based on the maps provided within the City of Encinitas Engineering Design Manual dated January 2016, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes
☑ No, no critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite
☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment
☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what was the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite
☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the SWQMP.
☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWQMP Exhibit.

Discussion / Additional Information:

Flow Control for Post-Project Runoff*

*This section only required if hydromodification management requirements apply

List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.

There is one (1) POC for the project, POC-1. POC-1 is located near the northeastern corner of the project site. Refer the exhibit located in Attachment 2a for the POC location.

Has a geomorphic assessment been performed for the receiving channel(s)?

☑ No, the low flow threshold is 0.1Q2 (default low flow threshold)
☐ Yes, the result is low flow threshold 0.1Q2
☐ Yes, the result is low flow threshold 0.3Q2
☐ Yes, the result is low flow threshold 0.5Q2

If a geomorphic assessment has been performed, provide title, date, and preparer:

Discussion / Additional Information: (optional)

Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.

SOURCE CONTROL BMP CHECKLIST

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	☑ Yes	☐ No	☐ N/A
SC-2 Storm Drain Stenciling or Signage	☑ Yes	☐ No	☐ N/A
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☑ N/A
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☐ Yes	☐ No	☑ N/A
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☑ Yes	☐ No	☐ N/A
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
☑ Onsite storm drain inlets	☑ Yes	☐ No	☐ N/A
☑ Interior floor drains and elevator shaft sump pumps drain to sewer	☑ Yes	☐ No	☐ N/A
☑ Interior parking garages drain to sewer	☑ Yes	☐ No	☐ N/A
☐ Need for future indoor & structural pest control	☐ Yes	☐ No	☑ N/A
☑ Landscape/outdoor pesticide use	☑ Yes	☐ No	☐ N/A
☑ Pools, spas, ponds, decorative fountains, and other water features	☑ Yes	☐ No	☐ N/A
☑ Food service	☑ Yes	☐ No	☐ N/A
☑ Refuse/Trash areas must be covered	☑ Yes	☐ No	☐ N/A
☐ Industrial processes	☐ Yes	☐ No	☑ N/A
☐ Outdoor storage of equipment or materials must be covered	☐ Yes	☐ No	☑ N/A
☐ Vehicle and equipment cleaning	☐ Yes	☐ No	☑ N/A
☐ Vehicle/equipment repair and maintenance	☐ Yes	☐ No	☑ N/A
☐ Fuel dispensing areas	☐ Yes	☐ No	☑ N/A
☐ Loading docks	☐ Yes	☐ No	☑ N/A
☑ Fire sprinkler test water	☑ Yes	☐ No	☐ N/A
☐ Miscellaneous drain or wash water	☐ Yes	☐ No	☑ N/A
☑ Plazas, sidewalks, and parking lots	☑ Yes	☐ No	☐ N/A

Discussion / justification if SC-1 through SC-6 not implemented. Justification must be provided for ALL "No" answers shown above.

SITE DESIGN BMP CHECKLIST

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	☐ Yes	☐ No	☑ N/A
SD-2 Conserve Natural Areas, Soils, and Vegetation	☐ Yes	☑ No	☐ N/A
SD-3 Minimize Impervious Area	☑ Yes	☐ No	☐ N/A
SD-4 Minimize Soil Compaction	☑ Yes	☐ No	☐ N/A
SD-5 Impervious Area Dispersion - Directly Connected Impervious Areas (e.g. roof downspouts connected to street) are not allowed	☑ Yes	☐ No	☐ N/A
SD-6 Runoff Collection	☑ Yes	☐ No	☐ N/A
SD-7 Landscaping with Native or Drought Tolerant Species	☑ Yes	☐ No	☐ N/A
SD-8 Harvesting and Using Precipitation	☐ Yes	☑ No	☐ N/A

Discussion / justification if SD-1 through SD-8 not implemented. Justification must be provided for ALL "No" answers shown above.

SD-2: The open space area in the southwestern portion of the site is a steep slope that will be graded to accommodate construction of buildings and improvements.

SD-8: Harvesting and using precipitation is not a feasible BMP for this project. Refer to Attachment 1c.

PDP STRUCTURAL BMPS

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s).

PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity (see Section 7 of the BMP Design Manual). The local jurisdiction will confirm the maintenance annually.

Use this section to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).

Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the BMP Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate.

DMAs 1-10 / BMPs 1-10 and 14

Step 1A: The DMA is not self-mitigating, de minimis, or self-retaining.

Step 1B: There are no site design BMPs proposed for the project for which the runoff factor can be adjusted.

Step 2: Harvest and use is not feasible. Refer to Attachment 1c.

Step 3: Pursuant to the geotechnical report and I-8 form, infiltration is feasible, however due to its potential to result in an increased risk of slope failure of existing slopes and nearby coastal bluff zones, infiltration is not suitable. Refer to Attachment 1d for the I-8 form.

Step 4: Biofiltration BMPs (BF-1) have been selected and sized per the design criteria to meet pollutant control requirements and an underground storage vault has been selected and sized per the design criteria to meet hydromodification management flow control requirements.

Right-Of-Way Improvements

Due to the timing of construction, the right-of-way improvements directly in front of the project site, per the plans prepared by Michael Baker International, will be built by Encinitas Beach Land Venture I, LLC. Plans prepared by Michael Baker International Inc. at this time do not indicate a clear strategy on how to treat all the street runoff for the portion of right-of-way improvements this project proposes to build. Other areas of the City of Encintas' capital improvement project, 101 Streetscape, proposes to utilize a Green Streets design strategy. Due to conflicts with existing utilities, the project proposes to install two Modular Wetlands System units to treat the street runoff, in lieu of Green Streets improvements.

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 1	DMA Nos: 1
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 2	DMA Nos: 2
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 3	DMA Nos: 3
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 4	DMA Nos: 4
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 5	DMA Nos: 5
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 6	DMA Nos: 6
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 7	DMA Nos: 7
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 8	DMA Nos: 8
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 9	DMA Nos: 9
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMPs 10	DMA Nos: 10
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) ☑ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) □ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: ☑ Pollutant control only □ Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

STRUCTURAL BMP SUMMARY INFORMATION

Structural BMP ID No: BMP-14	DMA No: 1-10
Construction Plan Sheet No:	
Type of structural BMP: □ Retention by harvest and use (HU-1) □ Retention by infiltration basin (INF-1) □ Retention by bioretention (INF-2) □ Retention by permeable pavement (INF-3) □ Partial retention by biofiltration with partial retention (PR-1) □ Biofiltration (BF-1) □ Biofiltration with Nutrient Sensitive Media Design (BF-2) □ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F □ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) □ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) □ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☑ Detention pond or vault for hydromodification management □ Other (describe in discussion section below)	
Purpose: □ Pollutant control only ☑Hydromodification control only □ Combined pollutant control and hydromodification control □ Pre-treatment/forebay for another structural BMP □ Other (describe in discussion section below)	
Who will inspect and certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms required by the City Engineer (See Section 1.12 of the BMP Design Manual)	William J. Suiter, RCE 68964 Pasco Laret Suiter & Associates 535 North Highway 101, Suite A Solana Beach, CA 92075 858-259-8212
Who will be the final owner of this BMP?	Encinitas Beach Land Venture I, LLC
Who will maintain this BMP into perpetuity?	Encinitas Beach Land Venture I, LLC
What is the funding mechanism for maintenance?	Encinitas Beach Land Venture I, LLC

ATTACHMENT 1 - BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which items are included behind this cover sheet:

Attachment	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	☑ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1a	☑ Included on DMA Exhibit in Attachment 1a ☐ Included as Attachment 1b, separate from DMA Exhibit
Attachment 1c	Form I-7, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form I-7.	☑ Included ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form I-8, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form I-8.	☑ Included ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	☑ Included

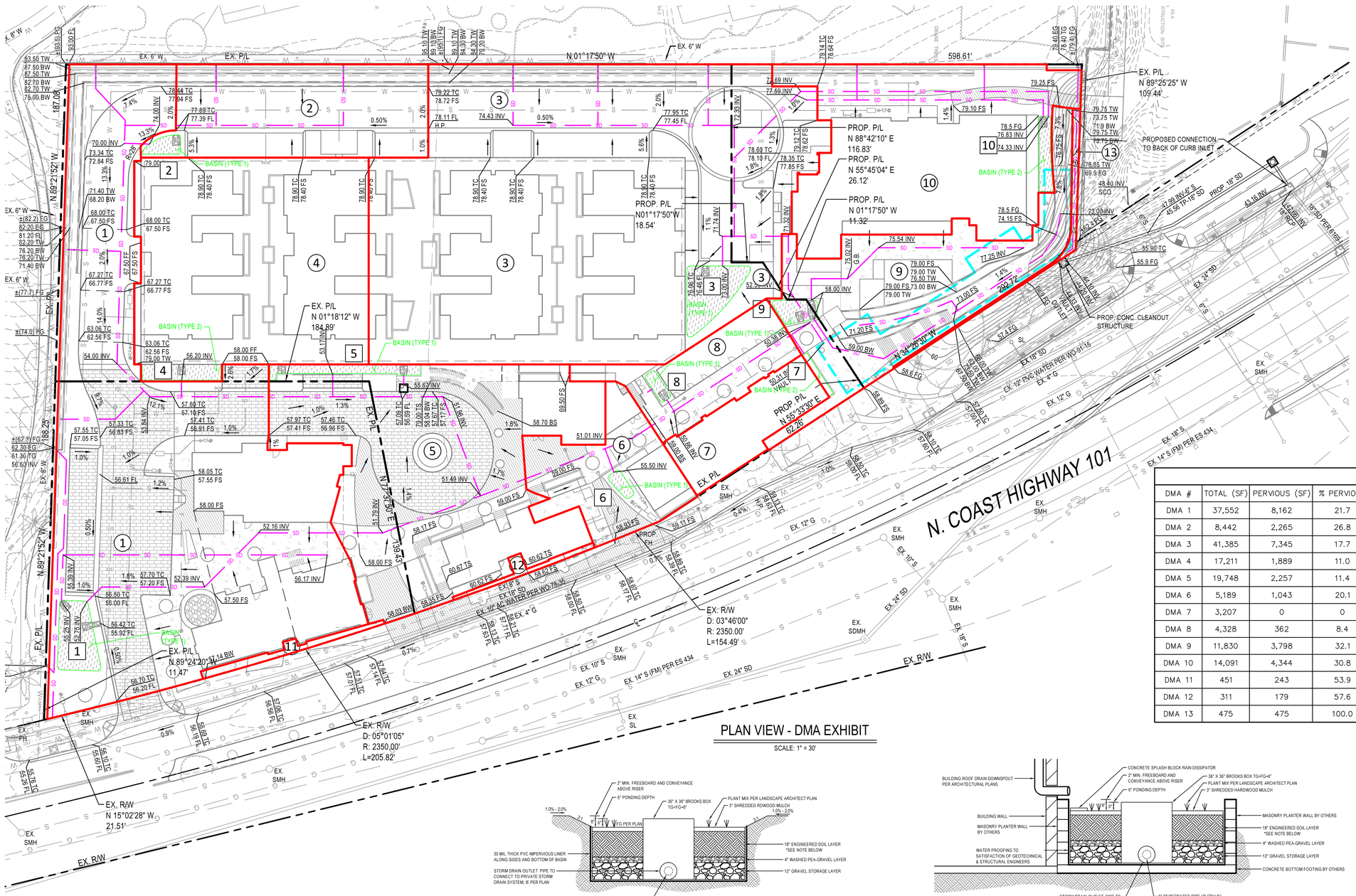
Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography and impervious areas
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed demolition
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- ☐ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form I-3B)
- ☐ Structural BMPs (identify location, type of BMP, and size/detail)

DMA EXHIBIT

FENWAY N. HWY 101



PLAN VIEW - DMA EXHIBIT

SCALE: 1" = 30'

LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- CENTER LINE OF ROAD
- DRAINAGE BOUNDARY
- PROPOSED BIOFILTRATION BASIN OR FLOW THROUGH PLANTER
- PROPOSED STORM DRAIN LINE — SD
- PROPOSED UNDERGROUND STORMTRAP DETENTION SYSTEM
- DMA AREA # — X
- BMP # — X
- PROPOSED BMP BIOFILTRATION BASIN (TYPE 1 OR TYPE 2) PLANTER PER DETAILS HEREON.

AREA CALCULATIONS

TOTAL SITE AREA:	165,107 SF (3.790 AC)
AREA DISTURBED BY PROJECT:	165,107 SF (3.790 AC)
EXISTING IMPERVIOUS AREA:	76,820 SF (1.764 AC)
PROPOSED IMPERVIOUS AREA:	143,659 SF (3.298 AC)
INCREASE IMPERVIOUS AREA:	66,839 SF (1.534 AC)

SOIL TYPE INFORMATION

SOIL: TYPE B HYDROLOGIC SOILS PER OBSERVED ONSITE / FIELD INFILTRATION RATES PROVIDED IN "GEOTECHNICAL INVESTIGATION - LEUCADIA MIXED-USE " PREPARED BY NOVA SERVICES, INC. AND ONSITE SOIL CLASSIFICATION PROVIDED BY NOVA SERVICES, INC.

GROUNDWATER INFORMATION

GROUNDWATER NOT ENCOUNTERED IN ANY OF THE BORINGS CONDUCTED BY NOVA SERVICES, INC., ACCORDING TO SECTION 4.2.3 OF THE PRELIMINARY GEOTECHNICAL STUDY PREPARED BY NOVA SERVICES, INC. CONCLUSION IN REPORT STATES THAT GROUNDWATER "THUS OCCURS BELOW ABOUT El + 10 MSL, AT LEAST 48 FEET BELOW THE FINISHED FLOOR OF THE LOWEST PARKING LEVEL (SET +58 MSL)."

TREATMENT CONTROL BMPS

BIOFILTRATION BF-1

POTENTIAL POLLUTANT SOURCE AREAS

TRASH DUMPESTERS, ROOFS, PARKING LOTS, LANDSCAPING, RESTAURANT(S), WATER FEATURES, AND OUTDOOR STORAGE AREAS.

SOURCE CONTROLS

SC-1: PREVENTION OF ILLICIT DISCHARGES INTO THE MS4
SC-2: STORM DRAIN STENCILING OR SIGNAGE
SC-5: PROTECT TRASH STORAGE AREAS FROM RAINFALL, RUN-ON, RUNOFF, AND WIND DISPERSAL
SC-6: ADDITIONAL BMPS BASED ON POTENTIAL SOURCES ON RUNOFF POLLUTANTS

NOTE

PROJECT SITE WILL MAINTAIN AND FOLLOW SAME WATER QUALITY DESIGN PROPOSED WITHIN THE CITY'S HIGHWAY 101 STREETSCAPE PROJECT FOR RIGHT-OF-WAY IN FRONT OF PROJECT SITE.

DMA AREAS

DMA #	TOTAL (SF)	PERVIOUS (SF)	% PERVIOUS	% IMPERVIOUS	MIN. BASIN AREA (SF)	BASIN PROVIDED (SF)	TREATMENT BMP(S)
DMA 1	37,552	8,162	21.7	78.3	867	870	1
DMA 2	8,442	2,265	26.8	73.2	187	196	2
DMA 3	41,385	7,345	17.7	82.3	981	983	3
DMA 4	17,211	1,889	11.0	89.0	429	434	4
DMA 5	19,748	2,257	11.4	88.6	492	500	5
DMA 6	5,189	1,043	20.1	79.9	121	128	6
DMA 7	3,207	0	0	100	87	93	7
DMA 8	4,328	362	8.4	91.6	110	132	8
DMA 9	11,830	3,798	32.1	67.9	252	301	9
DMA 10	14,091	4,344	30.8	69.2	304	305	10
DMA 11	451	243	53.9	46.1	–	–	SELF MITIGATING
DMA 12	311	179	57.6	42.4	–	–	SELF MITIGATING
DMA 13	475	475	100.0	0	–	–	SELF MITIGATING

*"BIOFILTRATION "ENGINEERED SOIL" LAYER SHALL BE EVENLY MIXED COMPOSITION OF WASHED SAND, SANDY LOAM TOPSOIL, AND HUMIC COMPOST. THE MIX SHALL CONTAIN 65% SAND, 20% TOPSOIL, AND 15% COMPOST OR HARDWOOD MULCH IN ACCORDANCE WITH COUNTY OF SAN DIEGO LID BIOSWALE MEDIA BIO65 CUT SHEET

TYPICAL SECTION - BIOFILTRATION BASIN TYPE 1

FUNCTIONS AS BIOFILTRATION BF-1

SCALE: NOT TO SCALE

*"BIOFILTRATION "ENGINEERED SOIL" LAYER SHALL BE EVENLY MIXED COMPOSITION OF WASHED SAND, SANDY LOAM TOPSOIL, AND HUMIC COMPOST. THE MIX SHALL CONTAIN 65% SAND, 20% TOPSOIL, AND 15% COMPOST OR HARDWOOD MULCH IN ACCORDANCE WITH COUNTY OF SAN DIEGO LID BIOSWALE MEDIA BIO65 CUT SHEET

TYPICAL SECTION - BIOFILTRATION BASIN TYPE 2

FUNCTIONS AS BIOFILTRATION BF-1

SCALE: NOT TO SCALE

SCALE: 1" = 30'

30 15 0 30 60 90

ATTACHMENT 1A: DMA EXHIBIT

FENWAY N. HWY 101

CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 05/05/21 ~ PLOT DATE: 05/05/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\REPORTS\SWQMP\Att 1a - DMA Exhibit with Table\3161-Preliminary DMA Exhibit.dwg

ATTACHMENT 1c

Worksheet B.3-1. Harvest and Use Feasibility Screening

Harvest and Use Feasibility Screening	**Worsksheet B.3-1**

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season?
✓Toilet and urinal flushing
✓ Landscape irrigation
Other:_____

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

Toilet/Urinal Flushing Residences and Hotel
(9.3 gal/person-day) x (0.13368 cuft/gal) x (1.5 days) = 1.86 cuft/person-36hr
Assume (400 people) x (1.86 cuft/person-36 hr) = 744 cuft/36hr

Toilet/Urinal Flushing Retail
(7x1.4 gal/person-day) x (0.13368 cuft/gal) x (1.5 days) = 1.97 cuft/person-36hr
Assume (18 people) x (1.97 cuft/person-36 hr) = 36 cuft/36hr

Landscape Irrigation
(0.76 ac irrigated) x (390 gal/ac-36hr) x (0.13368 cuft/gal) = 40 cuft/36hr

Total = 744 cuft + 36 cuft + 40 cuft = 820 cuft

3. Calculate the DCV using worksheet B-2.1.

DCV = 5,977 cuft

3a. Is the 36-hour demand greater than or equal to the DCV?	3b. Is the 36-hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36-hour demand less than 0.25DCV?
Yes / ✓ No	Yes / ✓ No	✓ Yes
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	✓ Harvest and use is considered to be infeasible.

ATTACHMENT 1d

Categorization of Infiltration Feasibility Condition		Form I-8	
Part 1 - Full Infiltration Feasibility Screening Criteria **Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	Yes	No
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	**X**	
Provide basis: *The infiltration rate of the existing soils for locations P-1 and P-2, based on the on-site infiltration study was calculated to be greater than 0.5 inches per hour (1.51 inches per hour and 1.74 inches per hour for P-1 and P-2, respectively) after applying a minimum factor of safety (F) of F=2.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		**X**
Infiltration of water has the potential to result in an increased risk of slope failure of existing slopes and nearby coastal bluff zones. As such, BMPs are not suitable for any location on site.			

Form I-8 Page 2 of 4			
Criteria	Screening Question	**Yes**	**No**
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, stormwater pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *Water contamination was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *The potential for water balance was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result *	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2	*Proceed to Part 2*	

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Form I-8 Page 3 of 4

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.	**X**	

Provide basis:

The infiltration rate of the existing soils for locations P-1 and P-2, based on the on-site infiltration study was calculated to be greater than 0.5 inches per hour (1.51 inches per hour and 1.74 inches per hour for P-1 and P-2, respectively) after applying a minimum factor of safety (F) of F=2.

The soil and geologic conditions allow for infiltration but not without increasing the risk of geotechnical hazards.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		**X**

Provide basis:

Infiltration of water has the potential to result in an increased risk of slope failure of existing slopes and nearby coastal bluff zones. As such, BMPs are not suitable for any location on site.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

Form I-8 Page 4 of 4			
Criteria	Screening Question	**Yes**	**No**
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, stormwater pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *Water contamination was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		
Provide basis: *The potential for water balance was not evaluated by NOVA Services.* Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result*	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		*No Infiltration*

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

ATTACHMENT 1e

3161 Leucadia 101
3/31/2021

Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

Worksheet B.2-1. DCV

DMA 1

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.86	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.77	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	1346	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	29390	0.9	26451	
Pervious Pavers		0.1	0	
Landscape	8162	0.3	2448.6	
Total	37552		28900	0.77

DMA 2

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.19	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.74	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	286	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	6177	0.9	5559.3	
Pervious Pavers		0.1	0	
Landscape	2265	0.3	679.5	
Total	8442		6239	0.74

3161 Leucadia 101
3/31/2021

Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

Worksheet B.2-1. DCV

DMA 3

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.95	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.79	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	1526	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	34040	0.9	30636	
Pervious Pavers		0.1	0	
Landscape	7345	0.3	2203.5	
Total	41385		32840	0.79

DMA 4

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.395	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.83	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	666	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	15322	0.9	13789.8	
Pervious Pavers		0.1	0	
Landscape	1889	0.3	566.7	
Total	17211		14357	0.83

3161 Leucadia 101
3/31/2021

Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

Worksheet B.2-1. DCV

DMA 5

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.45	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.83	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	759	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	17491	0.9	15741.9	
Pervious Pavers		0.1	0	
Landscape	2257	0.3	677.1	
Total	19748		16419	0.83

DMA 6

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.12	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.78	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	190	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	4146	0.9	3731.4	
Pervious Pavers		0.1	0	
Landscape	1043	0.3	312.9	
Total	5189		4044	0.78

3161 Leucadia 101
3/31/2021

Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

Worksheet B.2-1. DCV

DMA 7

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.07	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.90	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	128	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	3207	0.9	2886.3	
Pervious Pavers		0.1	0	
Landscape	0	0.3	0	
Total	3207		2886	0.90

DMA 8

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.1	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.85	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	173	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	3966	0.9	3569.4	
Pervious Pavers		0.1	0	
Landscape	362	0.3	108.6	
Total	4328		3678	0.85

3161 Leucadia 101
3/31/2021

Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

Worksheet B.2-1. DCV

DMA 9

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.27	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.71	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	390	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	8032	0.9	7228.8	
Pervious Pavers		0.1	0	
Landscape	3798	0.3	1139.4	
Total	11830		8368	0.71

DMA 10

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.32	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.72	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	468	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	9747	0.9	8772.3	
Pervious Pavers		0.1	0	
Landscape	4344	0.3	1303.2	
Total	14091		10076	0.72

3161 Leucadia 101
3/31/2021

Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

Worksheet B.2-1. DCV

DMA 11

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.01	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.58	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	12	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	208	0.9	187.2	
Pervious Pavers		0.1	0	
Landscape	243	0.3	72.9	
Total	451		260	0.58

DMA 12

Design Capture Volume		Worksheet B-2.1		
1	85th percentile 24-hr storm depth from Figure B.1-1	d=	0.56	inches
2	Area tributary to BMP (s)	A=	0.007	acres
3	Area weighted runoff factor (estimate using Appendix B.1.1 and B.2.1) * See calculation below	C=	0.55	unitless
4	Street trees volume reduction	TCV=	0	cubic-feet
5	Rain barrels volume reduction (1 cubic foot=7.48 gallons)	RCV=	0	cubic-feet
6	Calculate DCV = (3630 x C x d x A) – TCV - RCV	DCV=	8	cubic-feet

	Area (sq ft)	Runoff Factor	A x RF	Weighted RF
Impervious	132	0.9	118.8	
Pervious Pavers		0.1	0	
Landscape	179	0.3	53.7	
Total	311		173	0.55

DMA 1

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	1346.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	867.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	130.05	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	1216.0	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	1824	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	506.6	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	912	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	829	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	37552	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.77	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	867	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	867	sq-ft

DMA 2

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	286.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	192.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	28.80	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	257.2	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	386	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	107.2	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	193	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	175	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	8442	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.74	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	187	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	187	sq-ft

DMA 3

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	1526.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	981.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	147.15	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	1378.9	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	2068	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	574.5	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	1034	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	940	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	41385	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.79	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	981	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	981	sq-ft

DMA 4

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	666.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	429.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	64.35	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	601.7	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	902	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	250.7	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	451	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	410	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	17211	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.83	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	429	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	429	sq-ft

DMA 5

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	759.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	492.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	73.80	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	685.2	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	1028	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	285.5	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	514	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	467	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	19748	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.83	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	492	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	492	sq-ft

DMA 6

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	190.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	121.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	18.15	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	171.9	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	258	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	71.6	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	129	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	117	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	5189	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.78	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	121	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	121	sq-ft

DMA 7

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	128.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	87.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	13.05	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	115.0	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	172	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	47.9	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	86	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	78	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	3207	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.90	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	87	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	87	sq-ft

DMA 8

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	173.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	110.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	16.50	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	156.5	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	235	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	65.2	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	117	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	107	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	4328	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.85	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	110	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	110	sq-ft

DMA 9

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	390.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	252.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	37.80	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	352.2	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface area	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	528	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	146.8	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	264	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	240	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	11830	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.71	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	252	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	252	sq-ft

DMA 10

Simple Sizing Method for Biofiltration BMPs		Worksheet B.5-1	
1	Remaining DCV after implementing retention BMPs	468.0	cu-ft
Partial Retention			
2	Infiltration rate from Worksheet D.5-1 if partial infiltration is feasible	0.00	in/hr
3	Allowable drawdown time for aggregate storage below the underdrain	36	hours
4	Depth of runoff that can be infiltrated [Line 2 x Line 3]	0.00	inches
5	Aggregate pore space	0.40	in/in
6	Required depth of gravel below the underdrain [Line 4 / Line 5]	0.00	inches
7	Assumed surface area of the biofiltration BMP	304.0	sq-ft
8	Media retained pore space	0.1	in/in
9	Volume retained by BMP [[Line 4 + (Line 12 x Line 8)]/12] x Line 7	45.60	cu-ft
10	DCV that requires biofiltration [Line 1 - Line 9]	422.4	cu-ft
BMP Parameters			
11	Surface Ponding [6 inch minimum, 12 inch maximum]	6	inches
12	Media Thickness [18 in minimum]	18	inches
13	Aggregate Storage above underdrain invert (12 inches typical) - Use 0 inches for sizing if the aggregate is not over the entire bottom surface	9	inches
14	Media available pore space	0.2	in/in
15	Media filtration rate to be used for sizing	5	in/hr
Baseline Calculations			
16	Allowable Routing Time for sizing	6	hours
17	Depth filtered during storm [Line 15 x Line 16]	30	inches
18	Depth of Detention Storage [Line 11 + (Line 12 x Line 14) + (Line 13 x Line 5)]	13.20	inches
19	Total Depth Treated [Line 17 + Line 18]	43.20	inches
Option 1 - Biofilter 1.5 times the DCV			
20	Required biofiltered volume [1.5 x Line 10]	634	cu-ft
21	Required Footprint [Line 20 / Line 19] x 12	176.0	sq-ft
Option 2 - Store 0.75 of remaining DCV in pores and ponding			
22	Required Storage (surface + pores) Volume [0.75 x Line 10]	317	cu-ft
23	Required Footprint [Line 22 / Line 18] x 12	288	sq-ft
Footprint of the BMP			
24	Area draining to the BMP	14091	sq-ft
25	Adjusted Runoff Factor for drainage area (Refer to Appendix B.1 and B.2)	0.72	
26	Minimum BMP Footprint [Line 24 x Line 25 x 0.03]	304	sq-ft
27	Footprint of the BMP = Maximum (Minimum(Line 21, Line 23), Line 27)	304	sq-ft

ATTACHMENT 2 - BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

☐ Mark this box if this attachment is not included because the project is exempt from PDP hydromodification management requirements.

Indicate which items are included behind this cover sheet:

Attachment	Contents	Checklist
Attachment 2a	Hydromodification Management Exhibit (Required)	☑ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☑ Exhibit showing project drainage boundaries marked on City of Encinitas Potential Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☑ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	☑ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☑ Not required because BMPs will drain in less than 96 hours

Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

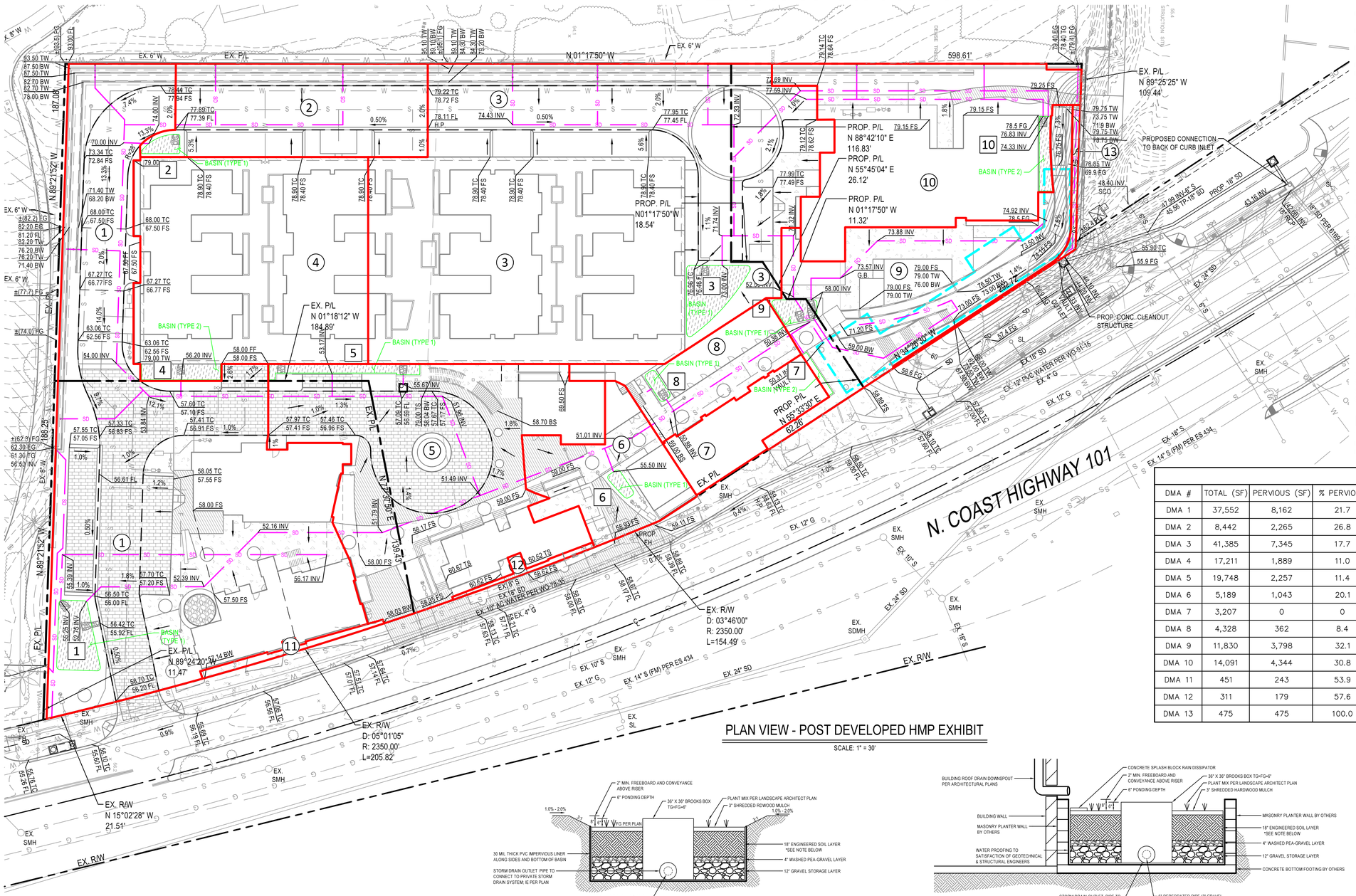
The Hydromodification Management Exhibit must identify:

- ☐ Underlying hydrologic soil group
- ☐ Approximate depth to groundwater
- ☐ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- ☐ Critical coarse sediment yield areas to be protected
- ☐ Existing topography
- ☐ Existing and proposed site drainage network and connections to drainage offsite
- ☐ Proposed grading
- ☐ Proposed impervious features
- ☐ Proposed design features and surface treatments used to minimize imperviousness
- ☐ Point(s) of Compliance (POC) for Hydromodification Management
- ☐ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- ☐ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)

ATTACHMENT 2a

POST DEVELOPED HMP EXHIBIT

FENWAY N. HWY 101



PLAN VIEW - POST DEVELOPED HMP EXHIBIT

SCALE: 1" = 30'

LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- CENTER LINE OF ROAD
- DRAINAGE BOUNDARY
- PROPOSED BIOFILTRATION BASIN OR FLOW THROUGH PLANTER
- PROPOSED STORM DRAIN LINE — SD
- PROPOSED UNDERGROUND STORMTRAP DETENTION SYSTEM
- DMA AREA # — X
- BMP # — X
- PROPOSED BMP BIOFILTRATION BASIN (TYPE 1 OR TYPE 2) PLANTER PER DETAILS HEREON.

AREA CALCULATIONS

TOTAL SITE AREA:	165,107 SF (3.790 AC)
AREA DISTURBED BY PROJECT:	165,107 SF (3.790 AC)
EXISTING IMPERVIOUS AREA:	76,820 SF (1.764 AC)
PROPOSED IMPERVIOUS AREA:	143,659 SF (3.298 AC)
INCREASE IMPERVIOUS AREA:	66,839 SF (1.534 AC)

SOIL TYPE INFORMATION

SOIL: TYPE B HYDROLOGIC SOILS PER OBSERVED ONSITE / FIELD INFILTRATION RATES PROVIDED IN "GEOTECHNICAL INVESTIGATION - LEUCADIA MIXED-USE " PREPARED BY NOVA SERVICES, INC. AND ONSITE SOIL CLASSIFICATION PROVIDED BY NOVA SERVICES, INC.

GROUNDWATER INFORMATION

GROUNDWATER NOT ENCOUNTERED IN ANY OF THE BORINGS CONDUCTED BY NOVA SERVICES, INC., ACCORDING TO SECTION 4.2.3 OF THE PRELIMINARY GEOTECHNICAL STUDY PREPARED BY NOVA SERVICES, INC. CONCLUSION IN REPORT STATES THAT GROUNDWATER "THUS OCCURS BELOW ABOUT EI + 10 MSL, AT LEAST 48 FEET BELOW THE FINISHED FLOOR OF THE LOWEST PARKING LEVEL (SET +58 MSL)."

TREATMENT CONTROL BMPS

BIOFILTRATION BF-1

POTENTIAL POLLUTANT SOURCE AREAS

TRASH DUMPESTERS, ROOFS, PARKING LOTS, LANDSCAPING, RESTAURANT(S), WATER FEATURES, AND OUTDOOR STORAGE AREAS.

SOURCE CONTROLS

SC-1: PREVENTION OF ILLICIT DISCHARGES INTO THE MS4
SC-2: STORM DRAIN STENCILING OR SIGNAGE
SC-5: PROTECT TRASH STORAGE AREAS FROM RAINFALL, RUN-ON, RUNOFF, AND WIND DISPERSAL
SC-6: ADDITIONAL BMPS BASED ON POTENTIAL SOURCES ON RUNOFF POLLUTANTS

NOTE

PROJECT SITE WILL MAINTAIN AND FOLLOW SAME WATER QUALITY DESIGN PROPOSED WITHIN THE CITY'S HIGHWAY 101 STREETSCAPE PROJECT FOR RIGHT-OF-WAY IN FRONT OF PROJECT SITE.

DMA AREAS

DMA #	TOTAL (SF)	PERVIOUS (SF)	% PERVIOUS	% IMPERVIOUS	MIN. BASIN AREA (SF)	BASIN PROVIDED (SF)	TREATMENT BMP(S)
DMA 1	37,552	8,162	21.7	78.3	867	870	1
DMA 2	8,442	2,265	26.8	73.2	187	196	2
DMA 3	41,385	7,345	17.7	82.3	981	983	3
DMA 4	17,211	1,889	11.0	89.0	429	434	4
DMA 5	19,748	2,257	11.4	88.6	492	500	5
DMA 6	5,189	1,043	20.1	79.9	121	128	6
DMA 7	3,207	0	0	100	87	93	7
DMA 8	4,328	362	8.4	91.6	110	132	8
DMA 9	11,830	3,798	32.1	67.9	252	301	9
DMA 10	14,091	4,344	30.8	69.2	304	305	10
DMA 11	451	243	53.9	46.1	–	–	SELF MITIGATING
DMA 12	311	179	57.6	42.4	–	–	SELF MITIGATING
DMA 13	475	475	100.0	0	–	–	SELF MITIGATING

*BIOFILTRATION "ENGINEERED SOIL" LAYER SHALL BE EVENLY MIXED COMPOSITION OF WASHED SAND, SANDY LOAM TOPSOIL, AND HUMIC COMPOST. THE MIX SHALL CONTAIN 65% SAND, 20% TOPSOIL, AND 15% COMPOST OR HARDWOOD MULCH IN ACCORDANCE WITH COUNTY OF SAN DIEGO LID BIOSWALE MEDIA BIO65 CUT SHEET

TYPICAL SECTION - BIOFILTRATION BASIN TYPE 1

FUNCTIONS AS BIOFILTRATION BF-1

SCALE: NOT TO SCALE

*BIOFILTRATION "ENGINEERED SOIL" LAYER SHALL BE EVENLY MIXED COMPOSITION OF WASHED SAND, SANDY LOAM TOPSOIL, AND HUMIC COMPOST. THE MIX SHALL CONTAIN 65% SAND, 20% TOPSOIL, AND 15% COMPOST OR HARDWOOD MULCH IN ACCORDANCE WITH COUNTY OF SAN DIEGO LID BIOSWALE MEDIA BIO65 CUT SHEET

TYPICAL SECTION - BIOFILTRATION BASIN TYPE 2

FUNCTIONS AS BIOFILTRATION BF-1

SCALE: NOT TO SCALE

SCALE: 1" = 30'

30 15 0 30 60 90

ATTACHMENT 2A: POST DEVELOPED HMP EXHIBIT

FENWAY N. HWY 101

CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 04/15/21 ~ PLOT DATE: 04/15/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\REPORTS\SWQMP\Att 2a - HMP Exhibit.dwg

ATTACHMENT 2b

City of Encinitas Web Map - PCCSY

March 27, 2020

N

1 inch = 446 feet

0 240 480 Feet

Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

ATTACHMENT 2d

BMP Sizing Spreadsheet V3.0

Project Name:	101 Leucadia
Project Applicant:	Fenway Capital Advisors
Jurisdiction:	City of Encinitas
Parcel (APN):	216-041-06, 20 and 21
Hydrologic Unit:	904.51
Rain Gauge:	Oceanside
Total Project Area (sf):	166,988
Channel Susceptibility:	High

BMP Sizing Spreadsheet V3.0			
Project Name:	101 Leucadia	Hydrologic Unit:	904.51
Project Applicant:	Fenway Capital Advisors	Rain Gauge:	Oceanside
Jurisdiction:	City of Encinitas	Total Project Area:	166,988
Parcel (APN):	216-041-06, 20 and 21	Low Flow Threshold:	0.1Q2
BMP Name:	Vault	BMP Type:	Cistern
BMP Native Soil Type:	B	BMP Infiltration Rate (in/hr):	NA

Areas Draining to BMP						HMP Sizing Factors	Minimum BMP Size
DMA Name	Area (sf)	Pre Project Soil Type	Pre-Project Slope	Post Project Surface Type	Area Weighted Runoff Factor (Table G.2-1)[1]	Volume	Volume (CF)
1a-10a	133,865	B	Steep	Concrete	1.00	0.16	21418
1b-10b	33,123	B	Steep	Landscape	0.1	0.16	530
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
						0	0
BMP Tributary Area	166,988					Minimum BMP Size	21948
						Proposed BMP Size*	23600

Standard Cistern Depth (Overflow Elevation)	3.5	ft
Provided Cistern Depth (Overflow Elevation)	7.5	ft
Minimum Required Cistern Footprint)	6271	CF

Notes:

1. Runoff factors which are used for hydromodification management flow control (Table G.2-1) are different from the runoff factors used for pollutant control BMP sizing (Table B.1-1). Table references are taken from the San Diego Region Model BMP Design Manu

Describe the BMP's in sufficient detail in your PDP SWQMP to demonstrate the area, volume, and other criteria can be met within the constraints of the site.

BMP's must be adapted and applied to the conditions specific to the development project such as unstable slopes or the lack of available head.
Designated Staff have final review and approval authority over the project design.

This BMP Sizing Spreadsheet has been updated in conformance with the San Diego Region Model BMP Design Manual, April 2018. For questions or concerns please contact the jurisdiction in which your project is located.

BMP Sizing Spreadsheet V3.0			
Project Name:	101 Leucadia	Hydrologic Unit:	904.51
Project Applicant:	Fenway Capital Advisors	Rain Gauge:	Oceanside
Jurisdiction:	City of Encinitas	Total Project Area:	166,988
Parcel (APN):	216-041-06, 20 and 21	Low Flow Threshold:	0.1Q2
BMP Name	Vault	BMP Type:	Cistern

DMA Name	Rain Gauge	Pre-developed Condition		Unit Runoff Ratio (cfs/ac)	DMA Area (ac)	Orifice Flow - $\%Q_2$ (cfs)	Orifice Area (in^2)
		Soil Type	Slope				
1a-10a	Oceanside	B	Steep	0.395	3.073	0.121	**1.79**
1b-10b	Oceanside	B	Steep	0.395	0.760	0.030	**0.44**

3.50	**0.151**	**2.23**	**1.69**
Max Orifice Head (feet)	**Max Tot. Allowable Orifice Flow (cfs)**	**Max Tot. Allowable Orifice Area (in^2)**	**Max Orifice Diameter (in)**

Provide Hand Calc.	**0.112**	**1.65**	**1.450**
Average outflow during surface drawdown (cfs)	Max Orifice Outflow (cfs)	Actual Orifice Area (in^2)	Selected Orifice Diameter (in)

Drawdown (Hrs)	Provide Hand Calculation

Vault Drawdown Calculation

Project Name	101 Leucadia		
Project No	3161	Date	7/16/2021
Vault Drawdown	**89.0**	**hrs**	

Note: Drawdown time is calculated assuming an initial water surface depth equal to the invert of the lowest surface discharge opening in the vault outlet structure.

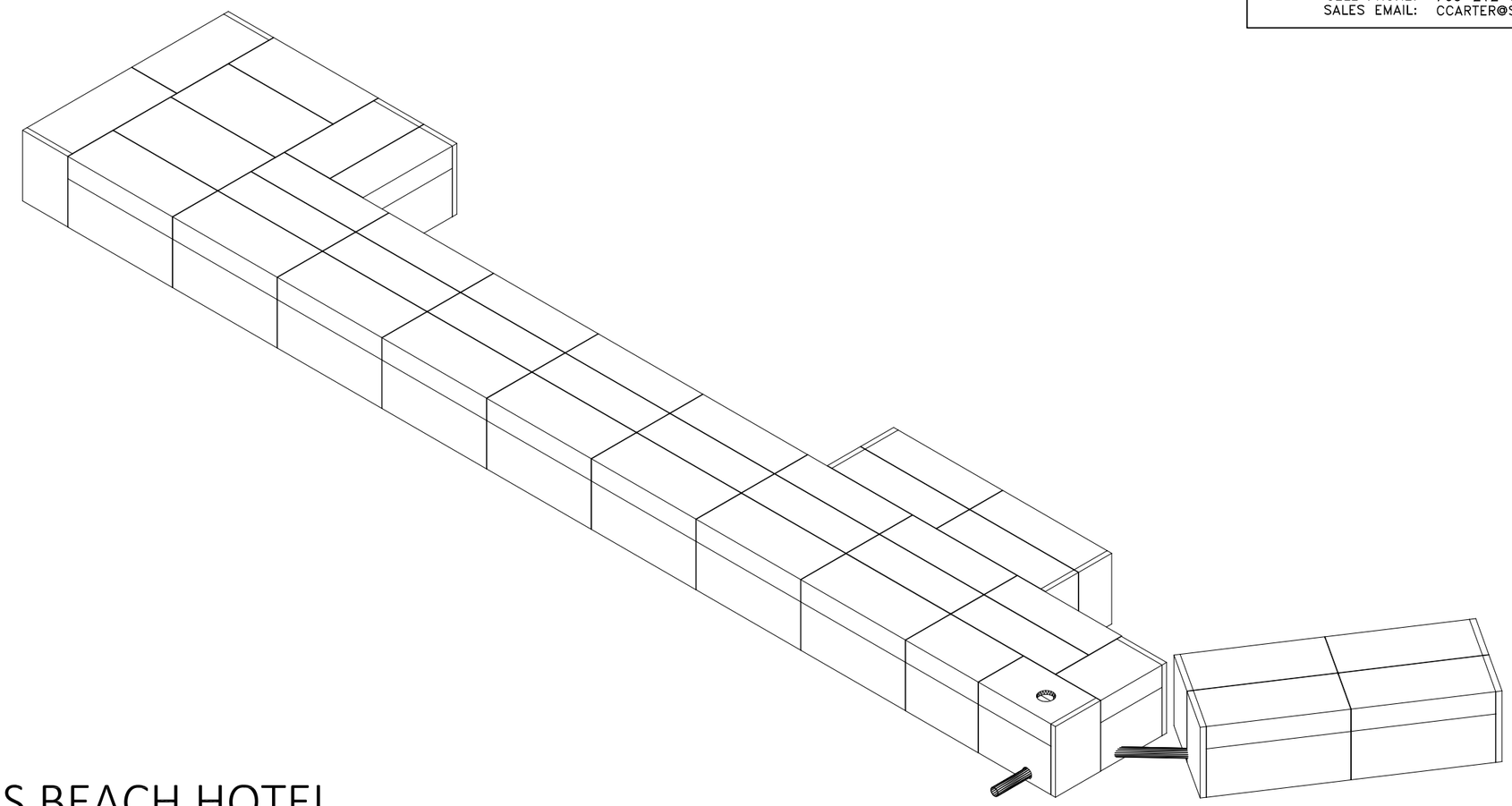
Underdrain Orifice Diameter:	**1.45**	in
C:	**0.6**	

Surface Depth (ft)	**Volume (cf)**	**$Q_{orifice}$ (cfs)**	**ΔT (hr)**	**Total Time (hr)**
7.5	23601	0.150	0.000	0.0
7	22027	0.145	2.960	3.0
6	18880	0.134	6.258	9.2
5	15734	0.122	6.811	16.0
4	12587	0.109	7.549	23.6
3	9440	0.094	8.593	32.2
2	6293	0.076	10.245	42.4
1	3147	0.053	13.523	55.9
0	0	0.000	33.089	89.0

8'-0" STORMTRAP STAGE STORAGE BREAKDOWN	
Elevation	Storage (cubic-feet)
44.31	0
44.56	786.68
44.81	1,573.37
45.06	2,360.05
45.31	3,146.74
45.56	3,933.42
45.81	4,720.11
46.06	5,506.79
46.31	6,293.48
46.56	7,080.16
46.81	7,866.85
47.06	8,653.53
47.31	9,440.22
47.56	10,226.90
47.81	11,013.59
48.06	11,800.27
48.31	12,586.96
48.56	13,373.64
48.81	14,160.33
49.06	14,947.01
49.31	15,733.70
49.56	16,520.38
49.81	17,307.07
49.99	17,866.49
50.06	18,093.75
50.31	18,880.44
50.56	19,667.12
50.81	20,453.81
51.06	21,240.49
51.31	22,027.18
51.56	22,813.86
51.81	23,600.55
52.06	24,387.22
52.31	25,173.92

StormTrap®

MODULAR CONCRETE
STORMWATER MANAGEMENT



ENCINITAS BEACH HOTEL
LEUCADIA, CA

SHEET INDEX

PAGE	DESCRIPTION
0.0	COVER SHEET
1.0	SINGLETRAP DESIGN CRITERIA
2.0	SINGLETRAP SYSTEM LAYOUT
2.1	SINGLETRAP FOUNDATION LAYOUT
3.0	SINGLETRAP INSTALLATION SPECIFICATIONS
3.1	SINGLETRAP INSTALLATION SPECIFICATIONS
4.0	SINGLETRAP BACKFILL SPECIFICATIONS
5.0	RECOMMENDED PIPE/ACCESS OPENING SPECIFICATIONS
6.0	SINGLETRAP MODULE TYPES

STORMTRAP CONTACT INFORMATION

STORMTRAP SUPPLIER: STORMTRAP
CONTACT NAME: CHARLIE CARTER
CELL PHONE: 760-212-5628
SALES EMAIL: CCARTER@STORMTRAP.COM

StormTrap®

PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]

1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER
& ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

0.0

STRUCTURAL DESIGN LOADING CRITERIA

LIVE LOADING: **AASHTO HS-20 HIGHWAY LOADING**

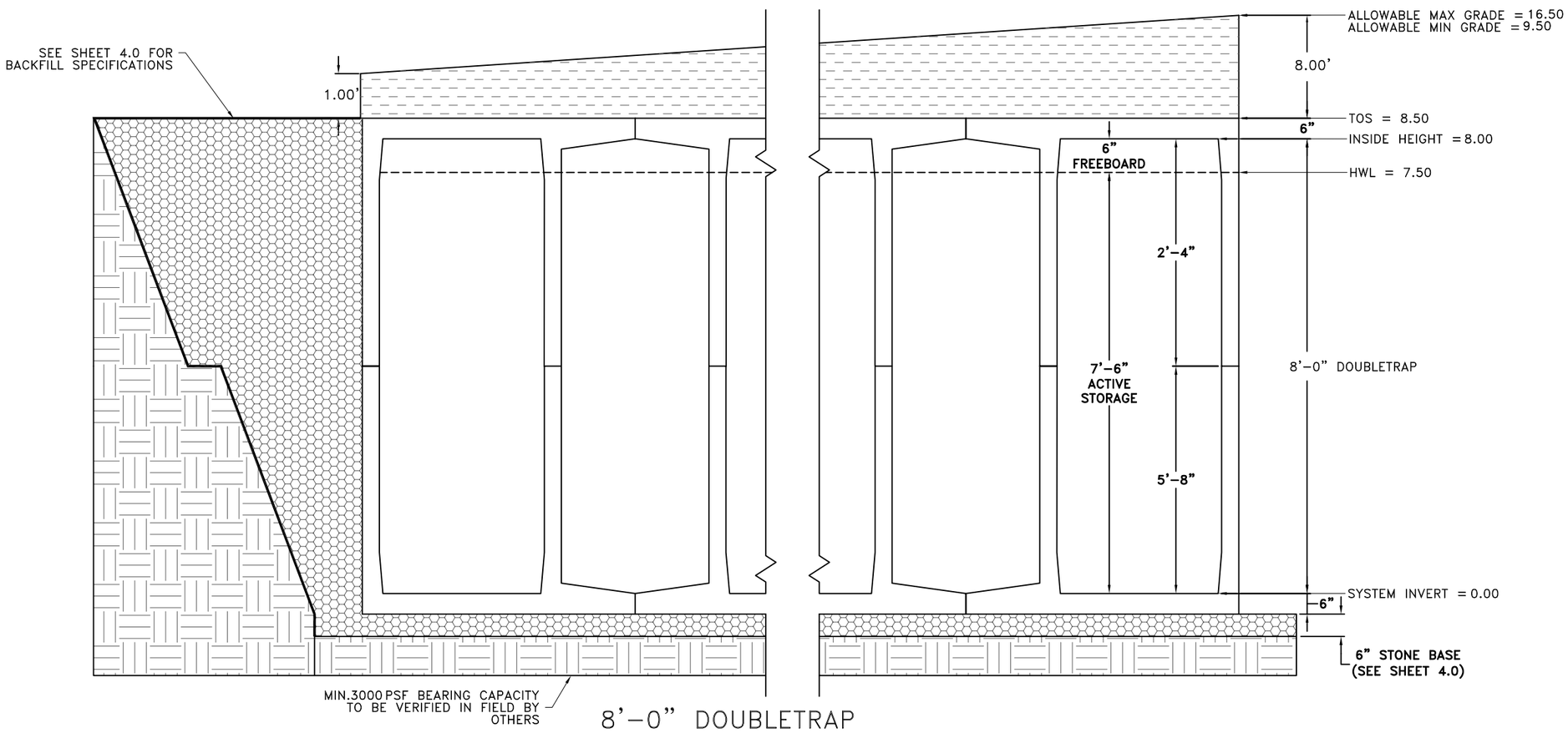
GROUND WATER TABLE: BELOW INVERT OF SYSTEM
SOIL BEARING PRESSURE: 3000 PSF
SOIL DENSITY: 120 PCF
EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE: 35 PSF / FT.
EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE: 80 PSF/FT. (IF WATER TABLE PRESENT)
APPLICABLE CODES: ASTM C857
ACI-318
BACKFILL TYPE: SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION

TOTAL WATER STORAGE PROV:	25,033.16	CUBIC FEET
WATER STORAGE PROV: ELEV 0.00 – 7.50	23,468.58	CUBIC FEET
UNIT HEADROOM:	8'-0" DOUBLETRAP	
UNIT QUANTITY:	84 TOTAL PIECES	

SITE SPECIFIC DESIGN CRITERIA

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 1.00' MAX. 8.00' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
5. **SYSTEM DESIGN MAY ALLOW FOR INCIDENTAL LEAKAGE AND WILL NOT BE SUBJECT TO LEAKAGE TESTING.**



8'-0" DOUBLETRAP

StormTrap®

PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]

1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP DESIGN CRITERIA

SHEET NUMBER:

1.0

BILL OF MATERIALS

QTY.	UNIT TYPE	DESCRIPTION	TOP WEIGHT	BASE WEIGHT
0	I	8'–0" DOUBLETRAP	0	0
2	II	8'–0" DOUBLETRAP	14286	18560
0	III	8'–0" DOUBLETRAP	0	0
14	IV	8'–0" DOUBLETRAP	12249	17584
0	VII	8'–0" DOUBLETRAP	0	0
11	VII–2	8'–0" DOUBLETRAP	9822	14096
9	VII–4	8'–0" DOUBLETRAP	10017	15352
5	SPIV	8'–0" DOUBLETRAP	VARIES	VARIES
1	SPVII–4	8'–0" DOUBLETRAP	VARIES	VARIES
0	T2 PANEL	8" THICK PANEL	0	
9	T4 PANEL	8" THICK PANEL	5963	
5	T7 PANEL	8" THICK PANEL	4348	
6	JOINT WRAP	150' PER ROLL		
80	JOINT TAPE	14.5' PER ROLL		

LOADING DISCLAIMER:

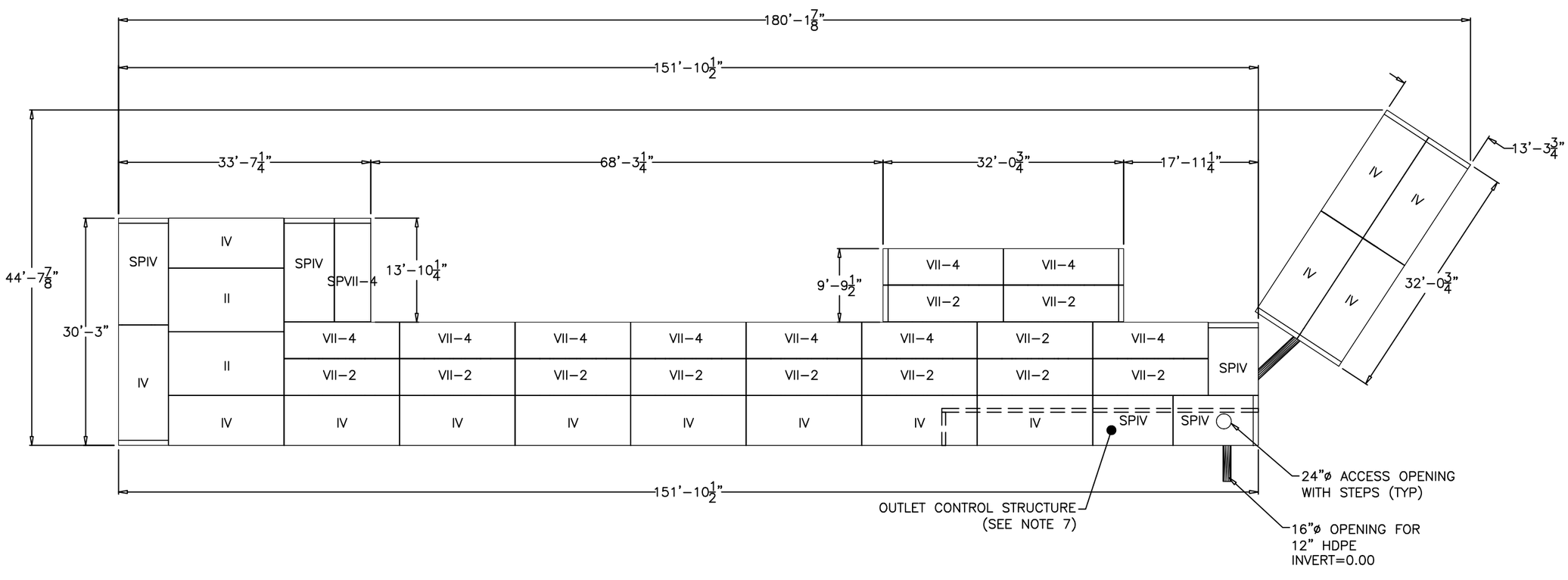
STORMTRAP IS NOT DESIGNED TO ACCEPT ANY ADDITIONAL LOADINGS FROM NEARBY STRUCTURES NEXT TO OR OVER THE TOP OF STORMTRAP. IF ADDITIONAL LOADING CONSIDERATIONS ARE REQUIRED FOR STRUCTURAL DESIGN OF STORMTRAP, PLEASE CONTACT STORMTRAP IMMEDIATELY.

THE STORMTRAP SYSTEM HAS NOT BEEN DESIGNED TO SUPPORT THE ADDITIONAL WEIGHT OF ANY TREES. FURTHERMORE, THE ROOTS OF THE TREES MUST BE CONTAINED TO PREVENT FUTURE DAMAGE TO THE STORMTRAP SYSTEM. STORMTRAP ACCEPTS NO LIABILITY FOR DAMAGES CAUSED BY TREES OR OTHER VEGETATION PLACE AROUND OR ON TOP OF THE SYSTEM.

DESIGN CRITERIA
ALLOWABLE MAX GRADE = 16.50
ALLOWABLE MIN GRADE =9.50
INSIDE HEIGHT ELEVATION =8.00
SYSTEM INVERT = 0.00

NOTES:

1. DIMENSIONING OF STORMTRAP SYSTEM SHOWN BELOW ALLOW FOR A 3/4" GAP BETWEEN EACH MODULE.
2. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
3. SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS.
4. SP – INDICATES A MODULE WITH MODIFICATIONS.
5. P – INDICATES A MODULE WITH A PANEL ATTACHMENT.
6. CONTRACTORS RESPONSIBILITY TO ENSURE CONSISTENCY/ACCURACY TO FINAL ENGINEER OF RECORD PLAN SET.
7. **IF A WATERTIGHT SOLUTION IS REQUIRED FOR THIS OUTLET CONTROL STRUCTURE, ALL EXTERIOR COLD JOINTS, INCLUDING JOINT BETWEEN TOP AND BASE MODULES, BETWEEN TOP AND BASE OF ADJOINING SYMONS WALLS, AND JOINTS BETWEEN MODULE AND ADJACENT END PANELS WILL BE THE SOLE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO PROVIDE AND INSTALL THE WATERTIGHT APPLICATION PER THE EOR'S SPECIFICATION.**



StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815–941–4549 / F:331–318–5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858–259–8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP SYSTEM LAYOUT

SHEET NUMBER:

2.0

STORMTRAP INSTALLATION SPECIFICATIONS

1. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891, STANDARD FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES, THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS SHALL APPLY:

2. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT PROPER/ADEQUATE EQUIPMENT IS USED TO SET/INSTALL THE MODULES.

3. STORMTRAP MODULES CAN BE PLACED ON A LEVEL, 6" FOUNDATION OF ¾" AGGREGATE EXTENDING 2'-0" PAST THE OUTSIDE OF THE SYSTEM (SEE DETAIL 1) AND SHALL BE PLACED ON PROPERLY COMPACTED SOILS (SEE SHEET 1.0 FOR SOIL BEARING CAPACITY REQUIREMENTS), AND IN ACCORDANCE WITH ASTM C891 STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST UTILITY STRUCTURES.

4. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED ¾" (SEE DETAIL 2). IF THE SPACE EXCEEDS ¾", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.

5. STORMTRAP MODULES ARE NOT WATERTIGHT. IF A WATERTIGHT SOLUTION IS REQUIRED, CONTACT STORMTRAP FOR RECOMMENDATIONS. THE WATERTIGHT APPLICATION IS TO BE PROVIDED AND IMPLEMENTED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SELECTED WATERTIGHT SOLUTION PERFORMS AS SPECIFIED BY THE MANUFACTURER.

6. THE PERIMETER HORIZONTAL JOINT BETWEEN THE TOP AND BASE LEG CONNECTION OF THE STORMTRAP MODULES SHALL BE SEALED WITH PREFORMED MASTIC JOINT TAPE ACCORDING TO ASTM C891, 8.8 AND 8.12. (SEE DETAIL 3). THE MASTIC JOINT TAPE DOES NOT PROVIDE A WATERTIGHT SEAL.

7. ALL EXTERIOR JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH 8" WIDE PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN, BONDED TO A WOVEN , HIGHLY PUNCTURE RESISTANT POLYMER WRAP, CONFORMING TO ASTM C891 AND SHALL BE INTEGRATED WITH PRIMER SEALANT AS APPROVED BY STORMTRAP (SEE DETAILS 4 & 5). THE JOINT WRAP DOES NOT PROVIDE A WATERTIGHT SEAL. THE SOLE PURPOSE OF THE JOINT WRAP IS TO PROVIDE A SILT AND SOIL TIGHT SYSTEM. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:

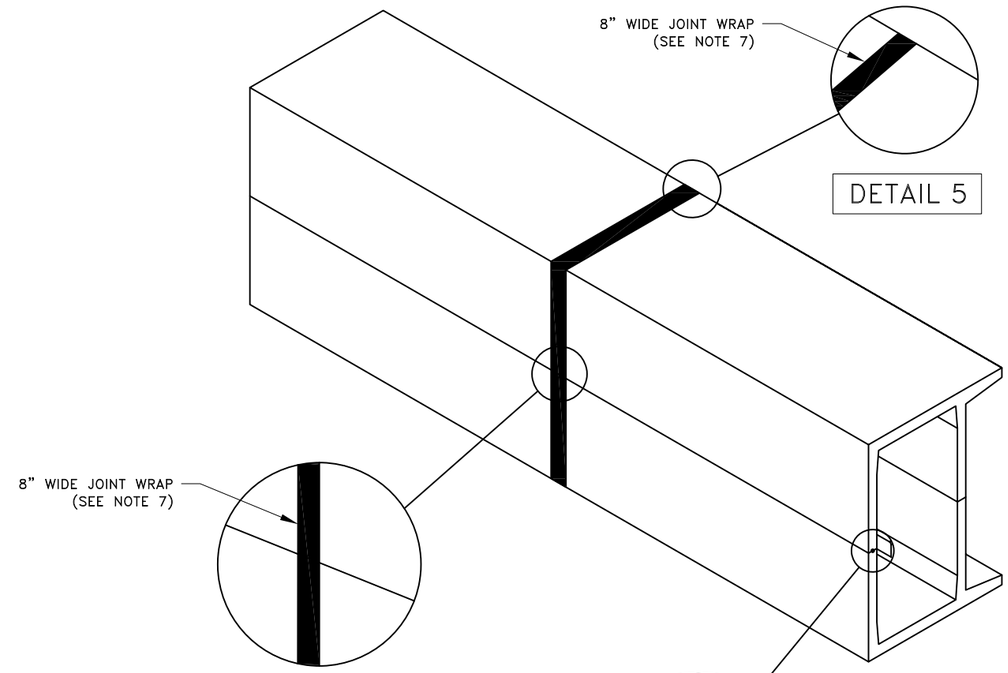
   7.1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE JOINT WRAP IS TO BE APPLIED.

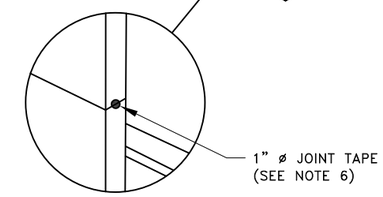
   7.2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (ADHESIVE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.

8. IF THE CONTRACTOR NEEDS TO CANCEL ANY SHIPMENTS, THEY MUST DO SO 48 HOURS PRIOR TO THEIR SCHEDULED ARRIVAL AT THE JOB SITE. IF CANCELED AFTER THAT TIME, PLEASE CONTACT THE PROJECT MANAGER.

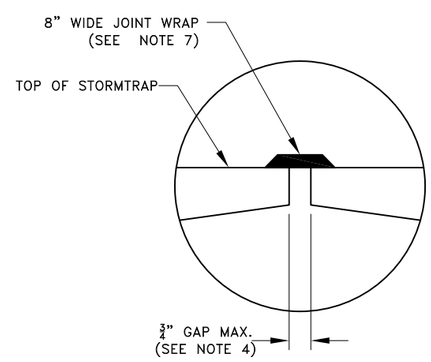
9. IF THE STORMTRAP MODULE(S) IS DAMAGED IN ANY WAY PRIOR, DURING, OR AFTER INSTALL, STORMTRAP MUST BE CONTACTED IMMEDIATELY TO ASSESS THE DAMAGE AND TO DETERMINE WHETHER OR NOT THE MODULE(S) WILL NEED TO BE REPLACED. IF ANY MODULE ARRIVES AT THE JOBSITE DAMAGED DO NOT UNLOAD IT; CONTACT STORMTRAP IMMEDIATELY. ANY DAMAGE NOT REPORTED BEFORE THE TRUCK IS UNLOADED WILL BE THE CONTRACTOR'S RESPONSIBILITY.

10. STORMTRAP MODULES CANNOT BE ALTERED IN ANY WAY AFTER MANUFACTURING WITHOUT WRITTEN CONSENT FROM STORMTRAP.

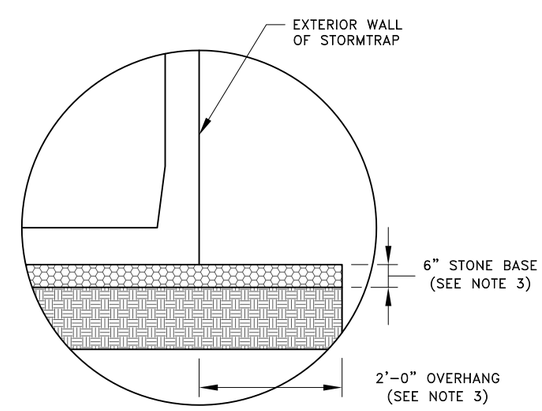




DETAIL 3



DETAIL 2



DETAIL 1

StormTrap®

PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]

1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

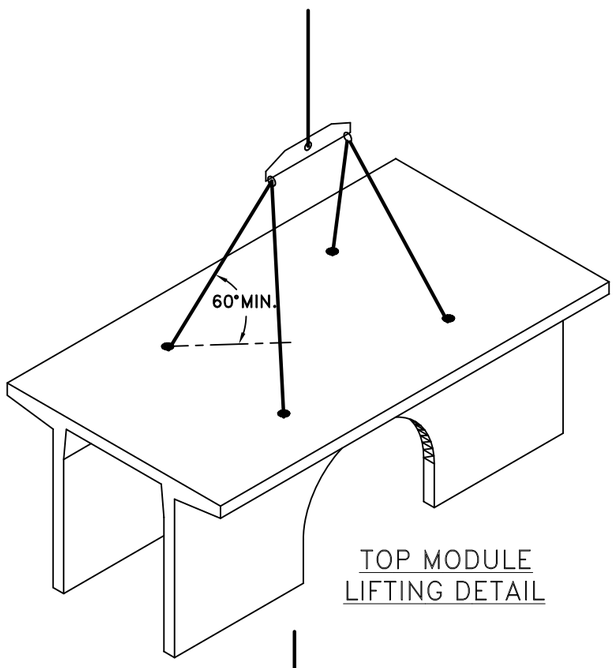
DOUBLETRAP INSTALLATION SPECIFICATIONS

SHEET NUMBER:

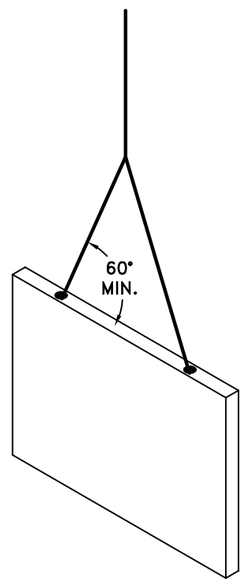
3.0

STORMTRAP MODULE LIFTING INSTALLATION NOTES

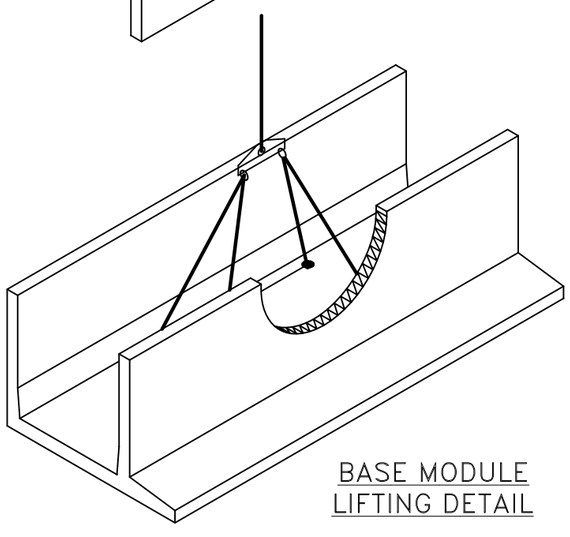
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL (4) CHAINS/CABLES ARE SECURED PROPERLY TO THE LIFTING ANCHORS AND IN EQUAL TENSION WHEN LIFTING THE STORMTRAP MODULE (SEE RECOMMENDATIONS 2 & 3).
2. MINIMUM 7'-0" CHAIN/CABLE LENGTH TO BE USED TO LIFT STORMTRAP MODULES (SUPPLIED BY CONTRACTOR).
3. CONTRACTOR TO ENSURE MINIMUM LIFTING ANGLE IS 60° FROM TOP SURFACE OF STORMTRAP MODULE. SEE DETAIL.



TOP MODULE LIFTING DETAIL



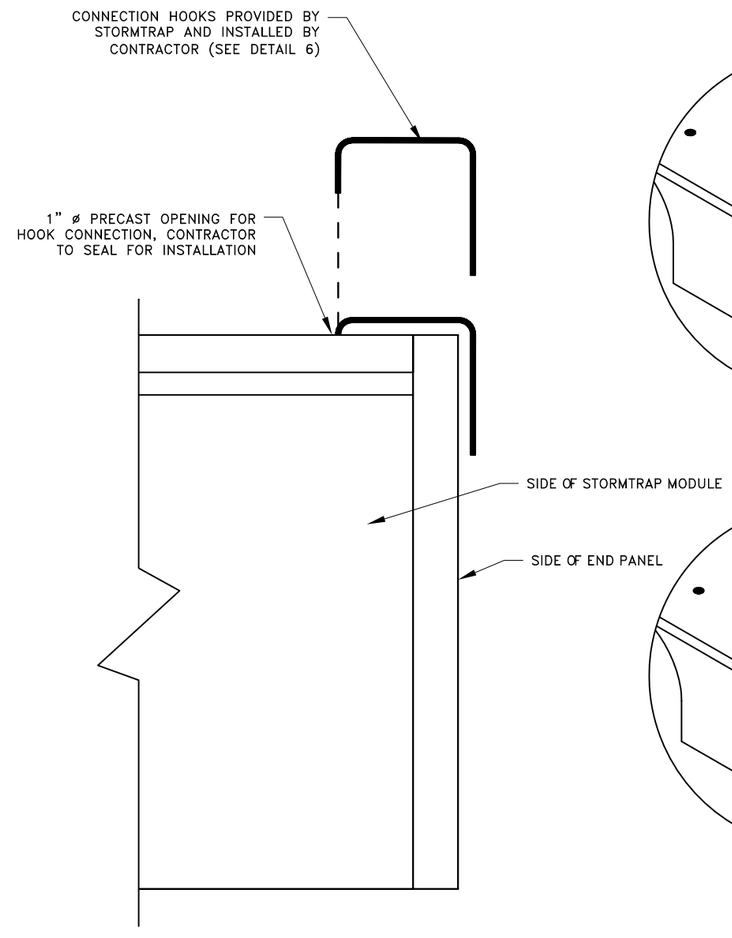
END PANEL LIFTING DETAIL



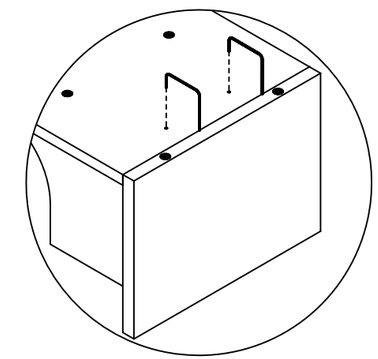
BASE MODULE LIFTING DETAIL

END PANEL ERECTION/INSTALLATION NOTES

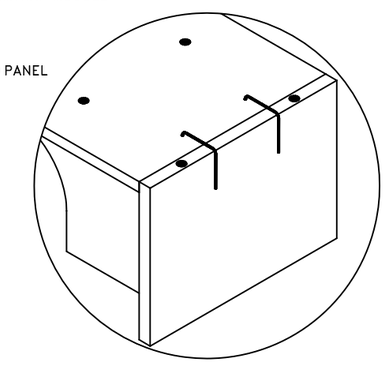
1. END PANELS WILL BE SUPPLIED TO CLOSE OFF OPEN ENDS OF ROWS.
2. PANELS SHALL BE INSTALLED IN A TILT UP FASHION DIRECTLY ADJACENT TO OPEN END OF MODULE (REFER TO SHEET 2.0 FOR END PANEL LOCATIONS).
3. CONNECTION HOOKS WILL BE SUPPLIED WITH END PANELS TO SECURELY CONNECT PANEL TO ADJACENT STORMTRAP MODULE (SEE PANEL CONNECTION ELEVATION VIEW).
4. ONCE CONNECTION HOOK IS ATTACHED, LIFTING CLUTCHES MAY BE REMOVED.
5. JOINT WRAP SHALL BE PLACED AROUND PERIMETER JOINT PANEL (SEE SHEET 3.0).



PANEL CONNECTION ELEVATION VIEW



STEP 1



STEP 2

DETAIL 6

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP INSTALLATION SPECIFICATIONS

SHEET NUMBER:

3.1

ZONE CHART

ZONES	ZONE DESCRIPTIONS	REMARKS
ZONE 1	FOUNDATION AGGREGATE	#5 (¾") STONE AGGREGATE (SEE NOTE 4 FOR DESCRIPTION)
ZONE 2	BACKFILL	UNIFIED SOILS CLASSIFICATION (GW, GP, SW, SP) OR SEE BELOW FOR APPROVED BACKFILL OPTIONS
ZONE 3	FINAL COVER OVERTOP	MATERIALS NOT TO EXCEED 120 PCF

FILL DEPTH	TRACK WIDTH	MAX VEHICLE WEIGHT (KIPS)	MAX GROUND PRESSURE
12"	12"	51.8	1690 psf
	18"	56.1	1219 psf
	24"	68.1	1111 psf
	30"	76.7	1000 psf
	36"	85.0	924 psf

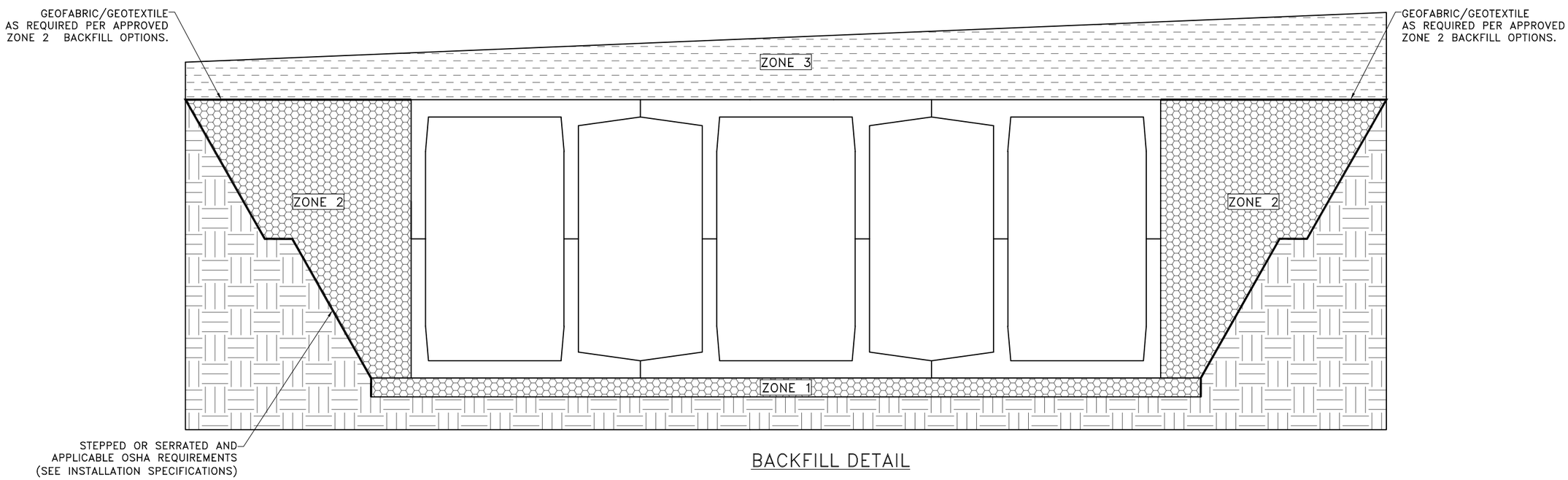
NOTE:
TRACK LENGTH NOT TO EXCEED 15'-4".
ONLY TWO TRACKS PER VEHICLE.

APPROVED ZONE 2 BACKFILL OPTIONS

OPTION	REMARKS
¾" STONE AGGREGATE	THE STONE AGGREGATE SHALL CONSIST OF CLEAN AND FREE DRAINING ANGULAR MATERIAL. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL (ASTM SIZE #57) AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
SAND	IMPORTED PURE SAND IS PERMITTED TO BE USED AS BACKFILL IF IT IS CLEAN AND FREE DRAINING. THE SAND USED FOR BACKFILLING SHALL HAVE LESS THAN 40% PASSING #40 SIEVE AND LESS THAN 5% PASSING #200 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE SAND BACKFILL.
CRUSHED CONCRETE AGGREGATE	CLEAN, FREE DRAINING CRUSHED CONCRETE AGGREGATE MATERIAL CAN BE USED AS BACKFILL FOR STORMTRAP'S MODULES. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL.
ROAD PACK	STONE AGGREGATE 100% PASSING THE 1-1/2" SIEVE WITH LESS THAN 12% PASSING THE #200 SIEVE (ASTM SIZE #467). GEOFABRIC AS PER GEOTECHNICAL ENGINEER RECOMMENDATION.

STORMTRAP ZONE INSTALLATION SPECIFICATIONS/PROCEDURES

1. THE FILL PLACED AROUND THE STORMTRAP MODULES MUST DEPOSITED ON BOTH SIDES AT THE SAME TIME AND TO APPROXIMATELY THE SAME ELEVATION. AT NO TIME SHALL THE FILL BEHIND ONE SIDE WALL BE MORE THAN 2'-0" HIGHER THAN THE FILL ON THE OPPOSITE SIDE. BACKFILL SHALL EITHER BE COMPACTED AND/OR VIBRATED TO ENSURE THAT BACKFILL AGGREGATE/STONE MATERIAL IS WELL SEATED AND PROPERLY INTER LOCKED. CARE SHALL BE TAKEN TO PREVENT ANY WEDGING ACTION AGAINST THE STRUCTURE, AND ALL SLOPES WITHIN THE AREA TO BE BACKFILLED MUST BE STEPPED OR SERRATED TO PREVENT WEDGING ACTION. CARE SHALL ALSO BE TAKEN AS NOT TO DISRUPT THE JOINT WRAP FROM THE JOINT DURING THE BACKFILL PROCESS. BACKFILL MUST BE FREE-DRAINING MATERIAL. SEE ZONE 2 BACKFILL CHART ON THIS PAGE FOR APPROVED BACKFILL OPTIONS. IF NATIVE EARTH IS SUSCEPTIBLE TO MIGRATION, CONFIRM WITH GEOTECHNICAL ENGINEER AND PROVIDE PROTECTION AS REQUIRED (PROVIDED BY OTHERS).
2. DURING PLACEMENT OF MATERIAL OVERTOP THE SYSTEM, AT NO TIME SHALL MACHINERY BE USED OVERTOP THAT EXCEEDS THE DESIGN LIMITATIONS OF THE SYSTEM. WHEN PLACEMENT OF MATERIAL OVERTOP, MATERIAL SHALL BE PLACED SUCH THAT THE DIRECTION OF PLACEMENT IS PARALLEL WITH THE OVERALL LONGITUDINAL DIRECTION OF THE SYSTEM WHENEVER POSSIBLE.
3. THE FILL PLACED OVERTOP THE SYSTEM SHALL BE PLACED AT A MINIMUM OF 6" LIFTS. AT NO TIME SHALL MACHINERY OR VEHICLES GREATER THAN THE DESIGN HS-20 LOADING CRITERIA TRAVEL OVERTOP THE SYSTEM WITHOUT THE MINIMUM DESIGN COVERAGE. IF TRAVEL IS NECESSARY OVERTOP THE SYSTEM PRIOR TO ACHIEVING THE MINIMUM DESIGN COVER, IT MAY BE NECESSARY TO REDUCE THE ULTIMATE LOAD/BURDEN OF THE OPERATING MACHINERY SO AS TO NOT EXCEED THE DESIGN CAPACITY OF THE SYSTEM. IN SOME CASES, IN ORDER TO ACHIEVE REQUIRED COMPACTION, HAND COMPACTION MAY BE NECESSARY IN ORDER NOT TO EXCEED THE ALLOTTED DESIGN LOADING. SEE CHART FOR TRACKED VEHICLE WIDTH AND ALLOWABLE MAXIMUM PRESSURE PER TRACK.
4. STONE AGGREGATE FOUNDATION IN ZONE 1 IS RECOMMENDED FOR LEVELING PURPOSES ONLY (OPTIONAL).



BACKFILL DETAIL

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP BACKFILL SPECIFICATIONS

SHEET NUMBER:

4.0

RECOMMENDED ACCESS OPENING SPECIFICATION

1. A TYPICAL ACCESS OPENING FOR THE STORMTRAP SYSTEM ARE 2'–0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 3'–0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 1'–0" OF CLEARANCE FROM THE END OF THE STORMTRAP MODULE UNLESS NOTED OTHERWISE. ALL ACCESS OPENINGS TO BE LOCATED ON INSIDE LEG UNLESS OTHERWISE SPECIFIED.
2. PLASTIC COATED STEEL STEPS PRODUCED BY M.A. INDUSTRIES PART #PS3–PFC OR APPROVED EQUAL (SEE STEP DETAIL) ARE PROVIDED INSIDE ANY MODULE WHERE DEEMED NECESSARY. THE HIGHEST STEP IN THE MODULE IS TO BE PLACED A DISTANCE OF 1'–0" FROM THE INSIDE EDGE OF THE STORMTRAP MODULES. ALL ENSUING STEPS SHALL BE PLACED AT A DISTANCE BETWEEN 10" MIN AND 14" MAX BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE MODULE.
3. STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO AVOID INTERFERENCE WITH ACCESS OPENINGS OR THE CENTER OF GRAVITY OF THE MODULE AS NEEDED.
4. STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
5. ACCESS OPENINGS SHOULD BE LOCATED IN ORDER TO MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST TWO ACCESS OPENINGS PER SYSTEM FOR ACCESS AND INSPECTION.
6. USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE SECTIONS. (PROVIDED BY OTHERS)

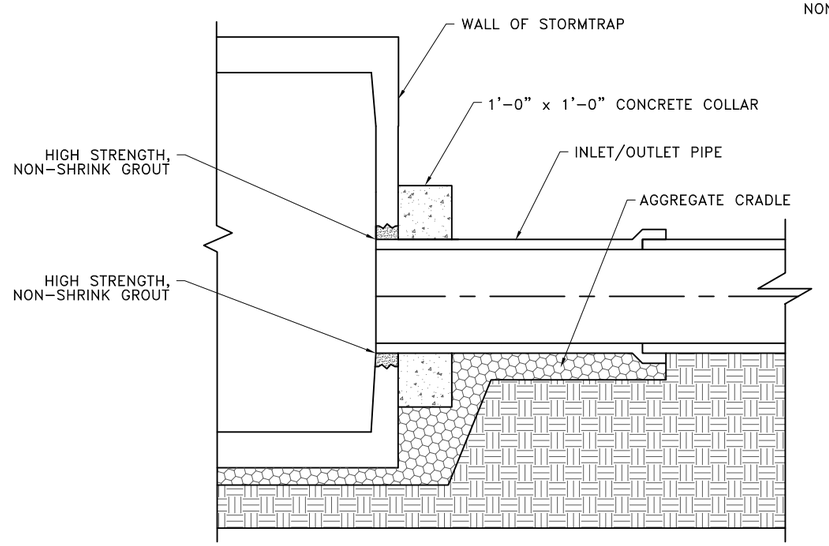
RECOMMENDED PIPE OPENING SPECIFICATION

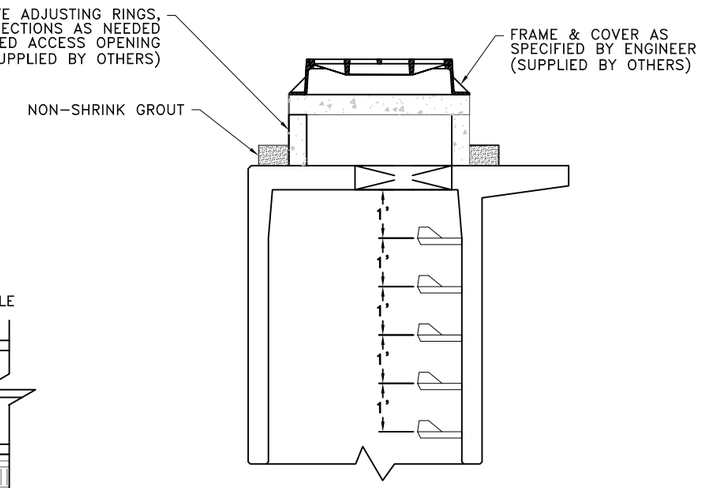
1. MINIMUM EDGE DISTANCE FOR AN OPENING ON THE OUTSIDE WALL SHALL BE NO LESS THAN 1'–0".
2. MAXIMUM OPENING SIZE TO BE DETERMINED BY THE MODULE HEIGHT. PREFERRED OPENING SIZE ø 36" OR LESS. ANY OPENING NEEDED THAT DOES NOT FIT THIS CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF STORMTRAP FOR REVIEW.
3. CONNECTING PIPES SHALL BE INSTALLED WITH A 1'–0" CONCRETE COLLAR, AND AN AGGREGATE CRADLE FOR AT LEAST ONE PIPE LENGTH (SEE PIPE CONNECTION DETAIL). A STRUCTURAL GRADE CONCRETE OR HIGH STRENGTH, NON–SHRINK GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI SHALL BE USED.
4. THE ANNULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH HIGH STRENGTH NON–SHRINK GROUT.

RECOMMENDED PIPE INSTALLATION INSTRUCTIONS

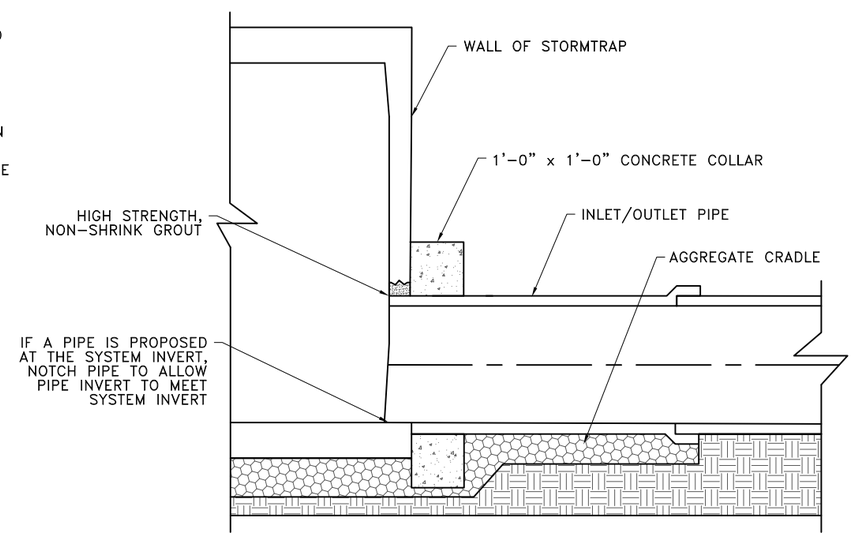
1. CLEAN AND LIGHTLY LUBRICATE ALL OF THE PIPE TO BE INSERTED INTO STORMTRAP.
2. IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
3. ALIGN CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.

NOTE: ALL ANCILLARY PRODUCTS/SPECIFICATIONS RECOMMENDED AND SHOWN ON THIS SHEET ARE RECOMMENDATIONS ONLY AND SUBJECT TO CHANGE PER THE INSTALLING CONTRACTOR AND/OR PER LOCAL MUNICIPAL CODE/REQUIREMENTS.

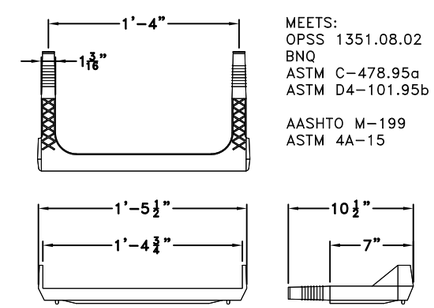




RISER / STAIR DETAIL



PIPE CONNECTION DETAIL



MEETS:
OPSS 1351.08.02
BNQ
ASTM C–478.95a
ASTM D4–101.95b

AASHTO M–199
ASTM 4A–15

STEP DETAIL

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815–941–4549 / F:331–318–5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858–259–8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

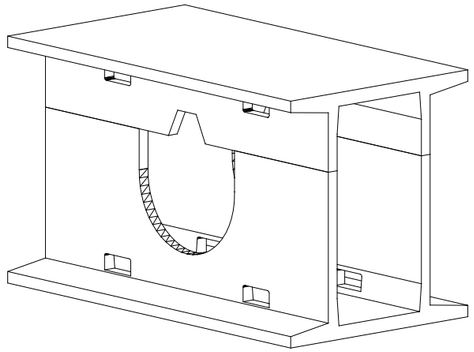
NTS

SHEET TITLE:

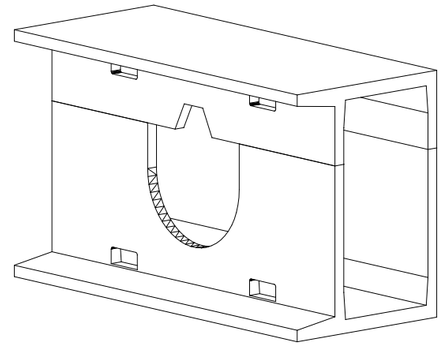
RECOMMENDED PIPE / ACCESS OPENING SPECIFICATIONS

SHEET NUMBER:

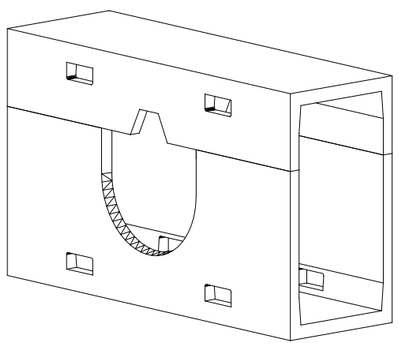
5.0



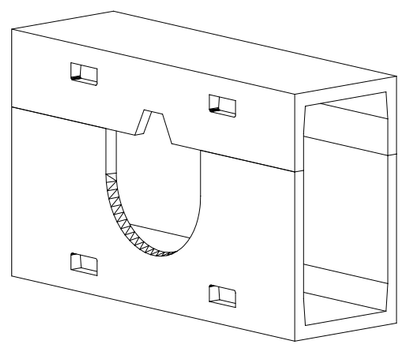
TYPE II



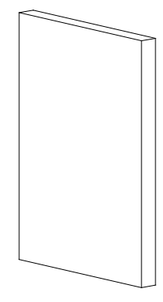
TYPE IV



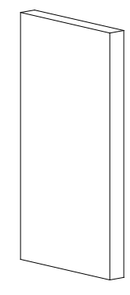
TYPE VII–2



TYPE VII–4



TYPE IV
END PANEL



TYPE VII
END PANEL

NOTES:
1. OPENING LOCATIONS AND SHAPES MAY VARY.
2. SP – INDICATES A MODULE WITH MODIFICATIONS.
3. P – INDICATES A MODULE WITH A PANEL ATTACHMENT.
4. POCKET WINDOW OPENINGS ARE OPTIONAL.

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815–941–4549 / F:331–318–5347

ENGINEER INFORMATION:

PASCO LARET SUITER
& ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858–259–8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

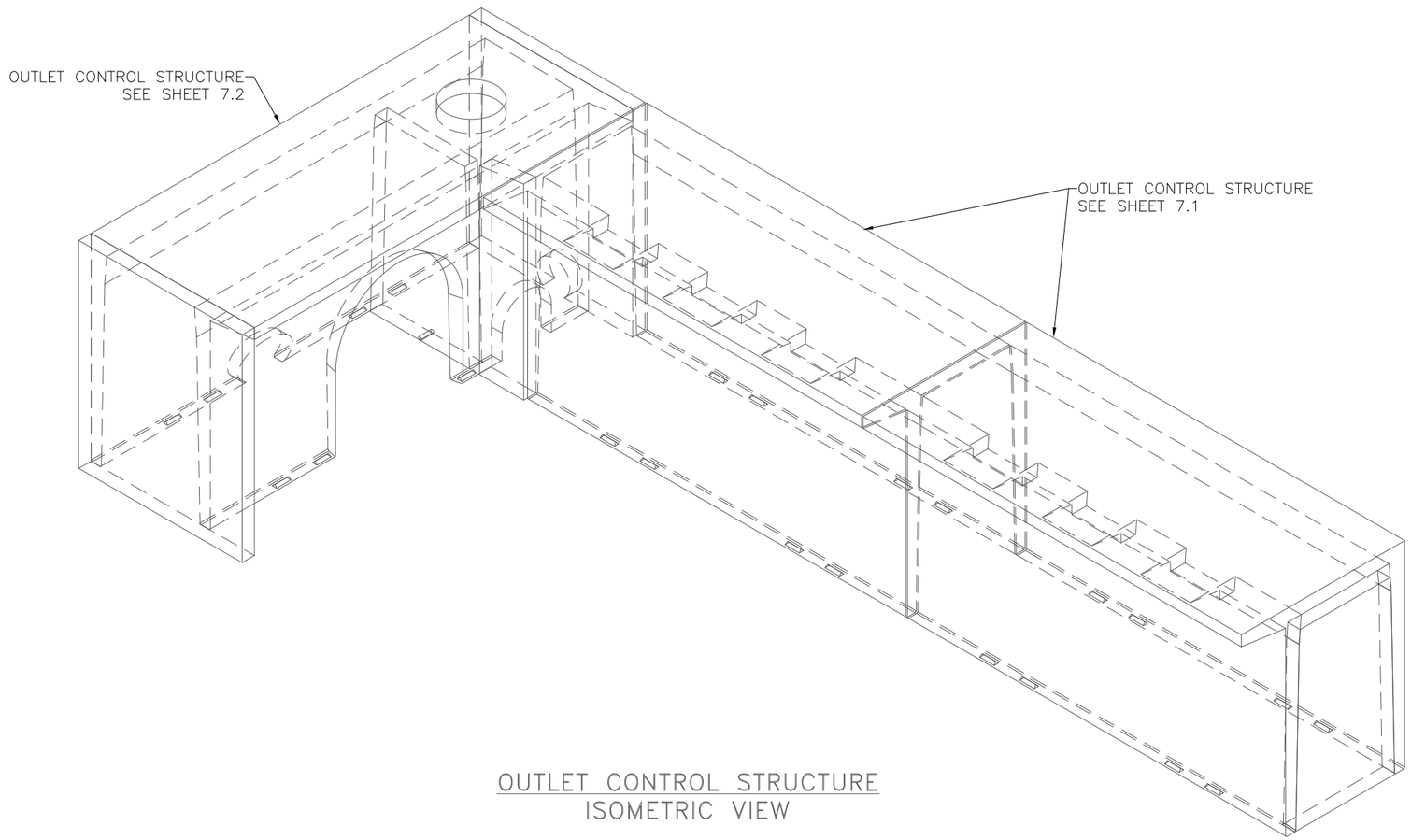
NTS

SHEET TITLE:

DOUBLETRAP
MODULE TYPES

SHEET NUMBER:

6.0



OUTLET CONTROL STRUCTURE
ISOMETRIC VIEW

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET
SUITER & ASSOCIATES
535 N COAST HWY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

3/9/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
3	3/9/2021	PRELIMINARY	RJL
2	12/11/2020	PRELIMINARY	RJL
1	8/26/2020	PRELIMINARY	NP

SCALE:

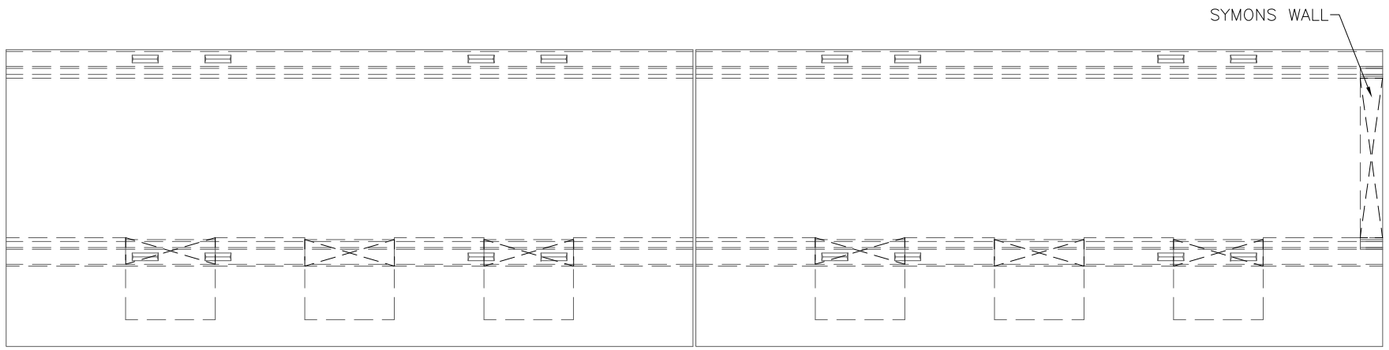
NTS

SHEET TITLE:

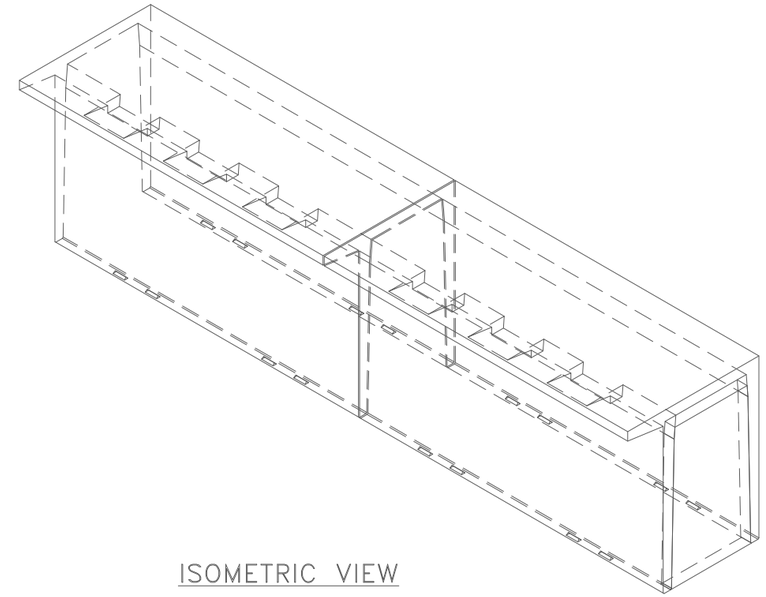
OUTLET CONTROL STRUCTURE

SHEET NUMBER:

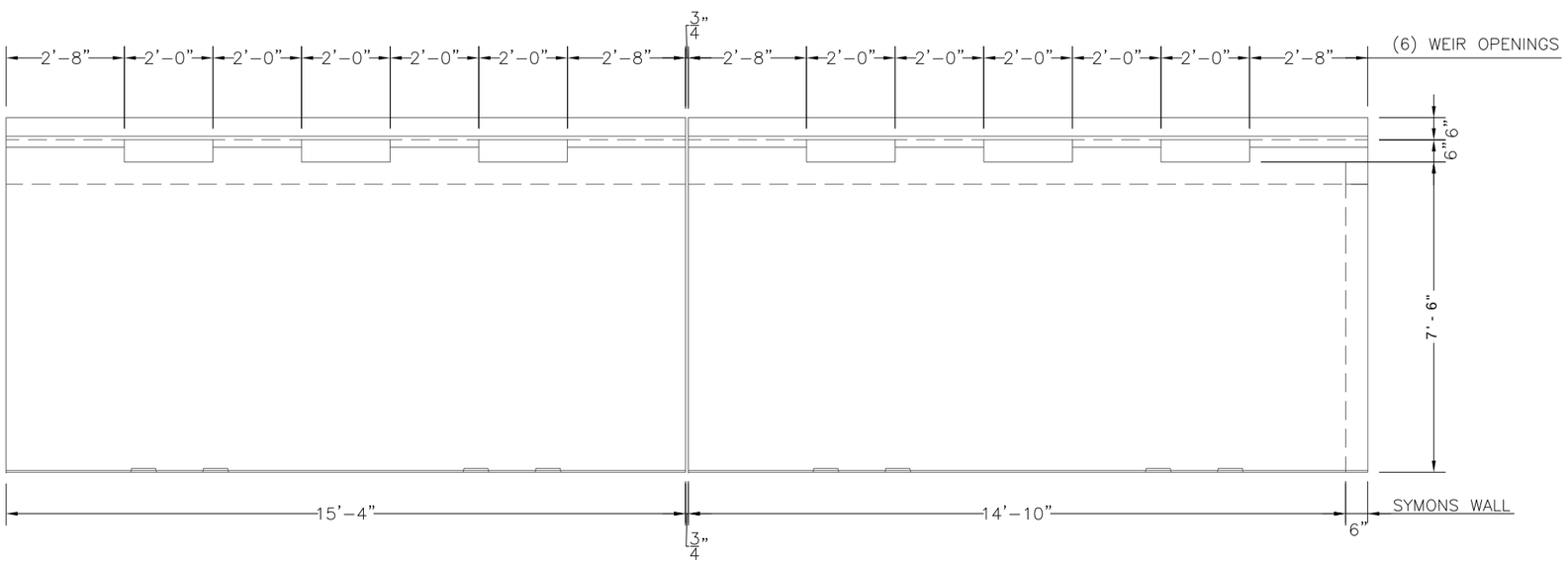
7.0



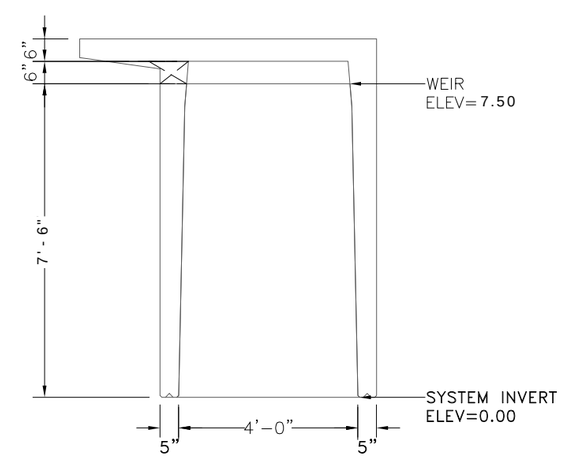
PLAN VIEW



ISOMETRIC VIEW



ELEVATION VIEW



SIDE VIEW

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET
SUITER & ASSOCIATES
535 N COAST HWY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

3/9/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
3	3/9/2021	PRELIMINARY	RJL
2	12/11/2020	PRELIMINARY	RJL
1	8/26/2020	PRELIMINARY	NP

SCALE:

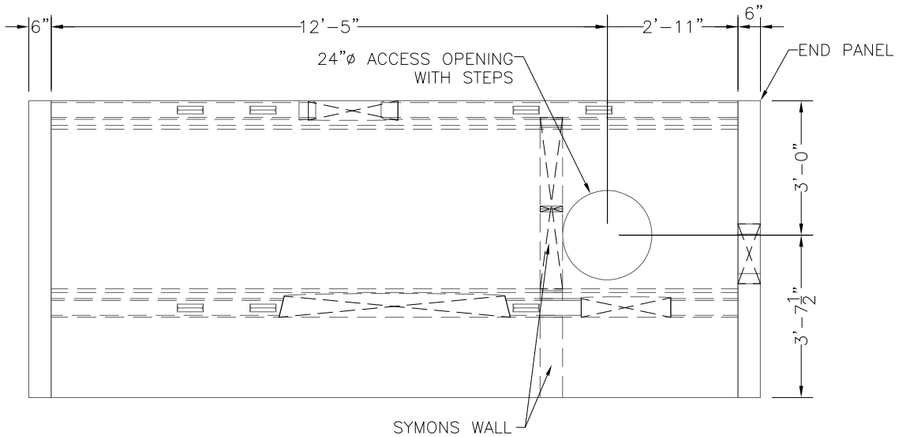
NTS

SHEET TITLE:

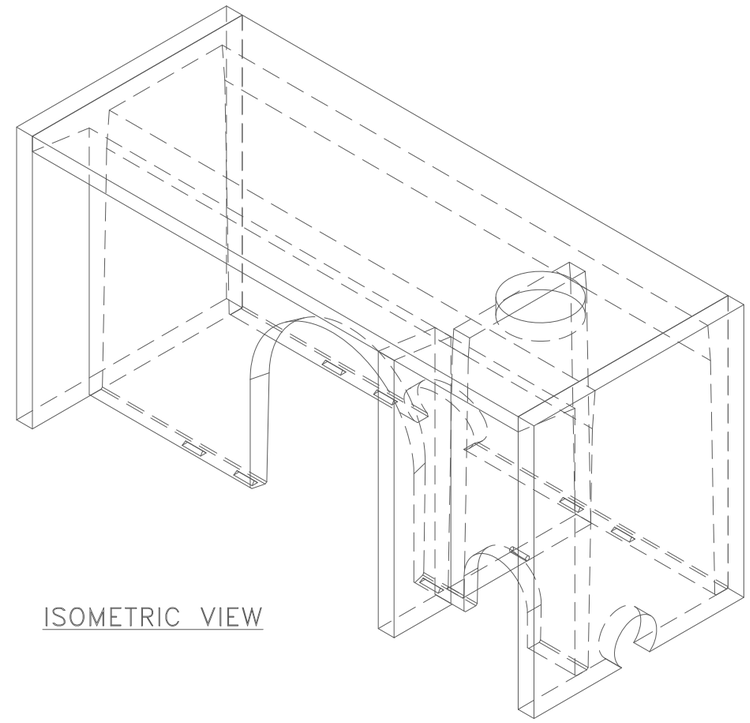
OUTLET CONTROL STRUCTURE

SHEET NUMBER:

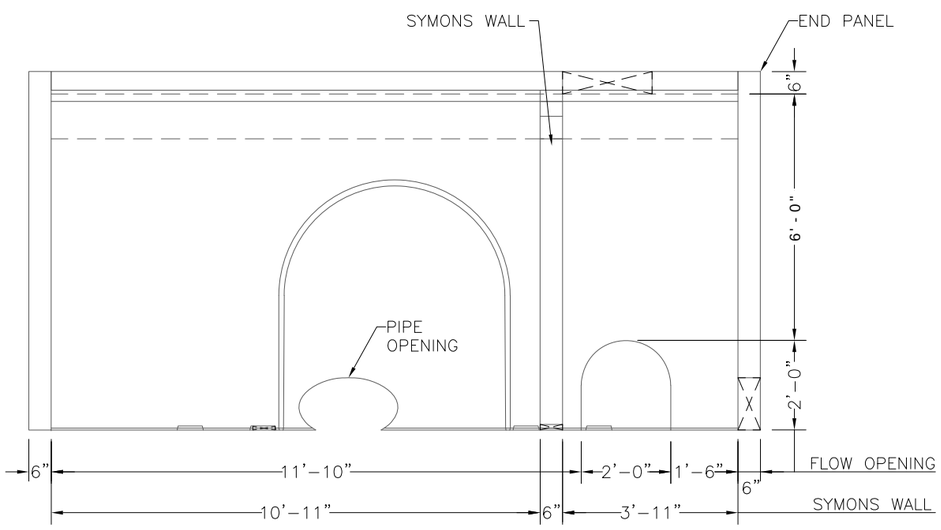
7.1



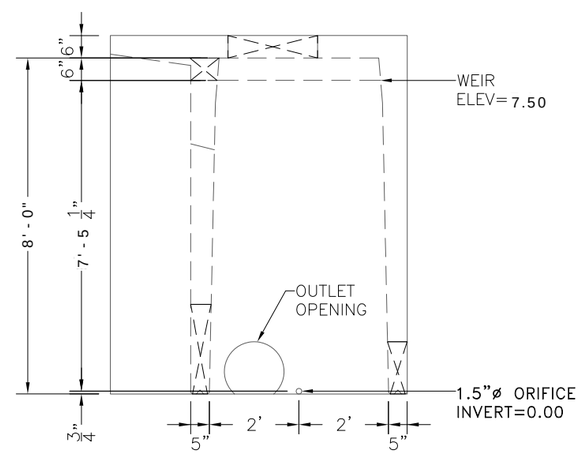
PLAN VIEW



ISOMETRIC VIEW



ELEVATION VIEW



SIDE VIEW

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET
SUITER & ASSOCIATES
535 N COAST HWY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

3/9/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
3	3/9/2021	PRELIMINARY	RJL
2	12/11/2020	PRELIMINARY	RJL
1	8/26/2020	PRELIMINARY	NP

SCALE:

NTS

SHEET TITLE:

OUTLET CONTROL STRUCTURE

SHEET NUMBER:

7.2

ATTACHMENT 3 - STRUCTURAL BMP MAINTENANCE INFORMATION

This is the cover sheet for Attachment 3.

Indicate which items are included behind this cover sheet:

Attachment	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	☑ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☐ Included ☐ Not Applicable

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

□ **Preliminary Design / Planning / CEQA level submittal:**

Attachment 3a must identify:

□ Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual

Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

□ **Final Design level submittal:**

Attachment 3a must identify:

□ Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)

□ How to access the structural BMP(s) to inspect and perform maintenance

□ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)

□ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable

□ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)

□ Recommended equipment to perform maintenance

□ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

Attachment 3b: For private entity operation and maintenance, Attachment 3b shall include a draft maintenance agreement in the local jurisdiction's standard format (PDP applicant to contact the City Engineer to obtain the current maintenance agreement forms).

BMP MAINTENANCE FACT SHEET
FOR
STRUCTURAL BMP BF-1 BIOFILTRATION

Biofiltration facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Biofiltration facilities have limited or no infiltration. They are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Typical biofiltration components include:

- Inflow distribution mechanisms (e.g., perimeter flow spreader or filter strips)
- Energy dissipation mechanism for concentrated inflows (e.g., splash blocks or riprap)
- Shallow surface ponding for captured flows
- Side slope and basin bottom vegetation selected based on climate and ponding depth
- Non-floating mulch layer
- Media layer (planting mix or engineered media) capable of supporting vegetation growth
- Filter course layer consisting of aggregate to prevent the migration of fines into uncompacted native soils or the aggregate storage layer
- Aggregate storage layer with underdrain(s)
- Impermeable liner or uncompacted native soils at the bottom of the facility
- Overflow structure

Normal Expected Maintenance

Biofiltration requires routine maintenance to: remove accumulated materials such as sediment, trash or debris; maintain vegetation health; maintain infiltration capacity of the media layer; replenish mulch; and maintain integrity of side slopes, inlets, energy dissipators, and outlets. A summary table of standard inspection and maintenance indicators is provided within this Fact Sheet.

Non-Standard Maintenance or BMP Failure

If any of the following scenarios are observed, the BMP is not performing as intended to protect downstream waterways from pollution and/or erosion. Corrective maintenance, increased inspection and maintenance, BMP replacement, or a different BMP type will be required.

- The BMP is not drained between storm events. Surface ponding longer than approximately 24 hours following a storm event may be detrimental to vegetation health, and surface ponding longer than approximately 96 hours following a storm event poses a risk of vector (mosquito) breeding. Poor drainage can result from clogging of the media layer, filter course, aggregate storage layer, underdrain, or outlet structure. The specific cause of the drainage issue must be determined and corrected.
- Sediment, trash, or debris accumulation greater than 25% of the surface ponding volume within one month. This means the load from the tributary drainage area is too high, reducing BMP function or clogging the BMP. This would require pretreatment measures within the tributary area draining to the BMP to intercept the materials. Pretreatment components, especially for sediment, will extend the life of components that are more expensive to replace such as media, filter course, and aggregate layers.
- Erosion due to concentrated storm water runoff flow that is not readily corrected by adding erosion control blankets, adding stone at flow entry points, or minor re-grading to restore proper drainage according to the original plan. If the issue is not corrected by restoring the BMP to the original plan and grade, the [City Engineer] shall be contacted prior to any additional repairs or reconstruction.

Other Special Considerations

Biofiltration is a vegetated structural BMP. Vegetated structural BMPs that are constructed in the vicinity of, or connected to, an existing jurisdictional water or wetland could inadvertently result in creation of expanded waters or wetlands. As such, vegetated structural BMPs have the potential to come under the jurisdiction of the United States Army Corps of Engineers, SDRWQCB, California Department of Fish and Wildlife, or the United States Fish and Wildlife Service. This could result in the need for specific resource agency permits and costly mitigation to perform maintenance of the structural BMP. Along with proper placement of a structural BMP, **routine maintenance is key to preventing this scenario**.

SUMMARY OF STANDARD INSPECTION AND MAINTENANCE FOR BF-1 BIOFILTRATION		
The property owner is responsible to ensure inspection, operation and maintenance of permanent BMPs on their property unless responsibility has been formally transferred to an agency, community facilities district, homeowners association, property owners association, or other special district. Maintenance frequencies listed in this table are average/typical frequencies. Actual maintenance needs are site-specific, and maintenance may be required more frequently. Maintenance must be performed whenever needed, based on maintenance indicators presented in this table. The BMP owner is responsible for conducting regular inspections to see when maintenance is needed based on the maintenance indicators. During the first year of operation of a structural BMP, inspection is recommended at least once prior to August 31 and then monthly from September through May. Inspection during a storm event is also recommended. After the initial period of frequent inspections, the minimum inspection and maintenance frequency can be determined based on the results of the first year inspections.		
Threshold/Indicator	**Maintenance Action**	**Typical Maintenance Frequency**
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials, without damage to the vegetation or compaction of the media layer.	• Inspect monthly. If the BMP is 25% full* or more in one month, increase inspection frequency to monthly plus after every 0.1-inch or larger storm event. • Remove any accumulated materials found at each inspection.
Obstructed inlet or outlet structure	Clear blockage.	• Inspect monthly and after every 0.5-inch or larger storm event. • Remove any accumulated materials found at each inspection.
Damage to structural components such as weirs, inlet or outlet structures	Repair or replace as applicable	• Inspect annually. • Maintenance when needed.
Poor vegetation establishment	Re-seed, re-plant, or re-establish vegetation per original plans.	• Inspect monthly. • Maintenance when needed.
Dead or diseased vegetation	Remove dead or diseased vegetation, re-seed, re-plant, or re-establish vegetation per original plans.	• Inspect monthly. • Maintenance when needed.
Overgrown vegetation	Mow or trim as appropriate.	• Inspect monthly. • Maintenance when needed.
2/3 of mulch has decomposed, or mulch has been removed	Remove decomposed fraction and top off with fresh mulch to a total depth of 3 inches.	• Inspect monthly. • Replenish mulch annually, or more frequently when needed based on inspection.

*"25% full" is defined as ¼ of the depth from the design bottom elevation to the crest of the outflow structure (e.g., if the height to the outflow opening is 12 inches from the bottom elevation, then the materials must be removed when there is 3 inches of accumulation – this should be marked on the outflow structure).

SUMMARY OF STANDARD INSPECTION AND MAINTENANCE FOR BF-1 BIOFILTRATION (Continued from previous page)		
Threshold/Indicator	**Maintenance Action**	**Typical Maintenance Frequency**
Erosion due to concentrated irrigation flow	Repair/re-seed/re-plant eroded areas and adjust the irrigation system.	• Inspect monthly. • Maintenance when needed.
Erosion due to concentrated storm water runoff flow	Repair/re-seed/re-plant eroded areas, and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or minor re-grading to restore proper drainage according to the original plan. If the issue is not corrected by restoring the BMP to the original plan and grade, the [City Engineer] shall be contacted prior to any additional repairs or reconstruction.	• Inspect after every 0.5-inch or larger storm event. If erosion due to storm water flow has been observed, increase inspection frequency to after every 0.1-inch or larger storm event. • Maintenance when needed. If the issue is not corrected by restoring the BMP to the original plan and grade, the [City Engineer] shall be contacted prior to any additional repairs or reconstruction.
Standing water in BMP for longer than 24 hours following a storm event Surface ponding longer than approximately 24 hours following a storm event may be detrimental to vegetation health	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, clearing underdrains, or repairing/replacing clogged or compacted soils.	• Inspect monthly and after every 0.5-inch or larger storm event. If standing water is observed, increase inspection frequency to after every 0.1-inch or larger storm event. • Maintenance when needed.
Presence of mosquitos/larvae For images of egg rafts, larva, pupa, and adult mosquitos, see http://www.mosquito.org/biology	If mosquitos/larvae are observed: first, immediately remove any standing water by dispersing to nearby landscaping; second, make corrective measures as applicable to restore BMP drainage to prevent standing water. If mosquitos persist following corrective measures to remove standing water, or if the BMP design does not meet the 96-hour drawdown criteria due to release rates controlled by an orifice installed on the underdrain, the [City Engineer] shall be contacted to determine a solution. A different BMP type, or a Vector Management Plan prepared with concurrence from the County of San Diego Department of Environmental Health, may be required.	• Inspect monthly and after every 0.5-inch or larger storm event. If mosquitos are observed, increase inspection frequency to after every 0.1-inch or larger storm event. • Maintenance when needed.
Underdrain clogged	Clear blockage.	• Inspect if standing water is observed for longer than 24-96 hours following a storm event. • Maintenance when needed.

References

American Mosquito Control Association.
http://www.mosquito.org/
California Storm Water Quality Association (CASQA). 2003. Municipal BMP Handbook.
https://www.casqa.org/resources/bmp-handbooks/municipal-bmp-handbook
County of San Diego. 2014. Low Impact Development Handbook.
http://www.sandiegocounty.gov/content/sdc/dpw/watersheds/susmp/lid.html
San Diego County Copermittees. 2016. Model BMP Design Manual, Appendix E, Fact Sheet BF-1.
http://www.projectcleanwater.org/index.php?option=com_content&view=article&id=250&Itemid=220

Page Intentionally Blank for Double-Sided Printing

BF-1
Biofiltration

Date:	Inspector:	BMP ID No.:
Permit No.:	APN(s):	
Property / Development Name:	Responsible Party Name and Phone Number:	
Property Address of BMP:	Responsible Party Address:	

INSPECTION AND MAINTENANCE CHECKLIST FOR BF-1 BIOFILTRATION PAGE 1 of 5			
Threshold/Indicator	**Maintenance Recommendation**	**Date**	**Description of Maintenance Conducted**
Accumulation of sediment, litter, or debris Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Remove and properly dispose of accumulated materials, without damage to the vegetation ☐ If sediment, litter, or debris accumulation exceeds 25% of the surface ponding volume within one month (25% full*), add a forebay or other pre-treatment measures within the tributary area draining to the BMP to intercept the materials. ☐ Other / Comments:		
Poor vegetation establishment Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Re-seed, re-plant, or re-establish vegetation per original plans ☐ Other / Comments:		

*"25% full" is defined as ¼ of the depth from the design bottom elevation to the crest of the outflow structure (e.g., if the height to the outflow opening is 12 inches from the bottom elevation, then the materials must be removed when there is 3 inches of accumulation – this should be marked on the outflow structure).

Date:	Inspector:	BMP ID No.:
Permit No.:	APN(s):	

INSPECTION AND MAINTENANCE CHECKLIST FOR BF-1 BIOFILTRATION PAGE 2 of 5			
Threshold/Indicator	**Maintenance Recommendation**	**Date**	**Description of Maintenance Conducted**
Dead or diseased vegetation Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Remove dead or diseased vegetation, re-seed, re-plant, or re-establish vegetation per original plans ☐ Other / Comments:		
Overgrown vegetation Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Mow or trim as appropriate ☐ Other / Comments:		
2/3 of mulch has decomposed, or mulch has been removed Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Remove decomposed fraction and top off with fresh mulch to a total depth of 3 inches ☐ Other / Comments:		

Date:	Inspector:	BMP ID No.:
Permit No.:	APN(s):	

INSPECTION AND MAINTENANCE CHECKLIST FOR BF-1 BIOFILTRATION PAGE 3 of 5			
Threshold/Indicator	**Maintenance Recommendation**	**Date**	**Description of Maintenance Conducted**
Erosion due to concentrated irrigation flow Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Repair/re-seed/re-plant eroded areas and adjust the irrigation system ☐ Other / Comments:		
Erosion due to concentrated storm water runoff flow Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Repair/re-seed/re-plant eroded areas, and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or minor re-grading to restore proper drainage according to the original plan ☐ If the issue is not corrected by restoring the BMP to the original plan and grade, the [City Engineer] shall be contacted prior to any additional repairs or reconstruction ☐ Other / Comments:		

Date:	Inspector:	BMP ID No.:
Permit No.:	APN(s):	

INSPECTION AND MAINTENANCE CHECKLIST FOR BF-1 BIOFILTRATION PAGE 4 of 5			
Threshold/Indicator	**Maintenance Recommendation**	**Date**	**Description of Maintenance Conducted**
Obstructed inlet or outlet structure Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Clear blockage ☐ Other / Comments:		
Underdrain clogged (inspect underdrain if standing water is observed for longer than 24-96 hours following a storm event) Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Clear blockage ☐ Other / Comments:		
Damage to structural components such as weirs, inlet or outlet structures Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Repair or replace as applicable ☐ Other / Comments:		

Date:	Inspector:	BMP ID No.:
Permit No.:	APN(s):	

INSPECTION AND MAINTENANCE CHECKLIST FOR BF-1 BIOFILTRATION PAGE 5 of 5			
Threshold/Indicator	**Maintenance Recommendation**	**Date**	**Description of Maintenance Conducted**
Standing water in BMP for longer than 24-96 hours following a storm event* Surface ponding longer than approximately 24 hours following a storm event may be detrimental to vegetation health Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, clearing underdrains, or repairing/replacing clogged or compacted soils ☐ Other / Comments:		
Presence of mosquitos/larvae For images of egg rafts, larva, pupa, and adult mosquitos, see http://www.mosquito.org/biology Maintenance Needed? ☐ YES ☐ NO ☐ N/A	☐ Apply corrective measures to remove standing water in BMP when standing water occurs for longer than 24-96 hours following a storm event.** ☐ Other / Comments:		

*Surface ponding longer than approximately 24 hours following a storm event may be detrimental to vegetation health, and surface ponding longer than approximately 96 hours following a storm event poses a risk of vector (mosquito) breeding. Poor drainage can result from clogging of the media layer, filter course, aggregate storage layer, underdrain, or outlet structure. The specific cause of the drainage issue must be determined and corrected.

**If mosquitos persist following corrective measures to remove standing water, or if the BMP design does not meet the 96-hour drawdown criteria due to release rates controlled by an orifice installed on the underdrain, the [City Engineer] shall be contacted to determine a solution. A different BMP type, or a Vector Management Plan prepared with concurrence from the County of San Diego Department of Environmental Health, may be required.

StormTrap Maintenance Manual

1. Introduction

Regular inspections are recommended to ensure that the system is functioning as designed. Please call your Authorized StormTrap Representative if you have questions in regards to the inspection and maintenance of the StormTrap system. Prior to entry into any underground storm sewer or underground detention systems, appropriate OSHA and local safety regulations and guidelines should be followed.

2. Inspection Schedules for Municipalities

StormTrap Stormwater Management Systems are recommended for inspection whenever the upstream and downstream catch basins and stormwater pipes of the stormwater collection system are inspected or maintained. This will economize the cost of the inspection if it is done at the same time the Municipal crews are visiting the area.

3. Inspection Schedules for Private Development

StormTrap Stormwater Management Systems, for a private development, are recommended for inspection after each major storm water event. At a minimum, until a cleaning schedule can be established, an annual inspection is recommended. If inspected on an annual basis, the inspection should be conducted before the stormwater season begins to be sure that everything is functioning properly for the upcoming storm season.

4. Inspection Process

Inspections should be done such that at least 2-3 days has lapsed since the most recent rain event to allow for draining. Visually inspect the system at all manhole locations. Utilizing a sediment pole, measure and document the amount of silt at each manhole location. Inspect each pipe opening to ensure that the silt level or any foreign objects are not blocking the pipes. Be sure to inspect the outlet pipe(s) because this is typically the smallest pipe in the system. It is common that most of the larger materials will be collected upstream of the system in catch basins, and it is therefore important at time of inspections to check these structures for large trash or blockages.

Remove any blockages if you can during the inspection process only if you can do so safely from the top of the system without entering into the system**. Do not go into the system under any circumstances** without proper ventilation equipment and training. Pass any information requiring action onto the appropriate maintenance personnel if you cannot remove the blockages from above during the inspection process. Be sure to describe the location of each manhole and the type of material that needs to be removed.

The sediment level of the system should also be measured and recorded during the inspection process. Recording the sediment level at each manhole is very important in order get a history of sediment that can be graphed over time (i.e. years) in order to estimate when the system will

need to be maintained next. It is also important to keep these records to verify that the inspection process was actually performed if anyone asks for your records in the future.

The sediment level in the underground detention system can be determined from the outside of the system by opening up all the manholes and using a sediment pole to measure the amount of sediment at each location. Force the stick to the bottom of the system and then remove it and measure the amount of sediment at that location. Again, do not go into the system under any circumstances without proper ventilation equipment and training.

5. When to Clean the System

Any blockages should be safely removed as soon as practical so that the Stormwater detention system will fill and drain properly before the next stormwater event.

The Dry Detention System should be completely cleaned whenever the sediment occupies more than 10% to 15% of the originally designed system's volume. The Wet Detention System should be cleaned when the sediment occupies more than 30% or 1/3rd of the originally designed system's volume. NOTE: Check with your municipality in regards to cleaning criteria, as the allowable sediment before cleaning may be more or less then described above.

6. How to Clean the StormTrap

The system should be completely cleaned back to 100% of the originally designed storage volume whenever the above sediment levels have been reached. Be sure to wait at least 3 days after a stormwater event to be sure that the system is completely drained (if it is a Dry Detention System), and all of the sediments have settled to the bottom of the system (if it is a Wet Detention System).

Do not enter the System unless you are properly trained, equipped, and qualified to enter a confined space as identified by local occupational safety and health regulations.

There are many maintenance companies that are in business to help you clean your underground stormwater detention systems and water quality units. Please call your StormTrap representative for referrals in your area.

A. Dry Detention System Cleaning

Maintenance is typically performed using a vacuum truck. Sediment should be flushed towards a vacuum hose for thorough removal. For a Dry Detention System, remove the manhole cover at the top of the system and lower a vacuum hose into one of the rows of the StormTrap system. Open up the manhole at the opposite end of the StormTrap and use sewer jetting equipment to force water in the same row from one end of the StormTrap row to the opposite side. The rows of the StormTrap are completely open in one contiguous channel from one end to the other for easy cleaning.

Place the vacuum hose and the sewer jetting equipment in the next row and repeat the process until all of the rows have been cleaned.

When finished, replace all covers that were removed and dispose of the collected material properly.

B. Wet Detention System Cleaning

If the system was designed to maintain a permanent pool of water, floatables and any oil should be removed in a separate procedure prior to the removal of all sediment.

The floatable trash is removed first by using a bucket strainer to capture and remove any floating debris.

The floatable oils are then removed off the top of the water by using the vacuum truck to suck off any floatable fluids and liquids.

The next step is to use the vacuum truck to gently remove the clarified water above the sediment layer.

The final step is to clean the sediment for each row as described above in the paragraph "A. Dry Detention System Cleaning". For smaller systems, the vacuum truck can remove all of the sediment in the basin without using the sewer jetting equipment because of the smaller space.

8. Proof of these inspections is the responsibility of the property owner. All inspection reports and data should be kept on site or at a location where they will be accessible for years in the future. Some municipalities require these inspection and cleaning reports to be forwarded to the proper governmental permitting agency on an annual basis.

   Refer to your local and national regulations for any additional maintenance requirements and schedules not contained herein. Inspections should be a part of your standard operating procedure.

SAMPLE INSPECTION AND MAINTENANCE LOG

Date	Depth of Sediment	Accumulated Trash	Maintenance Performed	Maintenance Personnel	Comments
	3”	None	Sediment Removal/Vac	B. Johnson	

ATTACHMENT 4 - COPY OF PLAN SHEETS SHOWING PERMANENT STORM WATER BMPS

This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

- ☐ Structural BMP(s) with ID numbers matching Form I-6 Summary of PDP Structural BMPs
- ☐ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- ☐ Details and specifications for construction of structural BMP(s)
- ☐ Signage indicating the location and boundary of structural BMP(s) as required by the [City Engineer]
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- ☐ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- ☐ All BMPs must be fully dimensioned on the plans
- ☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.

MULTI-003780-2020/ BADJ-003787-2020/ CDP-003788-2020/ DR-003786-2020 FENWAY N. HWY 101

LEGEND

- SUBJECT PROPERTY / SUBDIVISION BOUNDARY
- RIGHT-OF-WAY / PROPOSED FUTURE LOT LINE
- CENTERLINE OF ROAD
- EXISTING EASEMENTS
- PROPOSED EASEMENTS
- ADJACENT PROPERTY LINE

EXISTING EASEMENT INFORMATION

1. AN EASEMENT GRANTED TO THE STATE OF CALIFORNIA FOR STATE HIGHWAY 80 RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY IN BOOK 751, PAGE 375, AND IN BOOK 751, PAGE 377, AND BOOK 1073, PAGE 395, AS SHOWN HEREON.
2. AN EASEMENT GRANTED TO THE STATE OF CALIFORNIA FOR STATE HIGHWAY PURPOSES, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY AS BOOK 297, PAGE 324 OF OFFICIAL RECORDS, DATED JUNE 11, 1934, AS SHOWN HEREON.
3. AN EASEMENT GRANTED TO SAN DIEGO GAS AND ELECTRIC COMPANY FOR PUBLIC UTILITIES, INGRESS AND EGRESS, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY AS BOOK 1867, PAGE 333, OF OFFICIAL RECORDS, DATED MAY 15, 1945, AS SHOWN HEREON.
4. AN EASEMENT FOR PUBLIC UTILITIES, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY AS BOOK 1935, PAGE 418, OF OFFICIAL RECORDS, DATED OCTOBER 4, 1945. THE EXACT LOCATION OF SAID EASEMENT IS NOT DISCLOSED OF RECORD AND IS NOT SHOWN HEREON.
5. AN EASEMENT GRANTED TO SAN DIEGO GAS AND ELECTRIC COMPANY FOR PUBLIC UTILITIES, INGRESS AND EGRESS, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY AS BOOK 2198, PAGE 227, DATED FEBRUARY 4, 1946, OF OFFICIAL RECORDS.
6. AN EASEMENT GRANTED TO CITY OF ENCINITAS FOR PUBLIC STREET RGHT-OF-WAY, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY AS DOCUMENT NO. 2019-00104396, DATED JANUARY 10, 2019, OF OFFICIAL RECORDS.
7. AN EASEMENT GRANTED TO CITY OF ENCINITAS FOR PUBLIC STREET RGHT-OF-WAY, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY AS DOCUMENT NO. 2019-0010423, DATED JANUARY 10, 2019, OF OFFICIAL RECORDS.

PROPOSED EASEMENT INFORMATION

1. PROPOSED EMERGENCY ACCESS EASEMENT FOR PRIVATE ROADS TO THE CITY OF ENCINITAS
2. PROPOSED SEWER EASEMENT TO THE ENCINITAS SANITARY DISTRICT
3. PROPOSED WATER EASEMENT TO THE SAN DIEGUITO WATER DISTRICT
4. PROPOSED PRIVATE DRAINAGE EASEMENT

UTILITIES

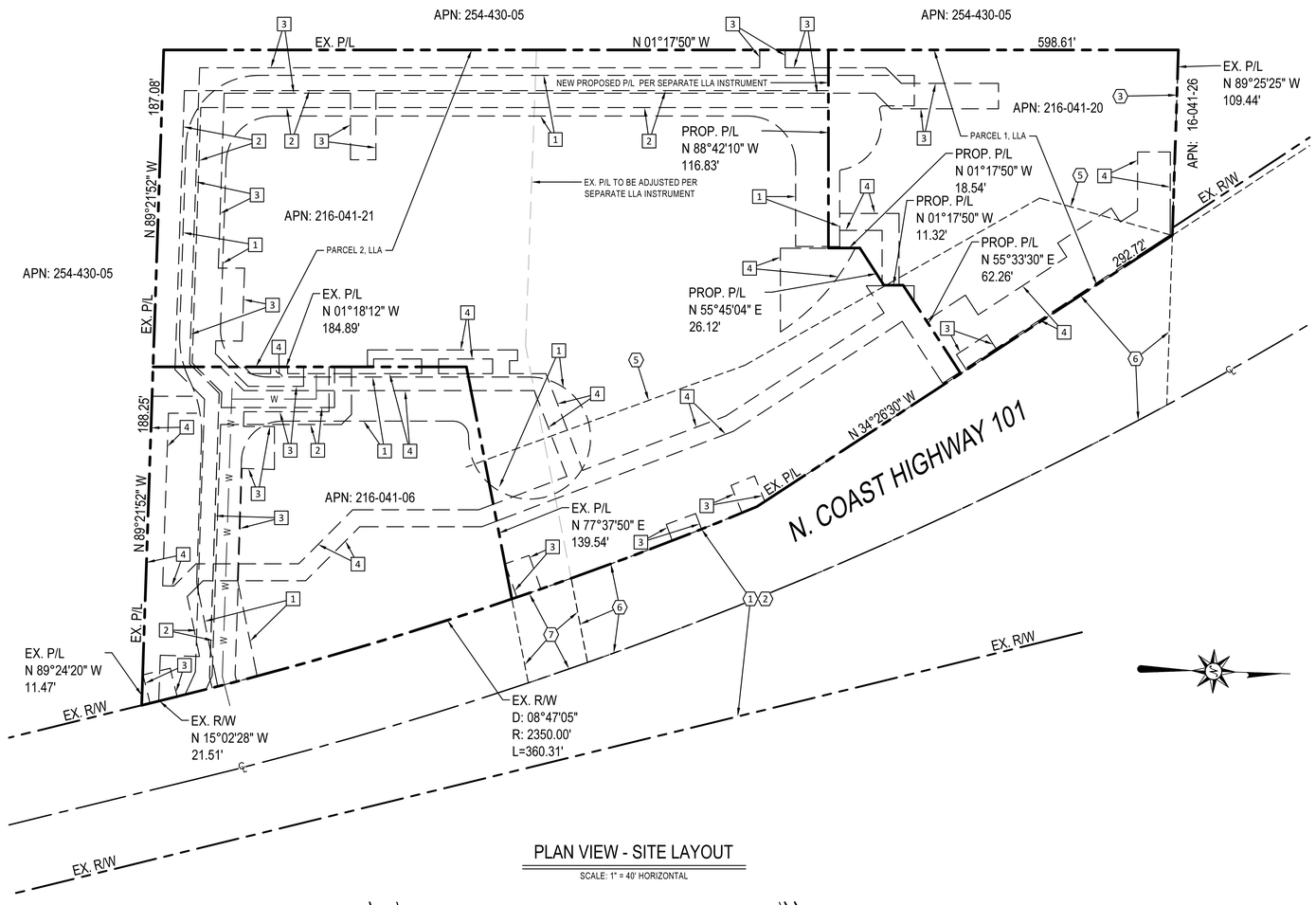
WATER	SAN DIEGUITO WATER DISTRICT
FIRE	ENCINITAS FIRE PROTECTION DISTRICT
SEWER	LEUCADIA WASTEWATER DISTRICT
ELEMENTARY SCHOOL	ENCINITAS UNION SCHOOL DISTRICT
HIGH SCHOOL	SAN DIEGUITO UNION HIGH SCHOOL DISTRICT

AREA CALCULATIONS

TOTAL SITE AREA:	165,107 SF (3.790 AC)
AREA DISTURBED BY PROJECT:	166,988 SF (3.834 AC)
EXISTING IMPERVIOUS AREA:	76,820 SF (1.764 AC)
PROPOSED IMPERVIOUS AREA:	143,659 SF (3.298 AC)
INCREASE IMPERVIOUS AREA:	66,839 SF (1.534 AC)

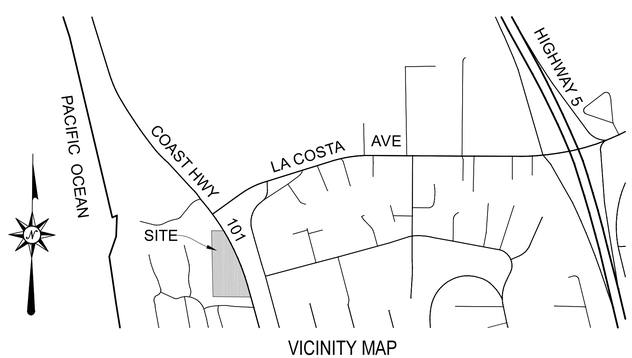
ABBREVIATIONS

AC	ASPHALT CONCRETE	MH	MANHOLE
BFD	BACKFLOW DEVICE	PA	PLANTER AREA
BS	BOTTOM OF STAIRS	P/L	PROPERTY LINE
BW	BOTTOM OF WALL	PP	POWER POLE
CB	CATCH BASIN	PROP	PROPOSED
CF	CURB FACE	PVC	POLYVINYL CHLORIIDE
CO	CLEANOUT	R/W	RIGHT-OF-WAY
CONC	CONCRETE	SCO	SEWER CLEANOUT
EG	EDGE OF GUTTER	SDCO	STORM DRAIN CLEANOUT
ELEC	ELECTRICAL	SL	STREET LIGHT
ELVT	ELEVATOR	SMH	SEWER MANHOLE
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
FF	FINISH FLOOR	TC	TOP OF CURB
FG	FINISHED GRADE	TG	TOP OF GRATE
FL	FLOW LINE	TS	TOP OF STAIRS
FM	FORCE MAIN	TW	TOP OF WALL
FS	FINISHED SURFACE	TYP	TYPICAL
GA	GUY ANCHOR	WAR	WATER AIR RELEASE
GB	GRADE BREAK	WM	WATER METER
GF	GARAGE FLOOR	WV	WATER VALVE
GP	GUY POLE		
GV	GAS VALVE		
INV	INVERT ELEVATION		



PLAN VIEW - SITE LAYOUT

SCALE: 1" = 40' HORIZONTAL



VICINITY MAP

NOT TO SCALE

OWNER INFORMATION

WE HEREBY CERTIFY THAT WE ARE THE RECORDED OWNERS OF THE PROPERTY SHOWN ON THE ATTACHED COASTAL DEVELOPMENT PERMIT AND THAT SAID APPLICATION SHOWS THE ENTIRE CONTIGUOUS OWNERSHIP. I UNDERSTAND THAT PROPERTY IS CONSIDERED CONTIGUOUS EVEN IF IT IS SEPARATED BY ROADS, STREETS, UTILITY EASEMENTS, OR RAILROAD RIGHTS OF WAY.

OWNER: _____

LARRY JACKEL FOR:
FENWAY CAPITAL ADVISORS
674 VIA DE LA VALLE, #310
SOLANA BEACH, CA 92075

ABBREVIATED LEGAL DESCRIPTION

APN 216-041-20 & 216-041-21: PORTION OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 12 SOUTH, RANGE 4 WEST, SAN BERNARDINO MERIDIAN IN THE CITY OF ENCINITAS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA AS SHOWN AND DESIGNATED ON GRANT DEED DOCUMENT NO. 2018-0286076 FILED ON JULY 13, 2018, (PARCELS "A" AND "B" ONLY).

216-041-06: PORTION OF SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 12 SOUTH, RANGE 4 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF ENCINITAS, COUNTY OF SAND DIEGO, STATE OF CALIFORNIA AS SHOWN AND DESIGNATED ON QUITCLAIM DEED NO. 1999-0646957.

SITE ADDRESS

LEUCADIA 101
1900, 1950 & 2100 NORTH COAST HWY 101
ENCINITAS, CA 92024
APN: 216-041-06, -20 & -21

ACCESS

VEHICULAR ACCESS FROM COAST HIGHWAY 101

TOPOGRAPHY

TOPOGRAPHY OBTAINED FROM ACCULINE SURVEY, PREPARED ON JULY 06, 2019
PREPARED BY: RUDY P. PACHECO, L.S. 5717
ACCULINE SURVEY, INC.
1919 GRAND AVE, SUITE 1G, SAN DIEGO, CA 92109

ALL TOPOGRAPHIC INFORMATION SHOWN HEREON WAS PROVIDED BY OTHERS AND IS ASSUMED TO BE COMPLETE AND ACCURATE. PLSA HAS NOT PROVIDED ANY VERIFICATION OF EXISTING SITE TOPOGRAPHY.

BENCHMARK

ENC-25 2.5" CITY OF ENCINITAS BRASS DISK IN WELL MONUMENT IN THE MIDDLE OF THE INTERSECTION OF SOUTH PORTAL AND LA MESA AVENUE AS SHOWNO N CITY OF ENCINITAS CONTROL RECORD OF SURVEY 18416
ELEVATION = 60.60
DATUM = NAVD 88

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, NAD 83 (CCS83) EPOCH 1991.35 ZONE 6, AS DETERMINED LOCALLY BY A LINE BETWEEN FIRST ORDER CONTROL STATIONS "CLSB-021" AND "ENC-25" BEING A GRID BEARING OF N09°56'55" W AS DERIVED FROM GEODETIC VALUES SHOWN ON RECORD OF SURVEY 18416, CITY OF ENCINITAS SURVEY CONTROL, FILED ON SEPTEMBER 3, 2004 AS FILE NUMBER 2004-843575 IN THE OFFICE OF THE COUNTY RECORDERD OF SAN DIEGO COUNTY

ZONING INFORMATION

GENERAL PLAN LAND USE:	PARCEL 1/2: VISITOR SERV. COMM. PARCEL 3: GENERAL COMMERCIAL	PRESENT USE:	PARCEL 1 & 2: COMMERCIAL/ RETAIL PARCEL 3: VACANT
PRESENT ZONING REQUIREMENTS:	PARCEL 1 & 2: N-LVSC / R-30 PARCEL 3: N-CRM-1	PROPOSED USE:	PARCEL 1: HOTEL PARCEL 2: MIXED USE PARCEL 3: MIXED USE
BUILDING HEIGHT:	35' TO 39' FOR R-30 OL 30' FOR N-CRM-1	TOTAL UNITS:	30 FOR HOTEL ON PARCEL 1 94 FOR RESID. ON PARCEL 2 10 FOR RESIDENTIAL ON N-CRM-1
MAXIMUM LOT COVERAGE (PER ZONE):	65% FOR R-30 OL 90% FOR N-CRM-1		

SETBACKS

	PARCEL 1	PARCEL 2	PARCEL 3
FRONT*	10' REQ'D/ 0' PROP.*	10' REQ'D/ 0' PROP.*	0' REQ'D/ 0' PROP.
SIDE*	10' REQ'D/ 10' PROP.	10' REQ'D/ 10' PROP.	0' REQ'D/ 0' PROP.
SIDE (ADJACENT TO RESIDENTIAL)	10' REQ'D/ 10' PROP.	10' REQ'D/ 10' PROP.	10' REQ'D/ 10' PROP.
REAR	10' REQ'D/ 10' PROP.	10' REQ'D/ 10' PROP.	0' REQ'D/ 0' PROP.
REAR (ADJ. TO RESIDENTIAL)	10' REQ'D/ 10' PROP.	10' REQ'D/ 10' PROP.	10' REQ'D/ 10' PROP.
REAR (ADJ. TO RESID.) 3 STORIES OR MORE	30' REQ'D/ 30' PROP.	30' REQ'D/ 30' PROP.	N/A/ N/A
STREET SIDE	10' REQ'D/ N/A	10' REQ'D/ N/A	0'/ N/A

*MAY BE REDUCED WITH DESIGN REVIEW

EARTHWORK / PROJECT GRADING

CUT:	50,700 CY	MAX CUT HEIGHT:	31.5 FT
FILL:	2,300 CY	MAX FILL HEIGHT:	18.4 FT
EXPORT:	48,400 CY		
REMEDIAL:	0 CY		

*ESTIMATE DOES NOT INCLUDE STRIPPINGS OR UTILITY TRENCH VOLUMES, IF REQUIRED BY SITE CONDITIONS

CONTRACTOR SHALL SATISFY SELF THAT ESTIMATES ARE CORRECT PRIOR TO COMMENCEMENT OF WORK.

EARTHWORK QUANTITIES ARE ESTIMATED FOR PERMIT PURPOSES ONLY. (CALCULATED ON A THEORETICAL BASIS. ACTUAL QUANTITIES MAY VARY DUE TO SHRINKAGE OR SWELL FACTORS).

DEPTH & QUANTITY OF REMEDIAL GRADING IS SUBJECT TO FIELD VERIFICATION BY PROJECT SOILS ENGINEER IN FIELD DURING EXCAVATION.

ENGINEER OF WORK

WILLIAM J. SUITER, PE #68964 DATE

REGISTERED PROFESSIONAL ENGINEER
WILLIAM J. SUITER
No. RCE 68964
EXP. 12-31-21
Civil
STATE OF CALIFORNIA

SHEET INDEX

SHEET 1 - CIVIL TITLE SHEET
SHEET 2 - EXISTING TOPOGRAPHY PLAN
SHEET 3 - PRELIMINARY GRADING PLAN
SHEET 4 - PRELIMINARY UTILITY PLAN
SHEET 5/6 - SITE SECTIONS
SHEET 7/8 - DETAILS
SHEET 9 - SLOPE ANALYSIS & LOT AREAS
SHEET 10 - HILLSIDE INLAND BLUFF OVERLAY ANALYSIS
SHEET 11 - PRELIMINARY WALL & FENCE PLAN

TITLE SHEET
FENWAY N. HWY 101
CITY OF ENCINITAS

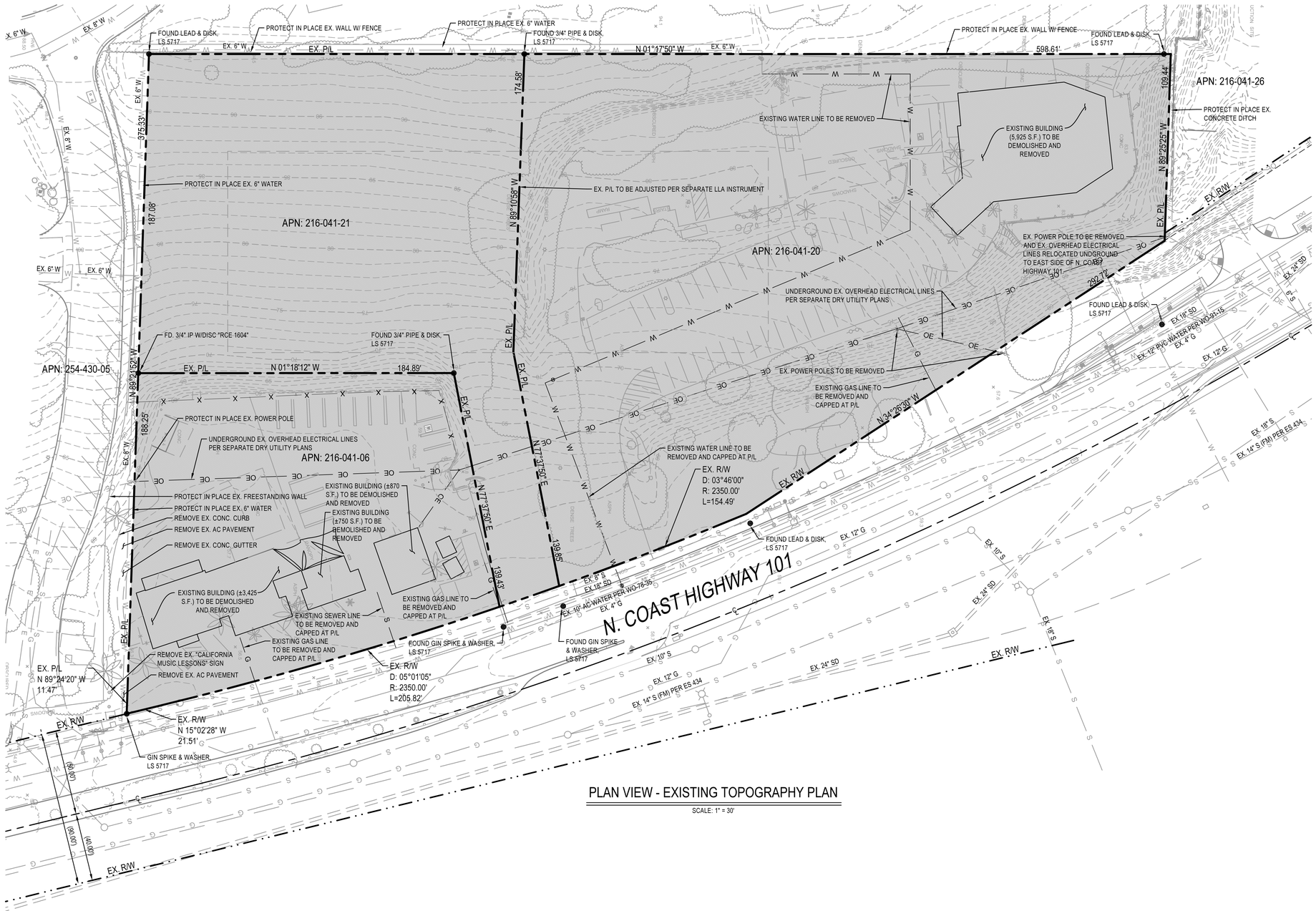
DATE PREPARED: 12/21/20
PREPARED BY: PAULO AYALA

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: ---- ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-01-TITL.dwg

EXISTING TOPOGRAPHY PLAN

FENWAY N. HWY 101



PLAN VIEW - EXISTING TOPOGRAPHY PLAN

SCALE: 1" = 30'

LEGEND

PROPERTY BOUNDARY	
CENTERLINE OF ROAD	
ADJACENT PROPERTY LINE / RIGHT-OF-WAY	
EXISTING CONTOUR LINE	64
EXISTING WATER MAIN (SIZE PER PLAN)	W
EXISTING SEWER MAIN (SIZE PER PLAN)	S
EXISTING STORM DRAIN (SIZE PER PLAN)	SD
EXISTING GAS MAIN	G
EXISTING TELECOM CONDUIT	T
LIMITS OF ON-SITE REMOVAL	

SITE NOTES

1. EXISTING SURVEY MONUMENTS TO BE PROTECTED IN PLNCE. IF MONUMENT IS DISTURBED OR DESTROYED, IT SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AND A CORNER RECORD OF SURVEY SHALL BE FILED WITH THE COUNTY.
2. ALL EXISTING STRUCTURES AND WALLS WITHIN THE PROPOSED DISTURBED AREA TO BE DEMOLISHED UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN THE PROPOSED DISTURBED AREA TO BE REMOVED AND THE AREA CLEARED / GRUBBED UNLESS OTHERWISE NOTED.
4. ALL UTILITIES SHOWN HEREON PER BEST AVAILABLE RECORDS. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD OF DISCREPANCIES UPON DISCOVERY.

ABBREVIATIONS

AC	ASPHALT CONCRETE	P/L	PROPERTY LINE
BFD	BACKFLOW DEVICE	PP	POWER POLE
BS	BOTTOM OF STAIRS	PROP	PROPOSED
BW	BOTTOM OF WALL	PVC	POLYVINYL CHLORIIDE
CB	CATCH BASIN	R/W	RIGHT-OF-WAY
CF	CURB FACE	SCO	SEWER CLEANOUT
CO	CLEANOUT	SDCO	STORM DRAIN CLEANOUT
CONC	CONCRETE	SL	STREET LIGHT
ELEC	ELECTRICAL	SMH	SEWER MANHOLE
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
FF	FINISH FLOOR	TC	TOP OF CURB
FG	FINISHED GRADE	TG	TOP OF GRATE
FL	FLOW LINE	TS	TOP OF STAIRS
FS	FINISHED SURFACE	TW	TOP OF WALL
GA	GUY ANCHOR	TYP	TYPICAL
GB	GRADE BREAK	WM	WATER METER
GF	GARAGE FLOOR	WV	WATER VALVE
GP	GUY POLE		
GV	GAS VALVE		
INV	INVERT ELEVATION		
MH	MANHOLE		
PA	PLANTER AREA		

EASEMENT NOTES

**SEE SHEET 1 FOR ALL EXISTING EASEMENTS PLOTTED AND LABELED ONSITE

SCALE: 1" = 30'

30 15 0 30 60 90

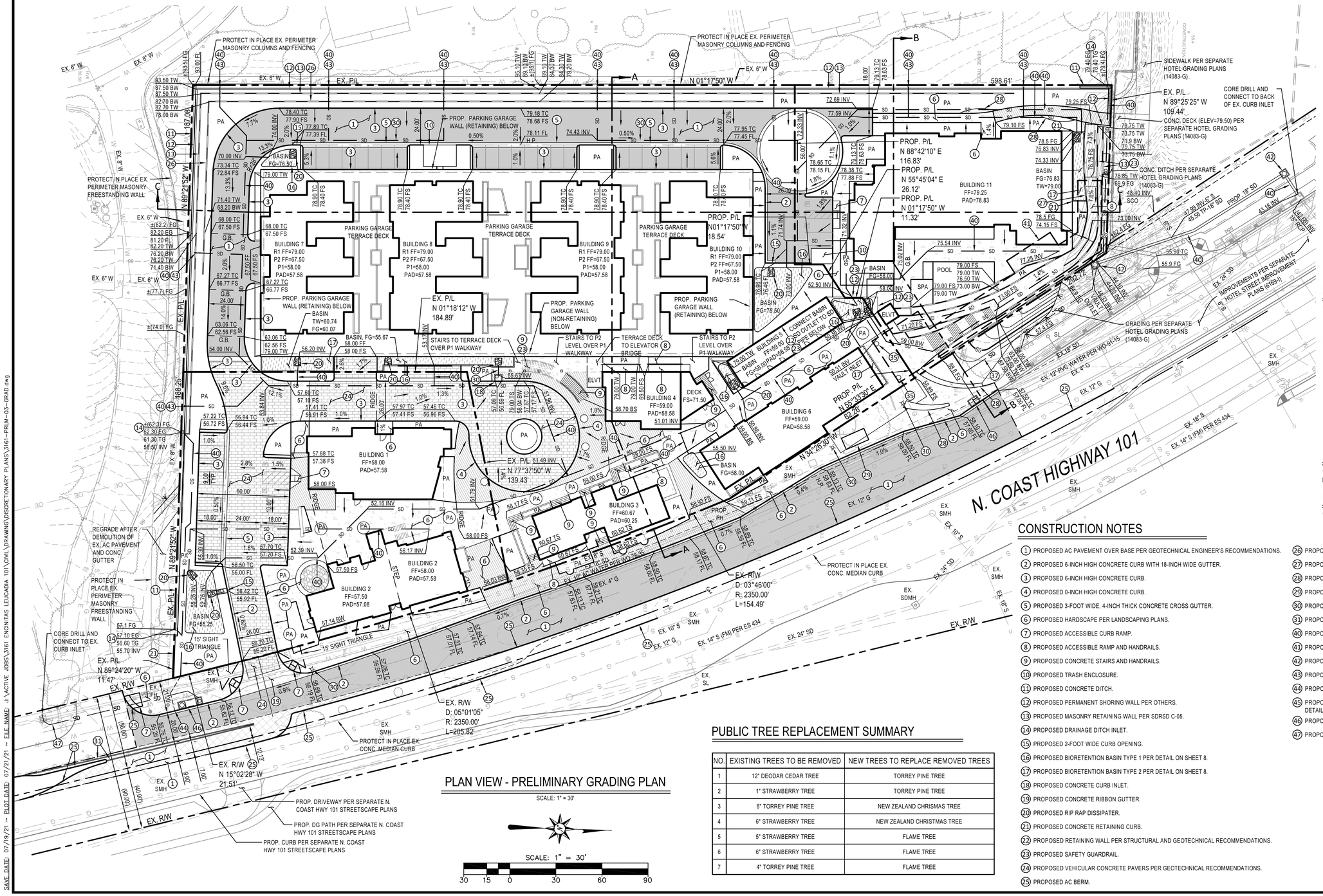
EXISTING TOPOGRAPHY PLAN
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 04/14/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-02-TOPO.dwg

PRELIMINARY GRADING PLAN

FENWAY N. HWY 101



PLAN VIEW - PRELIMINARY GRADING PLAN

SCALE: 1" = 30'

SCALE: 1" = 30'

30 15 0 30 60 90

PUBLIC TREE REPLACEMENT SUMMARY

NO.	EXISTING TREES TO BE REMOVED	NEW TREES TO REPLACE REMOVED TREES
1	12" DEODAR CEDAR TREE	TORREY PINE TREE
2	1" STRAWBERRY TREE	TORREY PINE TREE
3	6" TORREY PINE TREE	NEW ZEALAND CHRISMAS TREE
4	6" STRAWBERRY TREE	NEW ZEALAND CHRISTMAS TREE
5	5" STRAWBERRY TREE	FLAME TREE
6	6" STRAWBERRY TREE	FLAME TREE
7	4" TORREY PINE TREE	FLAME TREE

LEGEND

- PROPERTY BOUNDARY
- CENTERLINE OF ROAD
- ADJACENT PROPERTY LINE / RIGHT-OF-WAY
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- PROPOSED FLOWLINE
- PROPOSED DIRECTION OF FLOW
- PROPOSED 6" PCC CURB & GUTTER PER SDRSD G-2
- PROPOSED AC PAVEMENT
- PROPOSED AC PAVEMENT TO REPLACE EX. MEDIAN
- PROPOSED CONCRETE PAVEMENT
- PROPOSED BMP BIOFILTRATION BASIN (TYPE 1 OR TYPE 2) PLANTER PER DETAILS ON SHEET 7
- PROPOSED BOARDWALK PAVING (LINEAR PAVERS OR MANUFACTURED WOOD DECKING)
- PROPOSED CONCRETE PAVERS
- PROPOSED UNDERGROUND PARKING GARAGE WALL
- PROPOSED MASONRY RETAINING WALL
- PROPOSED STORM DRAIN
- EXISTING WATER MAIN (SIZE PER PLAN)
- EXISTING SEWER MAIN (SIZE PER PLAN)
- EXISTING STORM DRAIN (SIZE PER PLAN)
- EXISTING GAS MAIN (SIZE PER PLAN)
- EXISTING TELECOM CONDUIT

SITE NOTES

1. EXISTING SURVEY MONUMENTS TO BE PROTECTED IN PLACE. IF MONUMENT IS DISTURBED OR DESTROYED, IT SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AND A CORNER RECORD OF SURVEY SHALL BE FILED WITH THE COUNTY.
2. ALL EXISTING STRUCTURES AND WALLS WITHIN THE PROPOSED DISTURBED AREA TO BE DEMOLISHED UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN THE PROPOSED DISTURBED AREA TO BE REMOVED AND THE AREA CLEARED / GRUBBED UNLESS OTHERWISE NOTED.
4. ALL UTILITIES SHOWN HEREON PER BEST AVAILABLE RECORDS. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD OF DISCREPANCIES UPON DISCOVERY.
5. BMP'S ARE TO BE PRIVATELY MAINTAINED AND THE FACILITIES NOT MODIFIED OR REMOVED WITHOUT A PERMIT FROM THE CITY.

EASEMENT NOTES

**SEE SHEET 1 FOR ALL EXISTING EASEMENTS PLOTTED AND LABELED ONSITE

GENERAL NOTES

**SEE SHEET 5 & 6 FOR SITE SECTIONS

CONSTRUCTION NOTES

1. PROPOSED AC PAVEMENT OVER BASE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
2. PROPOSED 6-INCH HIGH CONCRETE CURB WITH 18-INCH WIDE GUTTER.
3. PROPOSED 6-INCH HIGH CONCRETE CURB.
4. PROPOSED 0-INCH HIGH CONCRETE CURB.
5. PROPOSED 3-FOOT WIDE, 4-INCH THICK CONCRETE CROSS GUTTER.
6. PROPOSED HARDSCAPE PER LANDSCAPING PLANS.
7. PROPOSED ACCESSIBLE CURB RAMP.
8. PROPOSED ACCESSIBLE RAMP AND HANDRAILS.
9. PROPOSED CONCRETE STAIRS AND HANDRAILS.
10. PROPOSED TRASH ENCLOSURE.
11. PROPOSED CONCRETE DITCH.
12. PROPOSED PERMANENT SHORING WALL PER OTHERS.
13. PROPOSED MASONRY RETAINING WALL PER SDRSD C-05.
14. PROPOSED DRAINAGE DITCH INLET.
15. PROPOSED 2-FOOT WIDE CURB OPENING.
16. PROPOSED BIORETENTION BASIN TYPE 1 PER DETAIL ON SHEET 8.
17. PROPOSED BIORETENTION BASIN TYPE 2 PER DETAIL ON SHEET 8.
18. PROPOSED CONCRETE CURB INLET.
19. PROPOSED CONCRETE RIBBON GUTTER.
20. PROPOSED RIP RAP DISSIPATER.
21. PROPOSED CONCRETE RETAINING CURB.
22. PROPOSED RETAINING WALL PER STRUCTURAL AND GEOTECHNICAL RECOMMENDATIONS.
23. PROPOSED SAFETY GUARDRAIL.
24. PROPOSED VEHICULAR CONCRETE PAVERS PER GEOTECHNICAL RECOMMENDATIONS.
25. PROPOSED AC BERM.
26. PROPOSED MASONRY RETAINING WALL PER SDRSD C-01.
27. PROPOSED MASONRY RETAINING WALL PER SDRSD C-03.
28. PROPOSED CONCRETE SEAT WALL.
29. PROPOSED BUS SHELTER STRUCTURE.
30. PROPOSED STREET LIGHT.
31. PROPOSED DOUBLE YELLOW STRIPING.
40. PROPOSED PRIVATE STORM DRAINAGE PIPE.
41. PROPOSED PRIVATE UNDERGROUND STORMTRAP DETENTION SYSTEM PER DETAILS ON SHEET 7.
42. PROPOSED PRIVATE STORM DRAIN CLEANOUT PER SDRSD D-09.
43. PROPOSED PRIVATE AREA DRAIN.
44. PROPOSED PUBLIC SIDEWALK UNDERDRAIN.
45. PROPOSED MANHOLE FRAME AND COVER FOR ACCESS INTO STORMTRAP DETENTION SYSTEM PER DETAILS ON SHEET 7.
46. PROPOSED MODULAR WETLANDS SYSTEM (CURB INLET TYPE).
47. PROPOSED PUBLIC STORM DRAINAGE PIPE.

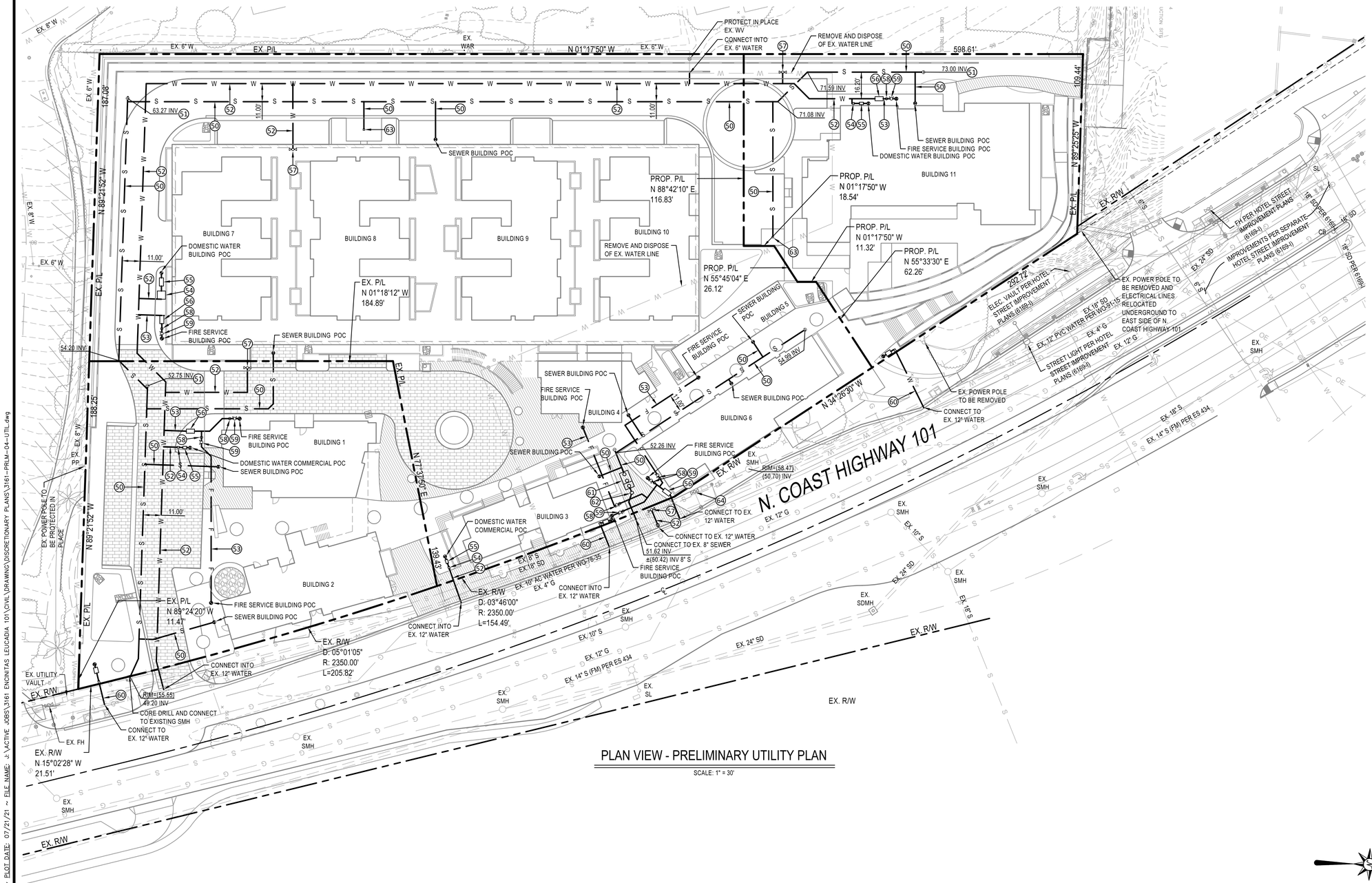
PRELIMINARY GRADING PLAN
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/19/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-03-GRAD.dwg

PRELIMINARY UTILITY PLAN

FENWAY N. HWY 101



PLAN VIEW - PRELIMINARY UTILITY PLAN

SCALE: 1" = 30'

LEGEND

- PROPERTY BOUNDARY/RIGHT-OF-WAY
- CENTERLINE OF ROAD
- SETBACK LINE
- EXISTING CONTOUR LINE (64)
- PROPOSED CONTOUR LINE (64)
- PROPOSED DIRECTION OF FLOW
- PROPOSED CURB & GUTTER
- PROPOSED MASONRY RETAINING WALL
- PROPOSED WATER MAIN (W)
- PROPOSED FIRE SERVICE (F)
- PROPOSED SEWER MAIN (S)
- EXISTING WATER MAIN (SIZE PER PLAN) (W)
- EXISTING SEWER MAIN (SIZE PER PLAN) (S)
- EXISTING STORM DRAIN (SIZE PER PLAN) (SD)
- EXISTING GAS MAIN (G)
- EXISTING TELECOM CONDUIT (T)

CONSTRUCTION NOTES

50. PROPOSED PRIVATE SEWER PIPE.
51. PROPOSED PRIVATE SEWER CLEANOUT.
52. PROPOSED PUBLIC WATER PIPE.
53. PROPOSED PRIVATE FIRE SERVICE WATER PIPE.
54. PROPOSED PUBLIC WATER METER.
55. PROPOSED PRIVATE DOMESTIC WATER BACKFLOW.
56. PROPOSED PUBLIC FIRE SERVICE REDUCED PRESSURE BACKFLOW PREVENTION DEVICE.
57. PROPOSED PUBLIC FIRE HYDRANT.
58. PROPOSED PRIVATE POST INDICATOR VALVE.
59. PROPOSED PRIVATE FIRE DEPARTMENT CONNECTION.
60. PROPOSED PUBLIC IRRIGATION METER, SERVICE LATERAL AND PRIVATE BACKFLOW.
61. PROPOSED PRIVATE SEWER GREASE INTERCEPTOR.
62. PROPOSED PRIVATE SEWER GREASE SAMPLE BOX.
63. PROPOSED PRIVATE DRAINAGE INLET FOR TRASH ENCLOSURE.
64. REMOVE EX. PUBLIC FIRE HYDRANT.

SITE NOTES

1. EXISTING SURVEY MONUMENTS TO BE PROTECTED IN PLNCE. IF MONUMENT IS DISTURBED OR DESTROYED, IT SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AND A CORNER RECORD OF SURVEY SHALL BE FILED WITH THE COUNTY.
2. ALL EXISTING STRUCTURES AND WALLS WITHIN THE PROPOSED DISTURBED AREA TO BE DEMOLISHED UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN THE PROPOSED DISTURBED AREA TO BE REMOVED AND THE AREA CLEARED / GRUBBED UNLESS OTHERWISE NOTED.
4. ALL UTILITIES SHOWN HEREON PER BEST AVAILABLE RECORDS. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD OF DISCREPANCIES UPON DISCOVERY.

EASEMENT NOTES

**SEE SHEET 1 FOR ALL EXISTING AND PROPOSED EASEMENTS PLOTTED AND LABELED ONSITE

SCALE: 1" = 30'

30 15 0 30 60 90

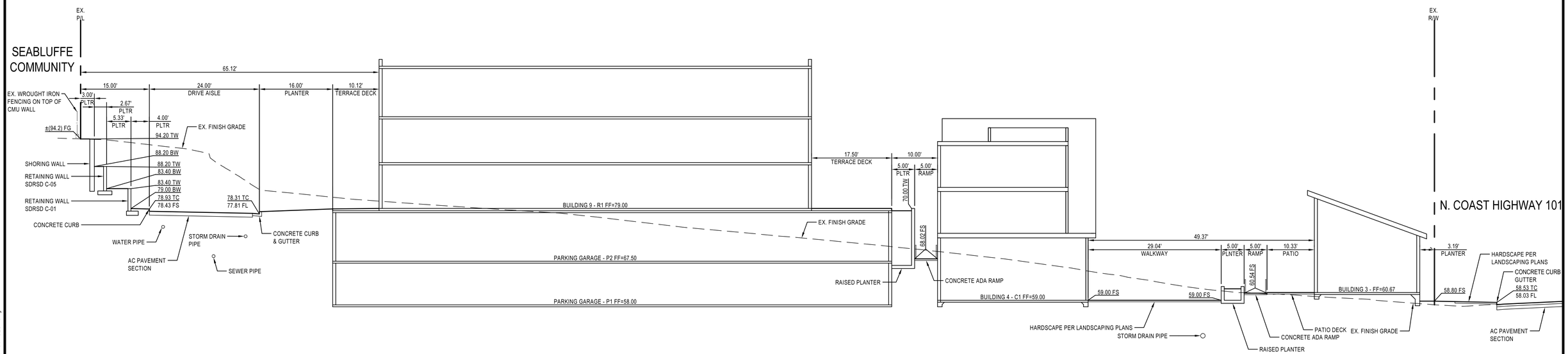
PRELIMINARY UTILITY PLAN
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: ----- ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-04-UTIL.dwg

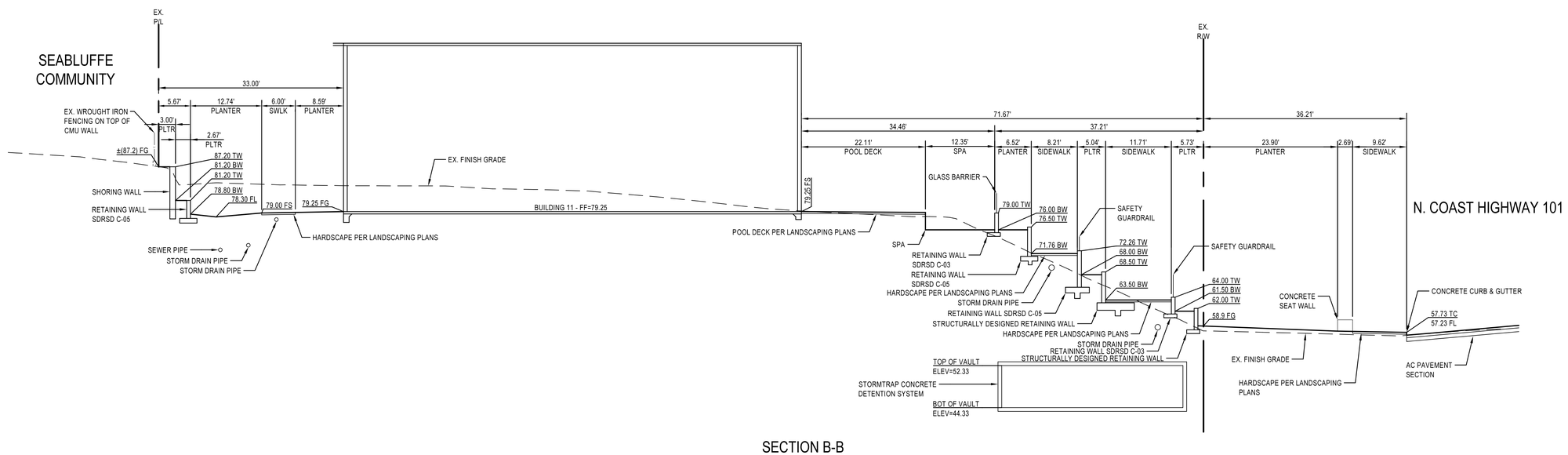
SITE SECTIONS

FENWAY N. HWY 101



SECTION A-A

SCALE: 1"=10'



SECTION B-B

SCALE: 1"=10'

NOTE

ACCORDING TO THE PROJECT'S GEOTECHNICAL REPORT PREPARED BY NOVA (DATED APRIL 27, 2020), NONE OF THE BORINGS COMPLETED ENCOUNTERED GROUNDWATER. BORINGS WERE COMPLETED IN DEPTHS RANGING FROM 21.5 FEET TO 56.5 FEET BELOW GROUND SURFACE WITH THE LOWEST BOTTOM OF BORING ELEVATION APPROXIMATELY AT 29.50. AS SUCH, THE GROUNDWATER ELEVATION CANNOT BE PLOTTED ON THE SITE SECTIONS.

SITE SECTIONS

FENWAY N. HWY 101

CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES

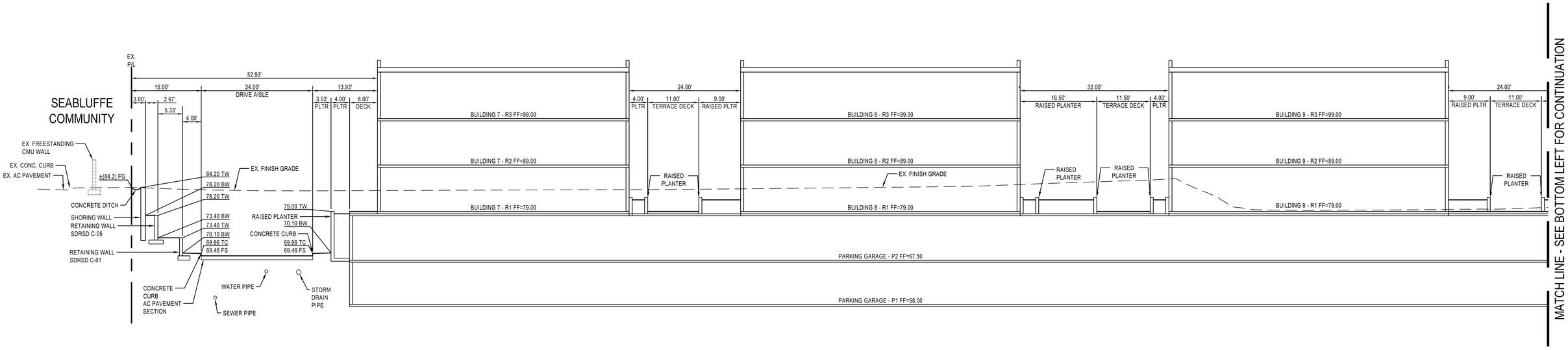
San Diego | Solana Beach | Orange County

Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/21/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-05-06-SECT.dwg

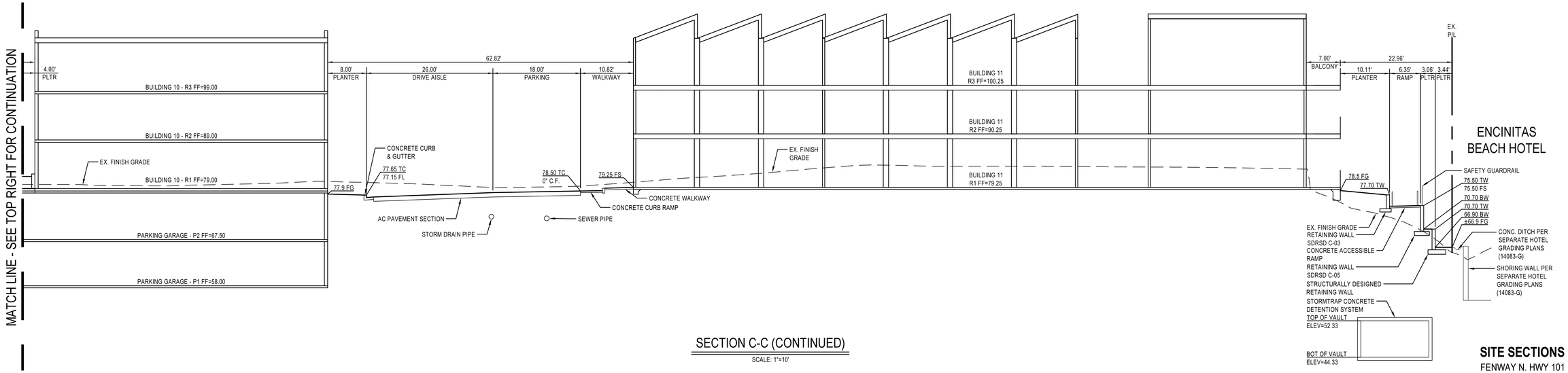
SITE SECTIONS

FENWAY N. HWY 101



SECTION C-C

SCALE: 1"=10'



SECTION C-C (CONTINUED)

SCALE: 1"=10'

NOTE

ACOORDING TO THE PROJECT'S GEOTECHNICAL REPORT PREPARED BY NOVA (DATED APRIL 27, 2020), NONE OF THE BORINGS COMPLETED ENCOUNTERED GROUNDWATER. BORINGS WERE COMPLETED IN DEPTHS RANGING FROM 21.5 FEET TO 56.5 FEET BELOW GROUND SURFACE WITH THE LOWEST BOTTOM OF BORING ELEVATION APPROXIMATELY AT 29.50. AS SUCH, THE GROUNDWATER ELEVATION CANNOT BE PLOTTED ON THE SITE SECTIONS.

SITE SECTIONS

FENWAY N. HWY 101

CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES

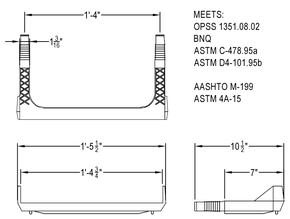
San Diego | Solana Beach | Orange County

Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/21/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-05-06-SECT.dwg

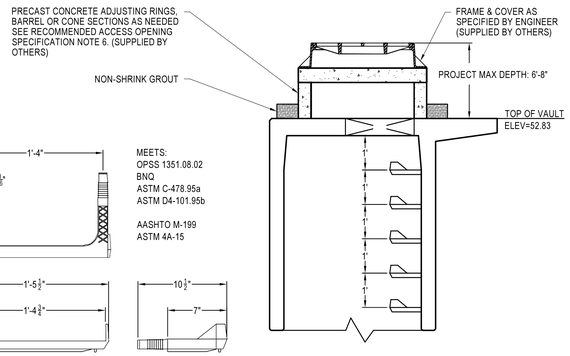
DETAILS

FENWAY N. HWY 101



STEP DETAIL

SCALE: NOT TO SCALE

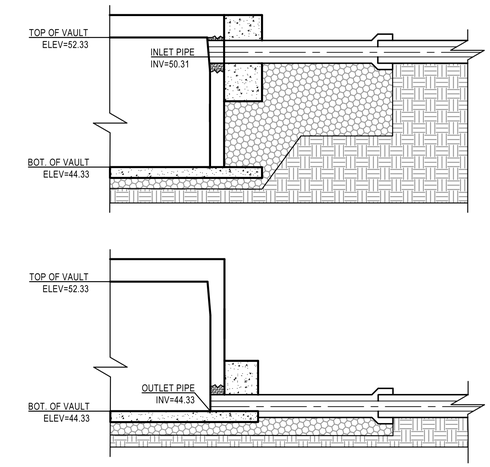


RISER/ STAIR DETAIL

SCALE: NOT TO SCALE

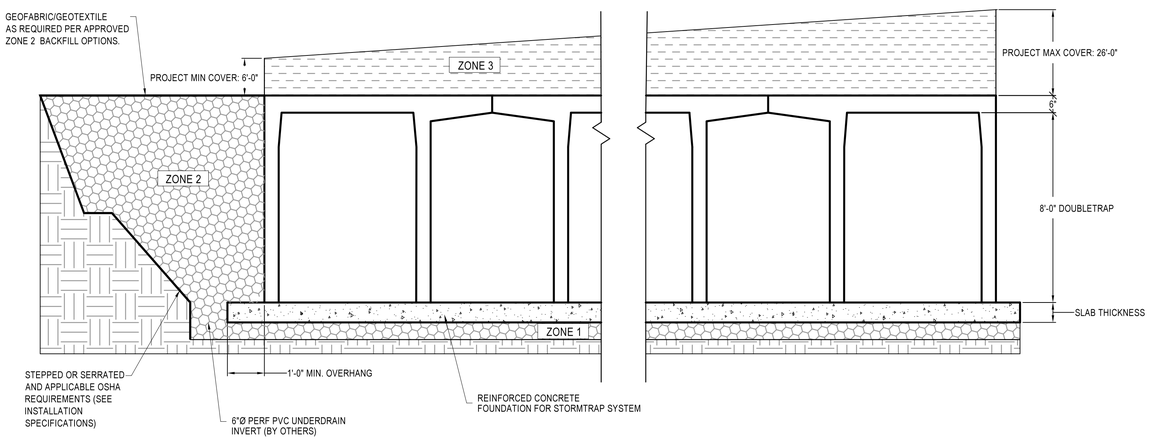
STORMTRAP INSTALLATION SPECIFICATIONS

1. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891, STANDARD FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES, THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS SHALL APPLY:
2. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT PROPER/ADEQUATE EQUIPMENT IS USED TO SET/INSTALL THE MODULES.
3. STORMTRAP MODULES SHALL BE PLACED ON A LEVEL CONCRETE FOUNDATION (SEE SHEET 2.1) WITH A 1'-0" OVERHANG ON ALL SIDES THAT SHALL BE POURED IN PLACE BY INSTALLING CONTRACTOR. A QUALIFIED GEOTECHNICAL ENGINEER WILL BE EMPLOYED, BY OWNER, TO PROVIDE ASSISTANCE IN EVALUATING THE EXISTING SOIL CONDITIONS TO ENSURE THAT THE SOIL BEARING PRESSURE MEETS OR EXCEEDS THE STRUCTURAL DESIGN LOADING CRITERIA AS SPECIFIED ON SHEET 1.0.
4. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED 3/8" (SEE DETAIL 2). IF THE SPACE EXCEEDS 3/8", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.
5. THE PERIMETER HORIZONTAL JOINT BETWEEN THE STORMTRAP MODULES AND THE CONCRETE FOUNDATION SHALL BE SEALED TO THE FOUNDATION WITH PRE-FORMED MASTIC JOINT SEALER ACCORDING TO ASTM C891, 8.8 AND 8.12 (SEE DETAIL 1). THE MASTIC JOINT TAPE DOES NOT PROVIDE A WATERTIGHT SEAL.
6. ALL EXTERIOR JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH 8" WIDE PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN, BONDED TO A WOVEN , HIGHLY PUNCTURE RESISTANT POLYMER WRAP, CONFORMING TO ASTM C891 AND SHALL BE INTEGRATED WITH PRIMER SEALANT AS APPROVED BY STORMTRAP (SEE DETAILS 3 & 4). THE JOINT WRAP DOES NOT PROVIDE A WATERTIGHT SEAL. THE SOLE PURPOSE OF THE JOINT
7. WRAP IS TO PROVIDE A SILT AND SOIL TIGHT SYSTEM. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:
   - 7.1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE JOINT WRAP IS TO BE APPLIED.
   - 7.2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (ADHESIVE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.
8. IF THE CONTRACTOR NEEDS TO CANCEL ANY SHIPMENTS, THEY MUST DO SO 48 HOURS PRIOR TO THEIR SCHEDULED ARRIVAL AT THE JOB SITE. IF CANCELED AFTER THAT TIME, PLEASE CONTACT THE PROJECT MANAGER.
9. IF THE STORMTRAP MODULE(S) IS DAMAGED IN ANY WAY PRIOR, DURING, OR AFTER INSTALL, STORMTRAP MUST BE CONTACTED IMMEDIATELY TO ASSESS THE DAMAGE AND DETERMINE WHETHER OR NOT THE MODULE(S) WILL NEED TO BE REPLACED. IF ANY MODULE ARRIVES AT THE JOBSITE DAMAGED DO NOT UNLOAD IT; CONTACT STORMTRAP IMMEDIATELY. ANY DAMAGE NOT REPORTED BEFORE THE TRUCK IS UNLOADED WILL BE THE CONTRACTOR'S RESPONSIBILITY.
10. STORMTRAP MODULES CANNOT BE ALTERED IN ANY WAY AFTER MANUFACTURING WITHOUT WRITTEN CONSENT FROM STORMTRAP.



PIPE CONNECTION DETAILS

SCALE: NOT TO SCALE

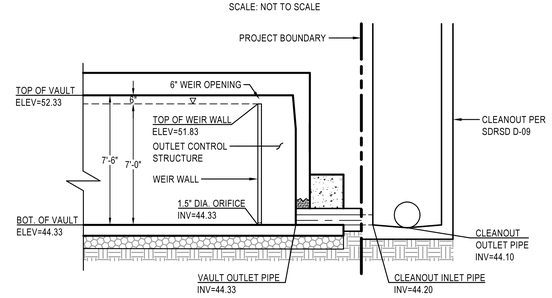


ZONE CHART

ZONES	ZONE DESCRIPTIONS	REMARKS
ZONE 1	FOUNDATION AGGREGATE	#5 (2") STONE AGGREGATE (SEE NOTE 4 FOR DESCRIPTION)
ZONE 2	BACKFILL	UNIFIED SOILS CLASSIFICATION (GW, GP, SW, SP) OR SEE BELOW FOR APPROVED BACKFILL OPTIONS
ZONE 3	FINAL COVER OVERTOP	MATERIALS NOT TO EXCEED 120 PCF

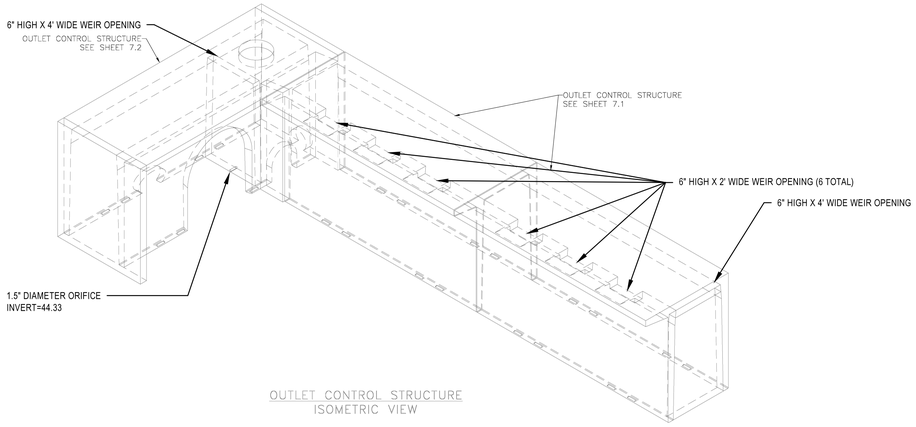
APPROVED ZONE 2 BACKFILL OPTIONS

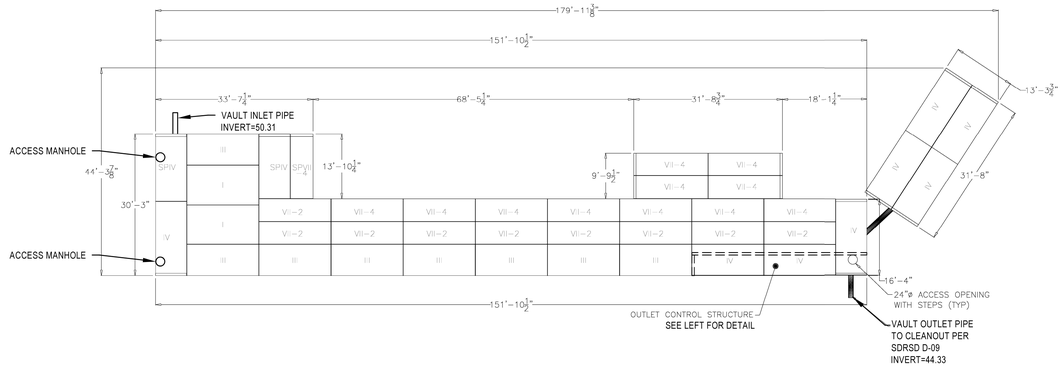
OPTION	REMARKS
3/4" STONE AGGREGATE	THE STONE AGGREGATE SHALL CONSIST OF CLEAN AND FREE DRAINING ANGULAR MATERIAL. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL (ASTM SIZE #57) AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
SAND	IMPORTED PURE SAND IS PERMITTED TO BE USED AS BACKFILL IF IT IS CLEAN AND FREE DRAINING. THE SAND USED FOR BACKFILLING SHALL HAVE LESS THAN 40% PASSING #40 SIEVE AND LESS THAN 5% PASSING #200 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE SAND BACKFILL.
CRUSHED CONCRETE AGGREGATE	CLEAN, FREE DRAINING CRUSHED CONCRETE AGGREGATE MATERIAL CAN BE USED AS BACKFILL FOR STORMTRAP'S MODULES. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL.
ROAD PACK	STONE AGGREGATE 100% PASSING THE 1-1/2" SIEVE WITH LESS THAN 12% PASSING THE #200 SIEVE (ASTM SIZE #467). GEOFABRIC AS PER GEOTECHNICAL ENGINEER RECOMMENDATION.



VAULT OUTLET DETAIL

SCALE: NOT TO SCALE





TYPICAL DETAILS - STORMTRAP DETENTION SYSTEM

SCALE: NOT TO SCALE

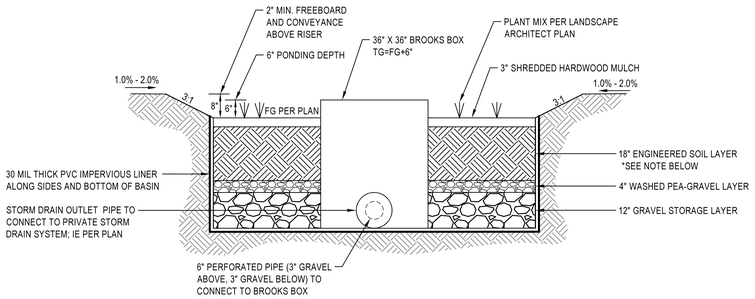
DETAILS
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/21/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-07-08-DETL.dwg

DETAILS

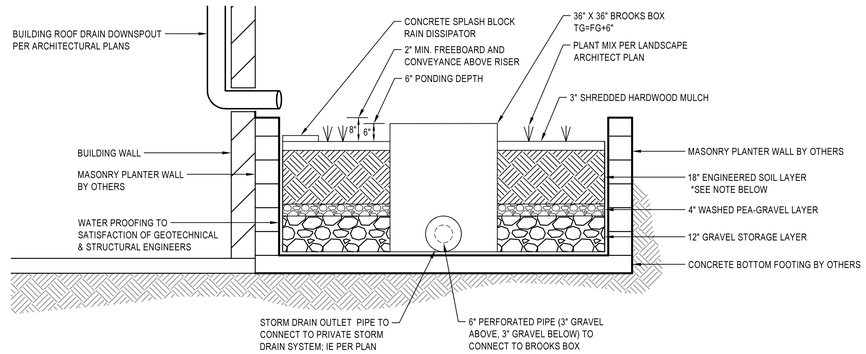
FENWAY N. HWY 101



*BIOFILTRATION "ENGINEERED SOIL" LAYER SHALL BE EVENLY MIXED COMPOSITION OF WASHED SAND, SANDY LOAM TOPSOIL, AND HUMIC COMPOST. THE MIX SHALL CONTAIN 65% SAND, 20% TOPSOIL, AND 15% COMPOST OR HARDWOOD MULCH IN ACCORDANCE WITH COUNTY OF SAN DIEGO LID BIOSWALE MEDIA BIO65 CUT SHEET

TYPICAL SECTION - BIOFILTRATION BASIN TYPE 1

SCALE: NOT TO SCALE



*BIOFILTRATION "ENGINEERED SOIL" LAYER SHALL BE EVENLY MIXED COMPOSITION OF WASHED SAND, SANDY LOAM TOPSOIL, AND HUMIC COMPOST. THE MIX SHALL CONTAIN 65% SAND, 20% TOPSOIL, AND 15% COMPOST OR HARDWOOD MULCH IN ACCORDANCE WITH COUNTY OF SAN DIEGO LID BIOSWALE MEDIA BIO65 CUT SHEET

TYPICAL SECTION - BIOFILTRATION BASIN TYPE 2

SCALE: NOT TO SCALE

DETAILS
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/21/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-07-08-DETL.dwg

SLOPE ANALYSIS & LOT AREAS

FENWAY N. HWY 101

PLAN VIEW - SLOPE ANALYSIS & LOT AREAS

SCALE: 1" = 30'

SITE ADDRESS:

LEUCADIA 101
1950 NORTH COAST HWY 101
ENCINITAS, CA 92024
APN: 216-041-06, -20 & -21

SOURCE OF TOPOGRAPHY:

TOPOGRAPHY OBTAINED BY AERIAL SURVEY METHODS PERFORMED BY ACCULINE SURVEY, INC. DATED JULY 6, 2019

NATURAL SLOPE AREA REDUCTIONS:

TOTAL GROSS LOT AREA (R30 & N-CRM-1) = 3.790 AC

SLOPES	0 - 25%	3.200 AC	(84.43% OF PROJECT SITE)
SLOPES	25 - 40%	0.208 AC	(5.48% OF PROJECT SITE)
SLOPES	40% +	0.382 AC	(10.09% OF PROJECT SITE)
	TOTAL SLOPES =	3.790 AC	

PER GEOTECHNICAL INVESTIGATION REPORT (DATED APRIL 27, 2020) BY NOVA SERVICES, INC., REVIEW OF HISTORICAL PHOTOS OF THE AREA AND ANALYSIS OF RECENT GRADING ACTIVITIES CONCLUDES THAT THE SLOPES STEEPER THAN 25% ON THE PROPERTY ARE THE DIRECT RESULT OF GRADING ACTIVITIES; THEREFORE ALL ONSITE SLOPES STEEPER THAN 25% ARE MANUFACTURED AND PARCEL NET ACREAGES WILL NOT BE REDUCED PURSUANT TO CITY MUNICIPAL CODE SECTION 30.16.10.B.2.

LOT AREA CALCULATIONS

PARCEL 1

GROSS LOT AREA (PARCEL 1)	= 30,096 SF
LESS PRIVATE ROAD EASEMENT*	= (0) SF
NET LOT AREA (PARCEL 1)	= 30,096 SF

PARCEL 2

GROSS LOT AREA (PARCEL 2)	= 100,357 SF
LESS PRIVATE ROAD EASEMENT*	= (0) SF
NET LOT AREA (PARCEL 2)	= 100,357 SF

PARCEL 3

GROSS LOT AREA (PARCEL 3)	= 34,654 SF
LESS PRIVATE ROAD EASEMENT*	= (0) SF
NET LOT AREA (PARCEL 3)	= 34,654 SF

*PRIVATE ROAD EASEMENT FOR EMERGENCY VEHICLE ACCESS PURPOSES DOES NOT SUBTRACT FROM GROSS LOT AREA

SCALE: 1" = 30'

30 15 0 30 60 90

SLOPE ANALYSIS & LOT AREAS
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 04/15/21 ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-09-SLOP.dwg

HILLSIDE INLAND BLUFF OVERLAY ANALYSIS

FENWAY N. HWY 101

PLAN VIEW - HILLSIDE INLAND BLUFF OVERLAY ANALYSIS

SCALE: 1" = 30'

SITE ADDRESS:

LEUCADIA 101
1950 NORTH COAST HWY 101
ENCINITAS, CA 92024
APN: 216-041-06, -20 & -21

SOURCE OF TOPOGRAPHY:

TOPOGRAPHY OBTAINED BY AERIAL SURVEY METHODS PERFORMED BY ACCULINE SURVEY, INC. DATED JULY 6, 2019

HILLSIDE INLAND BLUFF OVERLAY:

PURSUANT TO THE CITY OF ENCINITAS HILLSIDE / INLAND BLUFF OVERLAY ZONE (H/IBO) GIS MAP (DATED FEBRUARY 2008), A PORTION OF PARCEL 1 IS LOCATED WITHIN THE CITY'S SPECIAL STUDY OVERLAY ZONE. THEREFORE PARCEL 1 HAS BEEN EVALUATED FOR HILLSIDE / INLAND BLUFF OVERLAY ZONE APPLICABILITY.

PER CITY MUNICIPAL CODE SECTION 30.34.030, IF MORE THAN 10% OF PARCEL SLOPE EXCEED 25%, PARCEL IS SUBJECT TO HILLSIDE / INLAND BLUFF OVERLAY REGULATIONS AND SLOPES GREATER THAN 25% GRADE SHALL BE PRESERVED IN THEIR NATURAL STATE.

TOTAL GROSS LOT AREA (PARCEL 1) = 0.691 AC

SLOPES	0 - 25%	0.475 AC	(68.79% OF PROJECT SITE)
SLOPES	25 - 40%	0.054 AC	(7.82% OF PROJECT SITE)
SLOPES	40% +	0.162 AC	(23.39% OF PROJECT SITE)
	TOTAL SLOPES =	0.691 AC	

PER GEOTECHNICAL INVESTIGATION REPORT (DATED APRIL 27, 2020) BY NOVA SERVICES, INC., REVIEW OF HISTORICAL PHOTOS OF THE AREA AND ANALYSIS OF RECENT GRADING ACTIVITIES CONCLUDES THAT THE SLOPES STEEPER THAN 25% ON PARCEL 1 ARE THE DIRECT RESULT OF GRADING ACTIVITIES; THEREFORE ALL ONSITE SLOPES ON PARCEL 1 STEEPER THAN 25% ARE MANUFACTURED AND THE HILLSIDE / INLAND BLUFF OVERLAY REGULATIONS DO NOT APPLY TO PARCEL 1.

SCALE: 1" = 30'

30 15 0 30 60 90

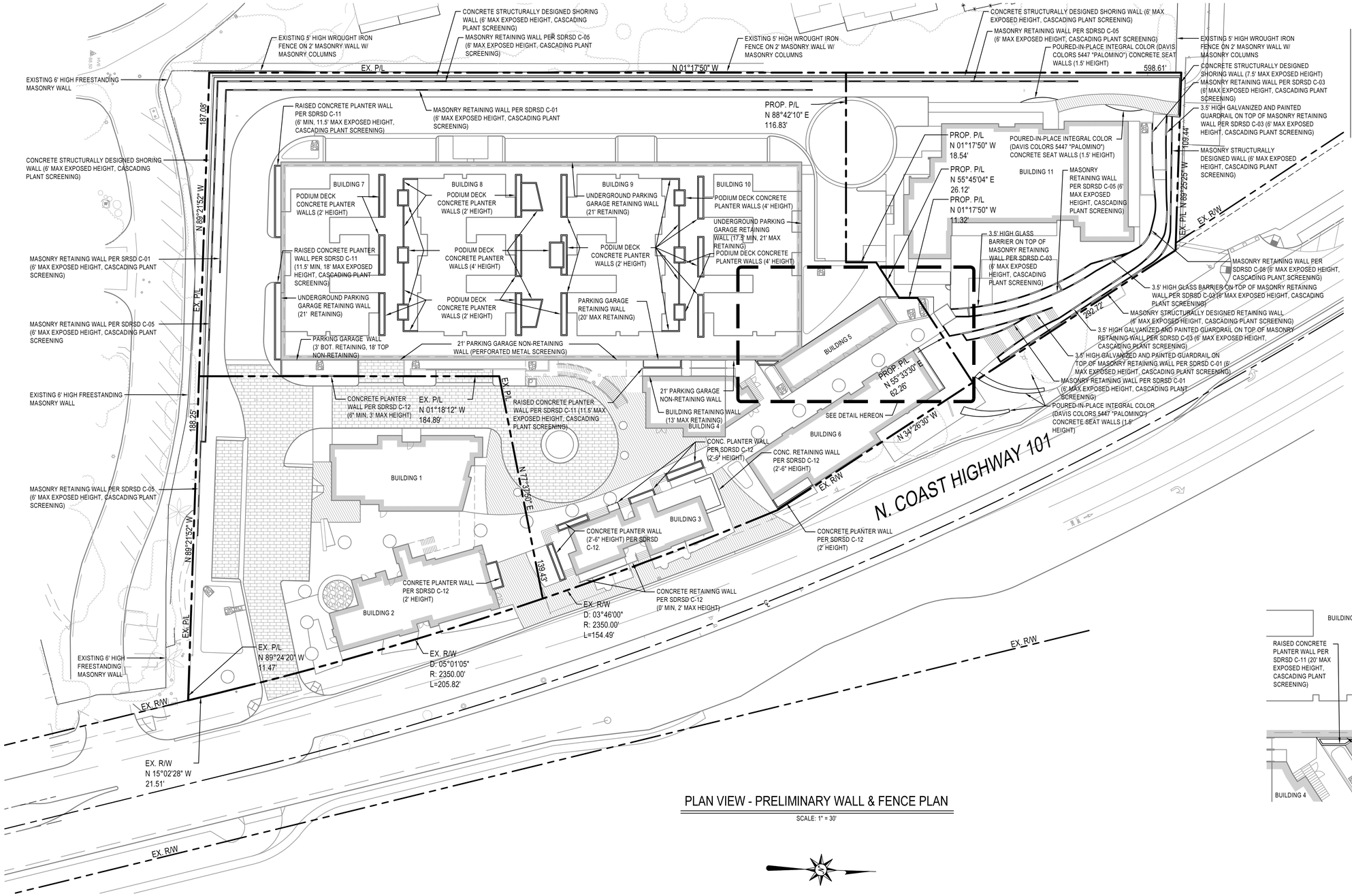
HILLSIDE INLAND BLUFF OVERLAY ANALYSIS
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: ----- ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-10-HIBO.dwg

PRELIMINARY WALL & FENCE PLAN

FENWAY N. HWY 101



PLAN VIEW - PRELIMINARY WALL & FENCE PLAN

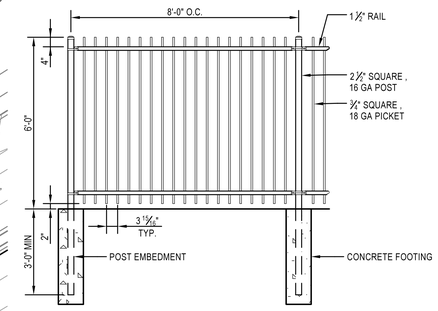
SCALE: 1" = 30'

SCALE: 1" = 30'

30 15 0 30 60 90

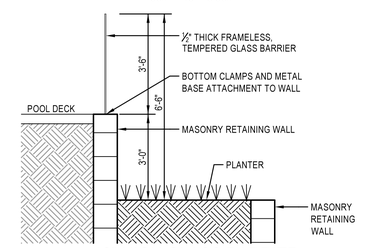
LEGEND

PROPERTY BOUNDARY/RIGHT-OF-WAY	
CENTERLINE OF ROAD	
CURB & GUTTER	
PROPOSED MASONRY RETAINING WALL	
PROPOSED CONCRETE SHORING WALL	
PROPOSED RAISED PLANTER WALL	
PROPOSED BUILDING WALL	



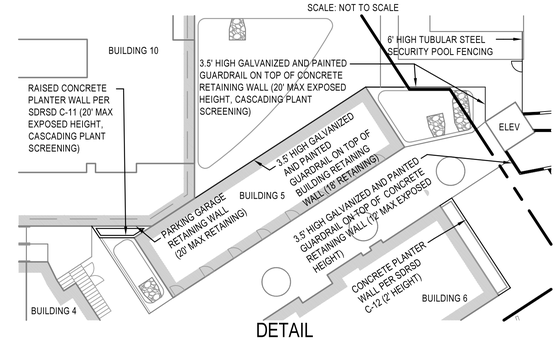
6' HIGH TUBULAR STEEL POOL SECURITY FENCE

SCALE: NOT TO SCALE



42" HIGH GLASS BARRIER

SCALE: NOT TO SCALE



DETAIL

SCALE: 1:20

PRELIMINARY WALL & FENCE PLAN

FENWAY N. HWY 101

CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES

San Diego | Solana Beach | Orange County

Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: ---- ~ PLOT DATE: 07/21/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\DRAWING\DISCRETIONARY PLANS\3161-PRLM-11-WALL-FNCE.dwg

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX H
PRELIMINARY HYDROLOGY STUDY

THIS PAGE INTENTIONALLY LEFT BLANK

PRELIMINARY HYDROLOGY STUDY

FOR

LEUCADIA 101 MIXED USE

CITY OF ENCINITAS, CA

PREPARED FOR:

ENCINITAS BEACH LAND VENTURE I, LLC
674 Via De La Valle, Suite 310
Solana Beach 92075
858-436-3600

PREPARED BY:

PASCO LARET SUITER & ASSOCIATES, INC.
535 N. HIGHWAY 101, SUITE A
SOLANA BEACH, CA 92075
(858) 259-8212

PREPARED: MAY 2020
REVISED: SEPTEMBER 2020
REVISED: DECEMBER 2020
REVISED: MAY 2021
REVISED: JULY 2021

7/16/21

WILLIAM J. SUITER, RCE 68964 DATE

PLSA 3161

TABLE OF CONTENTS

	SECTION
Executive Summary	**1.0**
Introduction	1.1
Existing Conditions	1.2
Proposed Project	1.3
Hydrologic Unit Contribution	1.4
Conclusions	1.5
References	1.6
Methodology	**2.0**
Rational Method	2.1
County of San Diego Criteria	2.2
Hydraulic Calculations	2.3
Hydrologic Analysis	**3.0**
Existing Condition Hydrologic Calculations	3.1
Proposed Condition Hydrologic Calculations	3.2
Detention Analysis	3.3
Proposed Condition Hydrologic Calculations - Detained	3.4
Hydromodification Analysis	3.5
Storm Water Pollutant Control	3.6

Appendices
Appendix A: Hydrology Support Material
Appendix B: Hydraulic Calculations
Appendix C: Existing and Proposed Hydrology Maps

1.0 EXECUTIVE SUMMARY

1.1 Introduction

This Hydrology Study for the proposed Leucadia 101 Mixed Use development has been prepared to analyze the hydrologic characteristics of the existing and proposed project site. This report presents both the methodology and the calculations used for determining the storm water runoff from the project site in the existing condition, proposed condition, and the proposed mitigated condition produced by the 100-year, 6-hour storm event.

1.2 Existing Conditions

The subject property is approximately 3.79 acres and is located at 1900 and 1950 North Coast Highway 101 in the City of Encinitas. The existing site is currently developed and consists of commercial buildings, paved access drives and parking, open space, hardscape and landscape.

In the existing condition, storm water runoff from the site generally flows overland and in onsite storm drain easterly to North Coast Highway 101. There is offsite run-on from the hillside along the westerly and southerly boundaries.
An existing high point in North Coast Highway 101 is located approximately at the midpoint of the property's easterly boundary. Surface runoff from the property that enters the right-of-way north of the high point will continue to surface flow northerly and enters the public storm drain system within the La Costa Avenue and North Coast Highway 101 intersection. The storm drain system then conveys captured flows to the east side Carlsbad Boulevard into the Batiquitos Lagoon and ultimately the Pacific Ocean. Surface runoff from the property that enters the right-of-way south of the high point will surface flow southerly and enters a separate public storm drain system that conveys captured flow northerly to an extended detention basin located on the west side of Carlsbad Boulevard which discharges to Batiquitos Lagoon and ultimately the Pacific Ocean. The onsite storm drain connects to the public storm drain located on the west side of North Coast Highway 101 which also drains to the extended detention basin on the west side of Carlsbad Boulevard which discharges to Batiquitos Lagoon and ultimately the Pacific Ocean.

Per the Web Soil Survey application available through the United States Department of Agriculture, the site is categorized to have hydrologic group B soil. Refer to Appendix A for soil information.

Using the Rational Method Procedure outlined in the San Diego County Hydrology Manual dated June 2003 (SDCHM), the 100-year, 6-hour storm event peak flow rate was calculated for the project site in the existing condition. The table below summarizes the existing condition hydrologic analysis.

Summary of Existing Condition 100-Yr Storm Event Hydrologic Analysis

Condition	Area (ac)	Q100 (cfs)
Existing (East of Carlsbad Boulevard) Existing Subareas 1 & 3	0.626	1.03
Existing (West of Carlsbad Boulevard) Existing Subarea 2	3.507	13.62
Existing (Total) Existing Subareas 1, 2 & 3	4.133	14.65

Refer to the existing condition hydrologic calculations included in Section 3.1 of this report.

1.3 Proposed Project

The project proposes to demolish the existing development and construct a new apartment complex with approximately 94 units, boutique hotel, retail units, structured parking, access drive, hardscape and landscape, and associated improvements including storm water biofiltration basins to meet the requirements for pollutant control and an underground storage vault to comply with hydromodification management flow control and to mitigate the 100-year storm event peak discharge rate.

In the proposed condition, storm water runoff will be collected by proposed storm drain and conveyed to biofiltration basins located throughout the site. Discharge from the biofiltration basins will flow to the proposed underground storage vault located in the northeastern corner of the project site. The vault will discharge to a proposed 18” RCP which will connect to the back of the existing curb inlet located north of the project along North Coast Highway 101. The existing curb outlets to an 18” RCP then transitions to a 24” RCP that conveys flows northerly and into the Batiquitos Lagoon on the east side of Carlsbad Boulevard. Offsite storm water that runs onto the site along the westerly boundary will be intercepted via a new concrete ditch and routed to proposed storm drain which runs along the northern boundary of the site and connects to the underground vault outlet pipe and continues as described above. Offsite run-on along the southern boundary will be captured in a new concrete ditch and discharged to North Coast Highway 101 via sidewalk underdrain which will enter the public storm drain system and be conveyed to the extended detention basin on the west side of Carlsbad Boulevard as in the existing condition.

The biofiltration basins and underground storage vault are designed to provide pollutant control treatment and hydromodification management flow control to meet the requirements of the California Regional Water Quality Control Board San Diego Region municipal storm water permit (Order No. R9-2013-0001, referred to as the MS4 Permit). The underground storage vault will also provide mitigation for the site’s total 100-year storm event peak discharge rate. Refer to the Storm Water Quality Management Plan (SWQMP) for the project titled “Storm Water Quality Management Plan for Leucadia

101 Mixed Use" dated July 2021 prepared by Pasco Laret Suiter & Associates for the detailed HMP and storm water pollutant control analyses.

The table below summarizes the existing and proposed condition hydrologic analyses.

Summary of 100-yr Storm Event Hydrologic Analyses

Condition	Area (ac)	Q100 (cfs)
Existing (East of Carlsbad Boulevard)	0.626	1.03
Existing (West of Carlsbad Boulevard)	3.507	13.62
Existing (Total)	**4.133**	**14.65**
Proposed (East of Carlsbad Boulevard) Proposed Subareas 1 & 2	4.009	19.62
Proposed Detained (East of Carlsbad Blvd) Proposed Subareas 1 & 2		0.89
Proposed (West of Carlsbad Boulevard) Proposed Subarea 3	0.124	0.28
Proposed (Total) Proposed Subareas 1, 2 & 3	4.133	19.90
Proposed (Total) Detained Proposed Subareas 1, 2 & 3	**4.133**	**1.17**

Refer to the proposed condition hydrologic calculations and detailed detention analysis included in Sections 3.2, 3.3, and 3.4.

1.4 Hydrologic Unit Contribution

As identified by the San Diego Basin Plan, the proposed project site drains within Carlsbad Hydrologic Unit, specifically the San Marcos Hydrologic Area and Batiquitos Sub Area (904.51).

1.5 Conclusions

Based upon the analyses included in this report, the proposed underground storage vault is sized to accommodate the increase in peak runoff in the proposed condition and the biofiltration basins and storage vault are designed to meet the requirements of the MS4 Permit for both pollutant control and hydromodification management. The peak flow rate resulting from the 100-year, 6-hour storm event will be lower in the proposed mitigated condition (1.17 cfs) than the existing condition (14.65 cfs).

1.6 References

"San Diego County Hydrology Manual", revised June 2003, County of San Diego, Department of Public Works, Flood Control Section.

"City of Encinitas Engineering Design Manual", October 28, 2009, City of Encinitas, Engineering Department

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov.

2.0 METHODOLOGY

2.1 Rational Method

Pursuant to the San Diego County Hydrology Manual dated June 2003 (SDCHM), the Rational Method is recommended for analyzing the runoff response from drainage areas up to approximately 1 square mile in size. The proposed project and associated watershed basins are less than 1 square mile, therefore the Rational Method was used to analyze the project's hydrologic characteristics in the existing and proposed conditions.

The Rational Method (RM) formula estimates the peak rate of runoff based on the variables of area, runoff coefficient, and rainfall intensity. The rainfall intensity (I) is equal to:

$$I = 7.44 \times P_6 \times D^{-0.645}$$

Where:

I = Intensity (in/hr)
P_6 = 6-hour precipitation (in)
D = duration (min – use Tc)

Using the Time of Concentration (Tc) which is the time required for a given element of water that originates at the most remote point of the basin being analyzed to reach the point at which the runoff from the basin is being analyzed, the RM equation determines the storm water runoff rate (Q) for a given basin in terms of flow (typically in cubic feet per second (cfs). The Tc is calculated pursuant to the methodology described in Section 3.1.4 of the San Diego County Hydrology Manual. The RM equation is as follows:

$$Q = CIA$$

Where:

Q= flow (cfs)
C = runoff coefficient, ratio of rainfall that produces storm water runoff (runoff vs. infiltration/evaporation/absorption/etc)
I = average rainfall intensity for a duration equal to the Tc for the area (in/hr)
A = drainage area contributing to the basin (ac)

The RM equation assumes that the storm event being analyzed delivers precipitation to the entire basin uniformly, and therefore the peak discharge rate will occur when a raindrop that falls at the most remote portion of the basin arrives at the point of analysis. The RM also assumes that the fraction of rainfall that becomes runoff or the runoff coefficient (C) is not affected by the storm intensity (I), or the precipitation zone number.

2.2 County of San Diego Criteria

The County of San Diego has developed tables, nomographs, and methodologies for analyzing storm water runoff for areas within the County. The County has also developed precipitation isopluvial contour maps that show even lines of rainfall anticipated from a given storm event (i.e. 100-year, 6-hour storm). The 100-year 6-hour storm event rainfall isopluvial map is included in Appendix A.

One of the variables of the RM equation is the runoff coefficient (C) which is dependent upon land use and soil type. Table 3-1 Runoff Coefficients for Urban Areas in the SDCHM categorizes the land use, the associated development density (dwelling units per acre) and the percentage of impervious area. Each of the categories listed has an associated runoff coefficient for each soil type class. A composite runoff coefficient can also be calculated for an area based on soil type and impervious percentage using the following equation from Section 3.1.2 of the SDCHM:

$$C = 0.90 \times (\% \text{ Impervious}) + Cp \times (1 - \% \text{ Impervious})$$

Where: Cp = Pervious Coefficient Runoff Value for the soil type (shown in Table 3-1 as Undisturbed Natural Terrain/Permanent Open Space, 0% Impervious)

The calculations contained herein figure a composite runoff coefficient for the onsite project areas based on the percentage of impervious area and the percentage of pervious or landscape area. Refer to Section 3.0 for the composite runoff coefficient calculations.

2.3 Hydraulic Calculations

The proposed Type A ditches were sized using the FHWA Hydraulic Toolbox, v4.4 to convey the 100-year peak discharge offsite run-on.

Refer to Appendix B for detailed calculations.

3.0 HYDROLOGIC ANALYSIS

The table below summarizes the hydrologic calculations provided in Sections 3.1, 3.2 and 3.4.

Summary of 100-yr Storm Event Hydrologic Analyses

Condition	Area (ac)	Q100 (cfs)
Existing (East of Carlsbad Boulevard)	0.626	1.03
Existing (West of Carlsbad Boulevard)	3.507	13.62
Existing (Total)	**4.133**	**14.65**
Proposed (East of Carlsbad Boulevard) Proposed Subareas 1 & 2	4.009	19.62
Proposed Detained (East of Carlsbad Blvd) Proposed Subareas 1 & 2		0.89
Proposed (West of Carlsbad Boulevard) Proposed Subarea 3	0.124	0.28
Proposed (Total) Proposed Subareas 1, 2 & 3	4.133	19.90
Proposed (Total) Detained Proposed Subareas 1, 2 & 3	**4.133**	**1.17**

3.1 Existing Condition Hydrologic Calculations

3161 Leucadia 101
7/16/2021

Existing Condition - Subarea 1

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	0	0.9	0	
Pervious	17025	0.25	4256.25	
Total (sf)	17025		4256.25	0.25
Total (ac)	0.391			

Tc =	5.0
I(in/hr) =	6.6
Q (cfs) =	**0.64**

3161 Leucadia 101
7/16/2021

Existing Condition - Subarea 2

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	79773	0.9	71795.7	
Pervious	73013	0.25	18253.25	
Total (sf)	152786		90048.95	0.59
Total (ac)	3.507			

Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**13.62**

3161 Leucadia 101
7/16/2021

Existing Condition - Subarea 3

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	0	0.9	0	
Pervious	10243	0.25	2560.75	
Total (sf)	10243		2560.75	0.25
Total (ac)	0.235			

Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**0.39**

3.2 Proposed Condition Hydrologic Calculations

3161 Leucadia 101
7/16/2021

Proposed Condition - Subarea 1

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	132474	0.9	119226.6	
Pervious	31874	0.25	7968.5	
Total (sf)	164348		127195.1	0.77
Total (ac)	3.773			

Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**19.23**

3161 Leucadia 101
7/16/2021

Proposed Condition - Subarea 2

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	40	0.9	36	
Pervious	10244	0.25	2561	
Total (sf)	10284		2597	0.25
Total (ac)	0.236			

Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**0.39**

3161 Leucadia 101
7/16/2021

Proposed Condition - Subarea 3

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	717	0.9	645.3	
Pervious	4705	0.25	1176.25	
Total (sf)	5422		1821.55	0.34
Total (ac)	0.124			

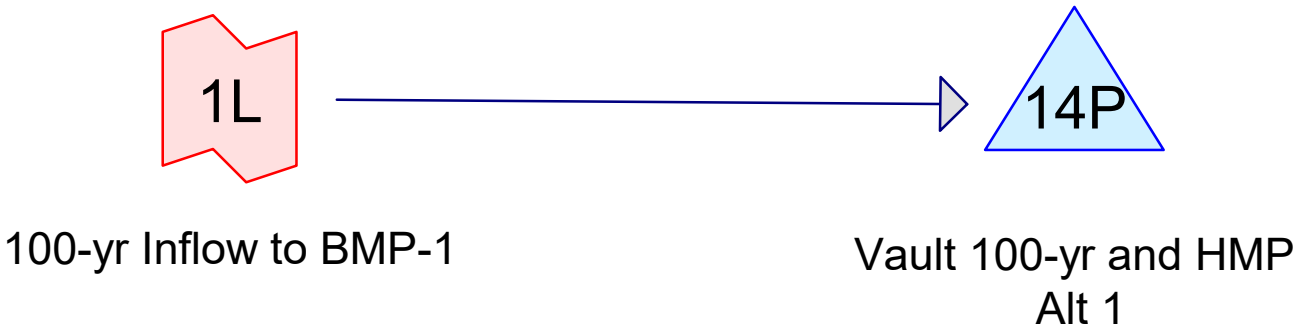
Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**0.28**

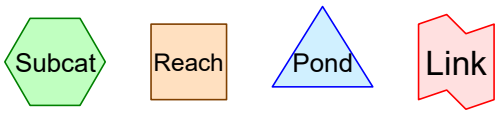
3.3 Detention Analysis

The underground storage vault provides hydromodification management flow control and mitigation of the 100-year storm event peak flow rate. The 100-year storm event detention analysis was performed using HydroCAD Stormwater Modeling software. The inflow runoff hydrograph to the vault was modeled using RatHydro which is a Rational Method Design Storm Hydrograph software that creates a hydrograph using the results of the Rational Method calculations. HydroCAD has the ability to route the 100-year 6-hour storm event inflow hydrograph through the vault and based on the cross sectional geometry, stage storage and outlet structure data, HydroCAD calculates the detained peak flow rate and detained time to peak.

Based on the results of the HydroCAD analysis, the underground storage vault provides mitigation for the 100-year storm event peak flow rate, detaining the proposed condition to 1.17 cfs which is below the existing condition of 14.65 cfs. Refer to Section 3.4 for the vault cross section and HydroCAD proposed detained condition detailed output.

3.4 Proposed Condition Hydrologic Calculations - Detained





Routing Diagram for 3161
Prepared by Pasco Laret Suiter & Associates, Printed 7/16/2021
HydroCAD® 10.10-6a s/n 10097 © 2020 HydroCAD Software Solutions LLC

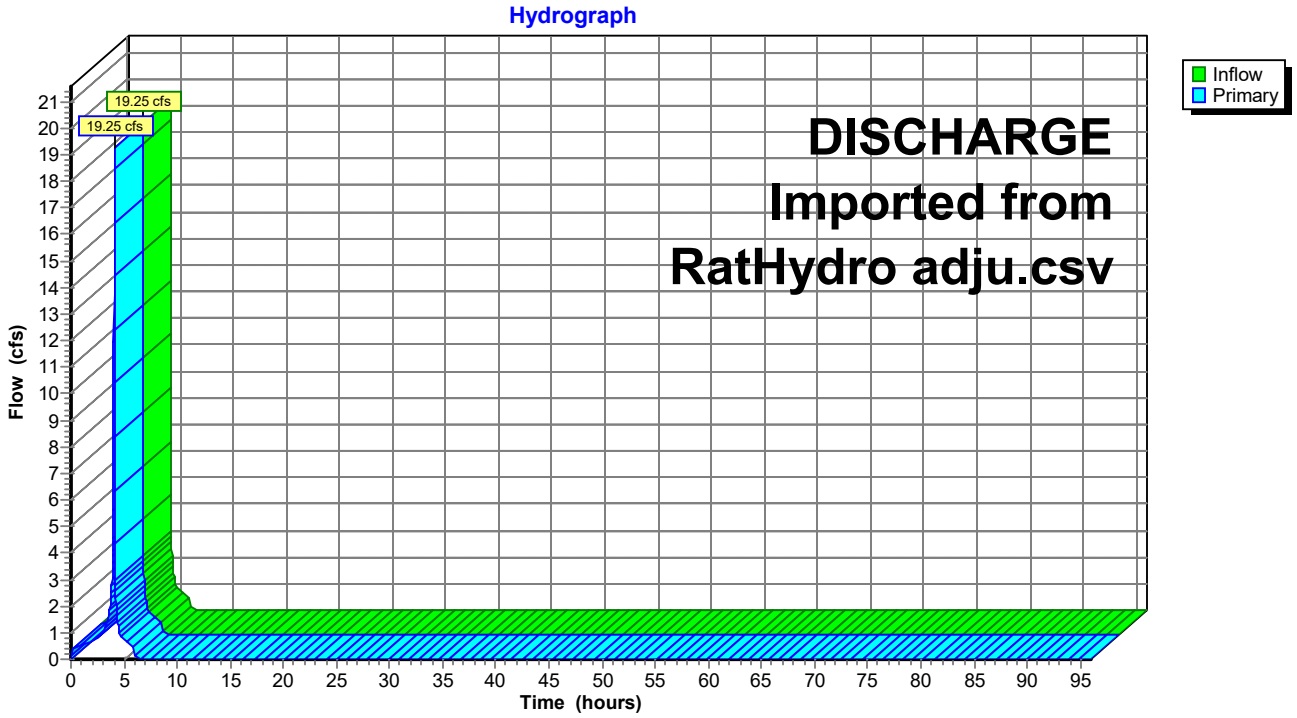
Summary for Link 1L: 100-yr Inflow to BMP-1

Inflow = 19.25 cfs @ 4.08 hrs, Volume= 0.601 af
Primary = 19.25 cfs @ 4.08 hrs, Volume= 0.601 af, Atten= 0%, Lag= 0.0 min
Routed to Pond 14P : Vault 100-yr and HMP Alt 1

Primary outflow = Inflow, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

DISCHARGE Imported from RatHydro adju.csv

Link 1L: 100-yr Inflow to BMP-1



Summary for Pond 14P: Vault 100-yr and HMP Alt 1

Inflow	=	19.25 cfs @	4.08 hrs,	Volume=	0.601 af
Outflow	=	0.50 cfs @	5.91 hrs,	Volume=	0.596 af, Atten= 97%, Lag= 109.7 min
Primary	=	0.50 cfs @	5.91 hrs,	Volume=	0.596 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 51.84' @ 5.91 hrs Storage= 23,699 cf

Plug-Flow detention time= 1,814.3 min calculated for 0.596 af (99% of inflow)
Center-of-Mass det. time= 1,813.2 min (2,025.8 - 212.6)

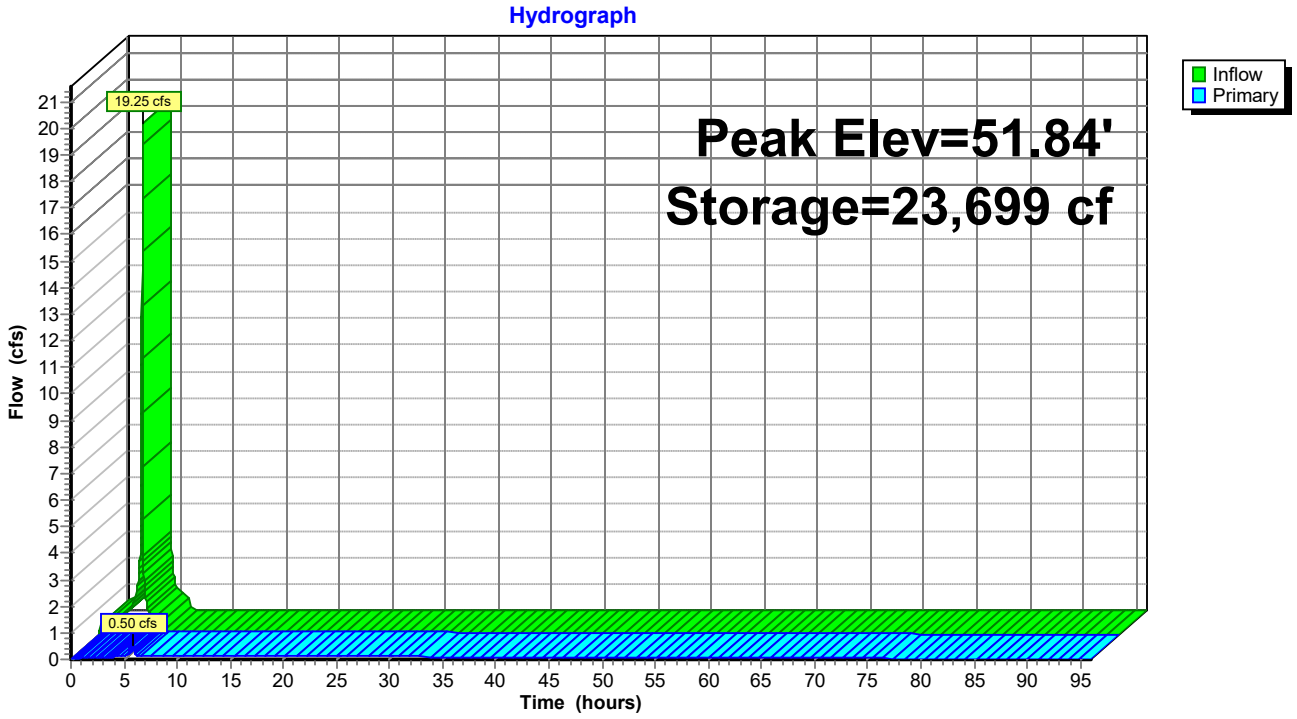
Volume	Invert	Avail.Storage	Storage Description
#1	44.31'	25,174 cf	**Custom Stage Data** Listed below

Elevation (feet)	Cum.Store (cubic-feet)
44.31	0
44.56	787
44.81	1,573
45.06	2,360
45.31	3,147
45.56	3,933
45.81	4,720
46.06	5,507
46.31	6,293
46.56	7,080
46.81	7,867
47.06	8,654
47.31	9,440
47.56	10,227
47.81	11,014
48.06	11,800
48.31	12,587
48.56	13,374
48.81	14,160
49.06	14,947
49.31	15,734
49.56	16,520
49.81	17,307
49.99	17,866
50.06	18,094
50.31	18,880
50.56	19,667
50.81	20,454
51.06	21,240
51.31	22,027
51.56	22,814
51.81	23,601
52.06	24,387
52.31	25,174

Device	Routing	Invert	Outlet Devices
#1	Primary	44.31'	**18.0" Round Culvert** L= 10.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 44.31' / 44.21' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	44.31'	**1.4" Vert. Orifice** C= 0.600 Limited to weir flow at low heads
#3	Device 1	51.81'	**Custom Weir, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 0.50 0.50 Width (feet) 20.00 20.00 0.00

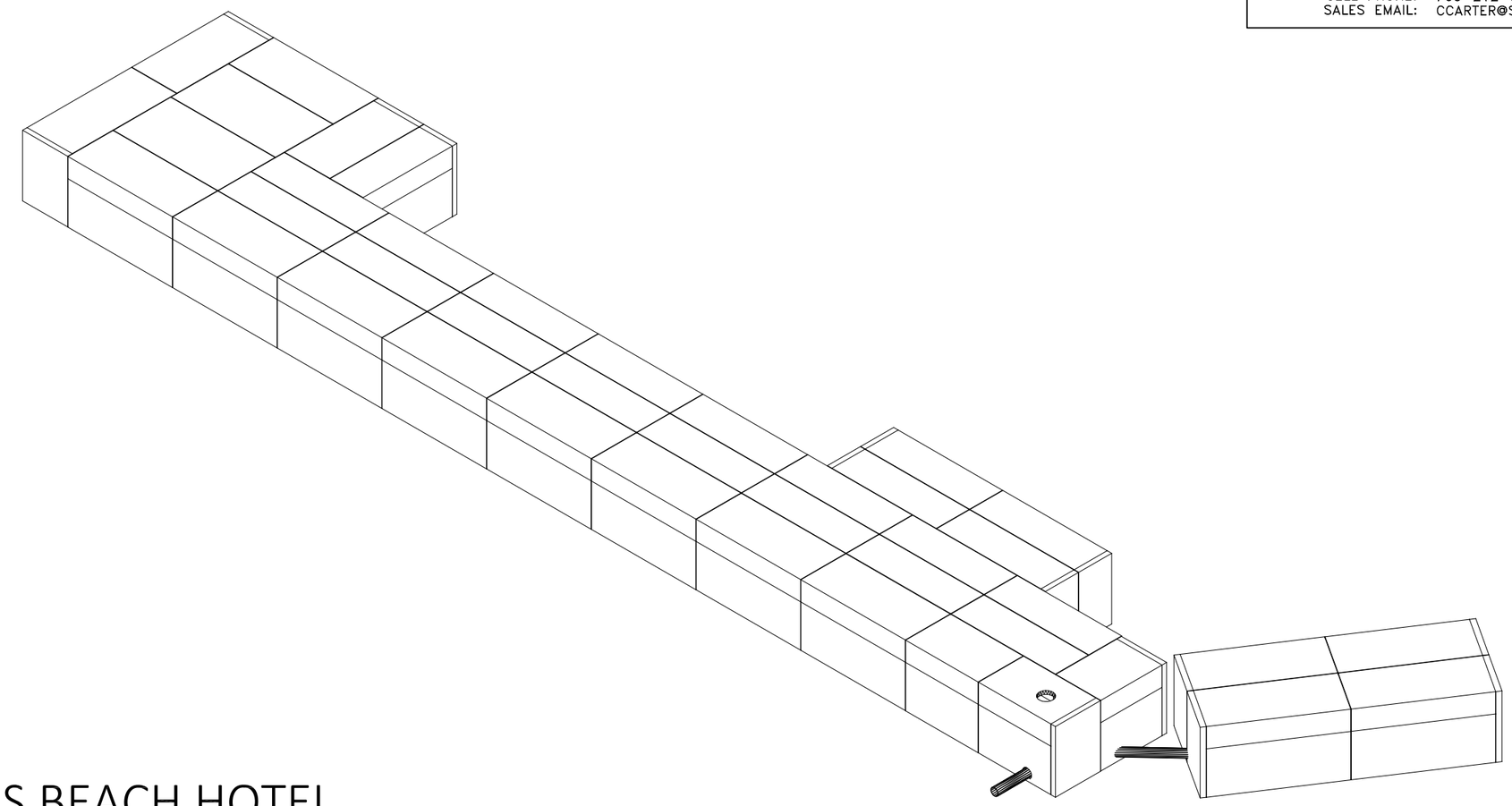
Primary OutFlow Max=0.50 cfs @ 5.91 hrs HW=51.84' (Free Discharge)
└─**1=Culvert** (Passes 0.50 cfs of 27.70 cfs potential flow)
  ├─**2=Orifice** (Orifice Controls 0.14 cfs @ 13.16 fps)
  └─**3=Custom Weir** (Weir Controls 0.36 cfs @ 0.58 fps)

Pond 14P: Vault 100-yr and HMP Alt 1



StormTrap®

MODULAR CONCRETE
STORMWATER MANAGEMENT



ENCINITAS BEACH HOTEL
LEUCADIA, CA

SHEET INDEX

PAGE	DESCRIPTION
0.0	COVER SHEET
1.0	SINGLETRAP DESIGN CRITERIA
2.0	SINGLETRAP SYSTEM LAYOUT
2.1	SINGLETRAP FOUNDATION LAYOUT
3.0	SINGLETRAP INSTALLATION SPECIFICATIONS
3.1	SINGLETRAP INSTALLATION SPECIFICATIONS
4.0	SINGLETRAP BACKFILL SPECIFICATIONS
5.0	RECOMMENDED PIPE/ACCESS OPENING SPECIFICATIONS
6.0	SINGLETRAP MODULE TYPES

STORMTRAP CONTACT INFORMATION

STORMTRAP SUPPLIER: STORMTRAP
CONTACT NAME: CHARLIE CARTER
CELL PHONE: 760-212-5628
SALES EMAIL: CCARTER@STORMTRAP.COM

StormTrap®

PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]

1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER
& ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

0.0

STRUCTURAL DESIGN LOADING CRITERIA

LIVE LOADING: **AASHTO HS-20 HIGHWAY LOADING**

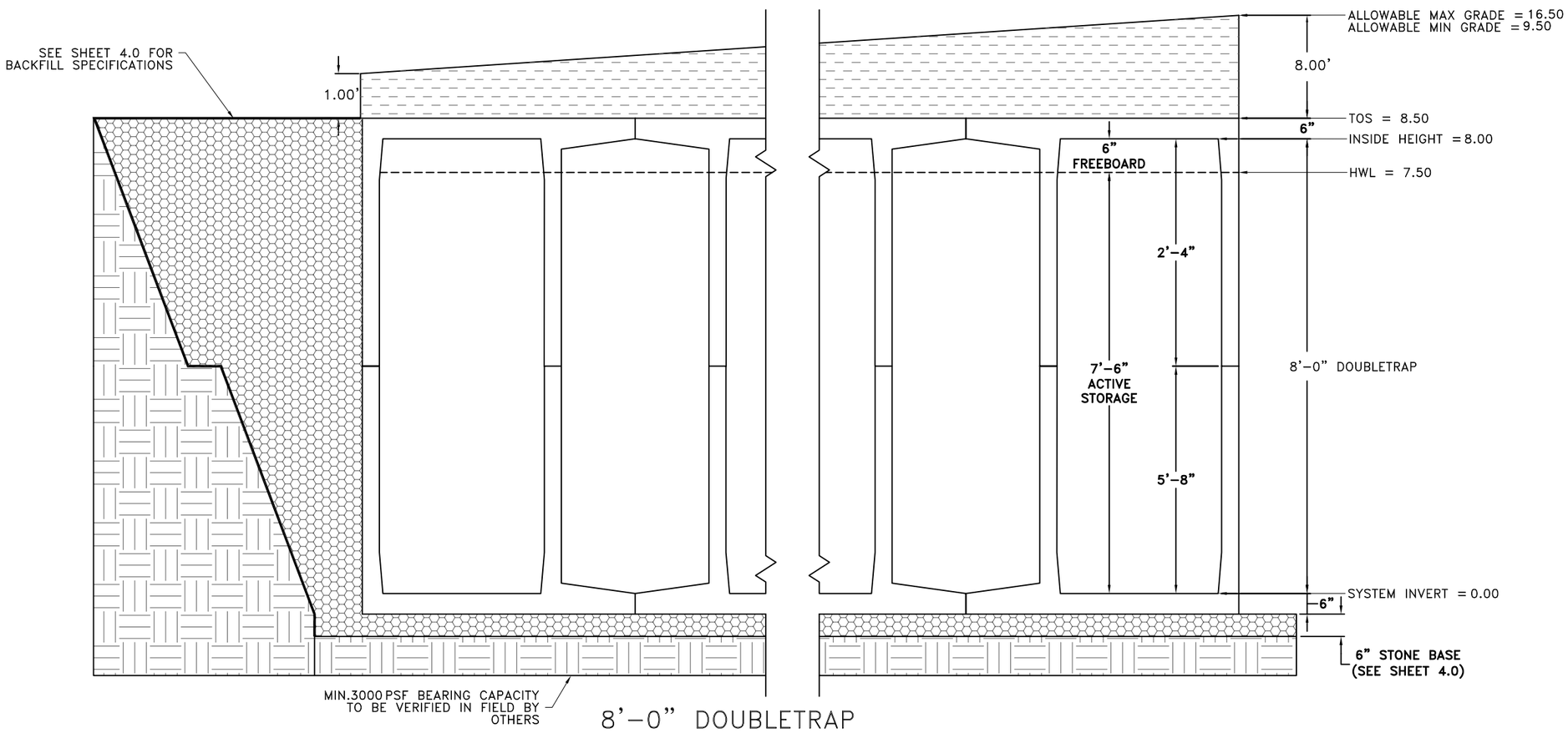
GROUND WATER TABLE: BELOW INVERT OF SYSTEM
SOIL BEARING PRESSURE: 3000 PSF
SOIL DENSITY: 120 PCF
EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE: 35 PSF / FT.
EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE: 80 PSF/FT. (IF WATER TABLE PRESENT)
APPLICABLE CODES: ASTM C857
ACI-318
BACKFILL TYPE: SEE SHEET 4.0 FOR BACKFILL OPTIONS

STORMTRAP SYSTEM INFORMATION

TOTAL WATER STORAGE PROV:	25,033.16	CUBIC FEET
WATER STORAGE PROV: ELEV 0.00 – 7.50	23,468.58	CUBIC FEET
UNIT HEADROOM:	8'-0" DOUBLETRAP	
UNIT QUANTITY:	84 TOTAL PIECES	

SITE SPECIFIC DESIGN CRITERIA

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 1.00' MAX. 8.00' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
5. **SYSTEM DESIGN MAY ALLOW FOR INCIDENTAL LEAKAGE AND WILL NOT BE SUBJECT TO LEAKAGE TESTING.**



8'-0" DOUBLETRAP

StormTrap®

PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]

1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP DESIGN CRITERIA

SHEET NUMBER:

1.0

BILL OF MATERIALS

QTY.	UNIT TYPE	DESCRIPTION	TOP WEIGHT	BASE WEIGHT
0	I	8'–0" DOUBLETRAP	0	0
2	II	8'–0" DOUBLETRAP	14286	18560
0	III	8'–0" DOUBLETRAP	0	0
14	IV	8'–0" DOUBLETRAP	12249	17584
0	VII	8'–0" DOUBLETRAP	0	0
11	VII–2	8'–0" DOUBLETRAP	9822	14096
9	VII–4	8'–0" DOUBLETRAP	10017	15352
5	SPIV	8'–0" DOUBLETRAP	VARIES	VARIES
1	SPVII–4	8'–0" DOUBLETRAP	VARIES	VARIES
0	T2 PANEL	8" THICK PANEL	0	
9	T4 PANEL	8" THICK PANEL	5963	
5	T7 PANEL	8" THICK PANEL	4348	
6	JOINT WRAP	150' PER ROLL		
80	JOINT TAPE	14.5' PER ROLL		

LOADING DISCLAIMER:

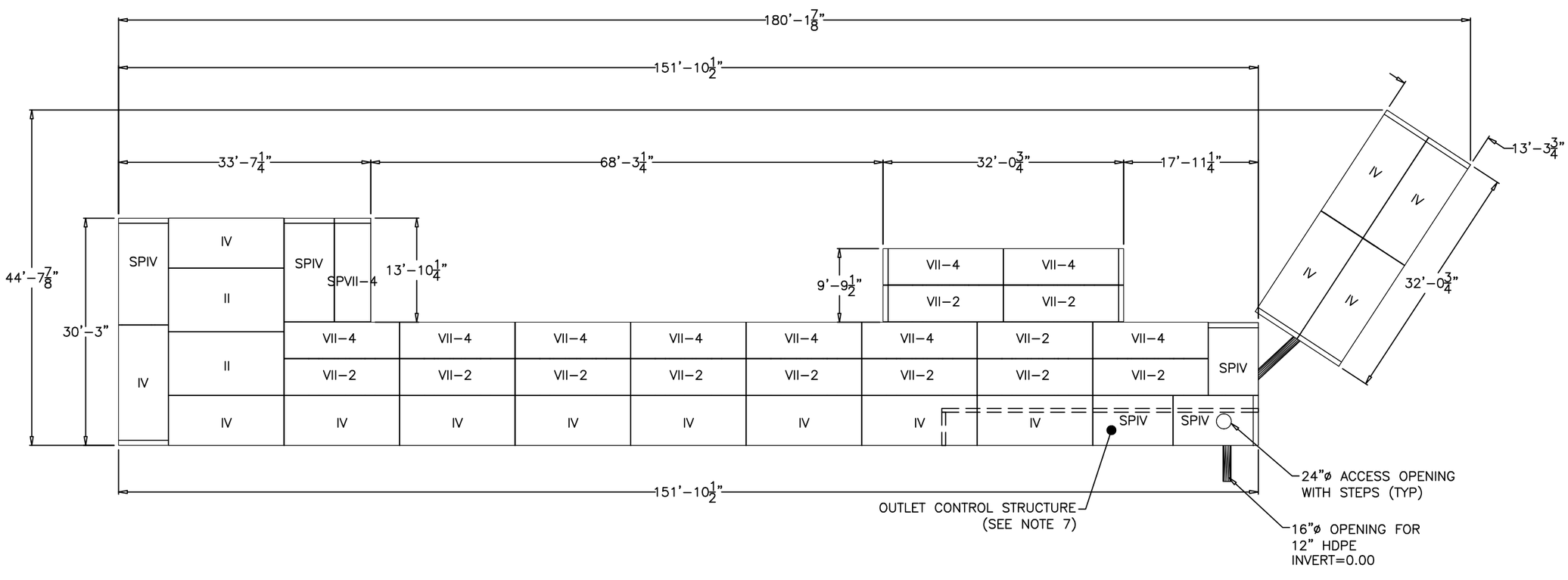
STORMTRAP IS NOT DESIGNED TO ACCEPT ANY ADDITIONAL LOADINGS FROM NEARBY STRUCTURES NEXT TO OR OVER THE TOP OF STORMTRAP. IF ADDITIONAL LOADING CONSIDERATIONS ARE REQUIRED FOR STRUCTURAL DESIGN OF STORMTRAP, PLEASE CONTACT STORMTRAP IMMEDIATELY.

THE STORMTRAP SYSTEM HAS NOT BEEN DESIGNED TO SUPPORT THE ADDITIONAL WEIGHT OF ANY TREES. FURTHERMORE, THE ROOTS OF THE TREES MUST BE CONTAINED TO PREVENT FUTURE DAMAGE TO THE STORMTRAP SYSTEM. STORMTRAP ACCEPTS NO LIABILITY FOR DAMAGES CAUSED BY TREES OR OTHER VEGETATION PLACE AROUND OR ON TOP OF THE SYSTEM.

DESIGN CRITERIA
ALLOWABLE MAX GRADE = 16.50
ALLOWABLE MIN GRADE =9.50
INSIDE HEIGHT ELEVATION =8.00
SYSTEM INVERT = 0.00

NOTES:

1. DIMENSIONING OF STORMTRAP SYSTEM SHOWN BELOW ALLOW FOR A 3/4" GAP BETWEEN EACH MODULE.
2. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
3. SEE SHEET 3.0 FOR INSTALLATION SPECIFICATIONS.
4. SP – INDICATES A MODULE WITH MODIFICATIONS.
5. P – INDICATES A MODULE WITH A PANEL ATTACHMENT.
6. CONTRACTORS RESPONSIBILITY TO ENSURE CONSISTENCY/ACCURACY TO FINAL ENGINEER OF RECORD PLAN SET.
7. **IF A WATERTIGHT SOLUTION IS REQUIRED FOR THIS OUTLET CONTROL STRUCTURE, ALL EXTERIOR COLD JOINTS, INCLUDING JOINT BETWEEN TOP AND BASE MODULES, BETWEEN TOP AND BASE OF ADJOINING SYMONS WALLS, AND JOINTS BETWEEN MODULE AND ADJACENT END PANELS WILL BE THE SOLE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO PROVIDE AND INSTALL THE WATERTIGHT APPLICATION PER THE EOR'S SPECIFICATION.**



StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815–941–4549 / F:331–318–5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858–259–8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP SYSTEM LAYOUT

SHEET NUMBER:

2.0

STORMTRAP INSTALLATION SPECIFICATIONS

1. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891, STANDARD FOR INSTALLATION OF UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES, THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS SHALL APPLY:

2. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT PROPER/ADEQUATE EQUIPMENT IS USED TO SET/INSTALL THE MODULES.

3. STORMTRAP MODULES CAN BE PLACED ON A LEVEL, 6" FOUNDATION OF ¾" AGGREGATE EXTENDING 2'-0" PAST THE OUTSIDE OF THE SYSTEM (SEE DETAIL 1) AND SHALL BE PLACED ON PROPERLY COMPACTED SOILS (SEE SHEET 1.0 FOR SOIL BEARING CAPACITY REQUIREMENTS), AND IN ACCORDANCE WITH ASTM C891 STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST UTILITY STRUCTURES.

4. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED ¾" (SEE DETAIL 2). IF THE SPACE EXCEEDS ¾", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.

5. STORMTRAP MODULES ARE NOT WATERTIGHT. IF A WATERTIGHT SOLUTION IS REQUIRED, CONTACT STORMTRAP FOR RECOMMENDATIONS. THE WATERTIGHT APPLICATION IS TO BE PROVIDED AND IMPLEMENTED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SELECTED WATERTIGHT SOLUTION PERFORMS AS SPECIFIED BY THE MANUFACTURER.

6. THE PERIMETER HORIZONTAL JOINT BETWEEN THE TOP AND BASE LEG CONNECTION OF THE STORMTRAP MODULES SHALL BE SEALED WITH PREFORMED MASTIC JOINT TAPE ACCORDING TO ASTM C891, 8.8 AND 8.12. (SEE DETAIL 3). THE MASTIC JOINT TAPE DOES NOT PROVIDE A WATERTIGHT SEAL.

7. ALL EXTERIOR JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH 8" WIDE PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN, BONDED TO A WOVEN , HIGHLY PUNCTURE RESISTANT POLYMER WRAP, CONFORMING TO ASTM C891 AND SHALL BE INTEGRATED WITH PRIMER SEALANT AS APPROVED BY STORMTRAP (SEE DETAILS 4 & 5). THE JOINT WRAP DOES NOT PROVIDE A WATERTIGHT SEAL. THE SOLE PURPOSE OF THE JOINT WRAP IS TO PROVIDE A SILT AND SOIL TIGHT SYSTEM. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:

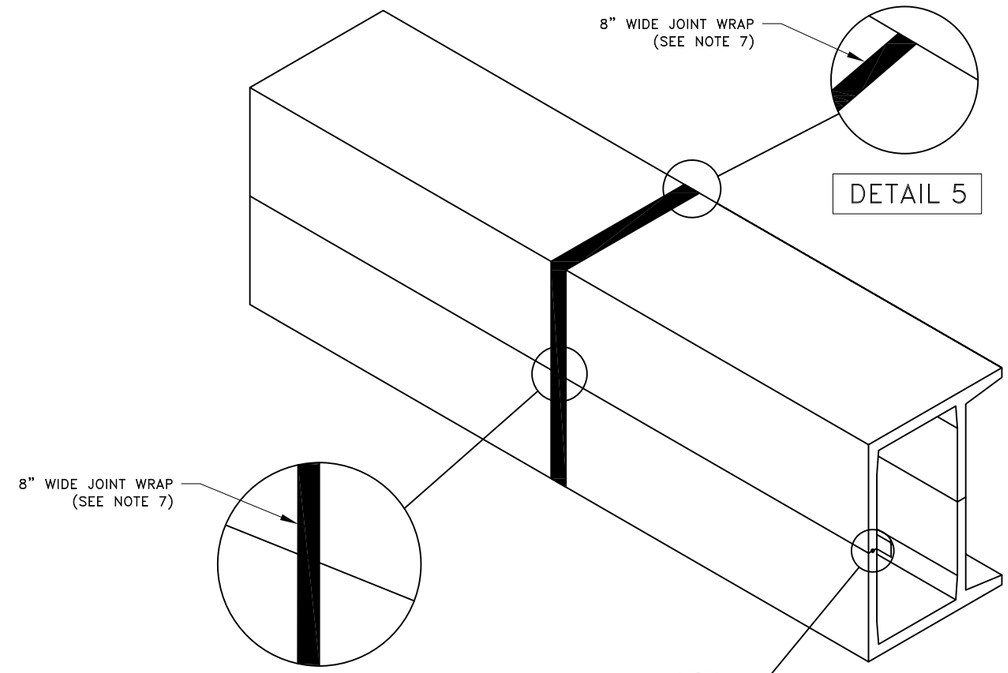
   7.1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE JOINT WRAP IS TO BE APPLIED.

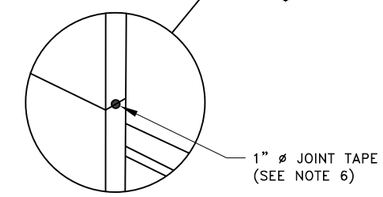
   7.2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (ADHESIVE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.

8. IF THE CONTRACTOR NEEDS TO CANCEL ANY SHIPMENTS, THEY MUST DO SO 48 HOURS PRIOR TO THEIR SCHEDULED ARRIVAL AT THE JOB SITE. IF CANCELED AFTER THAT TIME, PLEASE CONTACT THE PROJECT MANAGER.

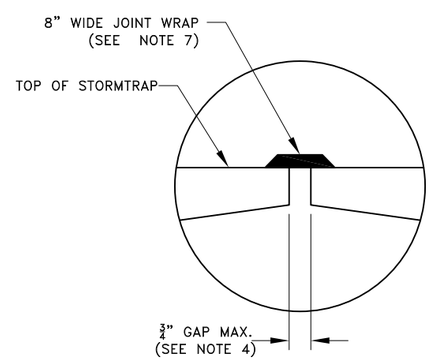
9. IF THE STORMTRAP MODULE(S) IS DAMAGED IN ANY WAY PRIOR, DURING, OR AFTER INSTALL, STORMTRAP MUST BE CONTACTED IMMEDIATELY TO ASSESS THE DAMAGE AND TO DETERMINE WHETHER OR NOT THE MODULE(S) WILL NEED TO BE REPLACED. IF ANY MODULE ARRIVES AT THE JOBSITE DAMAGED DO NOT UNLOAD IT; CONTACT STORMTRAP IMMEDIATELY. ANY DAMAGE NOT REPORTED BEFORE THE TRUCK IS UNLOADED WILL BE THE CONTRACTOR'S RESPONSIBILITY.

10. STORMTRAP MODULES CANNOT BE ALTERED IN ANY WAY AFTER MANUFACTURING WITHOUT WRITTEN CONSENT FROM STORMTRAP.

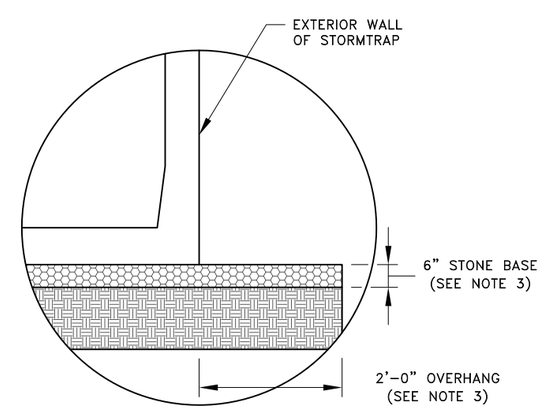




DETAIL 3



DETAIL 2



DETAIL 1

StormTrap®

PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]

1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

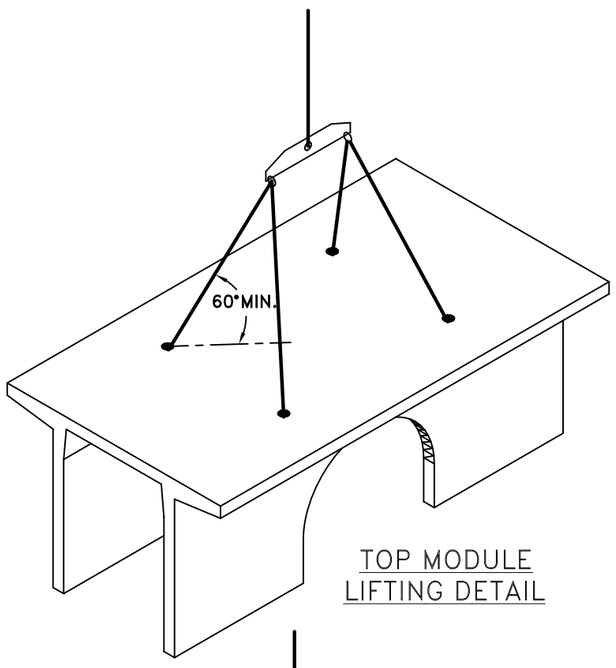
DOUBLETRAP INSTALLATION SPECIFICATIONS

SHEET NUMBER:

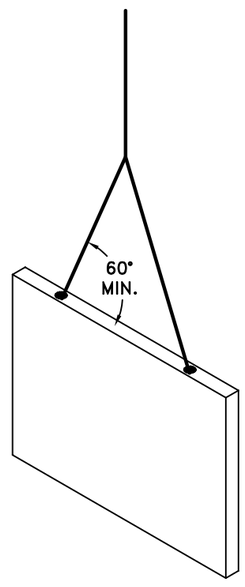
3.0

STORMTRAP MODULE LIFTING INSTALLATION NOTES

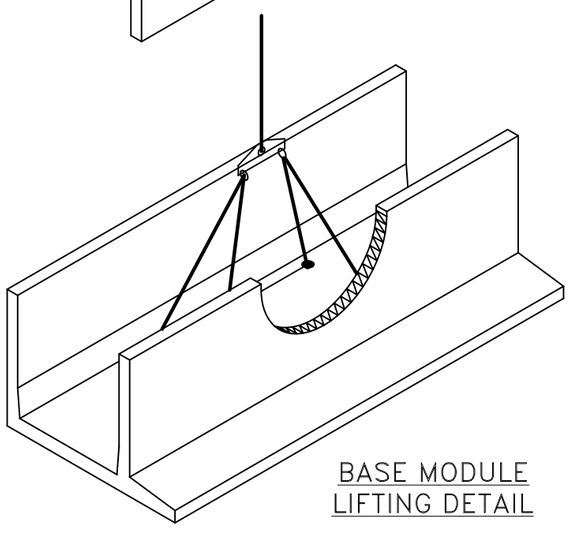
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL (4) CHAINS/CABLES ARE SECURED PROPERLY TO THE LIFTING ANCHORS AND IN EQUAL TENSION WHEN LIFTING THE STORMTRAP MODULE (SEE RECOMMENDATIONS 2 & 3).
2. MINIMUM 7'-0" CHAIN/CABLE LENGTH TO BE USED TO LIFT STORMTRAP MODULES (SUPPLIED BY CONTRACTOR).
3. CONTRACTOR TO ENSURE MINIMUM LIFTING ANGLE IS 60° FROM TOP SURFACE OF STORMTRAP MODULE. SEE DETAIL.



TOP MODULE LIFTING DETAIL



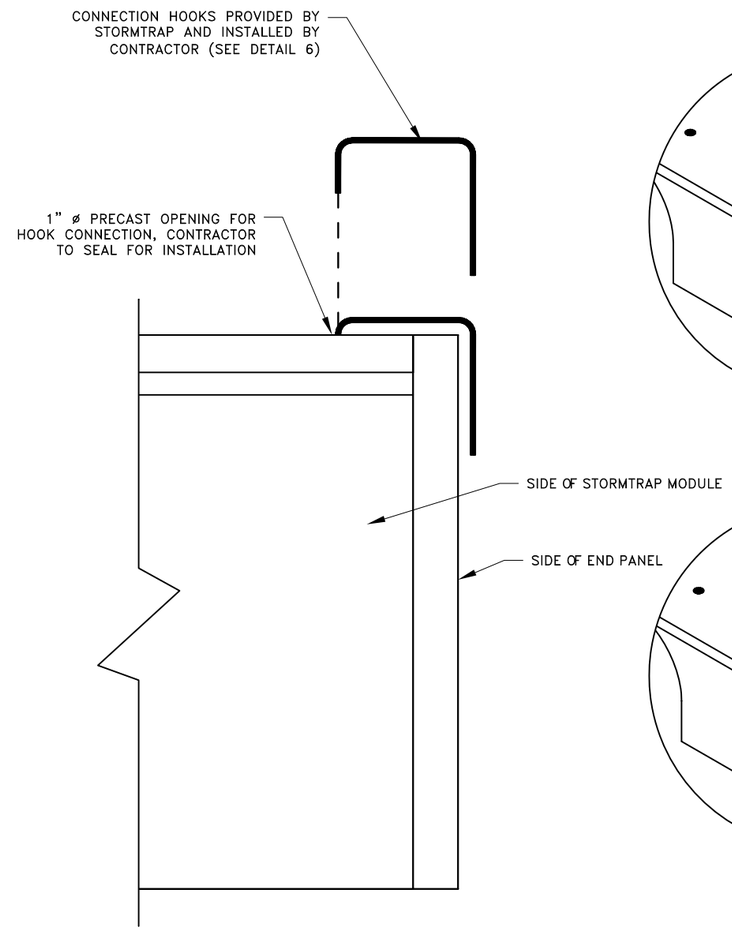
END PANEL LIFTING DETAIL



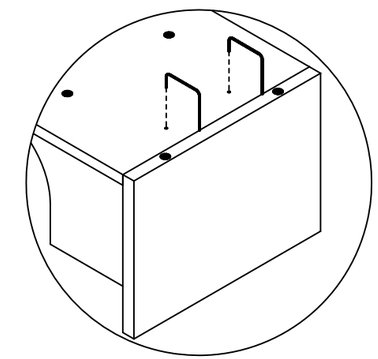
BASE MODULE LIFTING DETAIL

END PANEL ERECTION/INSTALLATION NOTES

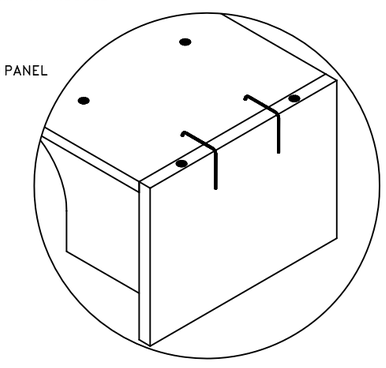
1. END PANELS WILL BE SUPPLIED TO CLOSE OFF OPEN ENDS OF ROWS.
2. PANELS SHALL BE INSTALLED IN A TILT UP FASHION DIRECTLY ADJACENT TO OPEN END OF MODULE (REFER TO SHEET 2.0 FOR END PANEL LOCATIONS).
3. CONNECTION HOOKS WILL BE SUPPLIED WITH END PANELS TO SECURELY CONNECT PANEL TO ADJACENT STORMTRAP MODULE (SEE PANEL CONNECTION ELEVATION VIEW).
4. ONCE CONNECTION HOOK IS ATTACHED, LIFTING CLUTCHES MAY BE REMOVED.
5. JOINT WRAP SHALL BE PLACED AROUND PERIMETER JOINT PANEL (SEE SHEET 3.0).



PANEL CONNECTION ELEVATION VIEW



STEP 1



STEP 2

DETAIL 6

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP INSTALLATION SPECIFICATIONS

SHEET NUMBER:

3.1

ZONE CHART

ZONES	ZONE DESCRIPTIONS	REMARKS
ZONE 1	FOUNDATION AGGREGATE	#5 (¾") STONE AGGREGATE (SEE NOTE 4 FOR DESCRIPTION)
ZONE 2	BACKFILL	UNIFIED SOILS CLASSIFICATION (GW, GP, SW, SP) OR SEE BELOW FOR APPROVED BACKFILL OPTIONS
ZONE 3	FINAL COVER OVERTOP	MATERIALS NOT TO EXCEED 120 PCF

FILL DEPTH	TRACK WIDTH	MAX VEHICLE WEIGHT (KIPS)	MAX GROUND PRESSURE
12"	12"	51.8	1690 psf
	18"	56.1	1219 psf
	24"	68.1	1111 psf
	30"	76.7	1000 psf
	36"	85.0	924 psf

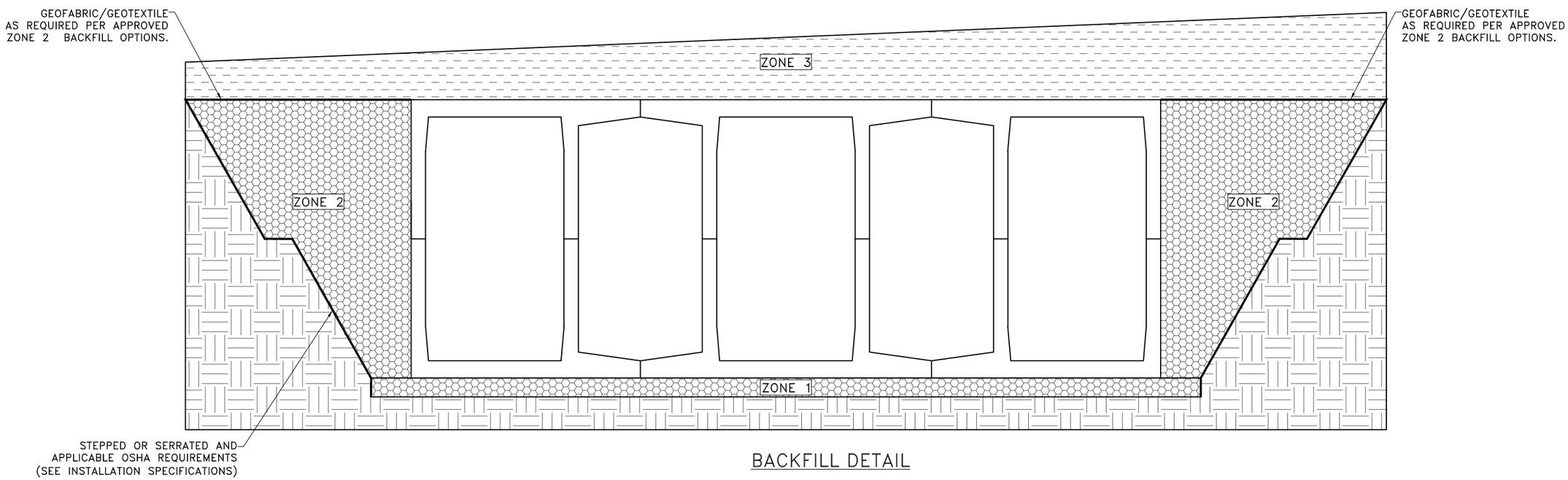
NOTE:
TRACK LENGTH NOT TO EXCEED 15'-4".
ONLY TWO TRACKS PER VEHICLE.

APPROVED ZONE 2 BACKFILL OPTIONS

OPTION	REMARKS
¾" STONE AGGREGATE	THE STONE AGGREGATE SHALL CONSIST OF CLEAN AND FREE DRAINING ANGULAR MATERIAL. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL (ASTM SIZE #57) AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
SAND	IMPORTED PURE SAND IS PERMITTED TO BE USED AS BACKFILL IF IT IS CLEAN AND FREE DRAINING. THE SAND USED FOR BACKFILLING SHALL HAVE LESS THAN 40% PASSING #40 SIEVE AND LESS THAN 5% PASSING #200 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE SAND BACKFILL.
CRUSHED CONCRETE AGGREGATE	CLEAN, FREE DRAINING CRUSHED CONCRETE AGGREGATE MATERIAL CAN BE USED AS BACKFILL FOR STORMTRAP'S MODULES. THE SIZE OF THIS MATERIAL SHALL HAVE 100% PASSING THE 1" SIEVE WITH 0% TO 5% PASSING THE #8 SIEVE. THIS MATERIAL SHALL BE SEPARATED FROM NATIVE MATERIAL USING GEOFABRIC AROUND THE PERIMETER OF THE BACKFILL.
ROAD PACK	STONE AGGREGATE 100% PASSING THE 1-1/2" SIEVE WITH LESS THAN 12% PASSING THE #200 SIEVE (ASTM SIZE #467). GEOFABRIC AS PER GEOTECHNICAL ENGINEER RECOMMENDATION.

STORMTRAP ZONE INSTALLATION SPECIFICATIONS/PROCEDURES

1. THE FILL PLACED AROUND THE STORMTRAP MODULES MUST DEPOSITED ON BOTH SIDES AT THE SAME TIME AND TO APPROXIMATELY THE SAME ELEVATION. AT NO TIME SHALL THE FILL BEHIND ONE SIDE WALL BE MORE THAN 2'-0" HIGHER THAN THE FILL ON THE OPPOSITE SIDE. BACKFILL SHALL EITHER BE COMPACTED AND/OR VIBRATED TO ENSURE THAT BACKFILL AGGREGATE/STONE MATERIAL IS WELL SEATED AND PROPERLY INTER LOCKED. CARE SHALL BE TAKEN TO PREVENT ANY WEDGING ACTION AGAINST THE STRUCTURE, AND ALL SLOPES WITHIN THE AREA TO BE BACKFILLED MUST BE STEPPED OR SERRATED TO PREVENT WEDGING ACTION. CARE SHALL ALSO BE TAKEN AS NOT TO DISRUPT THE JOINT WRAP FROM THE JOINT DURING THE BACKFILL PROCESS. BACKFILL MUST BE FREE-DRAINING MATERIAL. SEE ZONE 2 BACKFILL CHART ON THIS PAGE FOR APPROVED BACKFILL OPTIONS. IF NATIVE EARTH IS SUSCEPTIBLE TO MIGRATION, CONFIRM WITH GEOTECHNICAL ENGINEER AND PROVIDE PROTECTION AS REQUIRED (PROVIDED BY OTHERS).
2. DURING PLACEMENT OF MATERIAL OVERTOP THE SYSTEM, AT NO TIME SHALL MACHINERY BE USED OVERTOP THAT EXCEEDS THE DESIGN LIMITATIONS OF THE SYSTEM. WHEN PLACEMENT OF MATERIAL OVERTOP, MATERIAL SHALL BE PLACED SUCH THAT THE DIRECTION OF PLACEMENT IS PARALLEL WITH THE OVERALL LONGITUDINAL DIRECTION OF THE SYSTEM WHENEVER POSSIBLE.
3. THE FILL PLACED OVERTOP THE SYSTEM SHALL BE PLACED AT A MINIMUM OF 6" LIFTS. AT NO TIME SHALL MACHINERY OR VEHICLES GREATER THAN THE DESIGN HS-20 LOADING CRITERIA TRAVEL OVERTOP THE SYSTEM WITHOUT THE MINIMUM DESIGN COVERAGE. IF TRAVEL IS NECESSARY OVERTOP THE SYSTEM PRIOR TO ACHIEVING THE MINIMUM DESIGN COVER, IT MAY BE NECESSARY TO REDUCE THE ULTIMATE LOAD/BURDEN OF THE OPERATING MACHINERY SO AS TO NOT EXCEED THE DESIGN CAPACITY OF THE SYSTEM. IN SOME CASES, IN ORDER TO ACHIEVE REQUIRED COMPACTION, HAND COMPACTION MAY BE NECESSARY IN ORDER NOT TO EXCEED THE ALLOTTED DESIGN LOADING. SEE CHART FOR TRACKED VEHICLE WIDTH AND ALLOWABLE MAXIMUM PRESSURE PER TRACK.
4. STONE AGGREGATE FOUNDATION IN ZONE 1 IS RECOMMENDED FOR LEVELING PURPOSES ONLY (OPTIONAL).



BACKFILL DETAIL

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

NTS

SHEET TITLE:

DOUBLETRAP BACKFILL SPECIFICATIONS

SHEET NUMBER:

4.0

RECOMMENDED ACCESS OPENING SPECIFICATION

1. A TYPICAL ACCESS OPENING FOR THE STORMTRAP SYSTEM ARE 2'–0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 3'–0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 1'–0" OF CLEARANCE FROM THE END OF THE STORMTRAP MODULE UNLESS NOTED OTHERWISE. ALL ACCESS OPENINGS TO BE LOCATED ON INSIDE LEG UNLESS OTHERWISE SPECIFIED.
2. PLASTIC COATED STEEL STEPS PRODUCED BY M.A. INDUSTRIES PART #PS3–PFC OR APPROVED EQUAL (SEE STEP DETAIL) ARE PROVIDED INSIDE ANY MODULE WHERE DEEMED NECESSARY. THE HIGHEST STEP IN THE MODULE IS TO BE PLACED A DISTANCE OF 1'–0" FROM THE INSIDE EDGE OF THE STORMTRAP MODULES. ALL ENSUING STEPS SHALL BE PLACED AT A DISTANCE BETWEEN 10" MIN AND 14" MAX BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE MODULE.
3. STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO AVOID INTERFERENCE WITH ACCESS OPENINGS OR THE CENTER OF GRAVITY OF THE MODULE AS NEEDED.
4. STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
5. ACCESS OPENINGS SHOULD BE LOCATED IN ORDER TO MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST TWO ACCESS OPENINGS PER SYSTEM FOR ACCESS AND INSPECTION.
6. USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE SECTIONS. (PROVIDED BY OTHERS)

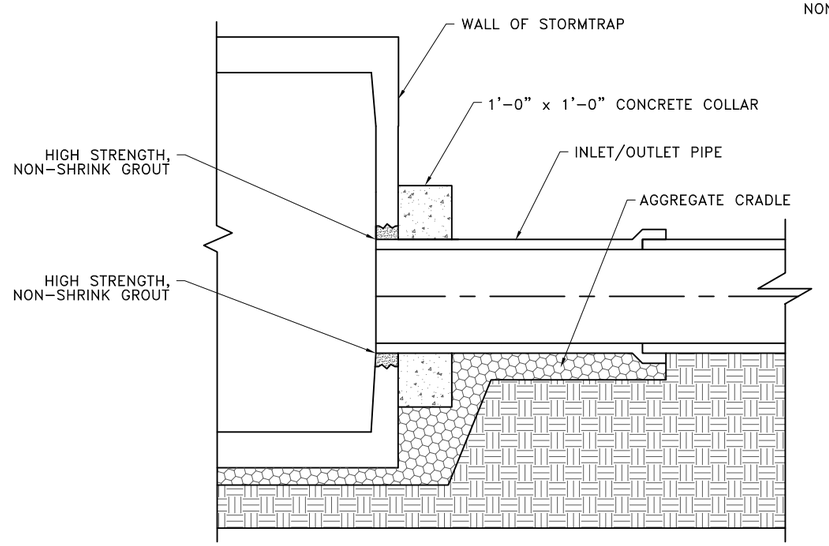
RECOMMENDED PIPE OPENING SPECIFICATION

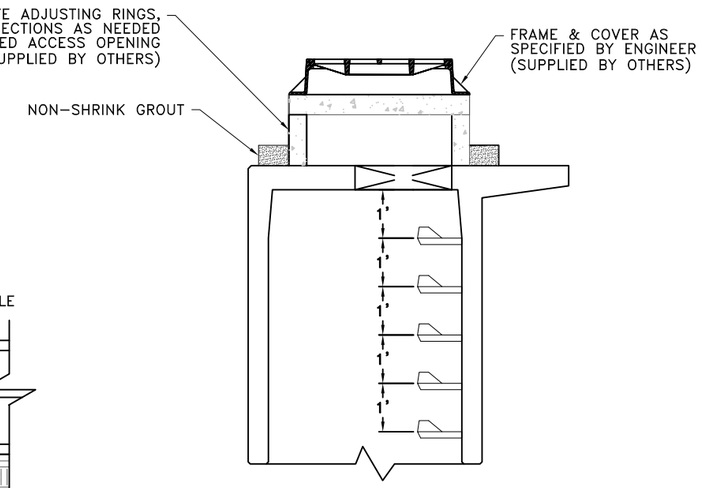
1. MINIMUM EDGE DISTANCE FOR AN OPENING ON THE OUTSIDE WALL SHALL BE NO LESS THAN 1'–0".
2. MAXIMUM OPENING SIZE TO BE DETERMINED BY THE MODULE HEIGHT. PREFERRED OPENING SIZE ø 36" OR LESS. ANY OPENING NEEDED THAT DOES NOT FIT THIS CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF STORMTRAP FOR REVIEW.
3. CONNECTING PIPES SHALL BE INSTALLED WITH A 1'–0" CONCRETE COLLAR, AND AN AGGREGATE CRADLE FOR AT LEAST ONE PIPE LENGTH (SEE PIPE CONNECTION DETAIL). A STRUCTURAL GRADE CONCRETE OR HIGH STRENGTH, NON–SHRINK GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI SHALL BE USED.
4. THE ANNULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH HIGH STRENGTH NON–SHRINK GROUT.

RECOMMENDED PIPE INSTALLATION INSTRUCTIONS

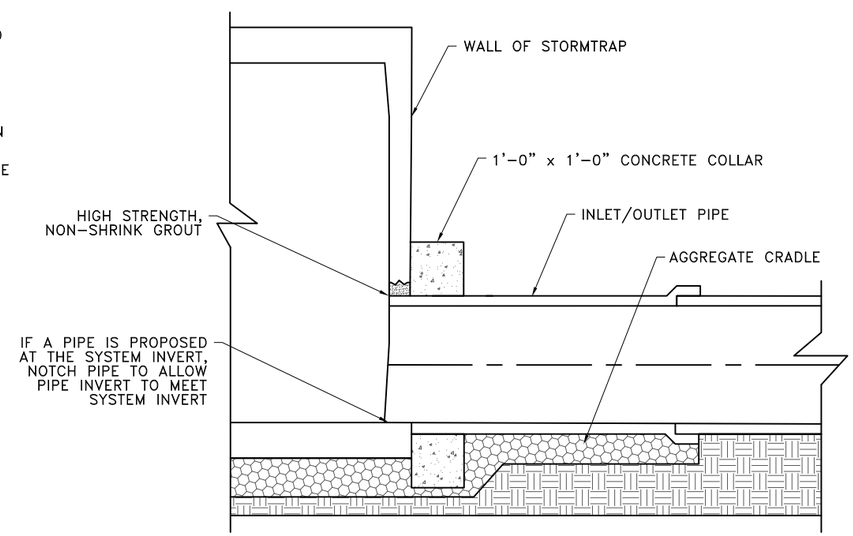
1. CLEAN AND LIGHTLY LUBRICATE ALL OF THE PIPE TO BE INSERTED INTO STORMTRAP.
2. IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
3. ALIGN CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.

NOTE: ALL ANCILLARY PRODUCTS/SPECIFICATIONS RECOMMENDED AND SHOWN ON THIS SHEET ARE RECOMMENDATIONS ONLY AND SUBJECT TO CHANGE PER THE INSTALLING CONTRACTOR AND/OR PER LOCAL MUNICIPAL CODE/REQUIREMENTS.

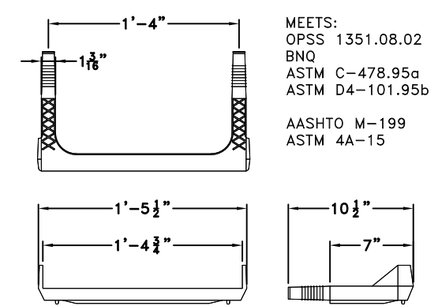




RISER / STAIR DETAIL



PIPE CONNECTION DETAIL



MEETS:
OPSS 1351.08.02
BNQ
ASTM C–478.95a
ASTM D4–101.95b

AASHTO M–199
ASTM 4A–15

STEP DETAIL

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815–941–4549 / F:331–318–5347

ENGINEER INFORMATION:

PASCO LARET SUITER & ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858–259–8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

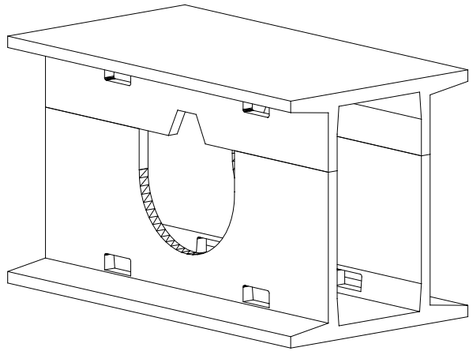
NTS

SHEET TITLE:

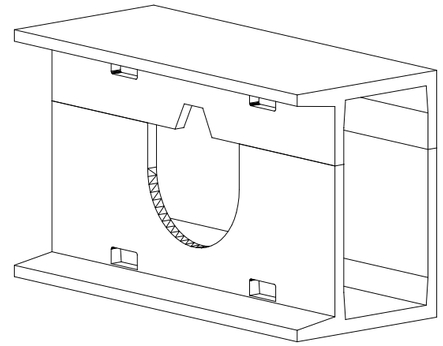
RECOMMENDED PIPE / ACCESS OPENING SPECIFICATIONS

SHEET NUMBER:

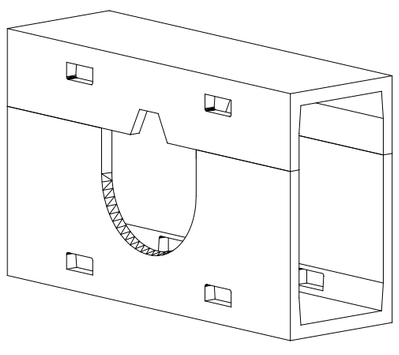
5.0



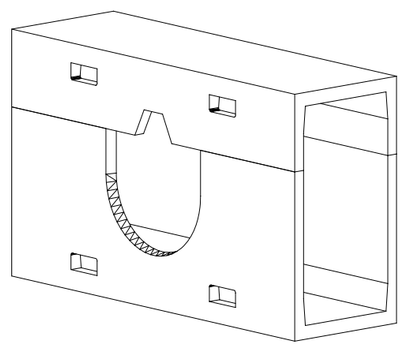
TYPE II



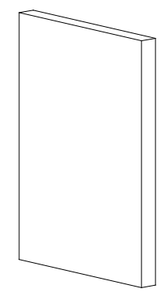
TYPE IV



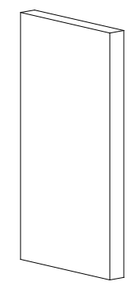
TYPE VII–2



TYPE VII–4



TYPE IV
END PANEL



TYPE VII
END PANEL

NOTES:
1. OPENING LOCATIONS AND SHAPES MAY VARY.
2. SP – INDICATES A MODULE WITH MODIFICATIONS.
3. P – INDICATES A MODULE WITH A PANEL ATTACHMENT.
4. POCKET WINDOW OPENINGS ARE OPTIONAL.

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815–941–4549 / F:331–318–5347

ENGINEER INFORMATION:

PASCO LARET SUITER
& ASSOCIATES
535 NORTH COAST HIGHWAY
SOLANA BEACH, CA
858–259–8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

7/19/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
1	7/9/2021	PRELIMINARY	RJL

SCALE:

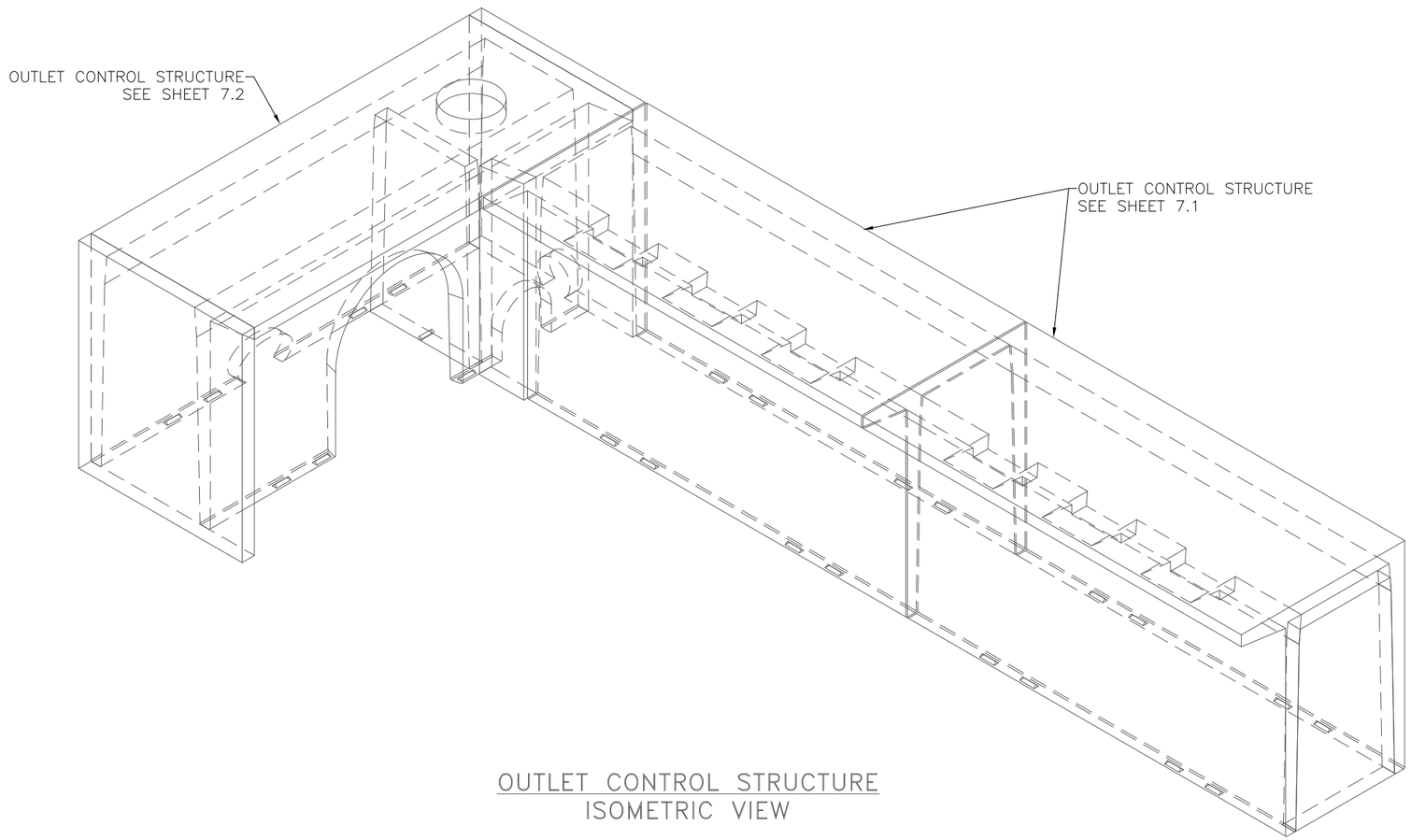
NTS

SHEET TITLE:

DOUBLETRAP
MODULE TYPES

SHEET NUMBER:

6.0



OUTLET CONTROL STRUCTURE
ISOMETRIC VIEW

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET
SUITER & ASSOCIATES
535 N COAST HWY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

3/9/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
3	3/9/2021	PRELIMINARY	RJL
2	12/11/2020	PRELIMINARY	RJL
1	8/26/2020	PRELIMINARY	NP

SCALE:

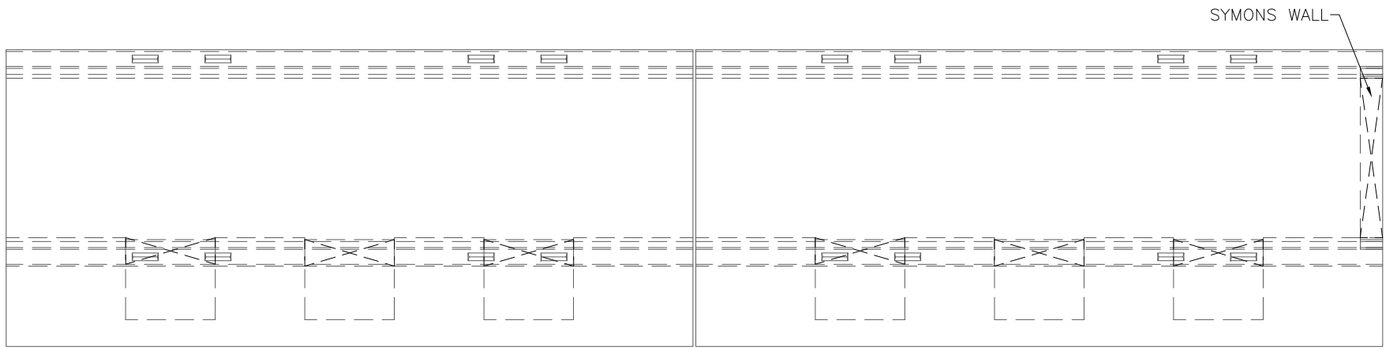
NTS

SHEET TITLE:

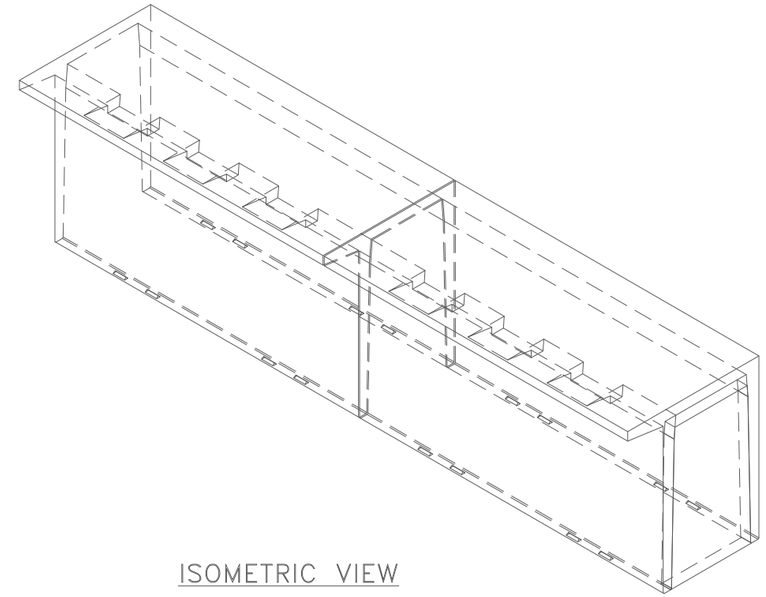
OUTLET CONTROL STRUCTURE

SHEET NUMBER:

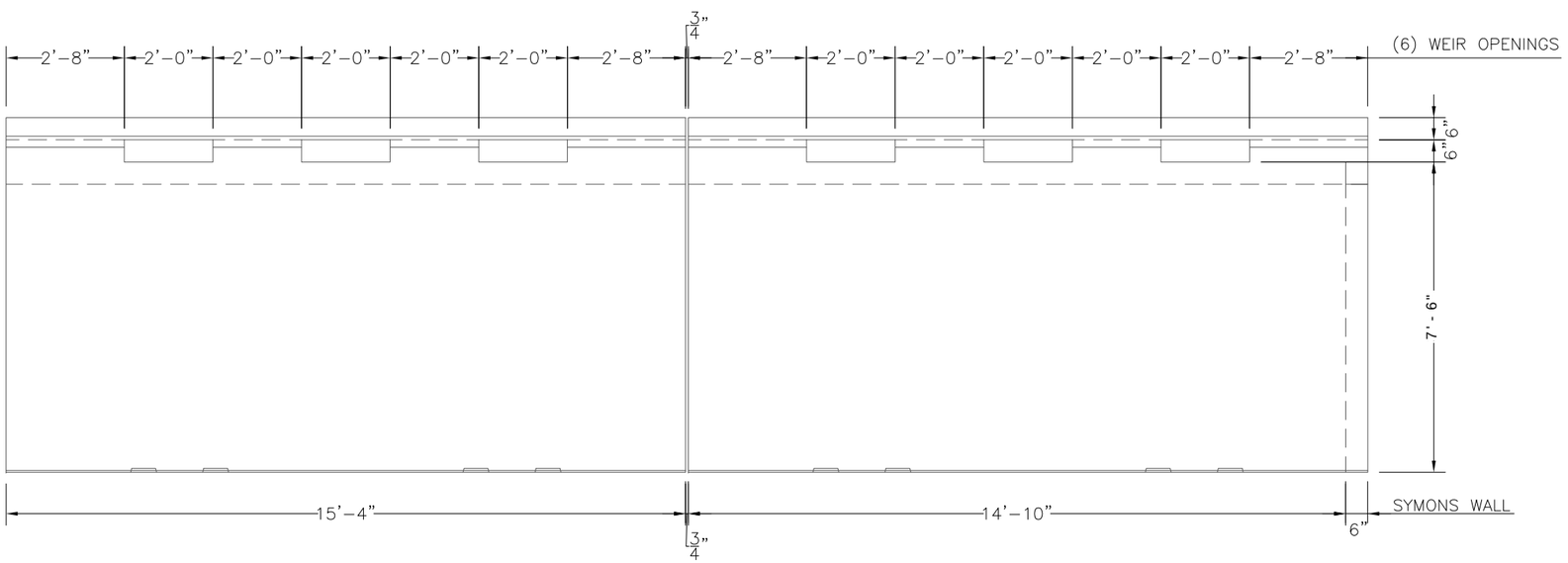
7.0



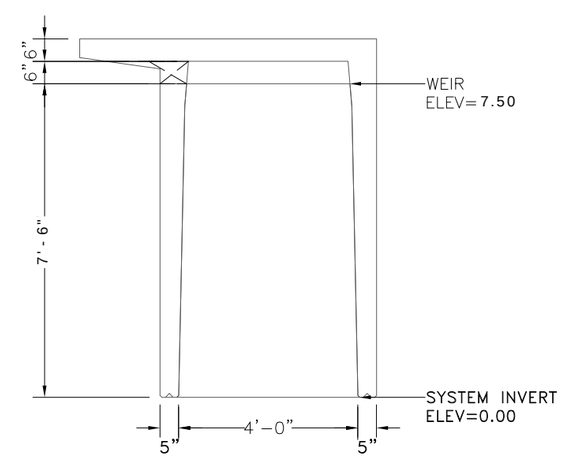
PLAN VIEW



ISOMETRIC VIEW



ELEVATION VIEW



SIDE VIEW

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET
SUITER & ASSOCIATES
535 N COAST HWY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

3/9/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
3	3/9/2021	PRELIMINARY	RJL
2	12/11/2020	PRELIMINARY	RJL
1	8/26/2020	PRELIMINARY	NP

SCALE:

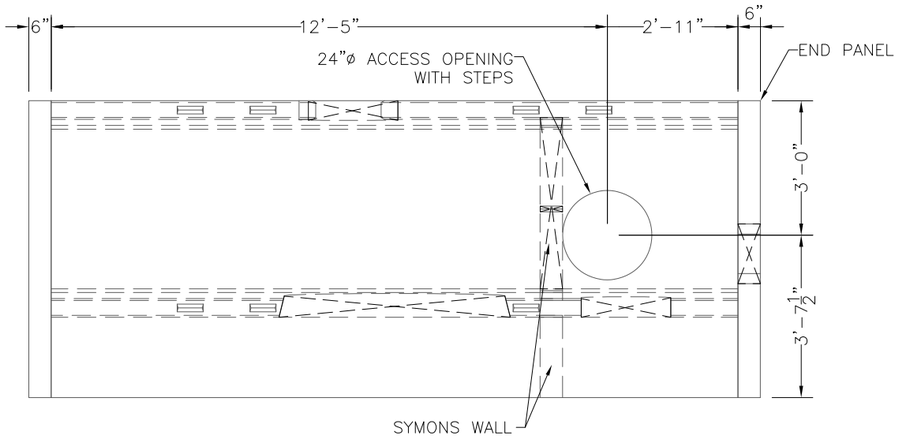
NTS

SHEET TITLE:

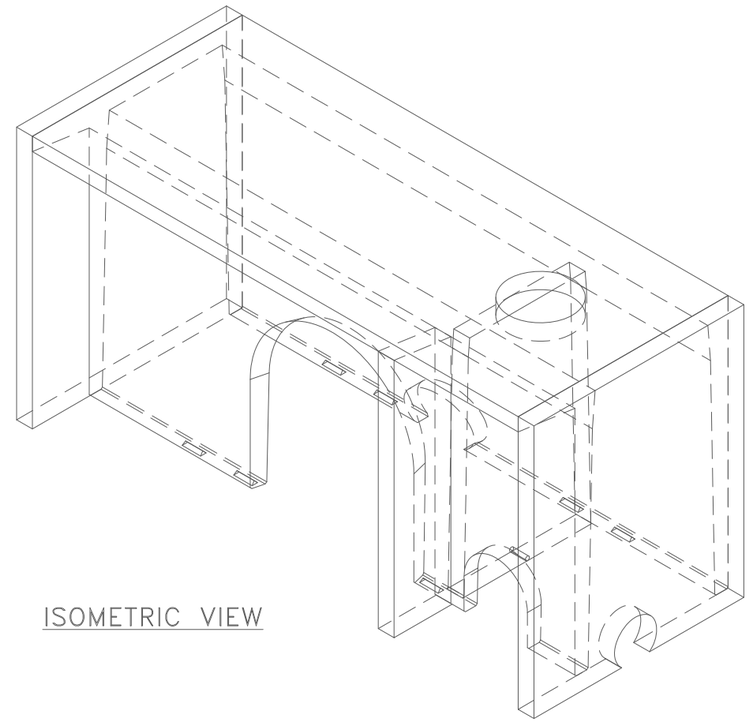
OUTLET CONTROL STRUCTURE

SHEET NUMBER:

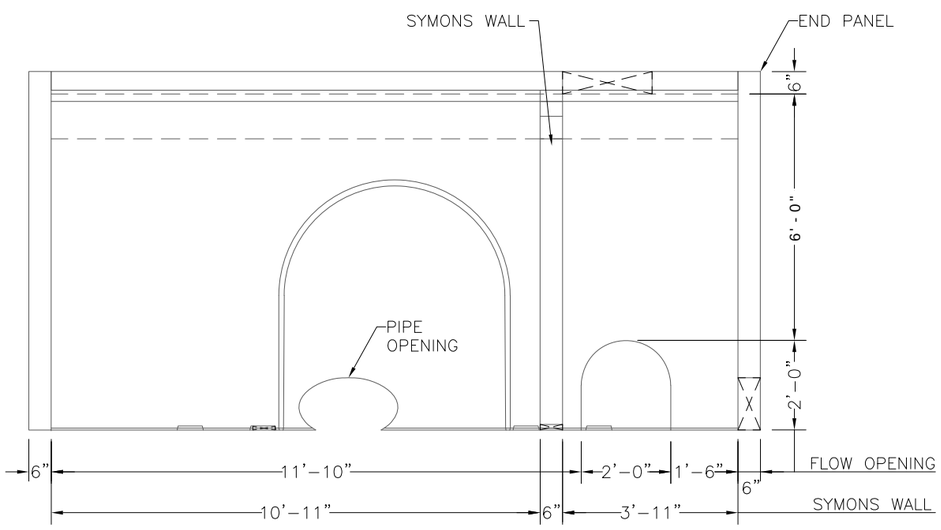
7.1



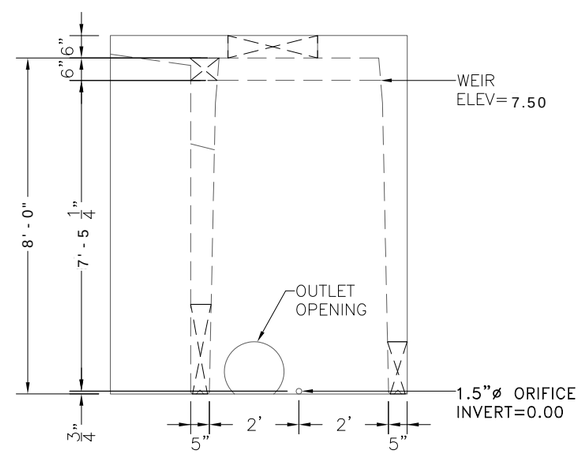
PLAN VIEW



ISOMETRIC VIEW



ELEVATION VIEW



SIDE VIEW

StormTrap®
PATENTS LISTED AT: [HTTP://STORMTRAP.COM/PATENT]
1287 WINDHAM PARKWAY
ROMEOVILLE, IL 60446
P:815-941-4549 / F:331-318-5347

ENGINEER INFORMATION:

PASCO LARET
SUITER & ASSOCIATES
535 N COAST HWY
SOLANA BEACH, CA
858-259-8212

PROJECT INFORMATION:

ENCINITAS BEACH HOTEL

LEUCADIA, CA

CURRENT ISSUE DATE:

3/9/2021

ISSUED FOR:

PRELIMINARY

REV.	DATE:	ISSUED FOR:	DWN BY:
3	3/9/2021	PRELIMINARY	RJL
2	12/11/2020	PRELIMINARY	RJL
1	8/26/2020	PRELIMINARY	NP

SCALE:

NTS

SHEET TITLE:

OUTLET CONTROL STRUCTURE

SHEET NUMBER:

7.2

8'-0" STORMTRAP STAGE STORAGE BREAKDOWN	
Elevation	Storage (cubic-feet)
44.31	0
44.56	786.68
44.81	1,573.37
45.06	2,360.05
45.31	3,146.74
45.56	3,933.42
45.81	4,720.11
46.06	5,506.79
46.31	6,293.48
46.56	7,080.16
46.81	7,866.85
47.06	8,653.53
47.31	9,440.22
47.56	10,226.90
47.81	11,013.59
48.06	11,800.27
48.31	12,586.96
48.56	13,373.64
48.81	14,160.33
49.06	14,947.01
49.31	15,733.70
49.56	16,520.38
49.81	17,307.07
49.99	17,866.49
50.06	18,093.75
50.31	18,880.44
50.56	19,667.12
50.81	20,453.81
51.06	21,240.49
51.31	22,027.18
51.56	22,813.86
51.81	23,600.55
52.06	24,387.22
52.31	25,173.92

3.5 Hydromodification Analysis

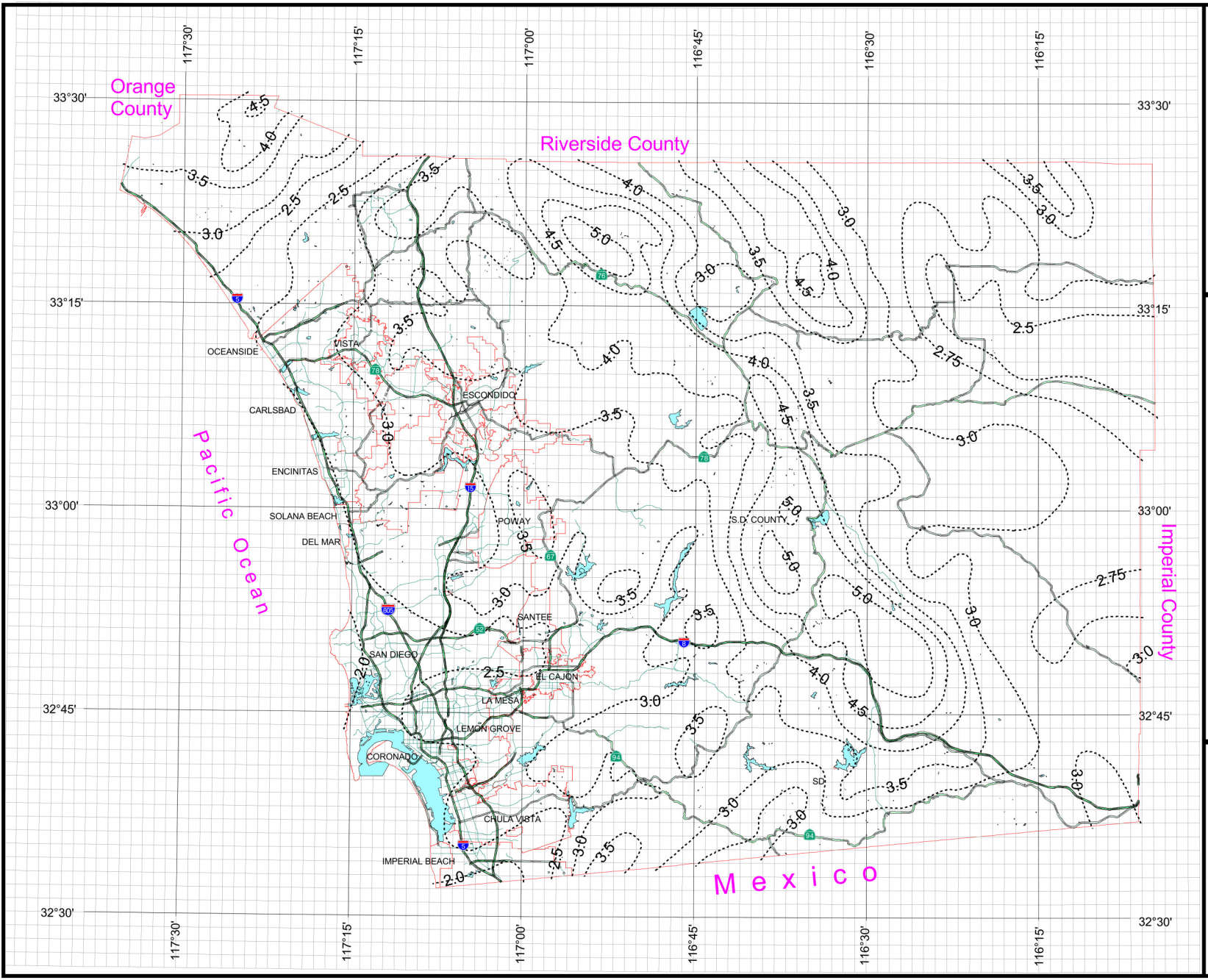
To satisfy the requirements of the MS4 Permit, a hydromodification management strategy has been developed for the project based on the Final Hydromodification Management Plan dated March 2011, (Final HMP). Refer to the Stormwater Quality Management Plan (SWQMP) for the project titled "Stormwater Quality Management Plan for Leucadia 101 Mixed Use" dated July 2021 prepared by Pasco Laret Suiter & Associates for the detailed HMP analysis.

3.6 Storm Water Pollutant Control

To meet the requirements of the MS4 Permit, the project has been designed to treat onsite storm water pollutants contained in the volume of runoff from a 24-hour, 85th percentile storm event by slowly infiltrating runoff through an engineered soil layer and gravel layer. Refer to the Stormwater Quality Management Plan (SWQMP) for the project titled "Stormwater Quality Management Plan for Leucadia 101 Mixed Use" dated July 2021 prepared by Pasco Laret Suiter & Associates for the detailed pollutant control calculations.

APPENDIX A

Hydrology Support Material



County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours

Isopluvial (inches)

DPW GIS
Department of Public Works
Geographic Information Services

SanGIS
We Have San Diego Covered!

N
W E
S

3 0 3 Miles

THIS MAP IS PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
Copyright SanGIS. All Rights Reserved.

This products may contain information from the SANDAG Regional Information System which cannot be reproduced without the written permission of SANDAG.

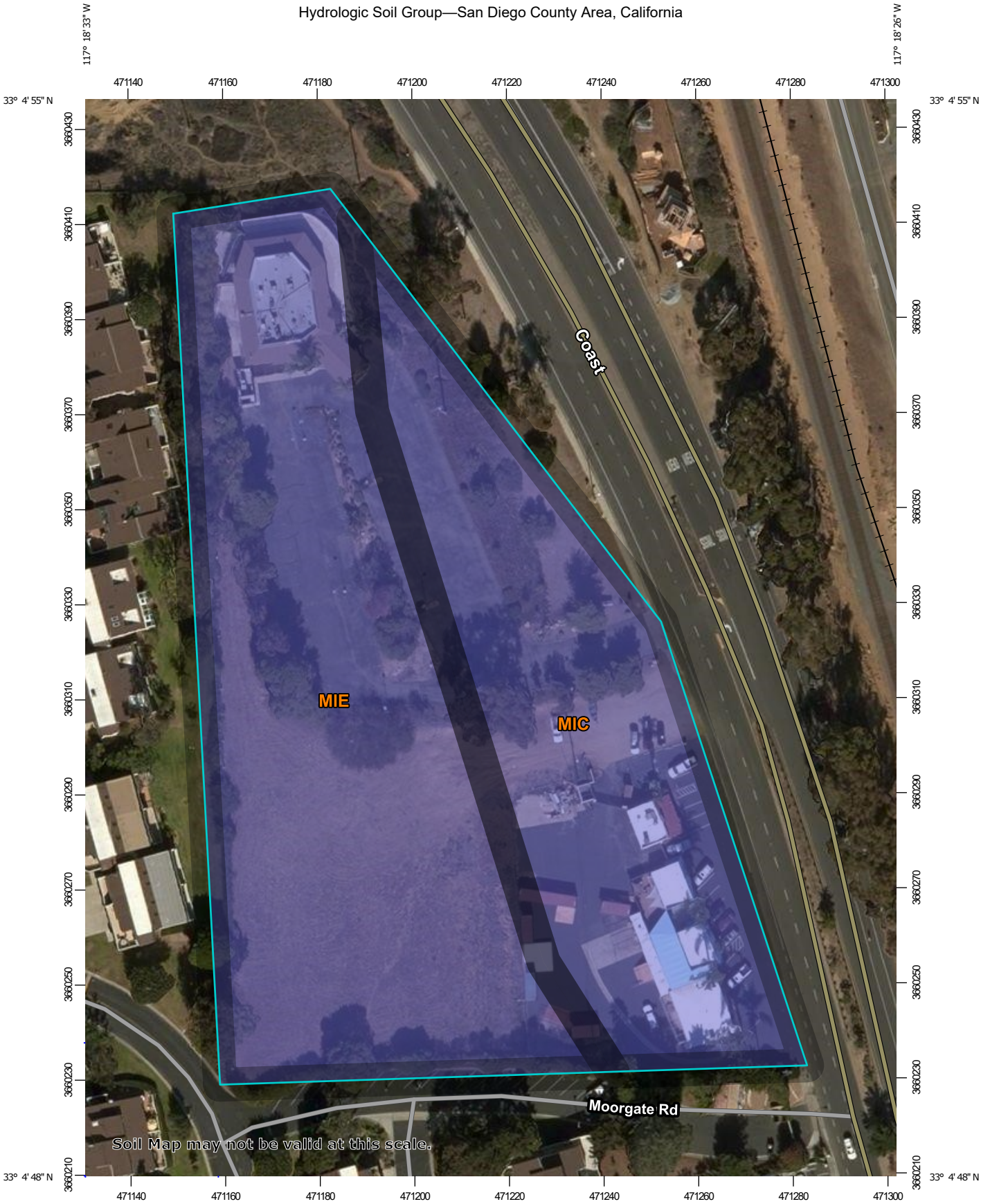
This product may contain information which has been reproduced with permission granted by Thomas Brothers Maps.

Table 3-1
RUNOFF COEFFICIENTS FOR URBAN AREAS

Land Use		Runoff Coefficient "C"				
			Soil Type			
NRCS Elements	County Elements	% IMPER.	A	B	C	D
Undisturbed Natural Terrain (Natural)	Permanent Open Space	0*	0.20	0.25	0.30	0.35
Low Density Residential (LDR)	Residential, 1.0 DU/A or less	10	0.27	0.32	0.36	0.41
Low Density Residential (LDR)	Residential, 2.0 DU/A or less	20	0.34	0.38	0.42	0.46
Low Density Residential (LDR)	Residential, 2.9 DU/A or less	25	0.38	0.41	0.45	0.49
Medium Density Residential (MDR)	Residential, 4.3 DU/A or less	30	0.41	0.45	0.48	0.52
Medium Density Residential (MDR)	Residential, 7.3 DU/A or less	40	0.48	0.51	0.54	0.57
Medium Density Residential (MDR)	Residential, 10.9 DU/A or less	45	0.52	0.54	0.57	0.60
Medium Density Residential (MDR)	Residential, 14.5 DU/A or less	50	0.55	0.58	0.60	0.63
High Density Residential (HDR)	Residential, 24.0 DU/A or less	65	0.66	0.67	0.69	0.71
High Density Residential (HDR)	Residential, 43.0 DU/A or less	80	0.76	0.77	0.78	0.79
Commercial/Industrial (N. Com)	Neighborhood Commercial	80	0.76	0.77	0.78	0.79
Commercial/Industrial (G. Com)	General Commercial	85	0.80	0.80	0.81	0.82
Commercial/Industrial (O.P. Com)	Office Professional/Commercial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (Limited I.)	Limited Industrial	90	0.83	0.84	0.84	0.85
Commercial/Industrial (General I.)	General Industrial	95	0.87	0.87	0.87	0.87

*The values associated with 0% impervious may be used for direct calculation of the runoff coefficient as described in Section 3.1.2 (representing the pervious runoff coefficient, Cp, for the soil type), or for areas that will remain undisturbed in perpetuity. Justification must be given that the area will remain natural forever (e.g., the area is located in Cleveland National Forest).
DU/A = dwelling units per acre
NRCS = National Resources Conservation Service

Hydrologic Soil Group—San Diego County Area, California



Map Scale: 1:1,110 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 14, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 3, 2014—Nov 22, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MIC	Marina loamy coarse sand, 2 to 9 percent slopes	B	1.6	40.0%
MIE	Marina loamy coarse sand, 9 to 30 percent slopes	B	2.5	60.0%
Totals for Area of Interest			**4.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX B

Hydraulic Calculations

3161 Leucadia 101
7/16/2021

West Ditch

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	40	0.9	36	
Pervious	10244	0.25	2561	
Total (sf)	10284		2597	0.25
Total (ac)	0.24			

Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**0.4**

Hydraulic Analysis Report

Project Data

Project Title: 3161 Leucadia 101

Channel Analysis: West Ditch

Input Parameters

Channel Type: Triangular
Side Slope 1 (Z1): 1.2500 ft/ft
Side Slope 2 (Z2): 1.2500 ft/ft
Longitudinal Slope: 0.2300 ft/ft
Manning's n: 0.0150
Flow: 0.4000 cfs

Result Parameters

Depth: 0.1940 ft
Area of Flow: 0.0470 ft^2
Wetted Perimeter: 0.6210 ft
Hydraulic Radius: 0.0757 ft
Average Velocity: 8.5046 ft/s
Top Width: 0.4849 ft
Froude Number: 4.8125
Critical Depth: 0.3637 ft
Critical Velocity: 2.4197 ft/s
Critical Slope: 0.0081 ft/ft
Critical Top Width: 0.91 ft
Calculated Max Shear Stress: 2.7839 lb/ft^2
Calculated Avg Shear Stress: 1.0869 lb/ft^2

3161 Leucadia 101
7/16/2021

South Ditch

Q = CIA

P6 (in)	2.5

	Area (sq ft)	C value	A x C value	Weighted C
Impervious	717	0.9	645.3	
Pervious	4705	0.25	1176.25	
Total (sf)	5422		1821.55	0.34
Total (ac)	0.12			

Tc =	5.0
I (in/hr) =	6.6
Q (cfs) =	**0.3**

Channel Analysis: South Ditch

Input Parameters

Channel Type: Triangular
Side Slope 1 (Z1): 1.2500 ft/ft
Side Slope 2 (Z2): 1.2500 ft/ft
Longitudinal Slope: 0.0100 ft/ft
Manning's n: 0.0150
Flow: 0.3000 cfs

Result Parameters

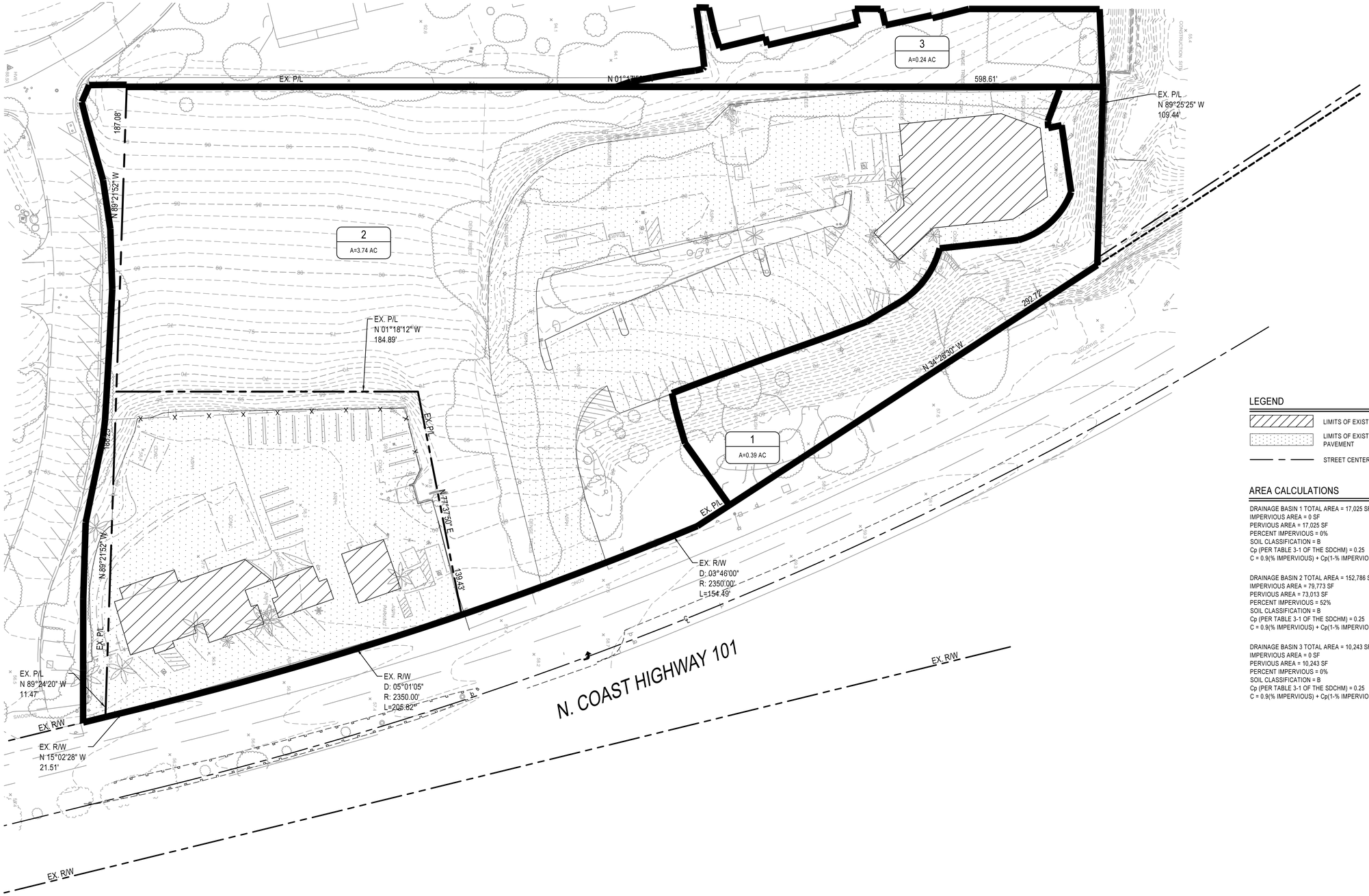
Depth: 0.3135 ft
Area of Flow: 0.1228 ft^2
Wetted Perimeter: 1.0036 ft
Hydraulic Radius: 0.1224 ft
Average Velocity: 2.4422 ft/s
Top Width: 0.7837 ft
Froude Number: 1.0871
Critical Depth: 0.3241 ft
Critical Velocity: 2.2844 ft/s
Critical Slope: 0.0084 ft/ft
Critical Top Width: 0.81 ft
Calculated Max Shear Stress: 0.1956 lb/ft^2
Calculated Avg Shear Stress: 0.0764 lb/ft^2

APPENDIX C

Existing and Proposed Hydrology Maps

EXISTING HYDROLOGY MAP

FENWAY N. HWY 101 - ENCINITAS, CA



LEGEND

- LIMITS OF EXISTING BUILDING
- LIMITS OF EXISTING AC PAVEMENT
- STREET CENTERLINE
- RIGHT OF WAY
- PROPERTY BOUNDARY
- BASIN BONDARY
- EXISTING CONTOURS

AREA CALCULATIONS

DRAINAGE BASIN 1 TOTAL AREA = 17,025 SF
IMPERVIOUS AREA = 0 SF
PERVIOUS AREA = 17,025 SF
PERCENT IMPERVIOUS = 0%
SOIL CLASSIFICATION = B
Cp (PER TABLE 3-1 OF THE SDCHM) = 0.25
C = 0.9(% IMPERVIOUS) + Cp(1-% IMPERVIOUS) = 0.9(0.00)+0.25(1-0.00) = 0.25

DRAINAGE BASIN 2 TOTAL AREA = 152,786 SF
IMPERVIOUS AREA = 79,773 SF
PERVIOUS AREA = 73,013 SF
PERCENT IMPERVIOUS = 52%
SOIL CLASSIFICATION = B
Cp (PER TABLE 3-1 OF THE SDCHM) = 0.25
C = 0.9(% IMPERVIOUS) + Cp(1-% IMPERVIOUS) = 0.9(0.52)+0.25(1-0.52) = 0.59

DRAINAGE BASIN 3 TOTAL AREA = 10,243 SF
IMPERVIOUS AREA = 0 SF
PERVIOUS AREA = 10,243 SF
PERCENT IMPERVIOUS = 0%
SOIL CLASSIFICATION = B
Cp (PER TABLE 3-1 OF THE SDCHM) = 0.25
C = 0.9(% IMPERVIOUS) + Cp(1-% IMPERVIOUS) = 0.9(0.52)+0.25(1-0.52) = 0.25

SCALE: 1" = 30'

30 15 0 30 60 90

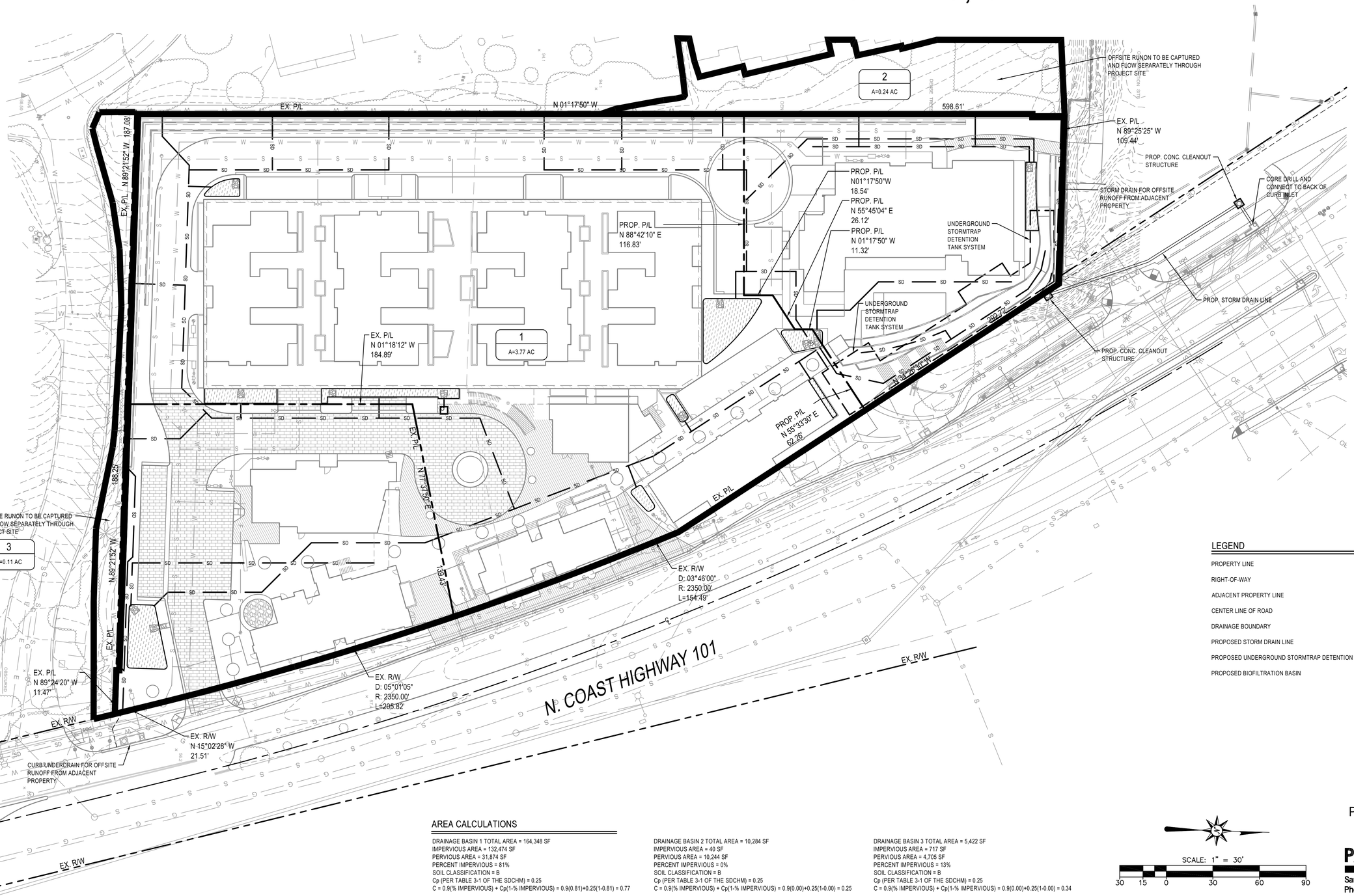
EXISTING HYDROLOGY MAP
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/13/21 ~ PLOT DATE: 07/16/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\REPORTS\HYDROLOGY\AppC - Exhibits\3161-Pre Development Hydrology Map.dwg

PROPOSED HYDROLOGY MAP

FENWAY N. HWY 101 - ENCINITAS, CA



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- ADJACENT PROPERTY LINE
- CENTER LINE OF ROAD
- DRAINAGE BOUNDARY
- PROPOSED STORM DRAIN LINE
- PROPOSED UNDERGROUND STORMTRAP DETENTION SYSTEM
- PROPOSED BIOFILTRATION BASIN

AREA CALCULATIONS

DRAINAGE BASIN 1 TOTAL AREA = 164,348 SF
IMPERVIOUS AREA = 132,474 SF
PERVIOUS AREA = 31,874 SF
PERCENT IMPERVIOUS = 81%
SOIL CLASSIFICATION = B
Cp (PER TABLE 3-1 OF THE SDCHM) = 0.25
C = 0.9(% IMPERVIOUS) + Cp(1-% IMPERVIOUS) = 0.9(0.81)+0.25(1-0.81) = 0.77

DRAINAGE BASIN 2 TOTAL AREA = 10,284 SF
IMPERVIOUS AREA = 40 SF
PERVIOUS AREA = 10,244 SF
PERCENT IMPERVIOUS = 0%
SOIL CLASSIFICATION = B
Cp (PER TABLE 3-1 OF THE SDCHM) = 0.25
C = 0.9(% IMPERVIOUS) + Cp(1-% IMPERVIOUS) = 0.9(0.00)+0.25(1-0.00) = 0.25

DRAINAGE BASIN 3 TOTAL AREA = 5,422 SF
IMPERVIOUS AREA = 717 SF
PERVIOUS AREA = 4,705 SF
PERCENT IMPERVIOUS = 13%
SOIL CLASSIFICATION = B
Cp (PER TABLE 3-1 OF THE SDCHM) = 0.25
C = 0.9(% IMPERVIOUS) + Cp(1-% IMPERVIOUS) = 0.9(0.00)+0.25(1-0.00) = 0.34

SCALE: 1" = 30'

30 15 0 30 60 90

PROPOSED HYDROLOGY MAP
FENWAY N. HWY 101
CITY OF ENCINITAS

PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

SAVE DATE: 07/13/21 ~ PLOT DATE: 07/16/21 ~ FILE NAME: J:\ACTIVE JOBS\3161 ENCINITAS LEUCADIA 101\CIVIL\REPORTS\HYDROLOGY\AppC - Exhibits\3161-Post Development Hydrology Map.dwg

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX I
PALEONTOLOGICAL RECORDS SEARCH

THIS PAGE INTENTIONALLY LEFT BLANK

PALEOSERVICES
SAN DIEGO NATURAL HISTORY MUSEUM

Paleontological Resources Technical Report

L101 Storm Drain Improvement
North Coast Highway 101 Streetscape Improvement Project
Encinitas, California

April 1, 2020

Prepared for:
Michael Baker International
5050 Avenida Encinas, Suite 260
Carlsbad, California 92008

Prepared by:
Department of PaleoServices
San Diego Natural History Museum
P.O. Box 121390
San Diego, California 92112-1390

Katie M. McComas, Paleontological Report Writer
Thomas A. Deméré, Ph.D., Principal Paleontologist

the nat | SAN DIEGO NATURAL HISTORY MUSEUM

Introduction & Project Description

This report provides a summary of findings concerning the paleontological resource potential of the corridor crossed by the proposed L101 Storm Drain Improvement portion of the North Coast Highway 101 Streetscape Improvement Project, Encinitas, California. The proposed improvements would enhance the existing storm drain system in this area by providing additional storage capacity during storm events, thereby reducing the frequency of existing flooding events within the project corridor.

The proposed storm drain pipe would be installed within the corridor along North Coast Highway 101 between Basil Street (approximate southern extent) and La Costa Avenue (approximate northern extent). The project description is as follows (provided by Michael Baker International):

> *This storm drain system would be designed to convey runoff from the project's drainage area west of the NCTD Railroad tracks, north of Basil Street, and south of La Costa Avenue. The total tributary drainage area is approximately 200 acres. Stormwater flows would continue to be discharged north towards existing facilities located near the Batiquitos Lagoon. The proposed storm drain pipe would join three existing outfalls in this area: a 24-inch and an 18-inch outlet at the basin west of North Coast Highway; and a 24-inch outlet east of North Coast Highway. A junction box (splitter structure) would be designed to convey flows from the main storm drain system into these three outfalls. No construction is proposed at these three outfalls.*
>
> *Overall, the revised drainage system is estimated to consist of the following size conduits:*
>
> - *300 linear feet of 36-inch diameter pipe (trenchwork varying in depth 15 to 20-feet)*
> - *200 linear feet of 42-inch diameter pipe (trenchwork varying in depth 10 to 15-feet)*
> - *1,500 linear feet of 48-inch diameter pipe (trenchwork varying in depth 10 to 15-feet)*
> - *6,300 linear feet of 60-inch diameter pipe (trenchwork varying in depth 15 to 30-feet)*
>
> *Construction of this system would include some trenching utilizing a trench box. This construction method of these size and depth of pipes produce a construction footprint ranging between 10 and 30 feet in width.*

Paleontological Resources

As defined here, paleontological resources (i.e., fossils) are the remains and/or traces of prehistoric plant and animal life. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) within which they were originally buried. For the purposes of this report, paleontological resources can be thought of as including not only the actual fossil remains, but also the collecting localities and the geologic formations containing those localities.

It is important to point out that many fossil collection sites presently on record in San Diego County were discovered during paleontological monitoring of residential development construction projects, highway and freeway construction projects, and pipeline and other utility construction projects. This close correlation between fossil collection sites and construction is related to the fact that surface weathering quickly destroys most fossils, and it is not until fresh, unweathered exposures are generated by construction-related earthwork that well-preserved fossils are often recovered. In general, larger volumes of earthwork typically generate more extensive previously unweathered exposures, and are therefore more likely to uncover fossil rich stratigraphic horizons.

Methods

Because of the direct relationship between fossils and the geologic units within which they are entombed, knowing the geology of a particular area and the fossil productivity of particular geologic units, one can reasonably predict where fossils will (or will not) be encountered. Paleontological resource assessment of the project corridor is based upon a review of existing published and unpublished geological literature (Wilson, 1972; Kennedy and Tan, 2005) and a review of museum paleontological records (San Diego Natural History Museum).

Results

The project corridor is underlain by a layer cake series of geologic units (Figure 1) including, from top to bottom and youngest to oldest, Pleistocene-age (approximately 220,000 to 85,000 years old) old paralic deposits (Qop, Kennedy and Tan, 2005) (broadly equivalent to the Bay Point Formation) and Eocene-age (approximately 46 to 40 million years old) strata of the Santiago Formation (Tsa, Kennedy and Tan, 2005). Although the contact between these two geologic units in the subsurface is not precisely known, based on exposures of this contact in the sea cliffs at Beacon's Beach, it is estimated that the contact lies closer to 28' above sea level (asl), or approximately 30' below the existing ground surface near the intersection of Leucadia Boulevard and Coast Highway 101.

The Bay Point Formation is known to preserve fossils of marine invertebrates (clams, snails, crustaceans, and echinoderms) and marine vertebrates (sharks, rays, and bony fishes), but has also yielded fossils of Ice Age land mammals (rodents, dire wolf, horses, tapirs, camels, deer, bison, mastodon, mammoth, and ground sloths) (Deméré, 1980; Deméré and Walsh, 1993). Based on this proven fossil record, the Bay Point Formation is typically assigned a moderate to high paleontological sensitivity.

In Leucadia, as exposed in the sea cliffs, the Bay Point Formation is represented by up to 75 feet of friable to compact sandstones, while along the North Coast Highway 101 corridor it is probably between 20 and 30 feet thick. The difference in thickness is due to the occurrence of a linear "beach ridge" that lies west of the highway and has been breached by modern sea cliff erosion (Eisenberg, 1985). At Beacon's Beach, this beach ridge sequence can be subdivided into four informal units, including, from bottom to top, a 7 foot thick basal marine unit, a 8 foot thick lower B-lamination unit, a 15 foot thick paleo-dune sand unit, and a 45-foot thick upper B-lamination unit. The contact with the underlying Eocene-age Santiago Formation here occurs at approximately 24 feet above sea level. This contact represents an elevated marine abrasion platform (sea floor) that was eroded into the Santiago Formation during a Pleistocene interglacial high sea stand.

The Santiago Formation is known to preserve fossils of marine invertebrates (corals, bryozoans, clams, snails, crustaceans, and echinoderms) and marine vertebrates (sharks, rays, and bony fishes), as well as fossils of early turtles, snakes, lizards, crocodiles, birds, and land mammals (opossums, hedgehogs, bats, primates, rodents, early carnivorans, tapirs, brontotheres, protoreodonts, and leptoreodonts) (Deméré and Boettcher, 1985; Golz, 1976; Irwin, 1985; Walsh, 1996). Based on this proven fossil record, the Santiago Formation is typically assigned a high paleontological sensitivity.

In Leucadia, as exposed in the sea cliffs, the Santiago Formation is represented by approximately 25 feet of interbedded dark olive gray laminated mudstones, massive siltstones, and very fine-grained sandstones (Irwin, 1985). Deméré and Boettcher (1985) and Irwin (1985) reported the occurrence of well-preserved marine mollusks and sharks from these exposures (Figure 1; SDSNH Localities 2815, 2816 2961, 3266).

Qmb
Qya
Qvop
Tsa
Qop2-6
Qop
Qls
3266
2815
2816
2961
La Costa Ave
San Diego Fwy
Sky Loft Rd
Andrew Ave
Eucalyptus Ave
Hillcrest Dr
Parkwood Ln
Grandview Rd
Avocado St
Range St
Raintree Dr
Sanford St
Jupiter St
E Jason St
W Jason St
Phoebe St
Diana St
Jasper St
Hymettus Ave
Hermes Ave
Naiad St
Leucadia Blvd
Rivia St
Basil St
Alvena St
N Coast Hwy
Orpheus Ave
Pisces St
Capri Rd
Wood Dr
Olympus St
Sparta Dr
Blossom Rd
Normandy Ave
Brittany Ave
Union St
Sources: Geology modified from Kennedy and Tan, 2007;
World Imagery, World Transportation, Terrain Hillshade, Esri et al., 2020
Geologic Map Units
Qmb marine beach deposits (late Holocene)
Qya young alluvial flood plain deposits (late Pleistocene to Holocene)
Qls landslide deposits (Pleistocene and Holocene)
Qop old paralic deposits (middle to late Pleistocene)
Qop2-6 old paralic deposits, Units 2-6 (middle to late Pleistocene)
Qvop very old paralic deposits (early to middle Pleistocene)
Tsa Santiago Formation (middle Eocene)
Geologic Map Symbols
contact, certain
fault, certain
Project limits of work
SDSNH fossil localities, existing
RIVERSIDE
map extent
SAN DIEGO
IMPERIAL
PALEOSERVICES
SAN DIEGO NATURAL HISTORY MUSEUM
FIGURE 1
Geologic Map of Project Alignment
North Coast Highway 101 Streetscape
Storm Drain Improvement
City of Encinitas, San Diego County, California
0
0.5
scale in miles
N

Analysis

Paleontological resources (fossils) are the remains of prehistoric animal and plant life, and are considered to be nonrenewable. Adverse effects to paleontological resources occur when earthwork activities, such as mass grading and/or trenching, cut into the geologic units within which fossils are buried. These direct effects are in the form of physical destruction of fossil remains and the loss of original stratigraphic context.

Tentative plans for the proposed storm drain improvement project indicate that trenching for pipeline installation will vary in depth for the invert level of the pipe from approximately 31' to 14' below existing ground surface. In addition, proposed IE levels along the pipeline decrease in elevation from approximately 52' asl in the south to approximately 27' asl in the north (NAVD; J. Tyler, personal communication, 2020).

As described above, proposed pipe diameters will vary from 36" to 60", with the larger diameter pipe proposed for installation along the northern 6,300 linear feet of the pipeline. These proposed installation depths and pipe diameters indicate that trenching for the pipeline will be extensive and could adversely affect deposits of the Bay Point Formation along the entire pipeline alignment. In addition, in the northern portion of the alignment where trenching will extend below approximately 30' asl, it is possible that trenching could adversely affect deposits of the underlying Santiago Formation.

However, the Resource Management Element of the Encinitas General Plan provides goals and policies for the preservation of cultural resources in the City. Goal 7 requires the City to make every effort to ensure significant scientific and cultural resources are preserved for future generations. Policy 7.1 "[r]equire[s] that paleontological, historical and archaeological resources in the planning area are documented, preserved or salvaged if threatened by new development." Consistent with Policy 7.1, the proposed drainage improvement plans include the following standard monitoring and recovery measures that will minimize potential effects to paleontological resources:

> [1] Prior to initiation of construction activities, the project contractor shall retain a qualified paleontologist to carry out the monitoring program outlined here. A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced in paleontological procedures and techniques.
>
> [2] The qualified paleontologist shall be at the pre-construction meeting to consult with the excavation contractor and City staff.
>
> [3] A paleontological monitor shall be onsite during the original cutting of previously undisturbed deposits of moderate and high sensitivity geologic units (the Bay Point Formation and Santiago Formation) to inspect exposures for any contained fossils. A paleontological monitor is defined as an individual who has documented experience in the collection and salvage of fossil materials. The paleontological monitor shall work under the direction of a qualified paleontologist. An adaptive approach is recommended, which involves initial part-time paleontological monitoring (i.e., up to 4 hours per day). As the project proceeds, the qualified paleontologist shall evaluate the monitoring results and, in consultation with the City and subject to the City's consent, may revise the monitoring schedule (e.g., maintain part-time monitoring, increase to full-time monitoring, or cease all monitoring).
>
> [4] When fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete skeleton) may require an extended salvage period. In these instances, the qualified paleontologist (or paleontological monitor) shall be

allowed to temporarily direct, divert, or halt grading/trenching to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains, such as rodent and primate teeth, it may be necessary to set up a screen-washing operation at the site.

[5] Fossil remains collected during the monitoring and salvage portion of the monitoring program shall be cleaned, repaired, sorted, and cataloged by the qualified paleontologist.

[6] Subject to the approval of the City, the qualified paleontologist shall donate and/or deposit prepared fossils, along with copies of all pertinent field notes, photos, and maps, in a scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum. Donation of the fossils shall be accompanied by appropriate financial support from the City to accommodate initial specimen storage.

[7] The qualified paleontologist shall prepare and submit to the City a final paleontological monitoring report that outlines the results of the monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, any fossils collected, and significance of any recovered fossils.

Conclusion

Implementation of the foregoing monitoring program pursuant to Policy 7.1 would avoid adverse effects on paleontological resources.

References

Deméré, T.A. 1980. A late Pleistocene molluscan fauna from San Dieguito Valley, San Diego County, California. Transactions of the San Diego Society of Natural History 19: 217-226.

Deméré, T.A., and R.S. Boettcher. 1985. Paleontology and biostratigraphy of middle Eocene nearshore marine sedimentary rocks, Leucadia, San Diego County, California. In, P. L. Abbott (ed.), On the Manner of Deposition of the Eocene Strata in Northern San Diego County. San Diego Association of Geologists, fieldtrip guidebook, pp. 49-53.

Deméré, T.A., and S.L. Walsh. 1993. Paleontological Resources, County of San Diego. Prepared for the Department of Public Works, County of San Diego, 1-68.

Eisenberg, L.I. 1985. Pleistocene faults and marine terraces, northern San Diego County. In, P.L. Abbott (ed.), On the Manner of Deposition of the Eocene Strata in Northern San Diego County. San Diego Association of Geologists, fieldtrip guidebook, pp. 87-91.

Golz, D.J. 1976. Eocene Artiodactyla of southern California. Natural History Museum of Los Angeles County, Science Bulletin, no. 26: 1-85.

Irwin, R.L. 1985. Eocene lithofacies exposed in sea cliffs from Leucadia to Cardiff-By-The-Sea, San Diego County. In, P.L. Abbott (ed.), On the Manner of Deposition of the Eocene Strata in Northern San Diego County. San Diego Association of Geologists, fieldtrip guidebook, pp. 37-47.

Kennedy, M.P., and S.S. Tan. 2005. Geologic map of the Oceanside 30’ X 60’ Quadrangle, California. California Geological Survey, Regional Geologic Map Series, Map No. 2.

Walsh, S.L. 1996. Middle Eocene mammal faunas of San Diego County, California. In, D.R. Prothero and R.J. Emry (eds.), The Terrestrial Eocene-Oligocene Transition in North America. Cambridge University Press, pp. 75-119.

Wilson, K.L. 1972. Eocene and related geology of a portion of the San Luis Rey and Encinitas quadrangles, San Diego County, California. Unpublished Master’s Thesis, University of California, Riverside.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX J-1
PHASE I ENVIRONMENTAL SITE ASSESSMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

HOVEY ENVIRONMENTAL
www.hoveyenvironmental.com ◊ info@hoveyenvironmental.com
2929 Chatsworth Blvd ◊ San Diego California 92106
Phone 619.203.9774 ◊ Fax 619.923.3055

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

REPORT

1900 N. Coast Highway 101
(APN 216-041-06-000)

Encinitas, California 92024

August 20, 2019

Submitted To:
Fenway Capital Advisors
Attn: Bryan Smith

Submitted By:
Caroline Hovey, CMC, CES, REA-08115
Principal Environmental Specialist
Hovey Environmental LLC

Report #19454-01

TABLE OF CONTENTS

Executive Summary 1

1 Introduction 2

2 Site Description 6

3 User Provided Information / Interview 6

4 Site Reconnaissance 7

5 Records Review 8

5.1 Physical Setting Data 8

5.2 Historical Use Data 9

5.3 Environmental & Regulatory Data 10

6 Data Gaps 12

7 Non-Scope Considerations 12

8 Findings and Opinions 13

9 Conclusion 13

10 Signature of Environmental Assessor 14

TABLES AND FIGURES

Table 1.1 Physical setting sources reviewed during the Phase I ESA. 3

Table 1.2 Historical sources reviewed during the Phase I ESA. 3

Table 1.3 Regulatory records reviewed during the Phase I ESA. 4

APPENDICES

Appendix A: Vicinity Map

Appendix B: Site Plan

Appendix C: Site Photographs

Appendix D: Historical Research Documentation

Appendix E: Regulatory Records Documentation

Appendix F: User-Provided Information

Appendix G: Signed Assessment Agreement

Appendix H: Qualifications of Caroline Hovey, Hovey Environmental LLC

EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) was performed at 1900 N. Coast Highway 101 in Encinitas, California. The site assessment included evaluation of the physical setting of the subject property and surrounding area, investigation into historic uses of the subject property, and review of government databases relating to the site and surrounding area. As of the time this report was prepared a site reconnaissance could not be conducted. All practices conformed to ASTM standard 1527-13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and 40 CFR 312 "Standards and Practices for All Appropriate Inquiries." The assessor's parcel numbers for the subject property is 216-041-06-000.

The subject property is a developed property with four structures on site. Once structure is occupied by a restaurant and the other four are office buildings.

The surrounding area is primarily residential with some light retail. A site reconnaissance was conducted on August 15, 2019. No visual indications of environmental degradation were noted on the surrounding properties or on the subject property at that time.

The subject property is listed with the San Diego County Hazardous Materials Management Division (HMMD) and HAZNET databases. The listings include four business entities that were equipment rental businesses at which used oil was collected and sent off site for disposal. There are no records of a release to the environment contained within the records.

There are eight sites listed with releases of hazardous materials to the soil, groundwater, or air within a one-mile radius of the subject property. Review of contaminant monitoring reports along with local topography and hydrology indicates a low probability of contamination migration to the subject property.

Hovey Environmental LLC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) and 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiries) at the property located at 1900 N. Coast Highway in Encinitas. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.

1 INTRODUCTION

This report summarizes the findings of the Phase I Environmental Site Assessment (ESA) at 1900 N. Coast Highway 101 (APN 216-041-06-000). The property is located in Encinitas, California. The ESA was performed in accordance with the recommended practices described in the American Society of Testing Materials (ASTM) Standard E 1527-13: "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and 40 CFR 312 "Standards and Practices for All Appropriate Inquiries." The purpose of the ESA is to determine the existence of or potential for any recognized environmental conditions. A recognized environmental condition is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." (ASTM E1527-13).

The Phase I ESA was requested by Bryan Smith of Fenway Capital Advisors as part of the due diligence in the purchase of the property.

The ESA was conducted by performing a site reconnaissance and interview with the current property owner, historic review, review of physical setting of the subject property and surrounding area, and review of city, county, state, and federal databases.

Historical records were reviewed to determine all past uses on the property and any pertinent practices in the surrounding area that may indicate a recognized environmental condition on the property. Table 1.2 lists historical documents reviewed.

Records were obtained from government and historical sources. Regulatory records review included searches of entities or conditions surrounding the property that have the potential to create a recognized environmental condition on the property. Table 1.3 lists federal, state, and local government databases and records searched for environmental contamination information.

The Phase I Environmental Site Assessment was limited to the scope outlined above and to what was reasonably ascertainable. Data gaps encountered in the review of records relating to the property are described in section 6 of this report.

All aspects of the Phase I ESA were performed by Caroline Hovey. Mrs. Hovey meets the requirements for an environmental professional, as defined by 40 CFR 312 and ASTM 1527-13 (see Appendix H for further details.)

Table 1.1 Physical setting sources reviewed during the Phase I ESA.

ACRONYM	DESCRIPTION / SOURCE	SEARCH RADIUS
USGS DEM	United States Geologic Survey 7.5' Digital Elevation Model	regional
FEMA	Flood Zone Data	regional
NWI	National Wetlands Inventory	regional
AQUIFLOW	general direction of groundwater	1.0 mile radius
USGS	Geologic Age and Rock Stratigraphic Unit	1.0 mile radius
STATSGO	State Soil Geographic Database	1.0 mile radius
SSURGO	Soil Survey Geographic Database	1.0 mile radius
PWS	Public Water Systems	1.0 mile radius
PWS ENF	Public Water Systems Violation and Enforcement Data	1.0 mile radius
USGS Water Wells	USGS National Water Inventory System (NWIS)	1.0 mile radius
Water Well Database	Department of Water Resources	1.0 mile radius
California Drinking Water Quality Database	Department of Health Services	1.0 mile radius
California Oil and Gas Well Locations	Department of Conservation	1.0 mile radius
RADON	Department of Health Services, EPA, & USGS Databases	regional
Airport Landing Facilities	Private and public use landing facilities	regional
Epicenters	World earthquake epicenters, Richter 5 or greater	regional

Table 1.2 Historical sources reviewed during the Phase I ESA.

DESCRIPTION / SOURCE	SEARCH RADIUS
City Directory	subject property and adjacent properties
Building Permits	subject property
Sanborn Fire Insurance Maps	subject property
Aerial Photography	regional
USGS Topographic Maps	regional

Table 1.3 Regulatory records reviewed during the Phase I ESA.

ACRONYM	DESCRIPTION	SEARCH RADIUS
NPL	National Priority List	1.0 miles
NPL LIENS	Federal Superfund Liens	1.0 miles
DELISTED NPL	National Priority List Deletions	1.0 miles
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	0.5 miles
CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	0.5 miles
RCRA CORRACTS	Resource Conservation & Recovery Act Corrective Action Report	1.0 miles
RCRA-TSDF	Treatment, Storage and Disposal facility	0.5 miles
RCRA-LQG	RCRA - Large Quantity Generators	0.25 miles
RCRA-SQG	RCRA - Small Quantity Generators	0.25 miles
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	0.25 miles
US ENG CONTROLS	Engineering Controls Sites List	0.5 miles
US INST CONTROL	Sites with Institutional Controls	0.5 miles
LUCIS	Land Use Control Information System	0.5 miles
ERNS	Emergency Response Notification System	subject property
RESPONSE	State Response Sites, state equivalent NPL	1.0 miles
ENVIROSTOR	EnviroStor Database, state equivalent CERCLIS	1.0 miles
SWF/LF (SWIS)	Solid Waste Information System	0.5 miles
LUST	Leaking Underground Storage Tanks	0.5 miles
SLIC	Statewide Spills, Leaks, Investigation & Cleanup Cost Recovery Listings	0.5 miles
UST	Active Underground Storage Tank Facilities	0.25 miles
VCP	Voluntary Cleanup Program Properties	0.5 miles
US BROWNFIELDS	A Listing of Brownfields Sites	0.5 miles
ODI	Open Dump Inventory	0.5 miles
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	0.5 miles
WMUDS/SWAT	Waste Management Unit Database	0.5 miles
SWRCY	Recycler Database	0.5 miles
HAULERS	Registered Waste Tire Haulers Listing	subject property
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	0.5 miles
HIST CAL-SITES	Calsites Database; potential or confirmed hazardous substance release properties	1.0 miles
SCH	School Property Evaluation Program	0.25 miles
TOXIC PITS	Toxic Pits Cleanup Act Sites	1.0 miles
CDL	Clandestine Drug Labs	subject property
CA FID UST	Facility Inventory Database of Underground Storage Tanks	0.25 miles
HIST UST	Hazardous Substance Storage Container Database of Underground Storage Tanks	0.25 miles
SWEEPS UST	Statewide Environmental Evaluation & Planning System Underground Storage Tank Listing	0.25 miles
LIENS 2	CERCLA Lien Information	subject property
LIENS	Environmental Liens Listing	subject property
DEED	Deed Restriction Listing	subject property
HMIRS	Hazardous Materials Information Reporting System	subject property
CHMIRS	California Hazardous Material Incident Report System	subject property
LDS	Land Disposal Sites Listing	subject property
MCS	Military Cleanup Sites Listing	subject property
RCRA NonGen / NLR	RCRA - Non Generators	0.25 miles
DOT OPS	Incident and Accident Data	subject property
DOD	Department of Defense Sites	1.0 miles
FUDS	Formerly Used Defense Sites	1.0 miles
CONSENT	Superfund (CERCLA) Consent Decrees	1.0 miles
ROD	Records Of Decision	1.0 miles
UMTRA	Uranium Mill Tailings Sites	0.5 miles
MINES	Mines Master Index File	0.25 miles
TRIS	Toxic Chemical Release Inventory System	subject property
TSCA	Toxic Substances Control Act	subject property

Table 1.3 Regulatory records reviewed during the Phase I ESA (continued).

ACRONYM	DESCRIPTION	SEARCH RADIUS
FTTS	FIFRA/ TSCA Tracking System - Federal Insecticide, Fungicide, & Rodenticide Act / Toxic Substances Control Act	subject property
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	subject property
ICIS	Integrated Compliance Information System	subject property
PADS	PCB Activity Database System	subject property
MLTS	Material Licensing Tracking System	subject property
FINDS	Facility Index System/Facility Registry System	subject property
RAATS	RCRA Administrative Action Tracking System	subject property
RMP	Risk Management Plans	subject property
BRS	Biennial Reporting System	subject property
CA BOND EXP. PLAN	Bond Expenditure Plan	1.0 miles
NPDES	NPDES Permits Listing	subject property
UIC	UIC Listing of underground control injection wells	subject property
CORTESE	"Cortese" Hazardous Waste & Substances Sites List	0.5 miles
HIST CORTESE	Hazardous Waste & Substance Site List	0.5 miles
NOTIFY 65	Proposition 65 Records	1.0 miles
DRYCLEANERS	Cleaner Facilities	0.25 miles
WIP	Well Investigation Program Case List	0.25 miles
ENF	Enforcement Action Listing	subject property
HAZNET	Facility and Manifest Data	subject property
EMI	Emissions Inventory Data	subject property
INDIAN RESERV	Indian Reservations	1.0 miles
US FIN ASSUR	Financial Assurance Information	subject property
PCB TRANSFORMER	PCB Transformer Registration Database	subject property
MWMP	Medical Waste Management Program Listing	0.25 miles
COAL ASH DOE	Steam-Electric Plan Operation Data	subject property
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	0.5 miles
HWT	Registered Hazardous Waste Transporter Database	0.25 miles
HWP	EnviroStor Permitted Facilities Listing	1.0 miles
2020 COR ACTION	2020 Corrective Action Program List	0.25 miles
WDS	Waste Discharge System	subject property
US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem	subject property
EPA WATCH LIST	EPA watch list	subject property
EDR MGP	EDR Proprietary Manufactured Gas Plants	1.0 miles
EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	0.25 miles
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	0.25 miles
HMMD	Hazardous Materials Management Division Database	subject property

2 SITE DESCRIPTION

The subject property is located at 1900 N. Coast Highway101 in Encinitas, California. The property is situated on the eastern side of a coastal bluff and is accessed from the east side off of N. Coast Highway. The total property size is approximately 35, 283 square feet.

There are four structures at the subject property: a restaurant and three office buildings.

The subject property utilizes city water. Wastewater is handled by city sewage system. Storm drains run from the property to N. Coast Highway on the east.

The surrounding area is primarily residential with some light commercial use. A vicinity map is provided in Appendix A and sketch of the subject property is provided in Appendix B.

There are no known environmental liens or activity and use limitations on the property. There are no known valuation reductions due to environmental issues on site.

3 USER PROVIDED INFORMATION / INTERVIEWS

Property information supplied by the owners, users, and other persons is provided in Appendix F.

A property disclosure form was completed by Gary Dewitt, trustee of The Gary Dewitt Trust, property owner since 1986. The disclosures indicate there was hazardous waste oil stored at the subject property in a designated enclosed storage area. The disclosures indicate there are currently four tenants occupying the subject property.

4 SITE RECONNAISSANCE

A site reconnaissance was conducted on August 20, 2019. Gary Dewitt, the property owner, and Peter Curry, the broker, were on site at the time of the site reconnaissance. All interior and exterior portions of the property were inspected.

There are four structures on site, which are the original structures constructed in 1947. The three office structures at the southern side of the property are connected by patio overhangs. These buildings are currently occupied by California Music, Surfers Point, and Plain Clarity. The fourth structure is separate from this and is occupied by Roberto's Mexican Restaurant. Parking is located along the eastern side of the property as well as the western half of the property. There is a non-hazardous waste collection at the north side of the property.

A small slab area with the skeleton of a previous structure is located at the southwest corner of the property. This was the previous location of the enclosure where used oil was kept by the previous tenants. Mr. Dewitt indicated this was an enclosed space utilized by equipment rental companies that were previous tenants at the site, the last of which left the site approximately 10 years ago.

A Phase I ESA was conducted on the adjacent properties to the west and north of the subject property in November 2017 by Hovey Environmental LLC. No concerns for a recognized environmental condition was noted at those sites.

There is a residential community immediately adjacent to the south side of the subject property. The land to the west and north of the subject property is a vacant parcel. North Coast Highway 101 is located on the east side of the subject property. The property is delineated by a fence line to the south, west, and north.

A sketch of the subject property based on observations in 2017 and current aerial photographs and google street images is provided in Appendix B.

5 RECORDS REVIEW

5.1 PHYSICAL SETTING DATA

Information on topography, hydrology, and environmentally sensitive lands was accessed for the subject property and surrounding area. The records reviewed are listed in Table 1.1 (Page 4), and is provided in detail in Appendix E.

The property is located at 33° 4’ 50.11” latitude by 117° 18’ 29.18” longitude. The approximate elevation at this location is 66 feet above sea level. The highest elevation of the surrounding area is approximately 253 feet above sea level located one mile to the east. The property is situated on a coastal bluff and there is a lower elevation between the subject property and the highest surrounding areas.

Information on groundwater flow and soil type was obtained to determine the ease with which contaminants from surrounding properties can reach the subject property. There is no data provided on groundwater flow rates and direction; however, given the overall topography of the region groundwater is likely to flow primarily from east to west towards the shoreline. The dominant soil type of this area is loamy coarse sand. This soil type is well drained with moderate infiltration rates.

There are wetlands and sensitive lands located in close proximity of the subject property to the west and north. The Pacific Ocean is within 1/8 of a mile to the west and Batiquitos Lagoon is within 1/8 of a mile to the north of the subject property.

5.2 HISTORICAL USE DATA

Several historic records and databases were reviewed to determine past practices at the subject property. The records searched are listed in Table 1.2 (Page 4) and detailed results are provided in Appendix D. Historic data was obtained from building permit reports, city directories, aerial photographs, historic topographic maps, and historic county records. Sanborn fire insurance maps were not available for the subject property.

The property at 1900 N. Coast Highway was listed first listed in the city directories in 1971. Listings on the adjacent properties were primarily residential with some retail and commercial. The following businesses were listed at the subject property. Businesses noted with an * were also listed in the San Diego County Hazardous Materials Management Division and/or HAZNET databases, as discussed in section 5.3.

1971	Sleepy Eye Motel
1977	CB Radio Center Pure Fun Surf Shop Tri City Treatment and Pest Control
1982	Mission Fence Co.
1987	North Coast Lawn Mower Inc. *
1992	North County Equipment Inc.
1995	Ryder Truck Rental
2000	Coral Reef Wet Suits Rebel Rents Inc. * Timeless Teak Furnishings
2005	Donna Deuling Rebel Rents Inc. * Roberto's Mexican Food
2010	Donna Deuling Hair Studio 1900 Timeless Teak Furnishings
2014	Penske Truck Rental

Building permits were issued by the City of Encinitas for 1900 N. Coast Highway 101 in 1987, 1991, 1993, 1995, 2001, 2006, 2007, and 2011. Permits pertained to remodeling and repair activities along with review of fire code reviews for the kitchen fire suppression system.

Historic topographic maps are available for the years 1893 - 2012. Aerial photographs are available from 1939 - 2016. The aerial photograph from 1939 shows vacant land at the subject property. In the aerial photograph from 1947 there are four small structures are visible at the subject property. These remain unchanged until 1979, where there appears to be two structures. Based on the site reconnaissance and information provided by the owner, the structures have remained unchanged since their original construction in the 1940's, but the three structures at the south side of the property are now connected by a patio overhang which makes the appear as one structure in the aerial photos.

The adjacent properties to the west and north appear to have been agricultural land in the mid 1900's. These properties are shown as developed land with structures on site in 1979. The surrounding areas showed significant development between 1939 and 1947.

Based on the historical sources and information provided by the user, the property at 1900 N. Coast Highway 101 was developed as far back as the 1940's; however, earlier improvements were removed and replaced with the current structures between 1964 and 1967. The properties to the west and north were previously part of an agricultural tract of land. In the mid to late 1970's were developed.

5.3 ENVIRONMENTAL & REGULATORY DATA

Table 1.3 (Page 4) lists all federal, state, and local databases accessed to obtain information on potential environmental hazards at the subject property and in the surrounding area. Research results are provided in Appendix E.

The subject property is listed with San Diego County Hazardous Materials Management Division and HAZNET databases due to the storage of hazardous materials on site including used oils and fuel blends under the following business names: Dorado Holdings LLC, North Coast Lawnmower, Rebel Rents Inc, and Handy Equipment Rental. Inspections were conducted at the subject property on 8/25/03, 9/6/05, 1/10/08, and 6/23/09. While violation notices were indicated in the records, all violations related to paperwork and were not indicative of conditions that would cause a release or spill to the environment.

Eight properties within a one-mile radius were listed in the local, county, state, and federal databases searched. The closest property is at 1865 North Vulcan Avenue. This is the site of a soil contamination clean-up in 2012 due to the presence of organochlorine pesticides. Soil was excavated and the case has since been closed. Due to the lower elevation and topographic variation, it is highly unlikely that this site has impacted the subject property.

Three sites were identified with leaking underground storage tanks within one-half mile of the subject property. Remedial action has taken place and the cases have been closed at each of these sites. These locations are all at lower elevation compared to the subject property and it is highly unlikely that they will have impacted the subject property.

There are four sites with environmental releases identified in the databases at a higher elevation compared to the subject property. Based on the location, distance from the subject property and local topography, these sites are unlikely to contaminate the subject property.

All sites within a one-third (1/3) mile radius were evaluated using the Environmental Data Resources Vapor Encroachment Screen (VEC). Results revealed no sites with potential vapor encroachment to the subject property.

Review of the regulatory data for businesses located at the subject and those within a one-mile radius of the subject property revealed a low likelihood of environmental contamination on site due to contaminant migration or a previous release at the site.

6 DATA GAPS

No data gaps were encountered in the preparation of the Phase I Environmental Site Assessment.

7 NON-SCOPE CONSIDERATIONS

The Phase I Environmental Site Assessment does not include evaluations or testing for moisture intrusion or subsequent microbial growth which could become an indoor air contaminant.

The Phase I ESA does not include evaluations or testing for asbestos or lead based paint. The presence of these substances in building materials are not considered a hazard unless disturbed. Any demolition, renovations, remodeling, repair, or repainting activities at the subject property should be done in accordance with the EPA Renovation, Repair, and Repainting Rule (RRP Rule), as well as the Clean Air Act Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP).

Based on the age of structures at 1900 N. Coast Highway 101, asbestos and lead-based paint may be present. Based on the condition of this structure, microbial contamination may be present. Evaluations and testing are recommended prior to any remodel or repair of the property.

8 FINDINGS AND OPINIONS

The environmental assessment performed at 1900 N. Coast Highway 101 revealed no areas of potential environmental degradation on site.

Historic records indicate prior uses of the subject property include agricultural, residential, and a restaurant. Historic review revealed no indications of a recognized environmental condition due to previous uses of the subject property.

Investigation into environmental degradation in the surrounding areas revealed a low probability that the subject property contains a recognized environmental condition due to contamination migration from the surrounding area. While the surrounding area has multiple areas identified as containing a recognized environmental condition local topography, hydrology, and physical characteristics indicate a low probability of contaminants traveling to the subject property from these sites.

9 CONCLUSION

Hovey Environmental LLC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) and 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiries) at 1900 N. Coast Highway 101. This assessment has revealed no evidence of recognized environmental conditions in connection with the property. No further environmental review is recommended at this time.

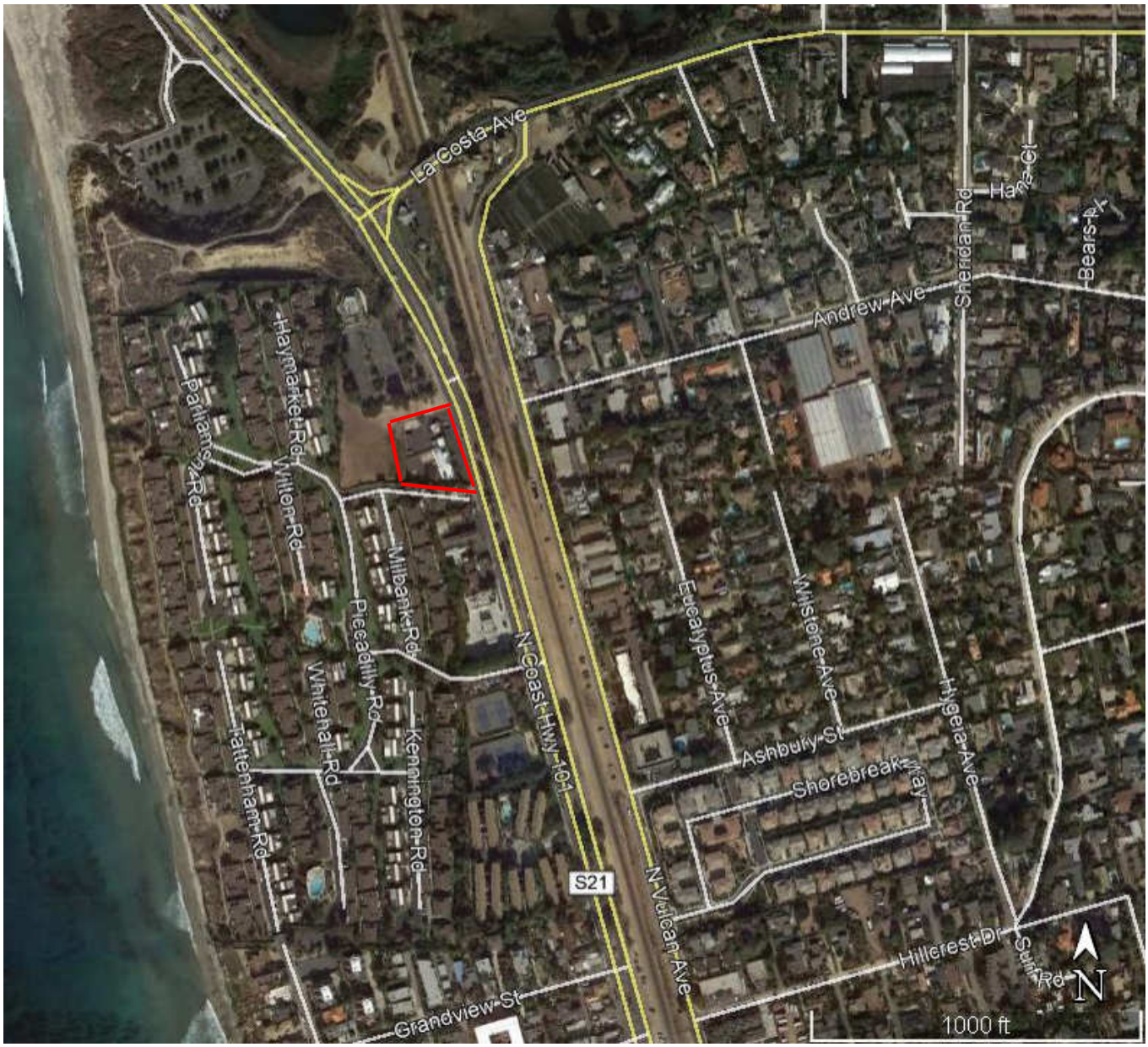
10 SIGNATURE OF INSPECTOR

I certify that the above findings, opinions, and recommendations are true and accurate to the best of my knowledge, and represent the most current knowledge of environmental assessment methods.

Caroline Hovey, CMC, CES, REA-08115
Principal Environmental Specialist
Hovey Environmental LLC

APPENDIX A

VICINITY MAP



APPENDIX B

SITE LAYOUT

APPENDIX C

SITE PHOTOGRAPHS

East side of subject property facing north

Area of previous enclosure for used oil

South side of property facing east

East side of subject property facing south

Area of previous enclosure for used oil

Adjacent property facing southwest

South side of subject property facing west

Parking area at west side of property

Adjacent property facing northwest

Area of previous enclosure for used oil

Front of office building facing west

Parking area at west side of property

Backside of office buildings facing northeast

Front of restaurant facing northwest

Non-hazardous waste enclosure

Backside of office building facing northeast

North side of property facing north

West side of property facing south

Interior of storage container

Parking area at back northwest corner of property

Back of restaurant facing east

Adjacent property to north

Non-hazardous waste enclosure

APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

CITY DIRECTORY

SANBORN FIRE INSURANCE MAPS

PROPERTY TAX MAPS

BUILDING PERMIT REPORT

HISTORIC TOPOGRAPHIC MAPS

AERICAL PHOTOGRAPHS

1900 N Highway 101

1900 N Highway 101
Encinitas, CA 92024

Inquiry Number: 5744045.5
August 07, 2019

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by infoUSA®

Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1987	☑	☐	EDR Digital Archive
1982	☑	☐	EDR Digital Archive
1977	☑	☐	EDR Digital Archive
1971	☑	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

1900 N Highway 101
Encinitas, CA 92024

Year	***CD Image***	***Source***
N 101		
2014	pg A1	EDR Digital Archive
2010	pg A2	EDR Digital Archive
2005	pg A3	EDR Digital Archive
2000	pg A4	EDR Digital Archive
1995	pg A5	EDR Digital Archive
1992	pg A6	EDR Digital Archive
1987	pg A7	EDR Digital Archive
1982	pg A8	EDR Digital Archive
1977	pg A9	EDR Digital Archive
1971	pg A10	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2014

1624	GEORGE CONSULTING GROUP INC
	PACIFIC TOUCH
1630	BEACH N RIDES
1636	MERKT MICHAEL A
	SKIN CARE BY RHONDA
	TAYLORS HAIR STUDIO LLC
1650	GREATERGOAL INCORPORATED
	MOLINE GREG CONSTRUCTION
	SWELL PROPERTY
1680	ALPHA LACROSSE INC
	BALBOA ENVIRONMENTAL LLC
	LEAH GRANT ENTERPRISES LLC
	LUNKER LOG LLC
	MALKANU ENTERPRISE
	R P M ELECTRIC
	RPMTV STUDIS
	TAXANDBLUESMAN
1750	LEUCADIA SEABLUFF VLLG COMMNTY
1766	CANCUN MEXICAN & SEAFOOD
	IMPERIAL STATIONS INC
1900	PENSKE TRUCK RENTAL
1967	CULLEN J
	HYNDMAN & HYNDMAN ARCHITECTS A
	PROFESSIONAL SPORTS MARKETING
	RE/MAX
2050	ELI HOWARD SURF SCHOOL
	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2010

1624	CG 3D INC
	MOBILE AMERICANA
	PACIFIC ORGANIC TECHNOLOGY
	PACIFIC TOUCH
1630	BEACH N RIDES
1636	MERKT MICHAEL A
	SKIN CARE BY RHONDA
	TAYLORS HAIR STUDIO LLC
1646	CLUB REPORT
1650	LA BODEGA DE MEXICO
1660	LOG CABIN MOTEL
1680	BRYANT DAVID L TR
	LEAH GRANT ENTERPRISES LLC
	SAA AIRPORT 305 LLC
	SAN DIEGO-SALT LAKE PRPTS LLC
	TAXANDBLUESMAN
	WESLEY A BOYCE
	ZUMA PROPERTY LLC
1750	LEUCADIA SEABLUFF VILLAGE
	LEUCADIA SEABLUFF VLLG COMMNTY
1766	SUBWAY SANDWICHS
1786	ISEN ALICIA
1900	DONNA DEULING
	HAIR STUDIO 1900
	TIMELESS TEAK FURNISHINGS
1950	DAVINAS CABO GRILL
1967	ANSWER STUDIOS INC
	CULLEN J
	LACOSTA ENGINEERING
	PACSHORE INC
	PROFESSIONAL SPORTS MARKETING
	RE/MAX
	SPORT USA SIGN GROUP INC
	VIXEN INC
2050	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2005

1630	BEACH-N-RIDES
1646	IN-FLIGHT MEDIA ASSOCIATES
	KILLER SUBS & MORE
	SJR MEDIA INC
1650	LA BODEGA DE MEXICO SAN D
	PROTECH POOLS LLC
	RICHMAN GALLERY
1660	LOG CABIN MOTEL
1680	NETWORKS CONNECT
	PUTTING GREENS BY SEARLE
	SAA AIRPORT 305 LLC
	WEBSTER RICHARD EA
1750	LEUCADIA SEABLUFF VILLAGE
	LEUCADIA SEABLUFF VLLG COMMNTY
1766	ARCO GAS & GO
1786	COLLECTORS COTTAGE
	J WALTER MANAGEMENT INC
1900	DONNA DEULING
	REBEL RENTS INC
	ROBERTOS MEXICAN FOOD
1950	DAVINAS CABO GRILL
1967	ANSWER STUDIOS INC
	CULLEN J
	DUPLACK DONNA
	PROFESSIONAL SPORTS MARKETING
	SPORT USA SIGN GROUP INC
2050	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2000

1624	MOBILE AMERICANA
1630	BEACH-N-RIDES
1646	BECKS BUY SEA
	IN-FLIGHT MEDIA ADVERTISING
	KILLER SUBS & MORE
1650	PERFORMANCE BOARD CENTER
1660	LOG CABIN MOTEL
1680	REV PAMELA ANN NOXON HHP
	WESLEY A BOYCE
1750	LEUCADIA SEABLUFF VILLAGE
	PCM OF CAL SEABLUFFS
1766	IMPERIAL STATIONS INC
1786	COLLECTORS COTTAGE
1900	CORAL REEF WET SUITS
	REBEL RENTS INC
	TIMELESS TEAK FURNISHINGS
1950	LACOSTA GARDENS
1967	BARELMANN ROBERT H
	DUPLACK DONNA
	STANDARD ACCOUNTING

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 1995

1630	BEACH-N-RIDES
1636	MERKT MICHAEL A
1660	LOG CABIN MOTEL
1680	WESLEY A BOYCE
1786	COLLECTORS COTTAGE
1900	RYDER TRUCK RENTAL ONE WAY
1950	LACOSTA GARDENS INC
1967	BARELMANN ROBERT H
	LACOSTA ENGINEERING

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 1992

1630	BEACH-N-RIDES
1636	SAN CARLOS HOT TUBS & SPAS
1646	VILLAGE FORGE
	WARD WILLIAM E & ASSOC
1650	BIKE FEVER INC
	THE ANTIQUE REPAIR SHOPPE
1660	LOG CABIN MOTEL
1680	WESLEY A BOYCE
1900	NORTH COUNTY EQUIPMENT INC
1967	LACOSTA ENGINEERING
	SILVER PACIFIC RE & INVESTMEN

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 1987

1636	BRE MAR MANAGEMENT COMPANY
1646	VILLAGE FORGE
	WARD WILLIAM E & ASSOC
1650	BIKE FEVER INC
1660	LOG CABIN MOTEL
1900	NORTH COAST LAWN MOWER INC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 1982

1646	CAL PACIFIC DISTRIBUTING CO S
	WARD WILLIAM E & ASSOC
1650	LEUCADIA LORE LTD
1660	LOG CABIN MOTEL
1900	MISSION FENCE CO

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 1977

1646	VILLAGE FORGE THE
1652	LEUCADIA LORE LTD
1660	LOG CABIN MOTEL
1900	C B RADIO CENTER
	PUREFUN SURF SHOP
	TRI CITY TRMT & PEST CONTRL*

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1971

```
 1636*PALMER ASSOCIATES   753-0341+1
 1646*VILLAGE FORGE THE   753-1641
 1650*POSIE EXPRESS INC   753-1700+1
 1660*LOG CABIN MOTEL     753-6711
 1680*PEDDLARS VLG PRDUCE753-9871 O
      PICKETT DON         753-4378
 1766*LEUCADIA HANCOCK SV753-0665+1
 1784*PACIFIC MOTEL       753-3088
      WYCKOFF L E PETE    753-3088
 1786 GRANTHAM ALBERT C   753-4981+1
     *WOLVERINE MOTEL     753-4981+1
1786½ SMITH HAROLD D B    753-4793
 1900*SLEEPY EYE MOTEL    753-3032+1
 2005 KEIGHER JAS         753-0468+1
2100....NOAHS ARK TRLR PK
      BAUSCH RALPH B      753-8506+1
      BLIESE E W MRS      753-7357
      GRANVILLE ROY       753-6961
      HADLEY PAUL E       753-1584
      MEYER ELOISE F      753-7294
      STEVENS ROBT G      753-0734+1
      URBANI LARRY E      753-0562+1
      WITT JOAN E         753-0539+1
     *  77 BUS   87 RES   65 NEW
```

1900 N Highway 101

1900 N Highway 101

Encinitas, CA 92024

Inquiry Number: 5744045.3

August 07, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

08/07/19

Site Name:	Client Name:
1900 N Highway 101	Hovey Environmental
1900 N Highway 101	2929 Chatsworth Blvd
Encinitas, CA 92024	San Diego, CA 92106-0000
EDR Inquiry # 5744045.3	Contact: Caroline Hovey

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Hovey Environmental were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 5BCF-4BE4-9B62

PO # NA

Project 19454

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 5BCF-4BE4-9B62

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Hovey Environmental (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

1900 N Highway 101

1900 N Highway 101
Encinitas, CA 92024

Inquiry Number: 5744045.6
August 07, 2019

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

19

216-03
-04

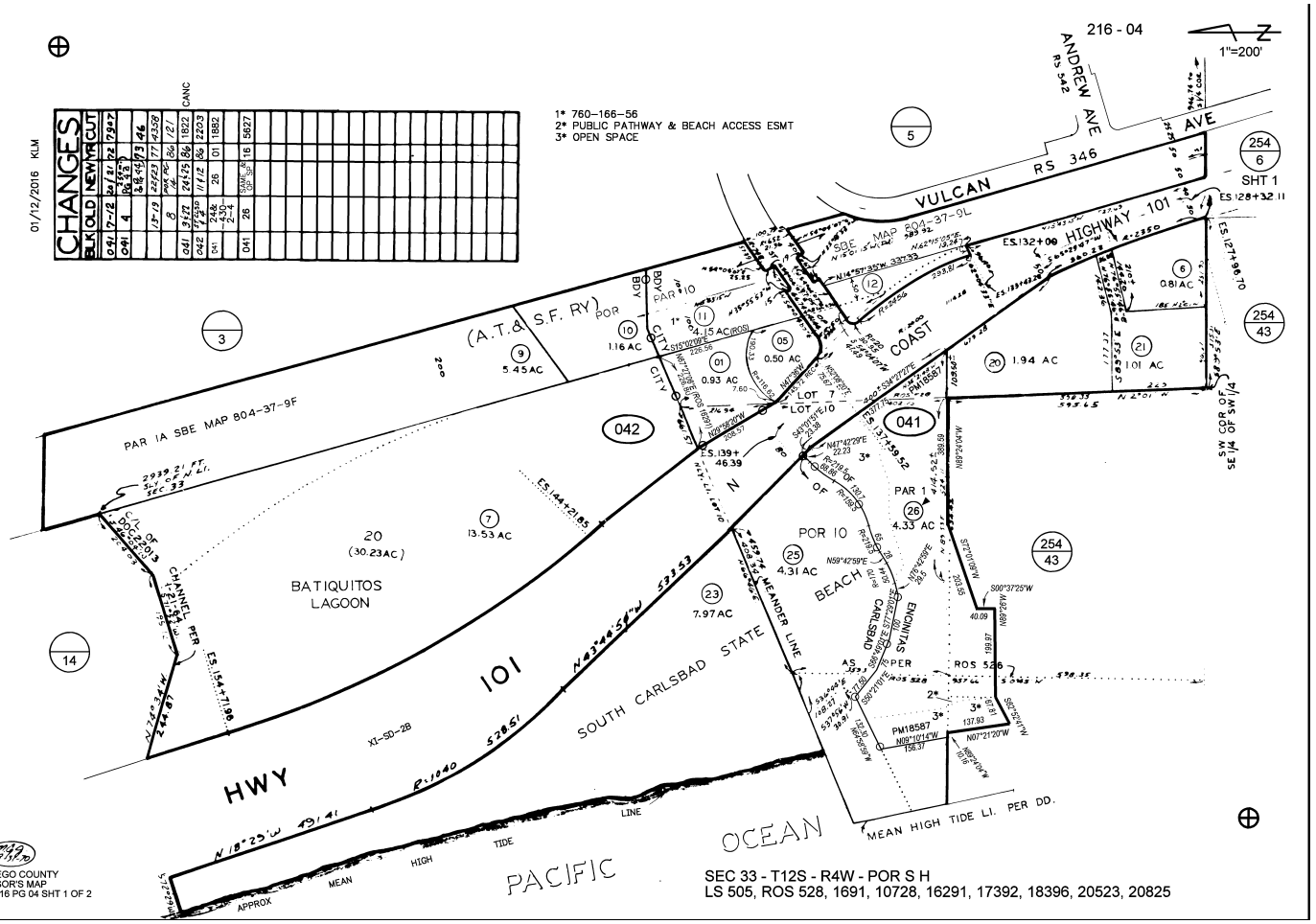
01/12/2016 KLM

CHANGES																							
BLK	OLD	NEW	MRC	UT																			
041	7-12	20/21	02	7947																			
041	4	2-3 (2-3)		3/8 46/73	46																		
		15-19	22/23	77	4338																		
		8	PAR PC	86	121																		
041	3/12	2/4/15	86	1822																			
042	27/35	11/12	88	2203																			
041	2/4	2-4	26	01	1882																		
		430-2-4	CANC SUB	SUB	16	5627																	
041	26																						

CANC

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

1* 760-166-56
2* PUBLIC PATHWAY & BEACH ACCESS ESMT
3* OPEN SPACE



SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PG 04 SHT 1 OF 2

SEC 33 - T12S - R4W - POR S H
LS 505, ROS 528, 1691, 10728, 16291, 17392, 18396, 20523, 20825

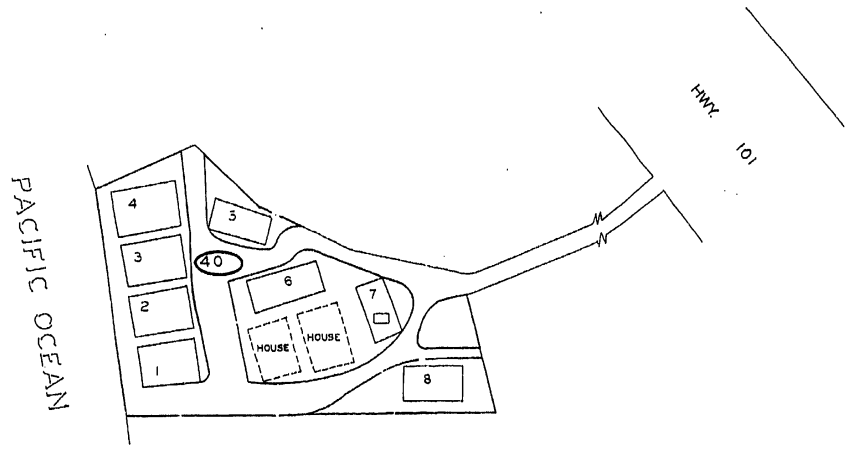
1-800-345-7334

SCALE IN 1/10 OF AN INCH

19

216-04
SHT. 2

NO SCALE



SPACE	PARCEL NUMBER
1 TO 8	772-160-40-01 TO 08

9-9-97 RG

CHANGES

BLK	OLD	NEW	YR	CUT
40	Pick-Up	07	97	42401
	KRL	07	98	1082

216-05

SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PAGE 04 SHT. 2

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

NIM'S SUNSET SHORES MOBILE HOME PARK
MAPPED FOR MOBILE HOME ASSESSMENT ONLY

OCT 1 3 1997

1900 N Highway 101

1900 N Highway 101
Encinitas, CA 92024

Inquiry Number: 5744045.8
August 07, 2019

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

About This Report

Executive Summary

Findings

Glossary

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILD FAX® PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Hovey Environmental on Aug 07, 2019.

TARGET PROPERTY

1900 N Highway 101
Encinitas, CA 92024

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Encinitas

Year	*Source*	*TP*	*Adjoining*
2018	City of Encinitas, Planning and Building		X
2017	City of Encinitas, Planning and Building		X
2016	City of Encinitas, Planning and Building		X
2015	City of Encinitas, Planning and Building		X
2014	City of Encinitas, Planning and Building		X
2013	City of Encinitas, Planning and Building		X
2012	City of Encinitas, Planning and Building		X
2011	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2010	City of Encinitas, Planning and Building		X
2009	City of Encinitas, Planning and Building		X
2008	City of Encinitas, Planning and Building		X
2007	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2006	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2005	City of Encinitas, Planning and Building		X
2004	City of Encinitas, Planning and Building		X
2003	City of Encinitas, Planning and Building		X
2002	City of Encinitas, Planning and Building		X
2001	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2000	City of Encinitas, Planning and Building		X
1999	City of Encinitas, Planning and Building		X
1998	City of Encinitas, Planning and Building		X
1997	City of Encinitas, Planning and Building		X
1996	City of Encinitas, Planning and Building		X
1995	City of Encinitas, Planning and Building		X

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1995	City of Encinitas, Planning and Building	X	
1994	City of Encinitas, Planning and Building		X
1993	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
1992	City of Encinitas, Planning and Building		X
1991	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
1990	City of Encinitas, Planning and Building		X
1989	City of Encinitas, Planning and Building		X
1988	City of Encinitas, Planning and Building		X
1987	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
1986	City of Encinitas, Planning and Building		
1985	City of Encinitas, Planning and Building		
1984	City of Encinitas, Planning and Building		
1983	City of Encinitas, Planning and Building		
1982	City of Encinitas, Planning and Building		
1981	City of Encinitas, Planning and Building		
1980	City of Encinitas, Planning and Building		
1979	City of Encinitas, Planning and Building		
1978	City of Encinitas, Planning and Building		
1977	City of Encinitas, Planning and Building		
1976	City of Encinitas, Planning and Building		
1975	City of Encinitas, Planning and Building		
1974	City of Encinitas, Planning and Building		
1973	City of Encinitas, Planning and Building		
1972	City of Encinitas, Planning and Building		
1971	City of Encinitas, Planning and Building		

San Diego County

Year	Source	TP	Adjoining
2019	San Diego County, Development Services		
2018	San Diego County, Development Services		
2017	San Diego County, Development Services		
2016	San Diego County, Development Services		
2015	San Diego County, Development Services		
2014	San Diego County, Development Services		
2013	San Diego County, Development Services		
2012	San Diego County, Development Services		
2011	San Diego County, Development Services		
2010	San Diego County, Development Services		
2009	San Diego County, Development Services		
2008	San Diego County, Development Services		
2007	San Diego County, Development Services		

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
2006	San Diego County, Development Services		
2005	San Diego County, Development Services		
2004	San Diego County, Development Services		
2003	San Diego County, Development Services		
2002	San Diego County, Development Services		
2001	San Diego County, Development Services		
2000	San Diego County, Development Services		
1999	San Diego County, Development Services		
1998	San Diego County, Development Services		
1997	San Diego County, Development Services		
1996	San Diego County, Development Services		
1995	San Diego County, Development Services		
1994	San Diego County, Development Services		
1993	San Diego County, Development Services		
1992	San Diego County, Development Services		
1991	San Diego County, Development Services		
1990	San Diego County, Development Services		
1989	San Diego County, Development Services		
1988	San Diego County, Development Services		
1987	San Diego County, Development Services		X
1986	San Diego County, Development Services		
1985	San Diego County, Development Services		
1984	San Diego County, Development Services		
1983	San Diego County, Development Services		
1982	San Diego County, Development Services		
1981	San Diego County, Development Services		
1980	San Diego County, Development Services		
1979	San Diego County, Development Services		
1978	San Diego County, Development Services		
1977	San Diego County, Development Services		
1976	San Diego County, Development Services		
1975	San Diego County, Development Services		
1974	San Diego County, Development Services		
1973	San Diego County, Development Services		
1972	San Diego County, Development Services		
1971	San Diego County, Development Services		

Name: JurisdictionName
Years: Years
Source: Source
Phone: Phone

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Encinitas
Years: 1971-2018
Source: City of Encinitas, Planning and Building, ENCINITAS, CA
Phone: (760) 633-2730

Name: San Diego County
Years: 1971-2019
Source: San Diego County, Development Services, ENCINITAS, CA
Phone: (619) 446-5000

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

1900 N Highway 101
Encinitas, CA 92024

1900 N COAST HIGHWAY 101

Date:	**3/3/2011**
Permit Type:	**ZFCF**
Description:	**FIRE CODE REVIEW KITCHEN FIRE SUPPRESSION SYSTEM**
Permit Description:	**FIRE FEES COMMERCIAL-JULY 2009**
Work Class:	
Proposed Use:	
Permit Number:	11-00000026
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**5/29/2007**
Permit Type:	**EPP**
Description:	**PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**
Permit Description:	**PLUMBING PERMIT-NON RESID**
Work Class:	
Proposed Use:	
Permit Number:	07-00000605
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date: **5/10/2006**
Permit Type: **EBP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **EEP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **EPP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **5/10/2006**
Permit Type: **FPO**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **ZFMC**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **MITIGATION COMM -MARCH 6**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **3/14/2001**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 01-00000477
Status:
Valuation: $561.00
Contractor Company:
Contractor Name: L N I CUSTOM MANURACTURING

TARGET PROPERTY FINDINGS

Date: **3/14/2001**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 01-00000477
Status:
Valuation: $561.00
Contractor Company:
Contractor Name: L N I CUSTOM MANURACTURING

Date: **2/2/1995**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 95-00000130
Status:
Valuation: $1,189.00
Contractor Company:
Contractor Name:

Date: **12/17/1993**
Permit Type: **EPP**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 93-00001428
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **8/19/1991**
Permit Type: **EEP**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 91-00000668
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **11/20/1987**
Permit Type: **EEP**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 87-00000385
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MOORE, J.D.

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CDS CIVIL ENGINEERS

1900 N COAST HIGHWAY 101 STE A

Date: **3/3/2011**
Permit Type: **ZFCF**
Description: **FIRE CODE REVIEW KITCHEN FIRE SUPPRESSION SYSTEM**

Permit Description: **FIRE FEES COMMERCIAL-JULY 2009**
Work Class:
Proposed Use:
Permit Number: 11-00000026
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **5/29/2007**
Permit Type: **EPP**
Description: **PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 07-00000605
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **5/10/2006**
Permit Type: **EBP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **EEP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **EPP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **5/10/2006**
Permit Type: **FPO**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **ZFMC**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **MITIGATION COMM -MARCH 6**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **3/14/2001**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 01-00000477
Status:
Valuation: $561.00
Contractor Company:
Contractor Name: L N I CUSTOM MANURACTURING

TARGET PROPERTY FINDINGS

Date: **3/14/2001**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 01-00000477
Status:
Valuation: $561.00
Contractor Company:
Contractor Name: L N I CUSTOM MANURACTURING

Date: **2/2/1995**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 95-00000130
Status:
Valuation: $1,189.00
Contractor Company:
Contractor Name:

Date: **12/17/1993**
Permit Type: **EPP**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 93-00001428
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **8/19/1991**
Permit Type: **EEP**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 91-00000668
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **11/20/1987**
Permit Type: **EEP**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 87-00000385
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MOORE, J.D.

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CDS CIVIL ENGINEERS

1900 N COAST HIGHWAY 101 STE D

Date: **3/3/2011**
Permit Type: **ZFCF**
Description: **FIRE CODE REVIEW KITCHEN FIRE SUPPRESSION SYSTEM**

Permit Description: **FIRE FEES COMMERCIAL-JULY 2009**
Work Class:
Proposed Use:
Permit Number: 11-00000026
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **5/29/2007**
Permit Type: **EPP**
Description: **PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 07-00000605
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **5/10/2006**
Permit Type: **EBP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **EEP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **EPP**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **5/10/2006**
Permit Type: **FPO**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **5/10/2006**
Permit Type: **ZFMC**
Description: **EATING/DRINKING-ADDITION**

Permit Description: **MITIGATION COMM -MARCH 6**
Work Class:
Proposed Use:
Permit Number: 04-00002038
Status:
Valuation: $18,659.00
Contractor Company:
Contractor Name:

Date: **3/14/2001**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 01-00000477
Status:
Valuation: $561.00
Contractor Company:
Contractor Name: L N I CUSTOM MANURACTURING

TARGET PROPERTY FINDINGS

Date: **3/14/2001**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 01-00000477
Status:
Valuation: $561.00
Contractor Company:
Contractor Name: L N I CUSTOM MANURACTURING

Date: **2/2/1995**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 95-00000130
Status:
Valuation: $1,189.00
Contractor Company:
Contractor Name:

Date: **12/17/1993**
Permit Type: **EPP**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 93-00001428
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date: **8/19/1991**
Permit Type: **EEP**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 91-00000668
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **11/20/1987**
Permit Type: **EEP**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 87-00000385
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MOORE, J.D.

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Work Class:	
Proposed Use:	
Permit Number:	
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CDS CIVIL ENGINEERS

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

101

2146 101

C.O. Issued Date:	**8/10/1989**
Date:	**11/2/1989**
Permit Type:	**EBP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	89-00001089
Status:	
Valuation:	$12,000.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**8/10/1989**
Date:	**11/2/1989**
Permit Type:	**EEP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**ELECTRIC PERMIT-NON RESID**
Work Class:	
Proposed Use:	
Permit Number:	89-00001089
Status:	
Valuation:	$12,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/10/1989**
Date: **11/2/1989**
Permit Type: **EPP**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 89-00001089
Status:
Valuation: $12,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **6/3/1989**
Date: **5/16/1989**
Permit Type: **EBP**
Description: **OFFICE-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 89-00469101
Status:
Valuation: $6,500.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **6/3/1989**
Date: **5/16/1989**
Permit Type: **EEP**
Description: **OFFICE-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 89-00469101
Status:
Valuation: $6,500.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/3/1989**
Date: **5/16/1989**
Permit Type: **EPP**
Description: **OFFICE-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 89-00469101
Status:
Valuation: $6,500.00
Contractor Company:
Contractor Name:

101 NEWCASTLE AV

2187 101 NEWCASTLE AV

Date: **10/2/1991**
Permit Type: **EEP**
Description: **ELECTRIC-RESET METER**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 91-00000827
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **11/29/1990**
Date: **11/13/1990**
Permit Type: **EBP**
Description: **OFFICE-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: OFFICE-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 90-00001058
Status:
Valuation: $16,799.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **11/29/1990**
Date: **11/13/1990**
Permit Type: **EEP**
Description: **OFFICE-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: OFFICE-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 90-00001058
Status:
Valuation: $16,799.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1941 N VULCAN AV

1911 1941 N VULCAN AV

Date:	**5/10/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONVERT TO UNDERGROUND SERVICE**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000825
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SOUTHERN CONTRACTING CO

Date:	**5/10/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONVERT TO UNDERGROUND SERVICE**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000826
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **11/10/1994**
Date: **11/2/1994**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 94-00001069
Status:
Valuation: $2,266.00
Contractor Company:
Contractor Name: URBACH ROOFING

ANDREW AVE

129 ANDREW AVE

C.O. Issued Date: **2/22/1999**
Date: **2/16/1999**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 99-00000248
Status:
Valuation: $2,600.00
Contractor Company:
Contractor Name: SPECIALTY ROOFING

ADJOINING PROPERTY FINDINGS

Date: **9/30/1988**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 88-00000959
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER PLUMBING

130 ANDREW AVE

Date: **1/16/2014**
Permit Type: **EEPD**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001857
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SAN DIEGO COUNTY SOLAR INC

Date: **8/16/1995**
Permit Type: **EPPD**
Description: **PLUMBING-SUPPLEMENTAL PERMIT**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 95-00000983
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MISSION POOLS OF ESCONDIDO INC

C.O. Issued Date: **8/31/1995**
Date: **6/2/1995**
Permit Type: **EBP**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **BUILDING PERMIT**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 95-00000615
Status:
Valuation: $23,063.00
Contractor Company:
Contractor Name: MISSION POOLS OF ESCONDIDO INC

C.O. Issued Date: **8/31/1995**
Date: **6/2/1995**
Permit Type: **EEPD**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 95-00000615
Status:
Valuation: $23,063.00
Contractor Company:
Contractor Name: MISSION POOLS OF ESCONDIDO INC

138 ANDREW AVE

Date: **2/19/2009**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 09-00000182
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name: RESCUE ROOTER

ADJOINING PROPERTY FINDINGS

139 ANDREW AVE

Date:	**12/6/2012**
Permit Type:	**EPPD**
Description:	**BBQ/FIREPIT**
Permit Description:	**ENC PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	12-00001542
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	E S HUMPHREYS LANDSCAPE DEV.

Date:	**4/15/2010**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	10-00000394
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ACTION AIR CONDITIONING

Date:	**2/19/1987**
Permit Type:	
Description:	**CROSS STREET: DESCRIPTION OF WORK: WATER HEATER**
Permit Description:	
Work Class:	Residential Alteration or Addition
Proposed Use:	
Permit Number:	PDS1987-P-87000691
Status:	Completed
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FOSTER, A & J PLUMBING

ADJOINING PROPERTY FINDINGS

157 ANDREW AVE

C.O. Issued Date:	**2/21/2006**
Date:	**1/17/2006**
Permit Type:	**EBP**
Description:	**REROOF**

Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	06-00000080
Status:	
Valuation:	$8,636.00
Contractor Company:	
Contractor Name:	SECURE ROOF INC

C.O. Issued Date:	**2/21/1991**
Date:	**1/30/1991**
Permit Type:	**EBP**
Description:	**ANTENNA-DISH/MAST (RESIDENTIAL)**

Permit Description:	**BUILDING PERMIT**
Work Class:	ANTENNA-DISH/MAST (RESIDENTIAL)
Proposed Use:	
Permit Number:	91-00000089
Status:	
Valuation:	$3,100.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

160 ANDREW AVE

Date: **2/11/2010**
Permit Type: **ZFRF**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 08-00000548
Status:
Valuation: $410,979.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

Date: **8/10/2009**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 09-00000724
Status:
Valuation: $7,250.00
Contractor Company:
Contractor Name:

Date: **12/1/2008**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 08-00001268
Status:
Valuation: $11,986.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

ADJOINING PROPERTY FINDINGS

Date: **8/11/2008**
Permit Type: **EEPD**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001022
Status:
Valuation: $3,420.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

Date: **8/7/2008**
Permit Type: **EBP**
Description: **PATIO COVER (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001018
Status:
Valuation: $2,640.00
Contractor Company:
Contractor Name:

Date: **7/24/2008**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00000548
Status:
Valuation: $410,979.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

ADJOINING PROPERTY FINDINGS

Date: **7/24/2008**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000548
Status:
Valuation: $410,979.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

Date: **7/24/2008**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000548
Status:
Valuation: $410,979.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

Date: **7/24/2008**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000548
Status:
Valuation: $410,979.00
Contractor Company:
Contractor Name: G D GARWOOD CONSTRUCTION INC

ADJOINING PROPERTY FINDINGS

Date: **12/28/2000**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 00-00002209
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: E-TECH

162 ANDREW AVE

Date: **8/29/2012**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001091
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: LINDQUIST, TERRY ROOFING

ADJOINING PROPERTY FINDINGS

164 ANDREW AVE

Date:	**12/23/2013**
Permit Type:	**EEPD**
Description:	**ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	13-00001631
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAN DIEGO COUNTY SOLAR INC

Date:	**11/20/2013**
Permit Type:	**EEPD**
Description:	**ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	13-00001632
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAN DIEGO COUNTY SOLAR INC

C.O. Issued Date:	**6/21/1988**
Date:	**10/22/1987**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	87-00000298
Status:	
Valuation:	$3,054.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/21/1988**
Date: **8/17/1987**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 87-00000096
Status:
Valuation: $73,524.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **6/21/1988**
Date: **8/17/1987**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 87-00000096
Status:
Valuation: $73,524.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **6/21/1988**
Date: **8/17/1987**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 87-00000096
Status:
Valuation: $73,524.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

165 ANDREW AVE

Date:	**9/27/2000**
Permit Type:	**EPPD**
Description:	**PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	00-00001609
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROTO ROOTER

170 ANDREW AVE

Date:	**1/15/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONSTRUCTION/TEMPORARY POWER**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000080
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	POWER PLUS! TEMPORARY UTILITY

ADJOINING PROPERTY FINDINGS

Date: **4/14/2003**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 02-00002442
Status:
Valuation: $118,061.00
Contractor Company:
Contractor Name:

Date: **4/14/2003**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 02-00002442
Status:
Valuation: $118,061.00
Contractor Company:
Contractor Name:

Date: **4/14/2003**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 02-00002442
Status:
Valuation: $118,061.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

ANDREW AVE UNIT 1

132 ANDREW AVE UNIT 1

Date:	**12/21/2016**
Permit Type:	**EEPD**
Description:	**ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	16-00002383
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**10/27/2014**
Permit Type:	**EBP**
Description:	**DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	14-00000977
Status:	
Valuation:	$43,792.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **10/27/2014**
Permit Type: **EEPD**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EMPD**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EPPD**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/27/2014**
Permit Type: **ZFMR**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **FIRE MITIGATION RES. MARCH 06**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **ZFRF**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EBP**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/27/2014**
Permit Type: **EEPD**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EMPD**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EPPD**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **9/18/2002**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 02-00002018
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

EUCALYPTUS AVE

1830 EUCALYPTUS AVE

C.O. Issued Date: **9/7/2001**
Date: **8/8/2001**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 01-00000209
Status:
Valuation: $64,880.00
Contractor Company:
Contractor Name: WORTHING, B. A. INC

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/7/2001**
Date: **8/8/2001**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 01-00000209
Status:
Valuation: $64,880.00
Contractor Company:
Contractor Name: WORTHING, B. A. INC

C.O. Issued Date: **9/7/2001**
Date: **3/8/2001**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 01-00000209
Status:
Valuation: $64,880.00
Contractor Company:
Contractor Name: WORTHING, B. A. INC

C.O. Issued Date: **10/8/1999**
Date: **9/28/1999**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 99-00001604
Status:
Valuation: $2,700.00
Contractor Company:
Contractor Name: URBACH ROOFING

ADJOINING PROPERTY FINDINGS

Date: **5/24/1990**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 90-00000465
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **12/7/1989**
Date: **10/11/1989**
Permit Type: **EBP**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **BUILDING PERMIT**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 89-00001009
Status:
Valuation: $8,964.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **12/7/1989**
Date: **10/11/1989**
Permit Type: **EEPD**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 89-00001009
Status:
Valuation: $8,964.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1842 EUCALYPTUS AVE

Date:	**2/5/2008**
Permit Type:	**EEPD**
Description:	**SPA (RESIDENTIAL)-UTILITIES ONLY**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	08-00000172
Status:	
Valuation:	$19,282.00
Contractor Company:	
Contractor Name:	

Date:	**2/5/2008**
Permit Type:	**EPPD**
Description:	**SPA (RESIDENTIAL)-UTILITIES ONLY**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	08-00000172
Status:	
Valuation:	$19,282.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

1854 EUCALYPTUS AVE

Date:	**5/11/2017**
Permit Type:	**EBR**
Description:	**REVISION TO PLANS-NO NEW FLOOR AREAS**
Permit Description:	**ENC BUILDING PERMIT/PLAN REV.**
Work Class:	
Proposed Use:	
Permit Number:	17-00000849
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SEMPER SOLARIS CONSTRUCTION IN

Date:	**4/25/2017**
Permit Type:	**EEPD**
Description:	**ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	17-00000731
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SEMPER SOLARIS CONSTRUCTION IN

Date:	**4/20/2016**
Permit Type:	**EEPD**
Description:	**ELECTRIC-MISCELLANEOUS**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	16-00000930
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **1/23/2014**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000001
Status:
Valuation: $84,963.00
Contractor Company:
Contractor Name: PHIL MILANA CONSTRUCTION CO IN

Date: **1/23/2014**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000001
Status:
Valuation: $84,963.00
Contractor Company:
Contractor Name: PHIL MILANA CONSTRUCTION CO IN

Date: **1/23/2014**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000001
Status:
Valuation: $84,963.00
Contractor Company:
Contractor Name: PHIL MILANA CONSTRUCTION CO IN

ADJOINING PROPERTY FINDINGS

Date: **1/23/2014**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000001
Status:
Valuation: $84,963.00
Contractor Company:
Contractor Name: PHIL MILANA CONSTRUCTION CO IN

1862 EUCALYPTUS AVE

Date: **9/1/2004**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 04-00001012
Status:
Valuation: $15,328.00
Contractor Company:
Contractor Name:

Date: **9/1/2004**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00001012
Status:
Valuation: $15,328.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **9/1/2004**
Permit Type: **FPO**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class:
Proposed Use:
Permit Number: 04-00001012
Status:
Valuation: $15,328.00
Contractor Company:
Contractor Name:

Date: **6/22/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00001130
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **2/18/2004**
Date: **11/17/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00002233
Status:
Valuation: $1,800.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **6/23/1998**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 98-00001086
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/28/1997**
Date: **2/11/1997**
Permit Type: **EBP**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 96-00001494
Status:
Valuation: $41,194.00
Contractor Company:
Contractor Name: GOLDEN HOME IMPROVEMENT

C.O. Issued Date: **5/28/1997**
Date: **2/11/1997**
Permit Type: **EEPD**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 96-00001494
Status:
Valuation: $41,194.00
Contractor Company:
Contractor Name: GOLDEN HOME IMPROVEMENT

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/28/1997**
Date: **2/11/1997**
Permit Type: **EPPD**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 96-00001494
Status:
Valuation: $41,194.00
Contractor Company:
Contractor Name: GOLDEN HOME IMPROVEMENT

C.O. Issued Date: **5/28/1997**
Date: **2/11/1997**
Permit Type: **FPM**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **DEPT. MITIGATION PERMIT**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 96-00001494
Status:
Valuation: $41,194.00
Contractor Company:
Contractor Name: GOLDEN HOME IMPROVEMENT

C.O. Issued Date: **5/28/1997**
Date: **2/11/1997**
Permit Type: **FPO**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 96-00001494
Status:
Valuation: $41,194.00
Contractor Company:
Contractor Name: GOLDEN HOME IMPROVEMENT

ADJOINING PROPERTY FINDINGS

1869 EUCALYPTUS AVE

Date:	**12/29/2014**
Permit Type:	**EEPD**
Description:	**ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	14-00002219
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	T AND M SOLAR INC

C.O. Issued Date:	**10/22/2004**
Date:	**8/19/2004**
Permit Type:	**EBP**
Description:	**PATIO COVER (RESIDENTIAL)**
Permit Description:	**BUILDING PERMIT**
Work Class:	PATIO COVER (RESIDENTIAL)
Proposed Use:	
Permit Number:	04-00001565
Status:	
Valuation:	$2,142.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**6/29/1998**
Date:	**8/12/1997**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	97-00000952
Status:	
Valuation:	$14,497.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/29/1998**
Date: **8/12/1997**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 97-00000952
Status:
Valuation: $14,497.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/24/1997**
Date: **5/28/1997**
Permit Type: **EBP**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **BUILDING PERMIT**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 97-00000619
Status:
Valuation: $28,173.00
Contractor Company:
Contractor Name: MISSION POOLS OF ESCONDIDO INC

C.O. Issued Date: **9/24/1997**
Date: **5/28/1997**
Permit Type: **EEPD**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 97-00000619
Status:
Valuation: $28,173.00
Contractor Company:
Contractor Name: MISSION POOLS OF ESCONDIDO INC

ADJOINING PROPERTY FINDINGS

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

1885 EUCALYPTUS AVE

Date: **7/23/2014**
Permit Type: **EEPD**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000996
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SMART ENERGY U S A

C.O. Issued Date: **6/12/2007**
Date: **4/5/2007**
Permit Type: **EBP**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **BUILDING PERMIT**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 07-00000453
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name: CALIFORNIA POOLS INC

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/12/2007**
Date: **4/5/2007**
Permit Type: **EEPD**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 07-00000453
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name: CALIFORNIA POOLS INC

Date: **8/6/2001**
Permit Type: **EBPM**
Description: **PLANS-RELEASE FOR DUPLICATION**

Permit Description: **BUILDING PERMIT/MISC. APPL**
Work Class:
Proposed Use:
Permit Number: 01-00001475
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: WESTERN MICROGRAPHICS

Date: **6/12/2000**
Permit Type: **EBPM**
Description: **PLANS-RELEASE FOR DUPLICATION**

Permit Description: **BUILDING PERMIT/MISC. APPL**
Work Class:
Proposed Use:
Permit Number: 00-00000915
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **4/9/1992**
Date: **8/12/1991**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 91-00000651
Status:
Valuation: $115,686.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **4/9/1992**
Date: **8/12/1991**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 91-00000651
Status:
Valuation: $115,686.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **4/9/1992**
Date: **8/12/1991**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 91-00000651
Status:
Valuation: $115,686.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **8/29/1990**
Permit Type: **EEP**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 90-00000806
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **4/9/1992**
Date: **9/8/1989**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 89-00000905
Status:
Valuation: $53,516.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **4/9/1992**
Date: **9/8/1989**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 89-00000905
Status:
Valuation: $53,516.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date:	**4/9/1992**
Date:	**9/8/1989**
Permit Type:	**EPPD**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	89-00000905
Status:	
Valuation:	$53,516.00
Contractor Company:	
Contractor Name:	

HAYMARKET RD

1837 HAYMARKET RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000348
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/15/1999**
Date: **3/16/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000416
Status:
Valuation: $3,384.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000114
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000114
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000114
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

1839 HAYMARKET RD

C.O. Issued Date: **7/15/1999**
Date: **3/16/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000415
Status:
Valuation: $3,384.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 99-00000115
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 99-00000115
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 99-00000115
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

1841 HAYMARKET RD

Date: **10/16/2012**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

ADJOINING PROPERTY FINDINGS

Date: **10/16/2012**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

Date: **10/16/2012**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

Date: **10/16/2012**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

Date: **10/14/1998**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 98-00001589
Status:
Valuation: $7,350.00
Contractor Company:
Contractor Name: BRADY, JOHN

Date: **10/14/1998**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 98-00001589
Status:
Valuation: $7,350.00
Contractor Company:
Contractor Name: BRADY, JOHN

1842 HAYMARKET RD

Date: **8/15/2013**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001117
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CALIFORNIA DELTA MECHANICAL IN

ADJOINING PROPERTY FINDINGS

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000349
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

1843 HAYMARKET RD

C.O. Issued Date: **12/9/1999**
Date: **9/15/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00001097
Status:
Valuation: $33,482.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **12/9/1999**
Date: **9/15/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00001097
Status:
Valuation: $33,482.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **12/9/1999**
Date: **9/15/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00001097
Status:
Valuation: $33,482.00
Contractor Company:
Contractor Name: BRADY, JOHN

1844 HAYMARKET RD

C.O. Issued Date: **4/15/2003**
Date: **12/13/2002**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000704
Status:
Valuation: $25,802.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **4/15/2003**
Date: **12/13/2002**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000704
Status:
Valuation: $25,802.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **4/15/2003**
Date: **12/13/2002**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000704
Status:
Valuation: $25,802.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **6/13/1995**
Date: **2/14/1995**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 94-00001273
Status:
Valuation: $30,056.00
Contractor Company:
Contractor Name: CASELINE DOOR & TRIM INC

C.O. Issued Date: **6/13/1995**
Date: **2/14/1995**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 94-00001273
Status:
Valuation: $30,056.00
Contractor Company:
Contractor Name: CASELINE DOOR & TRIM INC

ADJOINING PROPERTY FINDINGS

1846 HAYMARKET RD

Date:	**3/1/2018**
Permit Type:	**EEPD**
Description:	**ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	18-00000462
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ENERGY ENTERPRISES USA INC DBA

Date:	**2/14/2006**
Permit Type:	**EEPD**
Description:	**ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	06-00000246
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**3/17/2005**
Date:	**12/13/2002**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	02-00000703
Status:	
Valuation:	$18,178.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/11/2001**
Date: **5/15/2000**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 99-00001153
Status:
Valuation: $2,500.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/11/2001**
Date: **5/15/2000**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 99-00001153
Status:
Valuation: $2,500.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **2/6/1991**
Date: **9/25/1989**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 89-00000956
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **2/6/1991**
Date: **9/25/1989**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 89-00000956
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **2/6/1991**
Date: **9/25/1989**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 89-00000956
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name:

1849 HAYMARKET RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000350
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

1850 HAYMARKET RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000351
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

1852 HAYMARKET RD

Date:	**2/4/2013**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00001567
Status:	
Valuation:	$50,082.00
Contractor Company:	
Contractor Name:	ELDON E BLASCO INC

ADJOINING PROPERTY FINDINGS

Date: **2/4/2013**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001567
Status:
Valuation: $50,082.00
Contractor Company:
Contractor Name: ELDON E BLASCO INC

Date: **2/4/2013**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001567
Status:
Valuation: $50,082.00
Contractor Company:
Contractor Name: ELDON E BLASCO INC

Date: **2/4/2013**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001567
Status:
Valuation: $50,082.00
Contractor Company:
Contractor Name: ELDON E BLASCO INC

ADJOINING PROPERTY FINDINGS

1859 HAYMARKET RD

Date: **8/8/2014**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000657
Status:
Valuation: $900.00
Contractor Company:
Contractor Name:

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000352
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **10/22/2004**
Date: **8/20/2004**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 04-00001274
Status:
Valuation: $29,808.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **10/22/2004**
Date: **8/20/2004**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 04-00001274
Status:
Valuation: $29,808.00
Contractor Company:
Contractor Name:

1860 HAYMARKET RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000353
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **8/2/2001**
Date: **5/14/2001**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 01-00000901
Status:
Valuation: $3,000.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **10/27/1994**
Date: **8/30/1994**
Permit Type: **EBP**
Description: **SKYLIGHT(S)**

Permit Description: **BUILDING PERMIT**
Work Class: SKYLIGHT(S)
Proposed Use:
Permit Number: 94-00000837
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: S & T CONSTRUCTION

C.O. Issued Date: **10/27/1994**
Date: **8/30/1994**
Permit Type: **EEPD**
Description: **SKYLIGHT(S)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SKYLIGHT(S)
Proposed Use:
Permit Number: 94-00000837
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: S & T CONSTRUCTION

1863 HAYMARKET RD

Date: **10/10/2012**
Permit Type: **EEPD**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001261
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: NATIONAL CONSTRUCTION RENTALS

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/28/2001**
Date: **8/1/2001**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 01-00001322
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/28/2001**
Date: **8/1/2001**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 01-00001322
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name: BRADY, JOHN

Date: **12/29/1994**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 94-00001335
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

ADJOINING PROPERTY FINDINGS

1864 HAYMARKET RD

Date:	**2/19/2008**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	08-00000238
Status:	
Valuation:	$21,420.00
Contractor Company:	
Contractor Name:	JUST WATER HEATERS INC

1866 HAYMARKET RD

Date:	**5/26/2017**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	17-00000129
Status:	
Valuation:	$16,724.00
Contractor Company:	
Contractor Name:	CRAIG LEWIS GENERAL CONTRACTOR

ADJOINING PROPERTY FINDINGS

Date: **5/26/2017**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00000129
Status:
Valuation: $16,724.00
Contractor Company:
Contractor Name: CRAIG LEWIS GENERAL CONTRACTOR

Date: **5/26/2017**
Permit Type: **YFRF**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **FIRE FEES RESIDENTIAL JAN 2016**
Work Class:
Proposed Use:
Permit Number: 17-00000129
Status:
Valuation: $16,724.00
Contractor Company:
Contractor Name: CRAIG LEWIS GENERAL CONTRACTOR

C.O. Issued Date: **8/27/1993**
Date: **5/28/1993**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 93-00000648
Status:
Valuation: $10,000.00
Contractor Company:
Contractor Name: CAL COAST CONSTRUCTION

C.O. Issued Date: **8/27/1993**
Date: **5/28/1993**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 93-00000648
Status:
Valuation: $10,000.00
Contractor Company:
Contractor Name: CAL COAST CONSTRUCTION

C.O. Issued Date: **8/27/1993**
Date: **5/28/1993**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 93-00000648
Status:
Valuation: $10,000.00
Contractor Company:
Contractor Name: CAL COAST CONSTRUCTION

1867 HAYMARKET RD

Date: **9/29/2016**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 16-00002247
Status:
Valuation: $2,200.00
Contractor Company:
Contractor Name: PACIFIC COAST CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000354
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

1869 HAYMARKET RD

Date: **1/16/2013**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 13-00000068
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: GERALD F MAC DUFFEE GENERAL

Date: **11/15/2012**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 12-00001410
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: GERALD F MAC DUFFEE GENERAL

ADJOINING PROPERTY FINDINGS

Date: **10/25/2012**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001025
Status:
Valuation: $950.00
Contractor Company:
Contractor Name: GERALD F MAC DUFFEE GENERAL

1870 HAYMARKET RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000355
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **3/31/1998**
Date: **1/30/1998**
Permit Type: **EBP**
Description: **FIREPLACE/BBQ/FIREPIT**

Permit Description: **BUILDING PERMIT**
Work Class: FIREPLACE/BBQ/FIREPIT
Proposed Use:
Permit Number: 97-00001723
Status:
Valuation: $1,900.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/31/1998**
Date: **1/30/1998**
Permit Type: **EPPD**
Description: **FIREPLACE/BBQ/FIREPIT**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: FIREPLACE/BBQ/FIREPIT
Proposed Use:
Permit Number: 97-00001723
Status:
Valuation: $1,900.00
Contractor Company:
Contractor Name: BRADY, JOHN

1871 HAYMARKET RD

Date: **2/13/2018**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 18-00000206
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: OWNER/BUILDER

Date: **1/4/2018**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 17-00000377
Status:
Valuation: $18,231.00
Contractor Company:
Contractor Name: OWNER/BUILDER

ADJOINING PROPERTY FINDINGS

Date: **1/4/2018**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00000377
Status:
Valuation: $18,231.00
Contractor Company:
Contractor Name: OWNER/BUILDER

Date: **1/4/2018**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00000377
Status:
Valuation: $18,231.00
Contractor Company:
Contractor Name: OWNER/BUILDER

Date: **1/4/2018**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00000377
Status:
Valuation: $18,231.00
Contractor Company:
Contractor Name: OWNER/BUILDER

ADJOINING PROPERTY FINDINGS

Date: **1/4/2018**
Permit Type: **YFRF**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **FIRE FEES RESIDENTIAL JAN 2016**
Work Class:
Proposed Use:
Permit Number: 17-00000377
Status:
Valuation: $18,231.00
Contractor Company:
Contractor Name: OWNER/BUILDER

Date: **1/4/2018**
Permit Type: **EEPD**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 18-00000006
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: REPOWER SAN MARCOS

Date: **5/4/2012**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00000623
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1873 HAYMARKET RD

Date: **1/5/2015**
Permit Type: **EEPD**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00002255
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SAN DIEGO COUNTY SOLAR INC

Date: **3/29/2000**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 00-00000501
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

MILBANK RD

1801 MILBANK RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000366
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

1807 MILBANK RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000367
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date: **2/7/2008**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000185
Status:
Valuation: $336.00
Contractor Company:
Contractor Name: FAST WATER HEATER COMPANY

Date: **6/27/1994**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 94-00000600
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

1810 MILBANK RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000368
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/30/1994**
Date: **8/18/1994**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 94-00000163
Status:
Valuation: $15,664.00
Contractor Company:
Contractor Name: MILLER CONSTRUCTION CO

C.O. Issued Date: **8/30/1994**
Date: **5/2/1994**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 94-00000163
Status:
Valuation: $15,664.00
Contractor Company:
Contractor Name: MILLER CONSTRUCTION CO

C.O. Issued Date: **8/30/1994**
Date: **5/2/1994**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 94-00000163
Status:
Valuation: $15,664.00
Contractor Company:
Contractor Name: MILLER CONSTRUCTION CO

ADJOINING PROPERTY FINDINGS

1812 MILBANK RD

Date:	**1/7/2010**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**ENC PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	10-00000023
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AMERICAN RESIDENTIAL SVCS-ARS

Date:	**6/6/1997**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	97-00000677
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FOSTER, A & J PLUMBING

ADJOINING PROPERTY FINDINGS

1813 MILBANK RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000369
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**8/16/2005**
Date:	**6/13/2005**
Permit Type:	**EBP**
Description:	**DECK (RESIDENTIAL)**
Permit Description:	**BUILDING PERMIT**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	05-00000915
Status:	
Valuation:	$5,405.00
Contractor Company:	
Contractor Name:	NORTH COUNTY DECK AND PATIO

Date:	**10/24/1996**
Permit Type:	**EPPD**
Description:	**PLUMBING-GAS (INSTALL/REPAIR)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	96-00001309
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	TORREY PINES PLUMBING

ADJOINING PROPERTY FINDINGS

1814 MILBANK RD

Date:	**2/27/2018**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**ENC PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	18-00000445
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AFFORDABLE WATER HEATERS & PLU

Date:	**11/7/2005**
Permit Type:	**EEPD**
Description:	**ELECTRIC-SUPPLEMENTAL PERMIT**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	05-00001690
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**5/11/2006**
Date:	**7/8/2005**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	05-00000609
Status:	
Valuation:	$79,613.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/11/2006**
Date: **7/8/2005**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 05-00000609
Status:
Valuation: $79,613.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/11/2006**
Date: **7/8/2005**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 05-00000609
Status:
Valuation: $79,613.00
Contractor Company:
Contractor Name: BRADY, JOHN

1815 MILBANK RD

Date: **9/28/2011**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000765
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **9/28/2011**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000765
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name:

Date: **9/28/2011**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000765
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **6/18/2002**
Date: **1/2/2002**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 01-00000498
Status:
Valuation: $8,222.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/18/2002**
Date: **1/2/2002**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 01-00000498
Status:
Valuation: $8,222.00
Contractor Company:
Contractor Name: BRADY, JOHN

1819 MILBANK RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000370
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

Date: **12/19/1995**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 95-00001524
Status:
Valuation: $500.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1820 MILBANK RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000371
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

1822 MILBANK RD

Date:	**8/9/2006**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	06-00001136
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WATER HEATERS ONLY INC.

ADJOINING PROPERTY FINDINGS

1824 MILBANK RD

Date:	**1/14/2014**
Permit Type:	**EBR**
Description:	**REVISION TO PLANS-NO NEW FLOOR AREAS**
Permit Description:	**ENC BUILDING PERMIT/PLAN REV.**
Work Class:	
Proposed Use:	
Permit Number:	13-00001948
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/10/2013**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	13-00001381
Status:	
Valuation:	$31,795.00
Contractor Company:	
Contractor Name:	DEAN PORTER CONSTRUCTION

Date:	**12/10/2013**
Permit Type:	**EEPD**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	13-00001381
Status:	
Valuation:	$31,795.00
Contractor Company:	
Contractor Name:	DEAN PORTER CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **12/10/2013**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001381
Status:
Valuation: $31,795.00
Contractor Company:
Contractor Name: DEAN PORTER CONSTRUCTION

Date: **12/10/2013**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001381
Status:
Valuation: $31,795.00
Contractor Company:
Contractor Name: DEAN PORTER CONSTRUCTION

1828 MILBANK RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000372
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

1829 MILBANK RD

Date:	**3/13/2012**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONSTRUCTION/TEMPORARY POWER**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	12-00000416
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NATIONAL CONSTRUCTION RENTALS

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000373
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**8/26/2008**
Permit Type:	**EBP**
Description:	**REROOF**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	08-00001118
Status:	
Valuation:	$1,710.00
Contractor Company:	
Contractor Name:	PETRONELLA ROOFING CO

ADJOINING PROPERTY FINDINGS

1831 MILBANK RD

Date:	**8/26/2008**
Permit Type:	**EBP**
Description:	**REROOF**

Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	08-00001119
Status:	
Valuation:	$1,710.00
Contractor Company:	
Contractor Name:	PETRONELLA ROOFING CO

C.O. Issued Date:	**1/23/2007**
Date:	**12/20/2006**
Permit Type:	**EEPD**
Description:	**DECK (RESIDENTIAL)**

Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	06-00001795
Status:	
Valuation:	$5,720.00
Contractor Company:	
Contractor Name:	NORTH COUNTY DECK AND PATIO

C.O. Issued Date:	**1/23/2007**
Date:	**12/19/2006**
Permit Type:	**EBP**
Description:	**DECK (RESIDENTIAL)**

Permit Description:	**BUILDING PERMIT**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	06-00001795
Status:	
Valuation:	$5,720.00
Contractor Company:	
Contractor Name:	NORTH COUNTY DECK AND PATIO

ADJOINING PROPERTY FINDINGS

Date: **8/17/2006**
Permit Type: **EPPD**
Description: **MISC. PLUMBING & ELECTIRC**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00000411
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: T Q M BUILDER

C.O. Issued Date: **2/7/2007**
Date: **8/14/2006**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 06-00001145
Status:
Valuation: $3,000.00
Contractor Company:
Contractor Name: HOME IMPROVEMENT COMPANY, THE

C.O. Issued Date: **2/7/2007**
Date: **8/14/2006**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 06-00001145
Status:
Valuation: $3,000.00
Contractor Company:
Contractor Name: HOME IMPROVEMENT COMPANY, THE

ADJOINING PROPERTY FINDINGS

Date: **3/17/2006**
Permit Type: **EEPD**
Description: **MISC. PLUMBING & ELECTIRC**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00000411
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: T Q M BUILDER

1835 MILBANK RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000374
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

Date: **8/26/2008**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001116
Status:
Valuation: $1,710.00
Contractor Company:
Contractor Name: PETRONELLA ROOFING CO

ADJOINING PROPERTY FINDINGS

1836 MILBANK RD

Date:	**12/21/2015**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	15-00001386
Status:	
Valuation:	$37,759.00
Contractor Company:	
Contractor Name:	OWNER/BUILDER

Date:	**12/21/2015**
Permit Type:	**EEPD**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	15-00001386
Status:	
Valuation:	$37,759.00
Contractor Company:	
Contractor Name:	OWNER/BUILDER

Date:	**12/21/2015**
Permit Type:	**EMPD**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	15-00001386
Status:	
Valuation:	$37,759.00
Contractor Company:	
Contractor Name:	OWNER/BUILDER

ADJOINING PROPERTY FINDINGS

Date: **12/21/2015**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 15-00001386
Status:
Valuation: $37,759.00
Contractor Company:
Contractor Name: OWNER/BUILDER

Date: **10/28/2015**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 15-00002229
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BAREFOOT ELECTRIC

Date: **11/21/2013**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001642
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHERLOCK HEATING AND AIR CONDI

ADJOINING PROPERTY FINDINGS

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000375
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

1837 MILBANK RD

Date:	**8/26/2008**
Permit Type:	**EBP**
Description:	**REROOF**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	08-00001117
Status:	
Valuation:	$1,710.00
Contractor Company:	
Contractor Name:	PETRONELLA ROOFING CO

ADJOINING PROPERTY FINDINGS

N COAST HIGHWAY 101

1750 N COAST HIGHWAY 101

Date:	**3/24/2015**
Permit Type:	**EBP**
Description:	**STAIRS (RESIDENTIAL)**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	15-00000427
Status:	
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	P.B.A. LTD

Date:	**5/6/2014**
Permit Type:	**EBP**
Description:	**SWIMMING POOL (RESIDENTIAL/PRIVATE)**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	14-00000650
Status:	
Valuation:	$39,717.00
Contractor Company:	
Contractor Name:	BLUE MOON POOLS, INC.

ADJOINING PROPERTY FINDINGS

Date: **2/7/2011**
Permit Type: **EBP**
Description: **OFFICE-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000136
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: EMERCON CONSTRUCTION INC

Date: **2/25/2008**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00000268
Status:
Valuation: $1,254.00
Contractor Company:
Contractor Name: MILLENNIUM BUILDING SERVICES

C.O. Issued Date: **6/12/2006**
Date: **6/5/2006**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 06-00000793
Status:
Valuation: $1,482.00
Contractor Company:
Contractor Name: URBACH ROOFING

ADJOINING PROPERTY FINDINGS

Date: **11/7/2001**
Permit Type: **FPO**
Description: **ELECTRIC-GATE**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class:
Proposed Use:
Permit Number: 01-00001158
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CPI ACCESS SYSTEMS

Date: **6/20/2001**
Permit Type: **EEPD**
Description: **ELECTRIC-GATE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 01-00001158
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CPI ACCESS SYSTEMS

Date: **6/5/1998**
Permit Type: **EEPD**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 98-00000956
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ROBECK ELECTRICAL

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/9/1996**
Date: **1/26/1996**
Permit Type: **EBP**
Description: **PATIO COVER (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: PATIO COVER (RESIDENTIAL)
Proposed Use:
Permit Number: 95-00001516
Status:
Valuation: $4,368.00
Contractor Company:
Contractor Name: MILLER CONSTRUCTION CO

C.O. Issued Date: **8/23/1988**
Date: **6/28/1988**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 88-00000573
Status:
Valuation: $54,000.00
Contractor Company:
Contractor Name:

1766 N COAST HIGHWAY 101

Date: **8/14/2014**
Permit Type: **EBP**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000919
Status:
Valuation: $56,658.00
Contractor Company:
Contractor Name: VERSAI DESIGN AND DEVELOPMENT

ADJOINING PROPERTY FINDINGS

Date: **8/14/2014**
Permit Type: **EEP**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 14-00000919
Status:
Valuation: $56,658.00
Contractor Company:
Contractor Name: VERSAI DESIGN AND DEVELOPMENT

Date: **8/14/2014**
Permit Type: **EMP**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-NON RESI**
Work Class:
Proposed Use:
Permit Number: 14-00000919
Status:
Valuation: $56,658.00
Contractor Company:
Contractor Name: VERSAI DESIGN AND DEVELOPMENT

Date: **8/14/2014**
Permit Type: **EPP**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **ENC PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 14-00000919
Status:
Valuation: $56,658.00
Contractor Company:
Contractor Name: VERSAI DESIGN AND DEVELOPMENT

ADJOINING PROPERTY FINDINGS

Date: **8/14/2014**
Permit Type: **ZFCF**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **FIRE FEES COMMERCIAL-JULY 2009**
Work Class:
Proposed Use:
Permit Number: 14-00000919
Status:
Valuation: $56,658.00
Contractor Company:
Contractor Name: VERSAI DESIGN AND DEVELOPMENT

Date: **6/23/2014**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000893
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: EFRAIN PEREZ

Date: **6/23/2014**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ENC ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 14-00000893
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: EFRAIN PEREZ

ADJOINING PROPERTY FINDINGS

Date: **11/25/2013**
Permit Type: **EEP**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ENC ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 13-00001647
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SO CAL RETAIL SERVICES INC

Date: **5/14/2012**
Permit Type: **EBP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000593
Status:
Valuation: $34,000.00
Contractor Company:
Contractor Name: CONSOLIDATED CONSTRUCTION

Date: **5/14/2012**
Permit Type: **EEP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 12-00000593
Status:
Valuation: $34,000.00
Contractor Company:
Contractor Name: CONSOLIDATED CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **5/14/2012**
Permit Type: **EPP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 12-00000593
Status:
Valuation: $34,000.00
Contractor Company:
Contractor Name: CONSOLIDATED CONSTRUCTION

Date: **5/14/2012**
Permit Type: **ZFCF**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **FIRE FEES COMMERCIAL-JULY 2009**
Work Class:
Proposed Use:
Permit Number: 12-00000593
Status:
Valuation: $34,000.00
Contractor Company:
Contractor Name: CONSOLIDATED CONSTRUCTION

Date: **11/18/2011**
Permit Type: **EBP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00001389
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **11/18/2011**
Permit Type: **EEP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 11-00001389
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name:

Date: **11/18/2011**
Permit Type: **EMP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-NON RESI**
Work Class:
Proposed Use:
Permit Number: 11-00001389
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name:

Date: **11/18/2011**
Permit Type: **EPP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ENC PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 11-00001389
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **11/18/2011**
Permit Type: **ZFCF**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **FIRE FEES COMMERCIAL-JULY 2009**
Work Class:
Proposed Use:
Permit Number: 11-00001389
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name:

Date: **8/18/2011**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00001074
Status:
Valuation: $11,000.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

Date: **8/18/2011**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ENC ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 11-00001074
Status:
Valuation: $11,000.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

ADJOINING PROPERTY FINDINGS

Date: **12/15/2009**
Permit Type: **EBP**
Description: **VEHICLE REFUELING APPLIANCE**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 09-00001022
Status:
Valuation: $15,000.00
Contractor Company:
Contractor Name:

Date: **9/17/2009**
Permit Type: **ZFCF**
Description: **VEHICLE REFUELING APPLIANCE**

Permit Description: **FEES COMMERCIAL-JULY**
Work Class:
Proposed Use:
Permit Number: 09-00001022
Status:
Valuation: $2,009.00
Contractor Company:
Contractor Name:

Date: **12/30/2008**
Permit Type: **EBP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001373
Status:
Valuation: $56,700.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **12/30/2008**
Permit Type: **EEP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 08-00001373
Status:
Valuation: $56,700.00
Contractor Company:
Contractor Name:

Date: **12/30/2008**
Permit Type: **EMP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **MECHANICAL PERMIT-NON RESI**
Work Class:
Proposed Use:
Permit Number: 08-00001373
Status:
Valuation: $56,700.00
Contractor Company:
Contractor Name:

Date: **12/30/2008**
Permit Type: **EPP**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 08-00001373
Status:
Valuation: $56,700.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/27/2008**
Permit Type: **ZFC**
Description: **RETAIL/WHOLESALE-TI/REMODEL/REPAIR**

Permit Description: **FEES COMMERCIAL- JAN**
Work Class:
Proposed Use:
Permit Number: 08-00001373
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name:

Date: **10/6/2005**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 05-00001535
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

Date: **9/28/2005**
Permit Type: **EMP**
Description: **MISC. MECHANICAL & PLUMBING**

Permit Description: **MECHANICAL PERMIT-NON RESI**
Work Class:
Proposed Use:
Permit Number: 05-00001485
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **9/28/2005**
Permit Type: **EPP**
Description: **MISC. MECHANICAL & PLUMBING**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 05-00001485
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **3/30/2007**
Date: **3/31/2005**
Permit Type: **EBP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **BUILDING PERMIT**
Work Class: REISSUE EXPIRED PERMIT(S)
Proposed Use:
Permit Number: 05-00000462
Status:
Valuation: $6,422.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

C.O. Issued Date: **3/30/2007**
Date: **3/31/2005**
Permit Type: **EEP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: REISSUE EXPIRED PERMIT(S)
Proposed Use:
Permit Number: 05-00000462
Status:
Valuation: $6,422.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/19/2007**
Date: **1/18/2005**
Permit Type: **EBP**
Description: **VEHICLE/BOAT SALES/SERVICE-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: VEHICLE/BOAT SALES/SERVICE-NEW
Proposed Use:
Permit Number: 03-00000134
Status:
Valuation: $193,900.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/19/2007**
Date: **1/18/2005**
Permit Type: **EEP**
Description: **VEHICLE/BOAT SALES/SERVICE-NEW**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: VEHICLE/BOAT SALES/SERVICE-NEW
Proposed Use:
Permit Number: 03-00000134
Status:
Valuation: $193,900.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/19/2007**
Date: **1/18/2005**
Permit Type: **FPO**
Description: **VEHICLE/BOAT SALES/SERVICE-NEW**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: VEHICLE/BOAT SALES/SERVICE-NEW
Proposed Use:
Permit Number: 03-00000134
Status:
Valuation: $193,900.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/19/2007**
Date: **1/18/2005**
Permit Type: **EBP**
Description: **VEHICLE/BOAT SALES/SERVICE-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: VEHICLE/BOAT SALES/SERVICE-NEW
Proposed Use:
Permit Number: 03-00000142
Status:
Valuation: $64,913.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/19/2007**
Date: **1/18/2005**
Permit Type: **EEP**
Description: **VEHICLE/BOAT SALES/SERVICE-NEW**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: VEHICLE/BOAT SALES/SERVICE-NEW
Proposed Use:
Permit Number: 03-00000142
Status:
Valuation: $64,913.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/19/2007**
Date: **1/18/2005**
Permit Type: **FPO**
Description: **VEHICLE/BOAT SALES/SERVICE-NEW**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: VEHICLE/BOAT SALES/SERVICE-NEW
Proposed Use:
Permit Number: 03-00000142
Status:
Valuation: $64,913.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **9/7/2004**
Permit Type: **EEP**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 04-00001665
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: NATIONAL CONSTRUCTION RENTALS

Date: **8/3/2004**
Permit Type: **EBP**
Description: **VEHICLE/BOAT SALES/SERVICE-DEMOLITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 04-00001413
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **2/5/2004**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 03-00002266
Status:
Valuation: $7,054.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

ADJOINING PROPERTY FINDINGS

Date: **2/5/2004**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 03-00002266
Status:
Valuation: $7,054.00
Contractor Company:
Contractor Name: YOUNG ELECTRIC SIGN CO

Date: **4/3/2002**
Permit Type: **EBP**
Description: **VEHICLE/BOAT SALES/SERVICE-DEMOLITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 02-00000735
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

1784 N COAST HIGHWAY 101

Date: **11/20/2012**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001444
Status:
Valuation: $3,648.00
Contractor Company:
Contractor Name: URBACH ROOFING

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/26/2006**
Date: **5/18/2005**
Permit Type: **EBP**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002298
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/26/2006**
Date: **5/18/2005**
Permit Type: **EEPD**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002298
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/26/2006**
Date: **5/18/2005**
Permit Type: **EPPD**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002298
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/26/2006**
Date: **5/18/2005**
Permit Type: **FPO**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002298
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **3/2/2005**
Date: **12/27/2004**
Permit Type: **EBP**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002198
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **3/2/2005**
Date: **12/27/2004**
Permit Type: **EEPD**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002198
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/2/2005**
Date: **12/27/2004**
Permit Type: **EPPD**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002198
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **3/2/2005**
Date: **12/27/2004**
Permit Type: **FPO**
Description: **DWELLING,APT. (ACC. BLDG)-TI/REMODEL/REPAIR**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,APT. (ACC. BLDG)-TI/REMODE
Proposed Use:
Permit Number: 04-00002198
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name:

Date: **9/22/2004**
Permit Type: **FPO**
Description: **FIRE ALARM SYSTEM**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class:
Proposed Use:
Permit Number: 04-00001757
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **1/28/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000164
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **7/11/2003**
Permit Type: **EPPD**
Description: **PLUMBING-WATER REPIPE**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 03-00001358
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ANDERSON, WALTER PLUMBING INC

1786 N COAST HIGHWAY 101

Date: **8/22/2017**
Permit Type: **EEPD**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00001282
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PURE SOLAR POWER

ADJOINING PROPERTY FINDINGS

Date: **8/22/2017**
Permit Type: **YFCF**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **FIRE FEES COMMERCIAL -JAN 2016**
Work Class:
Proposed Use:
Permit Number: 17-00001282
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PURE SOLAR POWER

Date: **5/12/2017**
Permit Type: **EPPD**
Description: **PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00000878
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: AMERICAN RESIDENTIAL SVCS-ARS

Date: **1/23/2012**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00000091
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARLETT MECHANICAL & SUPPLIES

ADJOINING PROPERTY FINDINGS

Date: **8/7/2003**
Permit Type: **EEPD**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 03-00001510
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FLEET SERVICES

Date: **9/7/1999**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 99-00001512
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **8/9/1999**
Permit Type: **EPP**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 99-00001362
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

ADJOINING PROPERTY FINDINGS

1950 N COAST HIGHWAY 101

Date:	**5/22/2008**
Permit Type:	**EBP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	08-00000679
Status:	
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**6/3/2003**
Date:	**3/25/2003**
Permit Type:	**EBP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**BUILDING PERMIT**
Work Class:	EATING/DRINKING-TI/REMODEL/REPAIR
Proposed Use:	
Permit Number:	03-00000408
Status:	
Valuation:	$25,000.00
Contractor Company:	
Contractor Name:	EMERCON INC.

C.O. Issued Date:	**6/3/2003**
Date:	**3/25/2003**
Permit Type:	**EEP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**ELECTRIC PERMIT-NON RESID**
Work Class:	EATING/DRINKING-TI/REMODEL/REPAIR
Proposed Use:	
Permit Number:	03-00000408
Status:	
Valuation:	$25,000.00
Contractor Company:	
Contractor Name:	EMERCON INC.

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/3/2003**
Date: **3/25/2003**
Permit Type: **FPO**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: EATING/DRINKING-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 03-00000408
Status:
Valuation: $25,000.00
Contractor Company:
Contractor Name: EMERCON INC.

Date: **12/5/2002**
Permit Type: **EEP**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 02-00002524
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: EMERCON INC.

C.O. Issued Date: **9/8/2000**
Date: **8/9/2000**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 00-00001312
Status:
Valuation: $2,363.00
Contractor Company:
Contractor Name: BOO BOO'S GRAPHICS

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/8/2000**
Date: **8/9/2000**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 00-00001312
Status:
Valuation: $2,363.00
Contractor Company:
Contractor Name: BOO BOO'S GRAPHICS

Date: **6/11/1992**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 92-00000777
Status:
Valuation: $2,098.00
Contractor Company:
Contractor Name: CLEAR COMMUNICATIONS

Date: **6/11/1992**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 92-00000777
Status:
Valuation: $2,098.00
Contractor Company:
Contractor Name: CLEAR COMMUNICATIONS

ADJOINING PROPERTY FINDINGS

Date: **7/26/1990**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 90-00000694
Status:
Valuation: $2,625.00
Contractor Company:
Contractor Name:

Date: **7/26/1990**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 90-00000694
Status:
Valuation: $2,625.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/23/1991**
Date: **4/11/1990**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 90-00000320
Status:
Valuation: $2,575.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/23/1991**
Date: **4/11/1990**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 90-00000320
Status:
Valuation: $2,575.00
Contractor Company:
Contractor Name:

1967 N COAST HIGHWAY 101

Date: **1/17/2012**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00000062
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: INDOOR WEATHER

C.O. Issued Date: **3/1/2004**
Date: **2/12/2004**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 04-00000269
Status:
Valuation: $616.00
Contractor Company:
Contractor Name: CUSTOM MEDIA MANUFACTURING

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/18/2004**
Date: **9/15/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001731
Status:
Valuation: $3,810.00
Contractor Company:
Contractor Name: JOHNSON, ERIC ROOF SYSTEMS

Date: **3/11/1994**
Permit Type: **EPP**
Description: **PLUMBING-MISCELLANEOUS**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 94-00000251
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/25/1994**
Date: **9/23/1993**
Permit Type: **EBP**
Description: **OFFICE-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: OFFICE-NEW
Proposed Use:
Permit Number: 93-00001034
Status:
Valuation: $8,370.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/25/1994**
Date: **9/23/1993**
Permit Type: **FPM**
Description: **OFFICE-NEW**

Permit Description: **DEPT. MITIGATION PERMIT**
Work Class: OFFICE-NEW
Proposed Use:
Permit Number: 93-00001034
Status:
Valuation: $8,370.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/15/1988**
Date: **10/28/1987**
Permit Type: **EBP**
Description: **OFFICE-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: OFFICE-NEW
Proposed Use:
Permit Number: 87-00000313
Status:
Valuation: $65,077.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/15/1988**
Date: **10/28/1987**
Permit Type: **EEP**
Description: **OFFICE-NEW**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: OFFICE-NEW
Proposed Use:
Permit Number: 87-00000313
Status:
Valuation: $65,077.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/15/1988**
Date: **10/28/1987**
Permit Type: **EPP**
Description: **OFFICE-NEW**

Permit Description: **PLUMBING PERMIT-NON RESID**
Work Class: OFFICE-NEW
Proposed Use:
Permit Number: 87-00000313
Status:
Valuation: $65,077.00
Contractor Company:
Contractor Name:

N VULCAN AVE

1803 N VULCAN AVE

Date: **6/4/2018**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 18-00001259
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ASAP HOLDING CO DBA ASAP DRAIN

ADJOINING PROPERTY FINDINGS

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

1827 N VULCAN AVE

Date: **10/17/2017**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00001909
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: OCHOA ELECTRIC

Date: **1/8/2002**
Permit Type: **EEPD**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 02-00000034
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1835 N VULCAN AVE

Date:	**5/10/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONVERT TO UNDERGROUND SERVICE**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000850
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SOUTHERN CONTRACTING CO

1845 N VULCAN AVE

Date:	**5/10/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONVERT TO UNDERGROUND SERVICE**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000851
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

1853 N VULCAN AVE

Date:	**1/5/2018**
Permit Type:	**EBP**
Description:	**REROOF**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	18-00000037
Status:	
Valuation:	$3,534.00
Contractor Company:	
Contractor Name:	GASTELUM ROOFING

Date:	**3/19/2009**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	09-00000300
Status:	
Valuation:	$19,373.00
Contractor Company:	
Contractor Name:	ACTION COMFORT SYSTEMS

Date:	**1/19/2006**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER REPIPE**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	06-00000091
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PIPES PLUMBING

ADJOINING PROPERTY FINDINGS

Date: **12/14/2005**
Permit Type: **EPPD**
Description: **PLUMBING-WATER REPIPE**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 05-00001915
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PIPES PLUMBING

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000819
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

1859 N VULCAN AVE

Date: **11/15/2012**
Permit Type: **ZFRF**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 11-00000756
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/24/2012**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 12-00000944
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **7/13/2012**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 12-00000545
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **8/29/2011**
Permit Type: **EBP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000756
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/29/2011**
Permit Type: **EEPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000756
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EMPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000756
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EPPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000756
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EBP**
Description: **DWELLING,CONDO-NEW**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001304
Status:
Valuation: $184,643.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001304
Status:
Valuation: $184,643.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001304
Status:
Valuation: $184,643.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001304
Status:
Valuation: $184,643.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFC**
Description: **DWELLING,CONDO-NEW**

Permit Description: **FEES COMMERCIAL- JAN**
Work Class:
Proposed Use:
Permit Number: 08-00001304
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFMR**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MITIGATION RES. MARCH**
Work Class:
Proposed Use:
Permit Number: 08-00001304
Status:
Valuation: $6.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

1861 N VULCAN AVE

Date: **11/15/2012**
Permit Type: **ZFRF**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 11-00000755
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EBP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000755
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EEPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000755
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/29/2011**
Permit Type: **EMPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000755
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EPPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000755
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EBP**
Description: **DWELLING,CONDO-NEW**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001303
Status:
Valuation: $183,018.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001303
Status:
Valuation: $183,018.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001303
Status:
Valuation: $183,018.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001303
Status:
Valuation: $183,018.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **10/9/2008**
Permit Type: **ZFC**
Description: **DWELLING,CONDO-NEW**

Permit Description: **FEES COMMERCIAL- JAN**
Work Class:
Proposed Use:
Permit Number: 08-00001303
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFMR**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MITIGATION RES. MARCH**
Work Class:
Proposed Use:
Permit Number: 08-00001303
Status:
Valuation: $6.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

1863 N VULCAN AVE

Date: **11/15/2012**
Permit Type: **ZFRF**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 11-00000754
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/29/2011**
Permit Type: **EBP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000754
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EEPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000754
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EMPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000754
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/29/2011**
Permit Type: **EPPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000754
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EBP**
Description: **DWELLING,CONDO-NEW**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001302
Status:
Valuation: $190,254.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001302
Status:
Valuation: $190,254.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001302
Status:
Valuation: $190,254.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001302
Status:
Valuation: $190,254.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFC**
Description: **DWELLING,CONDO-NEW**

Permit Description: **FEES COMMERCIAL- JAN**
Work Class:
Proposed Use:
Permit Number: 08-00001302
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **10/9/2008**
Permit Type: **ZFMR**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MITIGATION RES. MARCH**
Work Class:
Proposed Use:
Permit Number: 08-00001302
Status:
Valuation: $6.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

1865 N VULCAN AVE

Date: **6/24/2009**
Permit Type: **EBP**
Description: **DWELLING,SFD W/ACC UNIT-DEMO/REMOVE ---------**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 09-00000653
Status:
Valuation: $4,500.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **2/23/1993**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 93-00000177
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: WELCH PLUMBING

ADJOINING PROPERTY FINDINGS

Date: **9/29/1988**
Permit Type: **EPPD**
Description: **PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 88-00000952
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

1867 N VULCAN AVE

Date: **11/15/2012**
Permit Type: **ZFRF**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 11-00000753
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EBP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000753
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/29/2011**
Permit Type: **EEPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000753
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EMPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000753
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EPPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000753
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EBP**
Description: **DWELLING,CONDO-NEW**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001301
Status:
Valuation: $185,356.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001301
Status:
Valuation: $185,356.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001301
Status:
Valuation: $185,356.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001301
Status:
Valuation: $185,356.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFC**
Description: **DWELLING,CONDO-NEW**

Permit Description: **FEES COMMERCIAL- JAN**
Work Class:
Proposed Use:
Permit Number: 08-00001301
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFMR**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MITIGATION RES. MARCH**
Work Class:
Proposed Use:
Permit Number: 08-00001301
Status:
Valuation: $6.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

1869 N VULCAN AVE

Date: **11/15/2012**
Permit Type: **ZFCF**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **FIRE FEES COMMERCIAL-JULY 2009**
Work Class:
Proposed Use:
Permit Number: 11-00000752
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **9/17/2012**
Permit Type: **EBR**
Description: **TRUSS APPROVAL/TRUSS REVISION**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 12-00001128
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **8/24/2012**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 12-00000945
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

ADJOINING PROPERTY FINDINGS

Date: **7/19/2012**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 12-00000881
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **8/29/2011**
Permit Type: **EBP**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000752
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EEPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000752
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **8/29/2011**
Permit Type: **EMPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000752
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **8/29/2011**
Permit Type: **EPPD**
Description: **REISSUE EXPIRED PERMIT(S)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000752
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: R Q L CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EBP**
Description: **DWELLING,CONDO-NEW**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001299
Status:
Valuation: $187,200.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **6/30/2009**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001299
Status:
Valuation: $187,200.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001299
Status:
Valuation: $187,200.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **6/30/2009**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001299
Status:
Valuation: $187,200.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **10/9/2008**
Permit Type: **ZFC**
Description: **DWELLING,CONDO-NEW**

Permit Description: **FEES COMMERCIAL- JAN**
Work Class:
Proposed Use:
Permit Number: 08-00001299
Status:
Valuation: $2,007.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **10/9/2008**
Permit Type: **ZFMR**
Description: **DWELLING,CONDO-NEW**

Permit Description: **MITIGATION RES. MARCH**
Work Class:
Proposed Use:
Permit Number: 08-00001299
Status:
Valuation: $6.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

1873 N VULCAN AVE

Date: **4/25/2018**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 18-00000934
Status:
Valuation: $38,000.00
Contractor Company:
Contractor Name: PACIFIC PLASTERING

ADJOINING PROPERTY FINDINGS

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000820
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

1887 N VULCAN AVE

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1939 N VULCAN AVE

Date: **2/9/2017**
Permit Type: **YFRF**
Description: **DWELLING,CONDO-NEW ++++++++++++++++++++++++++**

Permit Description: **FIRE FEES RESIDENTIAL JAN 2016**
Work Class:
Proposed Use:
Permit Number: 16-00000636
Status:
Valuation: $181,923.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **9/30/2016**
Permit Type: **EBP**
Description: **DWELLING,CONDO-NEW ++++++++++++++++++++++++++**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 16-00000636
Status:
Valuation: $181,923.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **9/30/2016**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-NEW ++++++++++++++++++++++++++**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 16-00000636
Status:
Valuation: $181,923.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

ADJOINING PROPERTY FINDINGS

Date: **9/30/2016**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-NEW ++++++++++++++++++++++++++**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 16-00000636
Status:
Valuation: $181,923.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **9/30/2016**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-NEW ++++++++++++++++++++++++++**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 16-00000636
Status:
Valuation: $181,923.00
Contractor Company:
Contractor Name: SHEA HOMES LIMITED PARTNERSHIP

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000821
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

1967 N VULCAN AVE

Date:	**10/9/2012**
Permit Type:	**EPPD**
Description:	**PLUMBING-GAS (INSTALL/REPAIR)**
Permit Description:	**ENC PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	12-00001255
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	UNIQUE RENOVATIONS

Date:	**5/10/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONVERT TO UNDERGROUND SERVICE**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000822
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SOUTHERN CONTRACTING CO

Date:	**5/10/2004**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONVERT TO UNDERGROUND SERVICE**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00000852
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

WILTON RD

1805 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000358
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**6/23/1999**
Date:	**1/7/1999**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	98-00001684
Status:	
Valuation:	$46,498.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/23/1999**
Date: **1/7/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 98-00001684
Status:
Valuation: $46,498.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **6/23/1999**
Date: **1/7/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 98-00001684
Status:
Valuation: $46,498.00
Contractor Company:
Contractor Name: BRADY, JOHN

1807 WILTON RD

Date: **4/1/2008**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00001825
Status:
Valuation: $2,184.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/26/2008**
Date: **1/19/2007**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 06-00001825
Status:
Valuation: $2,184.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

1809 WILTON RD

Date: **10/10/2017**
Permit Type: **EEPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00001850
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHERLOCK HEATING AND AIR CONDI

Date: **10/10/2017**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 17-00001850
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SHERLOCK HEATING AND AIR CONDI

ADJOINING PROPERTY FINDINGS

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000359
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **11/7/2003**
Date: **9/19/2003**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00001704
Status:
Valuation: $1,692.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **11/7/2003**
Date: **9/19/2003**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00001704
Status:
Valuation: $1,692.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/22/1999**
Date: **11/19/1998**
Permit Type: **EBP**
Description: **FIREPLACE/BBQ/FIREPIT**

Permit Description: **BUILDING PERMIT**
Work Class: FIREPLACE/BBQ/FIREPIT
Proposed Use:
Permit Number: 98-00002071
Status:
Valuation: $1,900.00
Contractor Company:
Contractor Name:

1810 WILTON RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000360
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

1815 WILTON RD

Date:	**12/1/2010**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	10-00001336
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BERCKS OLD TIME PLUMBING

Date:	**9/5/2006**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	06-00001249
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ALL STAR WATER HEATERS INC

ADJOINING PROPERTY FINDINGS

1816 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000361
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**7/22/2004**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00001345
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MY PLUMBER/SAN DIEGO LP

ADJOINING PROPERTY FINDINGS

1818 WILTON RD

C.O. Issued Date: **9/9/2004**
Date: **5/18/2004**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00000540
Status:
Valuation: $16,450.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/9/2004**
Date: **5/18/2004**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00000540
Status:
Valuation: $16,450.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/9/2004**
Date: **5/18/2004**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00000540
Status:
Valuation: $16,450.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1819 WILTON RD

Date:	**10/10/2012**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONSTRUCTION/TEMPORARY POWER**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	12-00001262
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NATIONAL CONSTRUCTION RENTALS

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000362
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**4/11/2011**
Permit Type:	**EEPD**
Description:	**ELECTRIC-MISCELLANEOUS**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	11-00000385
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NEW LIFE CONSTRUCTION COMPANY

ADJOINING PROPERTY FINDINGS

1820 WILTON RD

Date:	**4/10/2007**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	07-00000482
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CALIFORNIA DELTA MECHANICAL IN

1821 WILTON RD

C.O. Issued Date:	**11/4/2006**
Date:	**7/11/2006**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	06-00000873
Status:	
Valuation:	$13,252.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **11/4/2006**
Date: **7/11/2006**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 06-00000873
Status:
Valuation: $13,252.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **11/4/2006**
Date: **7/11/2006**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 06-00000873
Status:
Valuation: $13,252.00
Contractor Company:
Contractor Name:

Date: **11/13/2001**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 01-00002172
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

ADJOINING PROPERTY FINDINGS

1824 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000363
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**5/31/1996**
Date:	**12/29/1994**
Permit Type:	**EBP**
Description:	**DECK (RESIDENTIAL)**
Permit Description:	**BUILDING PERMIT**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	94-00001338
Status:	
Valuation:	$1,727.00
Contractor Company:	
Contractor Name:	AMY, ED CONST

ADJOINING PROPERTY FINDINGS

1825 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000364
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**11/18/1997**
Permit Type:	**EBR**
Description:	**REVISION TO PLANS-NO NEW FLOOR AREAS**
Permit Description:	**BUILDING PERMIT/PLAN REV.**
Work Class:	
Proposed Use:	
Permit Number:	97-00001664
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**5/26/1998**
Date:	**9/30/1997**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	97-00001123
Status:	
Valuation:	$67,460.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/26/1998**
Date: **9/30/1997**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 97-00001123
Status:
Valuation: $67,460.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/26/1998**
Date: **9/30/1997**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 97-00001123
Status:
Valuation: $67,460.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/26/1998**
Date: **9/30/1997**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 97-00001123
Status:
Valuation: $67,460.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1826 WILTON RD

Date:	**11/16/2015**
Permit Type:	**EEPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	15-00002403
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ASI HASTINGS, INC

Date:	**11/16/2015**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	15-00002403
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ASI HASTINGS, INC

Date:	**12/10/2014**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	14-00002196
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ASI HASTINGS, INC

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **10/21/2008**
Date: **11/29/2007**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 07-00001523
Status:
Valuation: $1,625.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **10/21/2008**
Date: **11/29/2007**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 07-00001523
Status:
Valuation: $1,625.00
Contractor Company:
Contractor Name:

1827 WILTON RD

Date: **5/10/2011**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 11-00000520
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **3/21/2011**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000036
Status:
Valuation: $12,000.00
Contractor Company:
Contractor Name: DEAN PORTER CONSTRUCTION

Date: **3/21/2011**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000036
Status:
Valuation: $12,000.00
Contractor Company:
Contractor Name: DEAN PORTER CONSTRUCTION

1830 WILTON RD

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000365
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

1900 N Highway 101

1900 N Highway 101

Encinitas, CA 92024

Inquiry Number: 5744045.4

August 07, 2019

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

08/07/19

Site Name:	Client Name:
1900 N Highway 101	Hovey Environmental
1900 N Highway 101	2929 Chatsworth Blvd
Encinitas, CA 92024	San Diego, CA 92106-0000
EDR Inquiry # 5744045.4	Contact: Caroline Hovey

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Hovey Environmental were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: 19454

Coordinates:

Latitude:	33.080586 33° 4' 50" North
Longitude:	-117.308105 -117° 18' 29" West
UTM Zone:	Zone 11 North
UTM X Meters:	471244.25
UTM Y Meters:	3660262.97
Elevation:	67.60' above sea level

Maps Provided:

2012	1898
1997	1893
1975	
1968	
1949	
1948	
1947	
1901	

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Encinitas
2012
7.5-minute, 24000

1997 Source Sheets

Encinitas
1997
7.5-minute, 24000
Aerial Photo Revised 1997

1975 Source Sheets

Encinitas
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1968 Source Sheets

Encinitas
1968
7.5-minute, 24000
Aerial Photo Revised 1967

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949 Source Sheets

Encinitas
1949
7.5-minute, 24000
Aerial Photo Revised 1947

1948 Source Sheets

Encinitas
1948
7.5-minute, 24000
Aerial Photo Revised 1947

1947 Source Sheets

OCEANSIDE
1947
15-minute, 50000

1901 Source Sheets

Oceanside
1901
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1898 Source Sheets

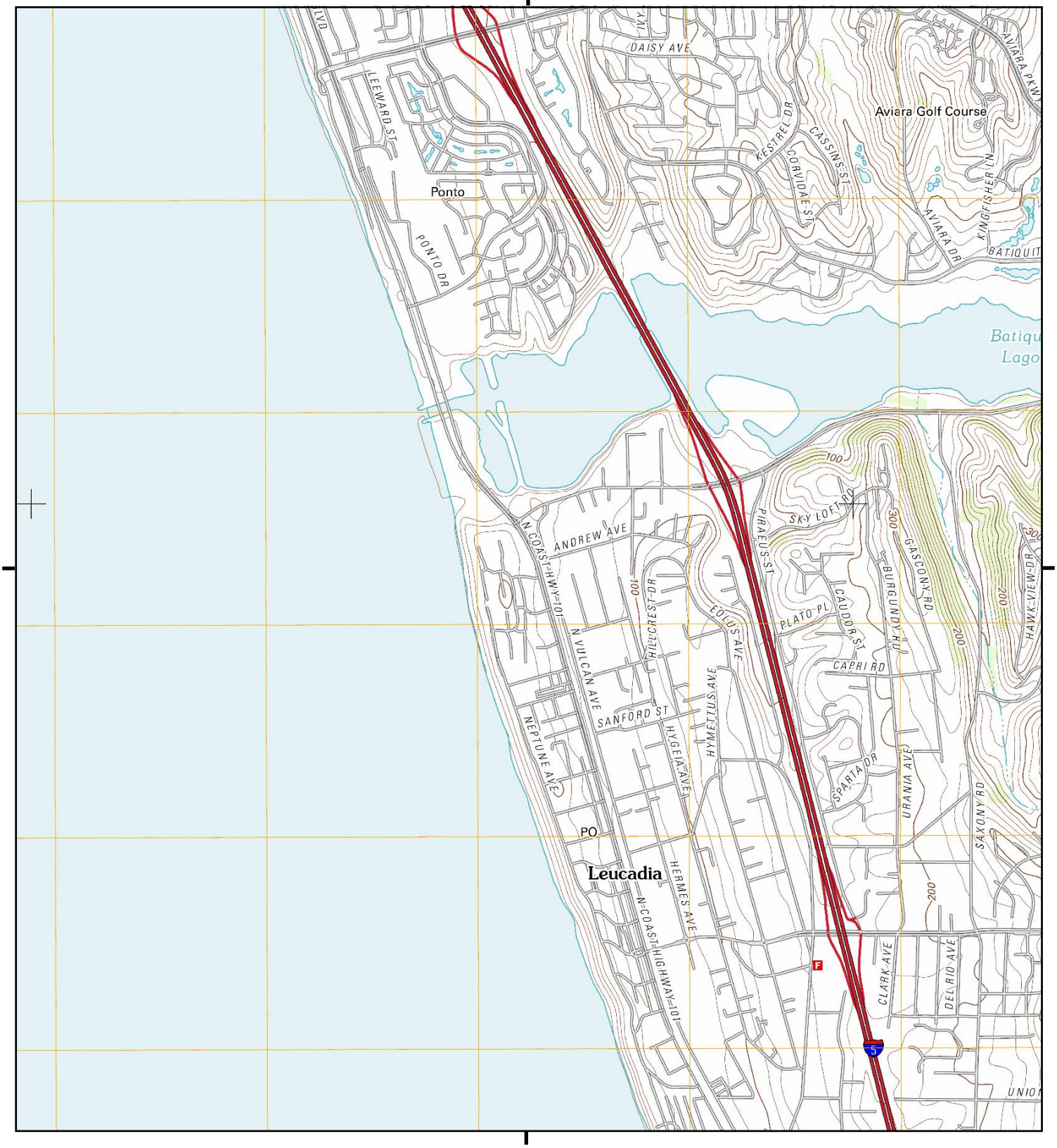
Oceanside
1898
15-minute, 62500

1893 Source Sheets

Oceanside
1893
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

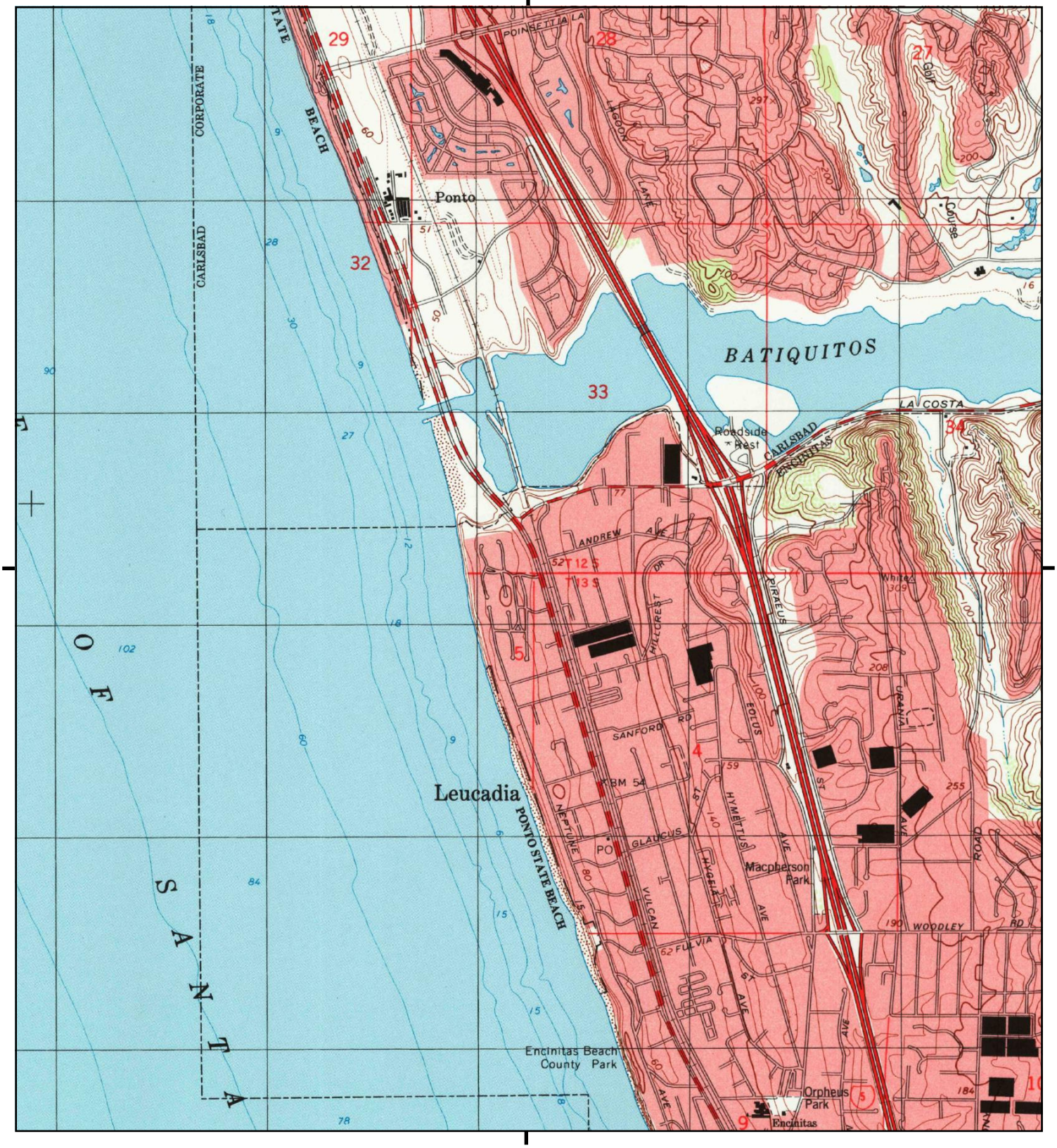
TP, Encinitas, 2012, 7.5-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1997



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

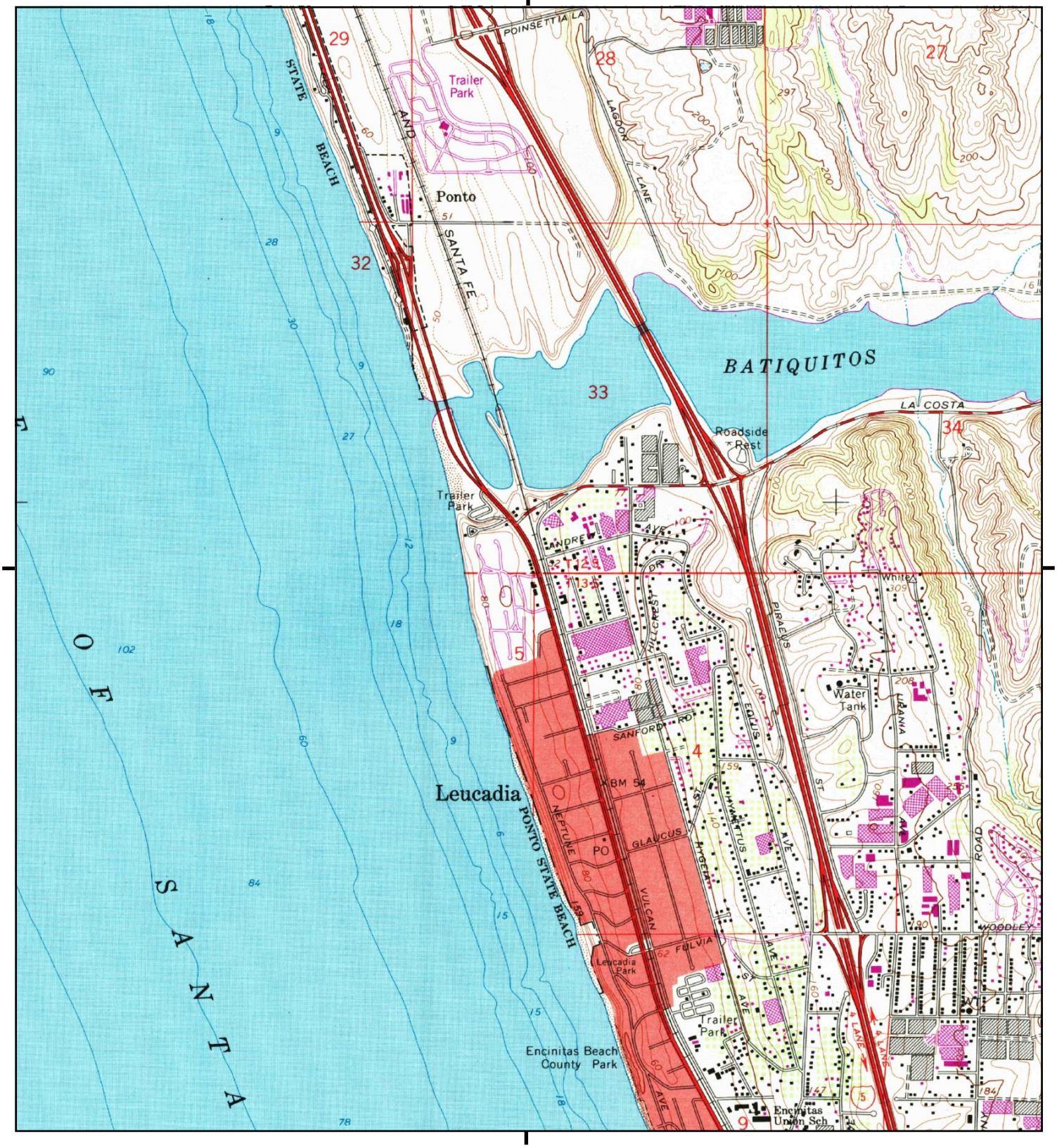
TP, Encinitas, 1997, 7.5-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1975



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

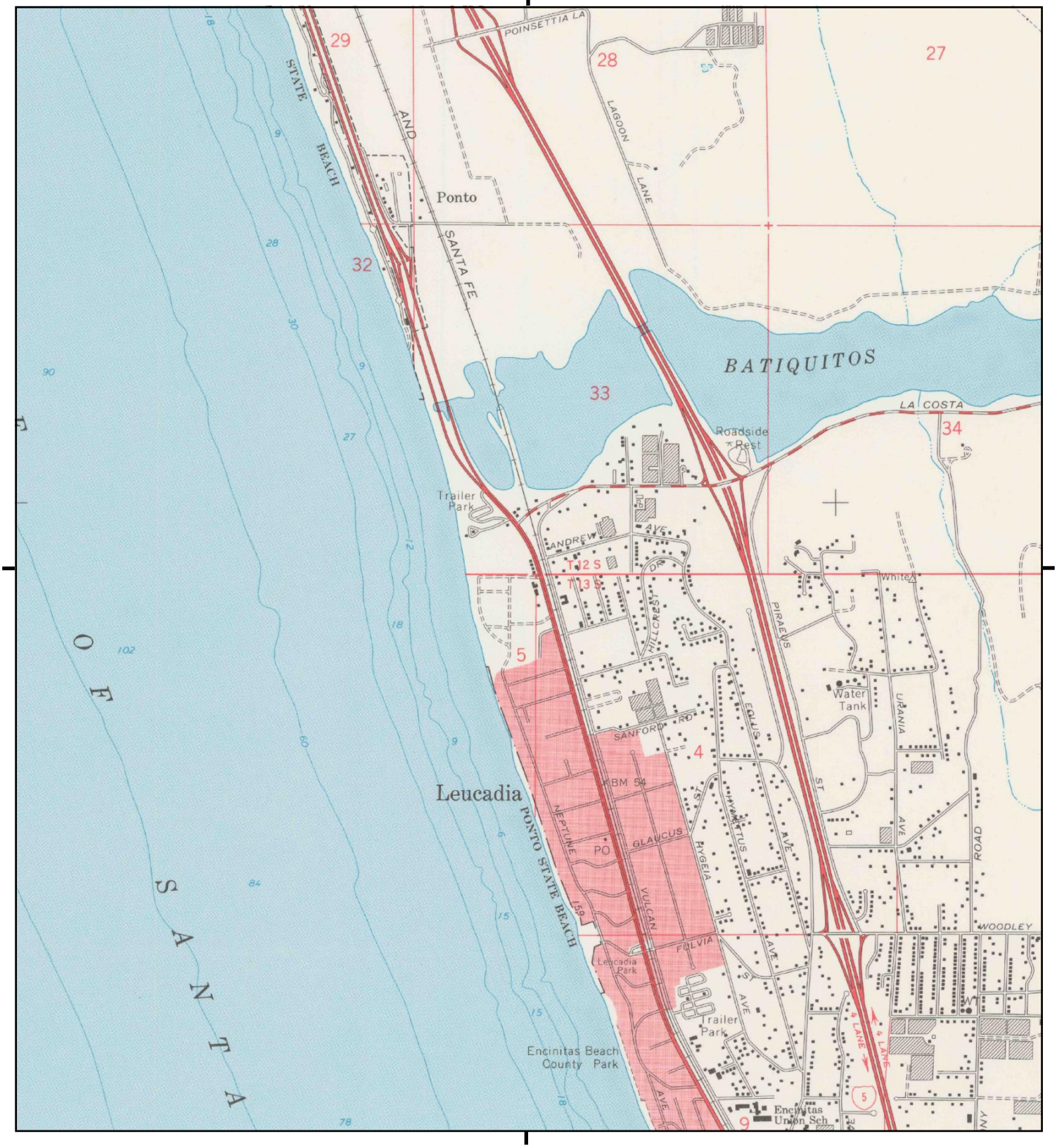
TP, Encinitas, 1975, 7.5-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

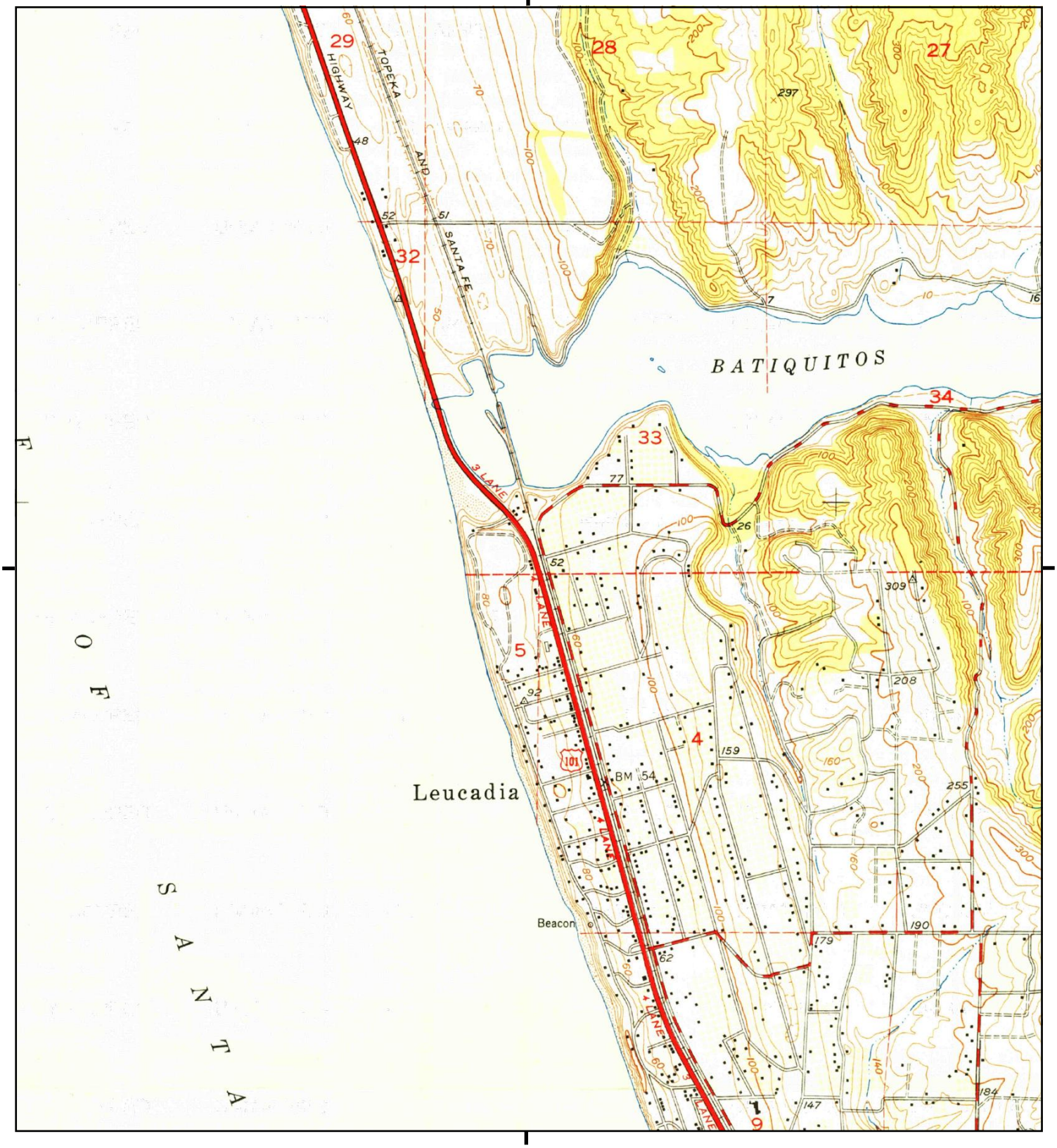
TP, Encinitas, 1968, 7.5-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1949



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

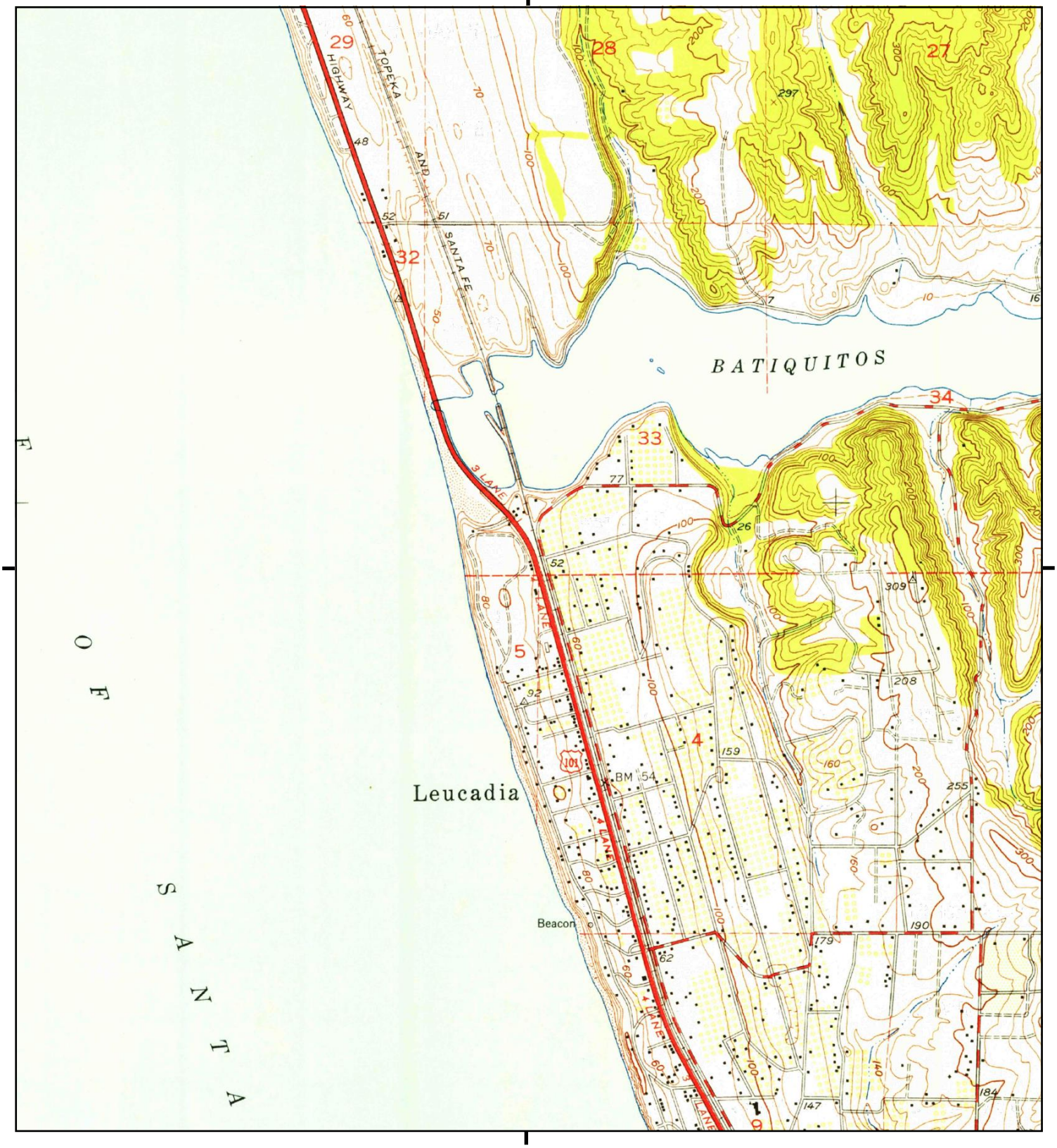
TP, Encinitas, 1949, 7.5-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1948



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Encinitas, 1948, 7.5-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1947

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

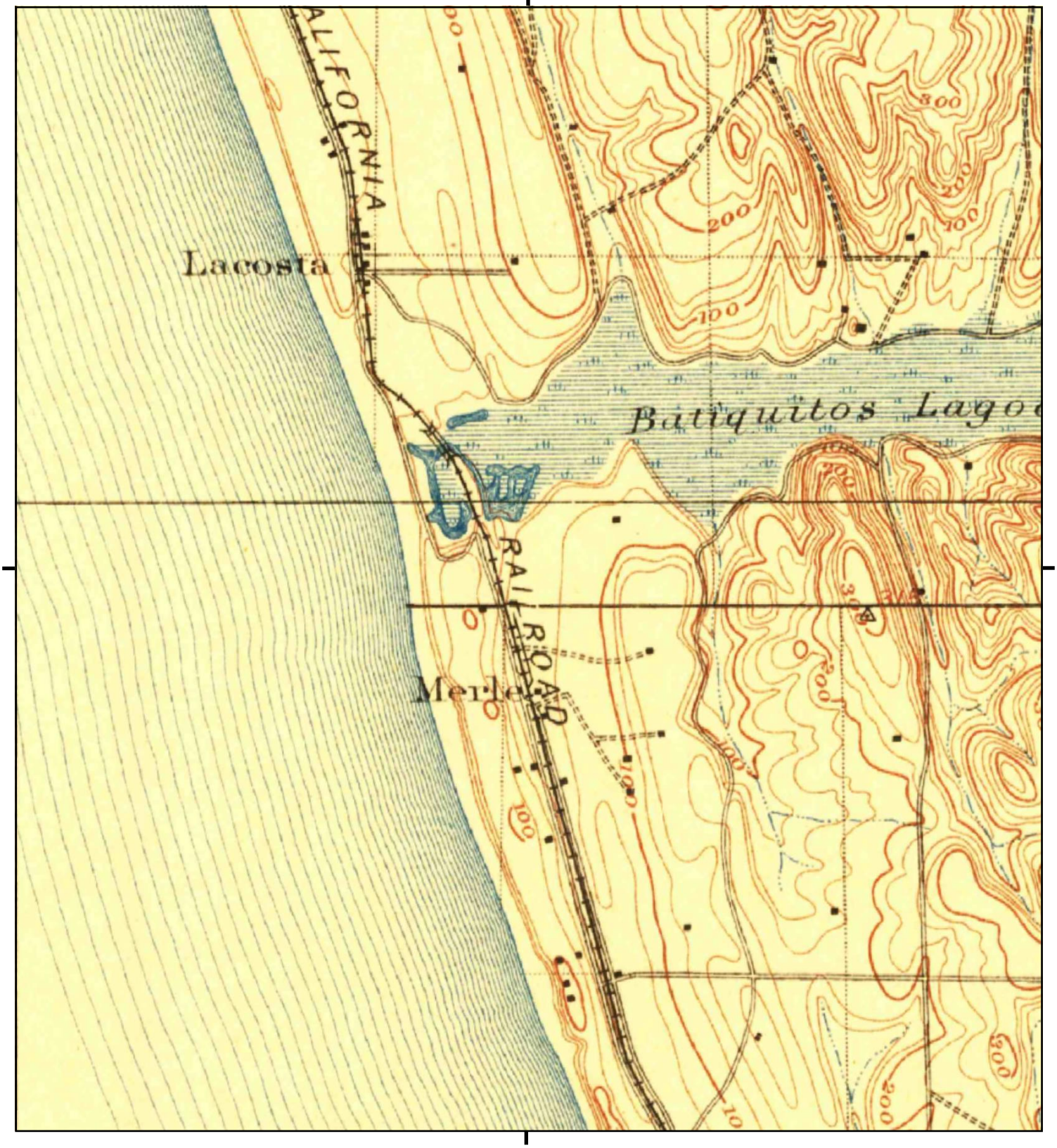
TP, OCEANSIDE, 1947, 15-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1901



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

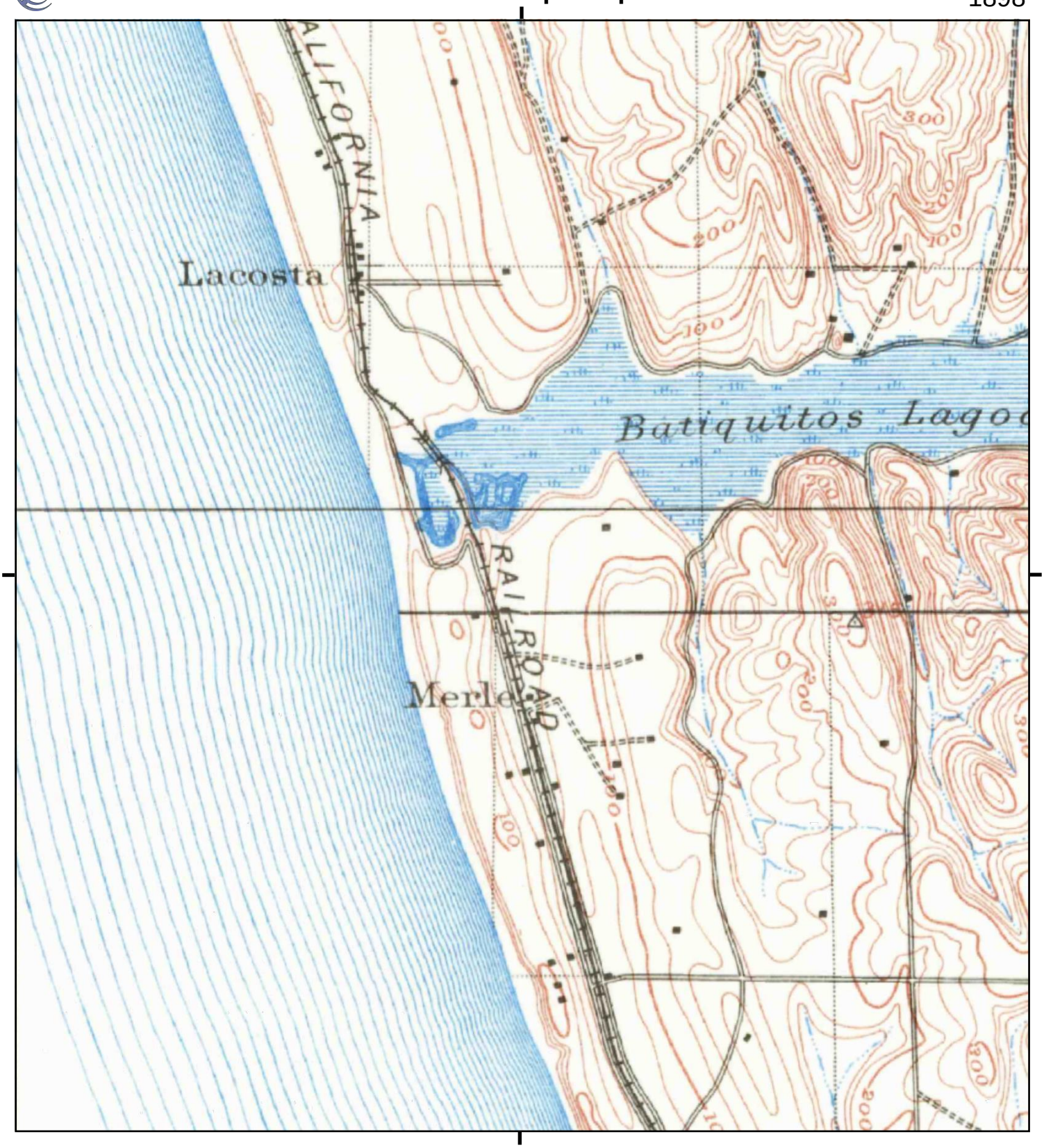
TP, Oceanside, 1901, 15-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1898



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Oceanside, 1898, 15-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1893

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Oceanside, 1893, 15-minute

SITE NAME: 1900 N Highway 101
ADDRESS: 1900 N Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

1900 N Highway 101

1900 N Highway 101

Encinitas, CA 92024

Inquiry Number: 5744045.11

August 07, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

08/07/19

Site Name:

1900 N Highway 101
1900 N Highway 101
Encinitas, CA 92024
EDR Inquiry # 5744045.11

Client Name:

Hovey Environmental
2929 Chatsworth Blvd
San Diego, CA 92106-0000
Contact: Caroline Hovey

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1990	1"=500'	Flight Date: September 06, 1990	USDA
1985	1"=500'	Flight Date: September 13, 1985	USDA
1979	1"=500'	Flight Date: February 13, 1979	EDR Proprietary Landiscor
1970	1"=500'	Flight Date: March 06, 1970	EDR Proprietary Landiscor
1967	1"=500'	Flight Date: May 07, 1967	USGS
1964	1"=500'	Flight Date: April 09, 1964	USDA
1953	1"=500'	Flight Date: April 14, 1953	USDA
1947	1"=500'	Flight Date: January 15, 1947	USGS
1939	1"=500'	Flight Date: April 16, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

INQUIRY #: 5744045.11

YEAR: 2016

= 500'

N

EDR

INQUIRY #: 5744045.11
YEAR: 2012
= 500'
N
EDR

INQUIRY #: 5744045.11
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 5744045.11

YEAR: 2005

= 500'

N

EDR

INQUIRY #: 5744045.11
YEAR: 1994
= 500'
N
EDR

INQUIRY #: 5744045.11

YEAR: 1990

= 500'

N

EDR

INQUIRY #: 5744045.11

YEAR: 1985

= 500'

N

EDR

INQUIRY #: 5744045.11

YEAR: 1979

= 500'

N

EDR

INQUIRY #: 5744045.11

YEAR: 1970

= 500'

N

EDR

INQUIRY #: 5744045.11

YEAR: 1967

= 500'

N

EDR

INQUIRY #: 5744045.11

YEAR: 1964

= 500'

N

EDR

INQUIRY #: 5744045.11
YEAR: 1953
= 500'
N
EDR

INQUIRY #: 5744045.11

YEAR: 1947

= 500'

N

EDR

INQUIRY #: 5744045.11
YEAR: 1939
= 500'
N
EDR

APPENDIX E

REGULATORY RECORDS DOCUMENTATION

LOCAL, STATE, AND FEDERAL

REGULATORY DATABASE FINDINGS

REGIONAL PHYSICAL SETTING DATA

1900 N Highway 101
1900 N Highway 101
Encinitas, CA 92024

Inquiry Number: 5744045.2s
August 07, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	112
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-10
Physical Setting Source Map Findings	A-12
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1900 N HIGHWAY 101
ENCINITAS, CA 92024

COORDINATES

Latitude (North):	33.0805860 - 33˚ 4' 50.10''
Longitude (West):	117.3081050 - 117˚ 18' 29.17''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	471243.6
UTM Y (Meters):	3660071.5
Elevation:	66 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641296 ENCINITAS, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1900 N HIGHWAY 101
ENCINITAS, CA 92024

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	DORADO HOLDINGS LLC	1900 N COAST HIGHWAY	HAZNET		TP
A2	NORTH COAST LAWNMOWE	1900 N HWY 101	HAZNET		TP
A3	REBEL RENTS INC	1900 N HWY 101	San Diego Co. HMMD		TP
A4	NORTH COAST LAWNMOWE	1900 N HWY 101	San Diego Co. HMMD		TP
A5	HANDY EQUIPMENT RENT	1900 N HWY 101	San Diego Co. HMMD		TP
A6	REBEL RENTS	1900 N HWY 101 STE C	HAZNET		TP
7	5-UNIT RESIDENTIAL P	1865 NORTH VULCAN AV	CPS-SLIC, CERS	Lower	417, 0.079, ESE
B8	JEFF WESTFALL	1809 MILLBANK ROAD	RCRA NonGen / NLR	Lower	495, 0.094, South
B9	ARCO	1766 HWY 101 N	LUST	Lower	497, 0.094, SSE
C10	IMPERIAL STATIONS IN	1766 N COAST HIGHWAY	EDR Hist Auto	Lower	569, 0.108, SSE
C11	ARCO	1766 N HIGHWAY 101	SWEEPS UST	Lower	569, 0.108, SSE
C12	IMPERIAL STATIONS, I	1766 N HWY 101	UST	Lower	569, 0.108, SSE
C13	IMPERIAL STATIONS IN	1766 N COAST HIGHWAY	RCRA NonGen / NLR	Lower	569, 0.108, SSE
C14	FAST GAS	1766 N COAST HIGHWAY	HIST UST	Lower	569, 0.108, SSE
C15	ARCO	1766 N HY 101	SAN DIEGO CO. SAM, SAN DIEGO CO LOP, CERS	Lower	569, 0.108, SSE
C16	FAST GAS	1766 N HWY 101	LUST, San Diego Co. HMMD, CERS HAZ WASTE, HIST...	Lower	569, 0.108, SSE
17	MAY & JOHN MCISAAC	1833 PARLIAMENT ROAD	RCRA NonGen / NLR	Higher	664, 0.126, West
D18	EATON BEACH ESTATES,	224 ANDREW AV	SAN DIEGO CO. SAM, CPS-SLIC, San Diego Co. HMMD,...	Higher	1140, 0.216, ENE
D19	BARRETT AMERICAN	236 ANDREW AV	LUST, SAN DIEGO CO. SAM, SAN DIEGO CO LOP, CERS	Higher	1227, 0.232, ENE
20	GAYLORD BAHLMANN INC	1657 VULCAN	SAN DIEGO CO. SAM, CPS-SLIC, San Diego Co. HMMD,...	Lower	1513, 0.287, SSE
E21	FIRST AMERICAN BANK	1508 HWY 101 N	LUST	Lower	2426, 0.459, SSE
F22	WESTON FAMILY TRUST	510 LA COSTA AVENUE	CPS-SLIC, HAZNET, CERS	Higher	2498, 0.473, ENE
E23	FIRST AMERICAN BANK	1508 101	HIST CORTESE	Lower	2517, 0.477, SSE
E24	ART WOLDENGA AND/OR	1508 N HIGHWAY 101	LUST, SWEEPS UST, CERS	Lower	2517, 0.477, SSE
E25	LEUCADIA AUTO BODY	1508 N HY 101	SAN DIEGO CO. SAM, CERS	Lower	2517, 0.477, SSE
E26	ART WOLDENGA AND/OR	1508 N HY 101	SAN DIEGO CO. SAM, SAN DIEGO CO LOP	Lower	2517, 0.477, SSE
E27	LEUCADIA AUTO BODY	1508 N HY 101	CPS-SLIC, San Diego Co. HMMD	Lower	2517, 0.477, SSE
F28	LA COSTA HOTEL	516 LA COSTA AVE	CPS-SLIC, CERS	Higher	2622, 0.497, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
DORADO HOLDINGS LLC 1900 N COAST HIGHWAY ENCINITAS, CA 92024	HAZNET GEPAID: CAL000338504	N/A
NORTH COAST LAWNMOWE 1900 N HWY 101 LEUCADIA, CA 92024	HAZNET GEPAID: CAL000018800	N/A
REBEL RENTS INC 1900 N HWY 101 ENCINITAS, CA 92024	San Diego Co. HMMD	N/A
NORTH COAST LAWNMOWE 1900 N HWY 101 ENSINITAS, CA 92024	San Diego Co. HMMD	N/A
HANDY EQUIPMENT RENT 1900 N HWY 101 ENCINITAS, CA 92024	San Diego Co. HMMD	N/A
REBEL RENTS 1900 N HWY 101 STE C ENCINITAS, CA 92024	HAZNET GEPAID: CAL000254921	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites

EXECUTIVE SUMMARY

NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR ..... EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing

EXECUTIVE SUMMARY

AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register
PFAS ..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CA FID UST ..... Facility Inventory Database

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing

SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing

EXECUTIVE SUMMARY

PROC..... Certified Processors Database
Notify 65..... Proposition 65 Records
UIC..... UIC Listing
UIC GEO..... UIC GEO (GEOTRACKER)
WASTEWATER PITS..... Oil Wastewater Pits Listing
WDS..... Waste Discharge System
WIP..... Well Investigation Program Case List
MILITARY PRIV SITES..... MILITARY PRIV SITES (GEOTRACKER)
PROJECT..... PROJECT (GEOTRACKER)
WDR..... Waste Discharge Requirements Listing
SAN DIEGO CO LOP..... Local Oversight Program Listing
CIWQS..... California Integrated Water Quality System
CERS..... CERS
NON-CASE INFO..... NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS..... OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS..... PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT..... SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ..... Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

EXECUTIVE SUMMARY

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BARRETT AMERICAN	***236 ANDREW AV***	***ENE 1/8 - 1/4 (0.232 mi.)***	***D19***	***95***
Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Global Id: T06019729886				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO	1766 HWY 101 N	SSE 0 - 1/8 (0.094 mi.)	B9	26
Database: LUST REG 9, Date of Government Version: 03/01/2001 Case Number: 9UT4078 Status: Preliminary site assessment workplan submitted				
FAST GAS	***1766 N HWY 101***	***SSE 0 - 1/8 (0.108 mi.)***	***C16***	***32***
Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Global Id: T0607399253				
FIRST AMERICAN BANK	1508 HWY 101 N	SSE 1/4 - 1/2 (0.459 mi.)	E21	99
Database: LUST REG 9, Date of Government Version: 03/01/2001 Case Number: 9UT3252 Closed Date: 3/7/97 Status: Case Closed				
ART WOLDENGA AND/OR	***1508 N HIGHWAY 101***	***SSE 1/4 - 1/2 (0.477 mi.)***	***E24***	***102***
Database: LUST, Date of Government Version: 12/10/2018 Status: Completed - Case Closed Global Id: T0607302005				

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there are 6 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EATON BEACH ESTATES,	***224 ANDREW AV***	***ENE 1/8 - 1/4 (0.216 mi.)***	***D18***	***90***
Case Number: H99138-001 Facility Status: Closed Case				
BARRETT AMERICAN	***236 ANDREW AV***	***ENE 1/8 - 1/4 (0.232 mi.)***	***D19***	***95***
Case Number: 226452 Facility Status: Closed Case				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO	***1766 N HY 101***	***SSE 0 - 1/8 (0.108 mi.)***	***C15***	***31***

Case Number: H04837-001
Facility Status: Closed Case

GAYLORD BAHLMANN INC	***1657 VULCAN***	***SSE 1/4 - 1/2 (0.287 mi.)***	***20***	***97***
Case Number: H99292-001				
Facility Status: Closed Case				
LEUCADIA AUTO BODY	***1508 N HY 101***	***SSE 1/4 - 1/2 (0.477 mi.)***	***E25***	***104***
Case Number: H05014-001				
Case Number: H05014-002				
Facility Status: Closed Case				
ART WOLDENGA AND/OR	***1508 N HY 101***	***SSE 1/4 - 1/2 (0.477 mi.)***	***E26***	***104***
Case Number: H32587-001				
Facility Status: Closed Case				

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 6 CPS-SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EATON BEACH ESTATES,	***224 ANDREW AV***	***ENE 1/8 - 1/4 (0.216 mi.)***	***D18***	***90***
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Facility Status: Completed - Case Closed				
Global Id: T06019755099				
WESTON FAMILY TRUST	***510 LA COSTA AVENUE***	***ENE 1/4 - 1/2 (0.473 mi.)***	***F22***	***100***
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Facility Status: Open - Active				
Global Id: T10000010402				
LA COSTA HOTEL	***516 LA COSTA AVE***	***ENE 1/4 - 1/2 (0.497 mi.)***	***F28***	***111***
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Facility Status: Open - Active				
Global Id: T10000012696				

Lower Elevation	Address	Direction / Distance	Map ID	Page
5-UNIT RESIDENTIAL P	***1865 NORTH VULCAN AV***	***ESE 0 - 1/8 (0.079 mi.)***	***7***	***23***
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Facility Status: Completed - Case Closed				
Global Id: T10000003413				
GAYLORD BAHLMANN INC	***1657 VULCAN***	***SSE 1/4 - 1/2 (0.287 mi.)***	***20***	***97***
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Facility Status: Completed - Case Closed				
Global Id: SLT19776403				
LEUCADIA AUTO BODY	***1508 N HY 101***	***SSE 1/4 - 1/2 (0.477 mi.)***	***E27***	***105***
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Facility Status: Completed - Case Closed				
Global Id: T0608121580				
Global Id: T0608127646				

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
IMPERIAL STATIONS, I Database: UST, Date of Government Version: 06/10/2019 Facility Id: 37-000-201254	1766 N HWY 101	SSE 0 - 1/8 (0.108 mi.)	C12	28

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 04/09/2019 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FAST GAS	***1766 N HWY 101***	***SSE 0 - 1/8 (0.108 mi.)***	***C16***	***32***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO Status: A Tank Status: A Comp Number: 4837	1766 N HIGHWAY 101	SSE 0 - 1/8 (0.108 mi.)	C11	27

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FAST GAS Facility Id: 00000011133	1766 N COAST HIGHWAY	SSE 0 - 1/8 (0.108 mi.)	C14	30
FAST GAS	***1766 N HWY 101***	***SSE 0 - 1/8 (0.108 mi.)***	***C16***	***32***

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 04/09/2019 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FAST GAS	***1766 N HWY 101***	***SSE 0 - 1/8 (0.108 mi.)***	***C16***	***32***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAY & JOHN MCISAAC EPA ID:: CAC002967304	1833 PARLIAMENT ROAD	W 1/8 - 1/4 (0.126 mi.)	17	89

Lower Elevation	Address	Direction / Distance	Map ID	Page
JEFF WESTFALL EPA ID:: CAC002981365	1809 MILLBANK ROAD	S 0 - 1/8 (0.094 mi.)	B8	24
IMPERIAL STATIONS IN EPA ID:: CAL000321592	1766 N COAST HIGHWAY	SSE 0 - 1/8 (0.108 mi.)	C13	29

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST AMERICAN BANK	1508 101	SSE 1/4 - 1/2 (0.477 mi.)	E23	102

EXECUTIVE SUMMARY

Reg Id: 9UT3252

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

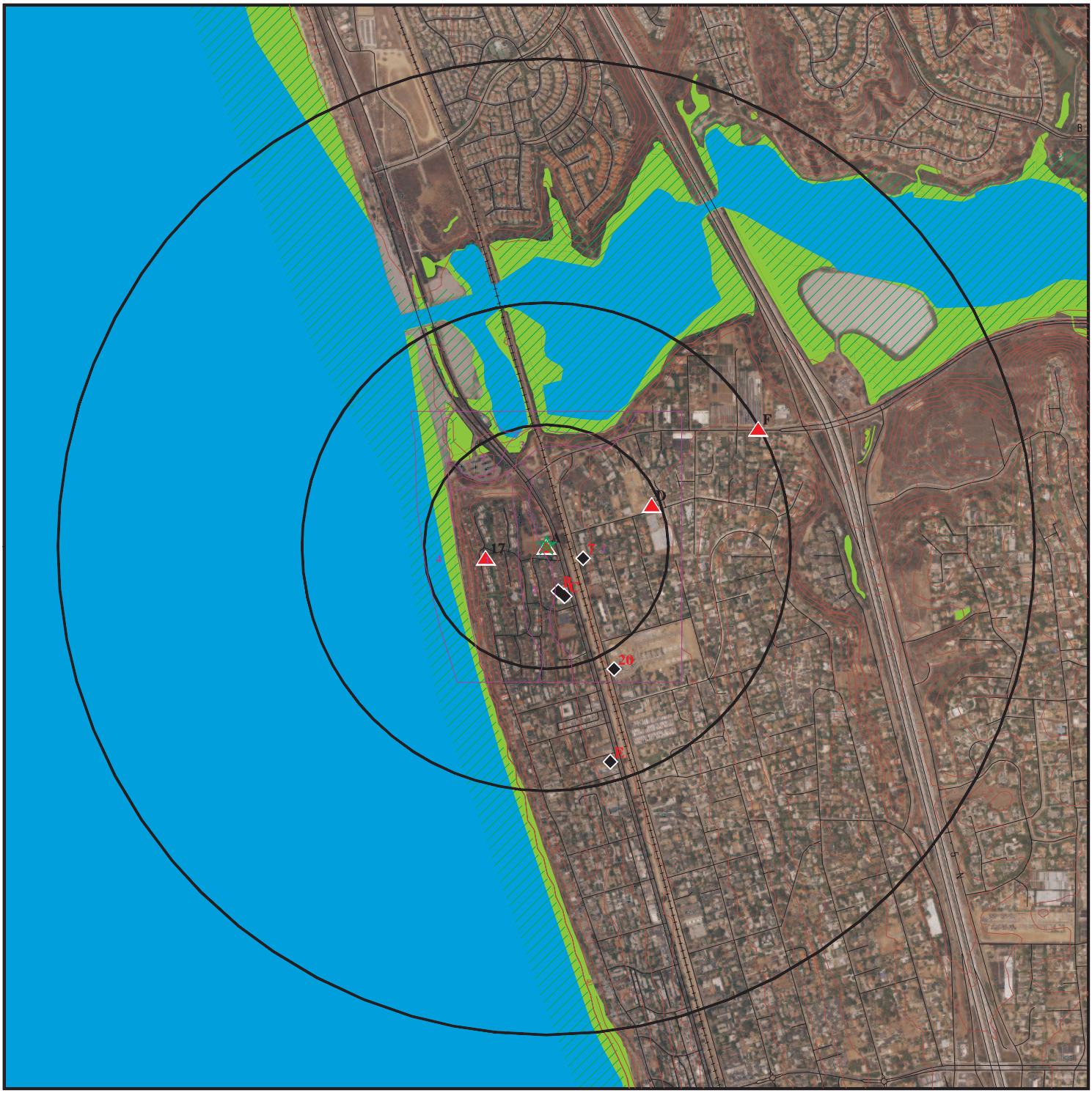
Lower Elevation	Address	Direction / Distance	Map ID	Page
IMPERIAL STATIONS IN	1766 N COAST HIGHWAY	SSE 0 - 1/8 (0.108 mi.)	C10	26

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
OLIVENHAIN AND COAST HIGHWAY 101 S	CIWQS
COCA COLA BOTTLING TRUCK SPIL	SAN DIEGO CO. SAM
GREYSTONE HOMES PROPERTY	SAN DIEGO CO. SAM

OVERVIEW MAP - 5744045.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 1900 N Highway 101 ADDRESS: 1900 N Highway 101 Encinitas CA 92024 LAT/LONG: 33.080586 / 117.308105	CLIENT: Hovey Environmental CONTACT: Caroline Hovey INQUIRY #: 5744045.2s DATE: August 07, 2019 2:59 pm

Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 5744045.2S

0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 1900 N Highway 101	CLIENT: Hovey Environmental
ADDRESS: 1900 N Highway 101 Encinitas CA 92024	CONTACT: Caroline Hovey INQUIRY #: 5744045.2s
LAT/LONG: 33.080586 / 117.308105	DATE: August 07, 2019 3:05 pm

Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		2	1	2	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SAN DIEGO CO. SAM	0.500		1	2	3	NR	NR	6
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		1	1	4	NR	NR	6
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMD	TP	3	NR	NR	NR	NR	NR	3
CERS HAZ WASTE	0.250		1	0	NR	NR	NR	1
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		2	0	NR	NR	NR	2
CERS TANKS	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	1	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	3	NR	NR	NR	NR	NR	3
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
SAN DIEGO CO LOP	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		6	13	5	10	0	0	34

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **DORADO HOLDINGS LLC DBA TOOLSHED EQUIPMENT RENTAL**
1900 N COAST HIGHWAY 101 STE A
ENCINITAS, CA 92024 | **HAZNET** | **S113154740**
N/A

Site 1 of 6 in cluster A

Actual: 66 ft.

HAZNET:

Name:	DORADO HOLDINGS LLC DBA TOOLSHED EQUIPMENT RENTAL
Address:	1900 N COAST HIGHWAY 101 STE A
City,State,Zip:	ENCINITAS, CA 920241055
Year:	2009
GEPAID:	CAL000338504
Contact:	JOSE ALVAREZ R.M.
Telephone:	7607436300
Mailing Name:	Not reported
Mailing Address:	142 W MISSION AVE
Mailing City,St,Zip:	ESCONDIDO, CA 920251709
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	0.187
CA Waste Code:	343-Unspecified organic liquid mixture
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	San Diego

Name:	DORADO HOLDINGS LLC DBA TOOLSHED EQUIPMENT RENTAL
Address:	1900 N COAST HIGHWAY 101 STE A
City,State,Zip:	ENCINITAS, CA 920241055
Year:	2009
GEPAID:	CAL000338504
Contact:	JOSE ALVAREZ R.M.
Telephone:	7607436300
Mailing Name:	Not reported
Mailing Address:	142 W MISSION AVE
Mailing City,St,Zip:	ESCONDIDO, CA 920251709
Gen County:	San Diego
TSD EPA ID:	TXD077603371
TSD County:	99
Tons:	0.075
CA Waste Code:	214-Unspecified solvent mixture
Method:	H061-Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	San Diego

Name:	DORADO HOLDINGS LLC DBA TOOLSHED EQUIPMENT RENTAL
Address:	1900 N COAST HIGHWAY 101 STE A
City,State,Zip:	ENCINITAS, CA 920241055
Year:	2009
GEPAID:	CAL000338504
Contact:	JOSE ALVAREZ R.M.
Telephone:	7607436300
Mailing Name:	Not reported
Mailing Address:	142 W MISSION AVE
Mailing City,St,Zip:	ESCONDIDO, CA 920251709
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	0.187
CA Waste Code:	343-Unspecified organic liquid mixture

DORADO HOLDINGS LLC DBA TOOLSHED EQUIPMENT RENTAL (Continued) **S113154740**

Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	San Diego

Name:	DORADO HOLDINGS LLC DBA TOOLSHED EQUIPMENT RENTAL
Address:	1900 N COAST HIGHWAY 101 STE A
City,State,Zip:	ENCINITAS, CA 920241055
Year:	2009
GEPAID:	CAL000338504
Contact:	JOSE ALVAREZ R.M.
Telephone:	7607436300
Mailing Name:	Not reported
Mailing Address:	142 W MISSION AVE
Mailing City,St,Zip:	ESCONDIDO, CA 920251709
Gen County:	San Diego
TSD EPA ID:	TXD077603371
TSD County:	99
Tons:	0.075
CA Waste Code:	214-Unspecified solvent mixture
Method:	H061-Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	San Diego

A2 Target Property | **NORTH COAST LAWNMOWER** | **HAZNET** | **S123764360**
1900 N HWY 101 | **N/A**
LEUCADIA, CA 92024

Site 2 of 6 in cluster A

Actual: 66 ft.

HAZNET:

Name:	NORTH COAST LAWNMOWER
Address:	1900 N HWY 101
City,State,Zip:	LEUCADIA, CA 920240000
Year:	1992
GEPAID:	CAL000018800
Contact:	UNDELIVERABLE FEE FORM 4-94
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	1900 N HWY 101
Mailing City,St,Zip:	LEUCADIA, CA 920240000
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	2.502
CA Waste Code:	222-Oil/water separation sludge
Method:	01-
Facility County:	San Diego

Name:	NORTH COAST LAWNMOWER
Address:	1900 N HWY 101
City,State,Zip:	LEUCADIA, CA 920240000
Year:	1992
GEPAID:	CAL000018800
Contact:	UNDELIVERABLE FEE FORM 4-94
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	1900 N HWY 101
Mailing City,St,Zip:	LEUCADIA, CA 920240000
Gen County:	San Diego

NORTH COAST LAWNMOWER (Continued) **S123764360**

TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	1.4595
CA Waste Code:	222-Oil/water separation sludge
Method:	-
Facility County:	San Diego

A3 Target Property **REBEL RENTS INC** **San Diego Co. HMMD** **S106072259**
1900 N HWY 101 **N/A**
ENCINITAS, CA 92024

Site 3 of 6 in cluster A

Actual: 66 ft.

HMMD SAN DIEGO:

Name:	REBEL RENTS INC
Address:	1900 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	202324
Business Type:	6HK60
EPA Id Number:	CAL000254921
APN:	DEH-116418
Last HMMD Inspection:	01/10/2008
Facility Telephone:	760-633-3100
Permit Status:	INAC
Permit Expiration:	01/31/2009
Date Last Updated:	11/02/2012
Facility Owner:	REBEL RENTS, INC
Facility Mailing Address:	1900 N HY 101 #A
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV0131
Violation:	UPF Permit NOT OBTAINED for HAZWASTE
Violation Citation:	A Unified Program Facility permit has not been obtained for the generation of hazardous waste. 68.905
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV0138
Violation:	NO TSDF SIGNED MANIFEST ONSITE
Violation Citation:	Generator has not maintained the required signed copy of the hazardous waste manifest from the TSD facility on site for review. CCR 66262.40(a)
Activity:	Inactive Permit

REBEL RENTS INC (Continued) **S106072259**

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV0202
Violation:	WASTE CONTAINER W/O LABELS
Violation Citation:	Hazardous waste containers &/or tanks are missing labels, accumulation date and/or are improperly labeled. CCR 66262.34(a)(2); 66262.34(a)(3) & 66262.34(f)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV1002
Violation:	HMBP NOT ESTABISHED/IMPLEMENTED.
Violation Citation:	Hazardous materials handler has not established/implemented a business plan. HSC 25503.5(a)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0138
Violation:	NO TSDF SIGNED MANIFEST ONSITE
Violation Citation:	Generator has not maintained the required signed copy of the hazardous waste manifest from the TSD facility on site for review. CCR 66262.40(a)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0201
Violation:	WASTE CONTAINER NOT CLOSED
Violation Citation:	Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0202
Violation:	WASTE CONTAINER W/O LABELS
Violation Citation:	Hazardous waste containers &/or tanks are missing labels, accumulation date and/or are improperly labeled. CCR 66262.34(a)(2); 66262.34(a)(3) & 66262.34(f)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0207
Violation:	FIRE/EXPLOSION/RELEASE NOT MINIMIZED
Violation Citation:	Facility not maintained &/operated to minimize possibility of fire, explosion or release. CCR 66265.31
Activity:	Inactive Permit

REBEL RENTS INC (Continued) **S106072259**

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0216
Violation:	HAZMATS WITHOUT PROPER LABELS
Violation Citation:	Hazardous materials have not been adequately labeled within 10 days & are now declared hazardous waste. HSC 25124(b)(3)(A) & 66262.34(f)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV1009
Violation:	HMBP: INADEQUATE SITE MAP
Violation Citation:	Business Plan does not have a site map which provides sufficient or complete information for emergency response agencies. HSC 25509(a)(5) & 25505(a)(2)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	01/10/2008
Violation Code:	6HV1009
Violation:	HMBP: INADEQUATE SITE MAP
Violation Citation:	Business Plan does not have a site map which provides sufficient or complete information for emergency response agencies. HSC 25509(a)(5) & 25505(a)(2)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	01/10/2008
Violation Code:	6HV1018
Violation:	INVENTORY INCOMPLETE/NOT AMENDED
Violation Citation:	Inventory not amended for 100% increase of hazardous material onsite or inventory is incomplete. 25509, 25510
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	01/10/2008
Violation Code:	6HV0135
Violation:	MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation:	Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	01/10/2008
Violation Code:	6HV0229
Violation:	HW CONTAINERS NOT INSPECTED WEEKLY
Violation Citation:	Failed to conduct weekly inspections. CFR 265.174
Activity:	Inactive Permit

REBEL RENTS INC (Continued) **S106072259**

Name:	REBEL RENTS INC
Address:	1900 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	202324
Business Type:	6HK60
EPA Id Number:	CAL000254921
APN:	DEH-116418
Last HMMD Inspection:	01/10/2008
Facility Telephone:	760-633-3100
Permit Status:	INAC
Permit Expiration:	01/31/2009
Date Last Updated:	11/02/2012
Facility Owner:	REBEL RENTS, INC
Facility Mailing Address:	1900 N HY 101 #A
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV0131
Violation:	UPF Permit NOT OBTAINED for HAZWASTE
Violation Citation:	A Unified Program Facility permit has not been obtained for the generation of hazardous waste. 68.905
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV0138
Violation:	NO TSDF SIGNED MANIFEST ONSITE
Violation Citation:	Generator has not maintained the required signed copy of the hazardous waste manifest from the TSD facility on site for review. CCR 66262.40(a)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003
Violation Code:	6HV0202
Violation:	WASTE CONTAINER W/O LABELS
Violation Citation:	Hazardous waste containers &/or tanks are missing labels, accumulation date and/or are improperly labeled. CCR 66262.34(a)(2); 66262.34(a)(3) & 66262.34(f)
Activity:	Inactive Permit

Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	08/25/2003

REBEL RENTS INC (Continued) **S106072259**

Violation Code:	6HV1002
Violation:	HMBP NOT ESTABISHED/IMPLEMENTED.
Violation Citation:	Hazardous materials handler has not established/implemented a business plan. HSC 25503.5(a)
Activity:	Inactive Permit
Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0138
Violation:	NO TSDF SIGNED MANIFEST ONSITE
Violation Citation:	Generator has not maintained the required signed copy of the hazardous waste manifest from the TSD facility on site for review. CCR 66262.40(a)
Activity:	Inactive Permit
Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0201
Violation:	WASTE CONTAINER NOT CLOSED
Violation Citation:	Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity:	Inactive Permit
Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0202
Violation:	WASTE CONTAINER W/O LABELS
Violation Citation:	Hazardous waste containers &/or tanks are missing labels, accumulation date and/or are improperly labeled. CCR 66262.34(a)(2); 66262.34(a)(3) & 66262.34(f)
Activity:	Inactive Permit
Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0207
Violation:	FIRE/EXPLOSION/RELEASE NOT MINIMIZED
Violation Citation:	Facility not maintained &/operated to minimize possibility of fire, explosion or release. CCR 66265.31
Activity:	Inactive Permit
Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV0216
Violation:	HAZMATS WITHOUT PROPER LABELS
Violation Citation:	Hazardous materials have not been adequately labeled within 10 days & are now declared hazardous waste. HSC 25124(b)(3)(A) & 66262.34(f)
Activity:	Inactive Permit
Permit Number:	202324
Update Date:	11/02/2012
Inspection Date:	09/06/2005
Violation Code:	6HV1009

REBEL RENTS INC (Continued) **S106072259**

Violation: HMBP: INADEQUATE SITE MAP
Violation Citation: Business Plan does not have a site map which provides sufficient or complete information for emergency response agencies. HSC 25509(a)(5) & 25505(a)(2)
Activity: Inactive Permit

Permit Number: 202324
Update Date: 11/02/2012
Inspection Date: 01/10/2008
Violation Code: 6HV1009
Violation: HMBP: INADEQUATE SITE MAP
Violation Citation: Business Plan does not have a site map which provides sufficient or complete information for emergency response agencies. HSC 25509(a)(5) & 25505(a)(2)
Activity: Inactive Permit

Permit Number: 202324
Update Date: 11/02/2012
Inspection Date: 01/10/2008
Violation Code: 6HV1018
Violation: INVENTORY INCOMPLETE/NOT AMENDED
Violation Citation: Inventory not amended for 100% increase of hazardous material onsite or inventory is incomplete. 25509, 25510
Activity: Inactive Permit

Permit Number: 202324
Update Date: 11/02/2012
Inspection Date: 01/10/2008
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: Inactive Permit

Permit Number: 202324
Update Date: 11/02/2012
Inspection Date: 01/10/2008
Violation Code: 6HV0229
Violation: HW CONTAINERS NOT INSPECTED WEEKLY
Violation Citation: Failed to conduct weekly inspections. CFR 265.174
Activity: Inactive Permit

A4 Target Property **NORTH COAST LAWNMOWER INC** **San Diego Co. HMMD** **S106061335**
1900 N HWY 101 **N/A**
ENSINITAS, CA 92024

Site 4 of 6 in cluster A

Actual: 66 ft.

HMMD SAN DIEGO:
Name: NORTH COAST LAWNMOWER INC
Address: 1900 N HWY 101
City,State,Zip: ENSINITAS, CA 92024
Permit Number: 116419
Business Type: Not reported
EPA Id Number: CAL000018800
APN: DEH-116419

NORTH COAST LAWNMOWER INC (Continued) **S106061335**

Last HMMD Inspection:	02/23/1991
Facility Telephone:	Not reported
Permit Status:	INAC
Permit Expiration:	02/23/1991
Date Last Updated:	11/02/2012
Facility Owner:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

A5 Target Property **HANDY EQUIPMENT RENTALS** **San Diego Co. HMMD** **S106061334**
1900 N HWY 101 **N/A**
ENCINITAS, CA 92024

Site 5 of 6 in cluster A

Actual: 66 ft.

HMMD SAN DIEGO:

Name:	TOOLSHED EQUIPMENT RENTALS
Address:	1900 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	210944
Business Type:	6HK60
EPA Id Number:	CAL000338504
APN:	DEH-116418
Last HMMD Inspection:	06/23/2009
Facility Telephone:	760-436-1700
Permit Status:	INAC
Permit Expiration:	09/30/2011
Date Last Updated:	11/02/2012
Facility Owner:	TOM HAWTHORNE
Facility Mailing Address:	530 N ANDREASON DR
Facility Mailing City:	ESCONDIDO
Facility Mailing State:	CA
Facility Mailing Zip:	92025
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV1014
Violation:	HMBP INCOMPLETE/NOT AMENDED
Violation Citation:	HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729

HANDY EQUIPMENT RENTALS (Continued) **S106061334**

Activity:	Inactive Permit
Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0304
Violation:	WASTE DETERMINATION NOT MADE
Violation Citation:	Generator of a waste has not determined if that waste is a hazardous waste as defined by law. CCR 66262.11 & 66260.200(c)
Activity:	Inactive Permit
Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0216
Violation:	HAZMATS WITHOUT PROPER LABELS
Violation Citation:	Hazardous materials have not been adequately labeled within 10 days & are now declared hazardous waste. HSC 25124(b)(3)(A) & 66262.34(f)
Activity:	Inactive Permit
Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0218
Violation:	FILTERS:FUEL/OIL NOT LABELED OR CLOSED
Violation Citation:	Failed to label &/or close drained used oil filters &/or used fuel filters. 25250.22 and 66266.130(c)(3)
Activity:	Inactive Permit
Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS
Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	Inactive Permit
Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity:	Inactive Permit

Name:	TOOLSHED EQUIPMENT RENTALS
Address:	1900 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	210944
Business Type:	6HK60
EPA Id Number:	CAL000338504
APN:	DEH-116418
Last HMMD Inspection:	06/23/2009
Facility Telephone:	760-436-1700

HANDY EQUIPMENT RENTALS (Continued) **S106061334**

Permit Status:	INAC
Permit Expiration:	09/30/2011
Date Last Updated:	11/02/2012
Facility Owner:	TOM HAWTHORNE
Facility Mailing Address:	530 N ANDREASON DR
Facility Mailing City:	ESCONDIDO
Facility Mailing State:	CA
Facility Mailing Zip:	92025
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Violations Inactive Permits:

Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV1014
Violation:	HMBP INCOMPLETE/NOT AMENDED
Violation Citation:	HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity:	Inactive Permit

Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0304
Violation:	WASTE DETERMINATION NOT MADE
Violation Citation:	Generator of a waste has not determined if that waste is a hazardous waste as defined by law. CCR 66262.11 & 66260.200(c)
Activity:	Inactive Permit

Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0216
Violation:	HAZMATS WITHOUT PROPER LABELS
Violation Citation:	Hazardous materials have not been adequately labeled within 10 days & are now declared hazardous waste. HSC 25124(b)(3)(A) & 66262.34(f)
Activity:	Inactive Permit

Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0218
Violation:	FILTERS:FUEL/OIL NOT LABELED OR CLOSED
Violation Citation:	Failed to label &/or close drained used oil filters &/or used fuel filters. 25250.22 and 66266.130(c)(3)
Activity:	Inactive Permit

Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0225
Violation:	ACCUMULATED HW>180 OR >270 DAYS

HANDY EQUIPMENT RENTALS (Continued) **S106061334**

Violation Citation:	Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity:	Inactive Permit
Permit Number:	210944
Update Date:	11/02/2012
Inspection Date:	06/23/2009
Violation Code:	6HV0227
Violation:	HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation:	Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity:	Inactive Permit

Name:	HANDY EQUIPMENT RENTALS
Address:	1900 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	116418
Business Type:	6HK70
EPA Id Number:	CAL000018790
APN:	DEH-116418
Last HMMD Inspection:	02/11/1997
Facility Telephone:	858-942-9940
Permit Status:	INAC
Permit Expiration:	02/11/1997
Date Last Updated:	11/02/2012
Facility Owner:	ALLAN ACQUISITION
Facility Mailing Address:	1900 N HY 101
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024-1052
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Name:	TOOLSHED EQUIPMENT RENTALS
Address:	1900 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	210944
Business Type:	6HK60
EPA Id Number:	CAL000338504
APN:	DEH-116418
Last HMMD Inspection:	06/23/2009
Facility Telephone:	760-436-1700
Permit Status:	INAC
Permit Expiration:	09/30/2011
Date Last Updated:	11/02/2012
Facility Owner:	TOM HAWTHORNE
Facility Mailing Address:	530 N ANDREASON DR
Facility Mailing City:	ESCONDIDO
Facility Mailing State:	CA
Facility Mailing Zip:	92025
UST Owner:	Not reported

HANDY EQUIPMENT RENTALS (Continued) **S106061334**

Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Violations Inactive Permits:

Permit Number: 210944
Update Date: 11/02/2012
Inspection Date: 06/23/2009
Violation Code: 6HV1014
Violation: HMBP INCOMPLETE/NOT AMENDED
Violation Citation: HMBP is incomplete/inadequate/not amended to reflect changes. 25504, 25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729
Activity: Inactive Permit

Permit Number: 210944
Update Date: 11/02/2012
Inspection Date: 06/23/2009
Violation Code: 6HV0304
Violation: WASTE DETERMINATION NOT MADE
Violation Citation: Generator of a waste has not determined if that waste is a hazardous waste as defined by law. CCR 66262.11 & 66260.200(c)
Activity: Inactive Permit

Permit Number: 210944
Update Date: 11/02/2012
Inspection Date: 06/23/2009
Violation Code: 6HV0216
Violation: HAZMATS WITHOUT PROPER LABELS
Violation Citation: Hazardous materials have not been adequately labeled within 10 days & are now declared hazardous waste. HSC 25124(b)(3)(A) & 66262.34(f)
Activity: Inactive Permit

Permit Number: 210944
Update Date: 11/02/2012
Inspection Date: 06/23/2009
Violation Code: 6HV0218
Violation: FILTERS:FUEL/OIL NOT LABELED OR CLOSED
Violation Citation: Failed to label &/or close drained used oil filters &/or used fuel filters. 25250.22 and 66266.130(c)(3)
Activity: Inactive Permit

Permit Number: 210944
Update Date: 11/02/2012
Inspection Date: 06/23/2009
Violation Code: 6HV0225
Violation: ACCUMULATED HW>180 OR >270 DAYS
Violation Citation: Accumulated waste too long (>180 or 270 days). 66262.34(d), CFR 262.34(e)&(f), &/or 25201(a) [>90 days for AHW waste]
Activity: Inactive Permit

Permit Number: 210944
Update Date: 11/02/2012
Inspection Date: 06/23/2009
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE

HANDY EQUIPMENT RENTALS (Continued) **S106061334**

Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: Inactive Permit

A6 Target Property **REBEL RENTS**
1900 N HWY 101 STE C
ENCINITAS, CA 92024

HAZNET **S113120469**
N/A

Site 6 of 6 in cluster A

Actual: 66 ft.

HAZNET:

Name:	REBEL RENTS
Address:	1900 N HWY 101 STE C
City,State,Zip:	ENCINITAS, CA 92024
Year:	2008
GEPAID:	CAL000254921
Contact:	GEORGE MCNULTY
Telephone:	7606333100
Mailing Name:	Not reported
Mailing Address:	PO BOX 11610
Mailing City,St,Zip:	CHANDLER, AZ 925900000
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	6.3
CA Waste Code:	135-Unspecified aqueous solution
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	San Diego

Name:	REBEL RENTS
Address:	1900 N HWY 101 STE C
City,State,Zip:	ENCINITAS, CA 92024
Year:	2008
GEPAID:	CAL000254921
Contact:	GEORGE MCNULTY
Telephone:	7606333100
Mailing Name:	Not reported
Mailing Address:	PO BOX 11610
Mailing City,St,Zip:	CHANDLER, AZ 925900000
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	6.3
CA Waste Code:	135-Unspecified aqueous solution
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	San Diego

Name:	REBEL RENTS
Address:	1900 N HWY 101 STE C
City,State,Zip:	ENCINITAS, CA 92024
Year:	2007
GEPAID:	CAL000254921
Contact:	GEORGE MCNULTY
Telephone:	7606333100
Mailing Name:	Not reported

REBEL RENTS (Continued) **S113120469**

Mailing Address: PO BOX 11610
Mailing City,St,Zip: CHANDLER, AZ 925900000
Gen County: San Diego
TSD EPA ID: CAD097030993
TSD County: Los Angeles
Tons: 0.22935
CA Waste Code: 491-Unspecified sludge waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: San Diego

Name: REBEL RENTS
Address: 1900 N HWY 101 STE C
City,State,Zip: ENCINITAS, CA 92024
Year: 2007
GEPAID: CAL000254921
Contact: GEORGE MCNULTY
Telephone: 7606333100
Mailing Name: Not reported
Mailing Address: PO BOX 11610
Mailing City,St,Zip: CHANDLER, AZ 925900000
Gen County: San Diego
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Tons: 0.187
CA Waste Code: 343-Unspecified organic liquid mixture
Method: H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: San Diego

Name: REBEL RENTS
Address: 1900 N HWY 101 STE C
City,State,Zip: ENCINITAS, CA 92024
Year: 2007
GEPAID: CAL000254921
Contact: GEORGE MCNULTY
Telephone: 7606333100
Mailing Name: Not reported
Mailing Address: PO BOX 11610
Mailing City,St,Zip: CHANDLER, AZ 925900000
Gen County: San Diego
TSD EPA ID: CAD097030993
TSD County: Los Angeles
Tons: 0.22935
CA Waste Code: 491-Unspecified sludge waste
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: San Diego

Click this hyperlink while viewing on your computer to access
9 additional CA_HAZNET: record(s) in the EDR Site Report.

7 ESE < 1/8 0.079 mi. 417 ft. | **5-UNIT RESIDENTIAL PROPERTY**
1865 NORTH VULCAN AVENUE
ENCINITAS, CA 92024 | **CPS-SLIC** | **S111346985**
CERS | **N/A**

Relative: Lower

Actual: 58 ft.

CPS-SLIC:

Name:	5-UNIT RESIDENTIAL PROPERTY
Address:	1865 NORTH VULCAN AVENUE
City,State,Zip:	ENCINITAS, CA 92024
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	03/20/2012
Global Id:	T10000003413
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H39778-001
Latitude:	33.080164
Longitude:	-117.306632
Case Type:	Cleanup Program Site
Case Worker:	CF
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	DEH Case #H39778-001 was opened under the Voluntary Assistance Program (VAP) to mitigate soil impacted by organochlorine pesticides. Former residences on the properties at 1859 and 1869 North Vulcan Avenue in Encinitas were demolished circa 2006 in anticipation of planned new residential construction. Preliminary grading of the properties was performed following demolition activities. Redevelopment is currently planned that would result in the construction of five residential units. Due to prior agricultural use of the property, testing of site soils for organochlorine pesticides was recommended in a Phase I Environmental Assessment Report and Limited Soil Sampling Report (Geocon, 2011). Twelve soil samples were initially collected from six hand-augered borings to a maximum depth of 1.0 foot below ground surface (bgs). A direct-push rig was used to collect an additional eight samples from depths of 2.0 and 3.0 feet bgs, respectively, at four of the hand auger boring locations. The soil samples were tested for arsenic and organochlorine pesticides. Arsenic was not detected in the 20 samples submitted for laboratory analysis. Four organochlorine pesticides were detected in the samples, including 4,4-DDE, 4,4-DDT, chlordane, and heptachlor. Chlordane was detected in all of the samples, but concentrations in eight of these samples exceeded its residential California Human Health Screening Level (CHHSL) of 0.43 milligrams per kilogram (mg/kg). The CHHSL was not exceeded in the samples collected below a depth of 2 feet. The detected chlordane concentrations ranged from 0.14 to 2.14 mg/kg. Analytical results for the other detected organochlorine pesticides did not exceed their respective residential CHHSLs. A remedial action plan (RAP) was submitted for review under the VAP in November 2011. The RAP proposed removal of soil at the property characterized by chlordane concentrations that equaled or exceeded its residential CHSSL. The RAP was conditionally approved by DEH on January 25, 2012. Excavation activities at the site began on January 31, 2012. Two, high-volume, air samplers were in operation during earth-moving activities. An initial lift was removed to a depth of 1.5 feet bgs. The excavated soil was temporarily stockpiled

5-UNIT RESIDENTIAL PROPERTY (Continued) **S111346985**

in the northeast corner of the site. Thirteen verification soil samples were then collected at a frequency of one sample per 25 x 25-foot grid. Chlordane concentrations detected in seven of the verification samples exceeded its residential CHHSL. Additional excavation was then performed at the seven soil sampling locations to depths of 2 to 3 feet bgs. The stockpiled soil was transported offsite for disposal. A second round of verification sampling was performed at these locations and an initial sample was collected beneath the former stockpile location. Results for the samples indicated that further soil removal was necessary at two sampling locations. The excavation was advanced to a depth of four feet and a third round of verification sampling was performed at these two locations. Analytical results for these two samples were below the residential CHSSL for chlordane. No further excavation was performed. The remaining excavated soil at the site was transported offsite to a disposal facility. A total of 978 tons of soil was exported to an off-site disposal facility. Fill materials imported from a quarry was used to backfill the excavation. Based on the removal of pesticide-impacted soil from the site, the consultant (Stantec) has recommended no further action at the site and case closure. DEH concurs with these recommendations.

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	5-UNIT RESIDENTIAL PROPERTY
Address:	1865 NORTH VULCAN AVENUE
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	236059
CERS ID:	T10000003413
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	CAROL FENNER - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

B8 **JEFF WESTFALL** **RCRA NonGen / NLR** **1024761505**
South **1809 MILLBANK ROAD** **CAC002981365**
< 1/8 **ENCINITAS, CA 92024**
0.094 mi.
495 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
63 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/21/2018
Facility name:	JEFF WESTFALL
Facility address:	1809 MILLBANK ROAD ENCINITAS, CA 92024
EPA ID:	CAC002981365
Contact:	JEFF WESTFALL
Contact address:	1809 MILLBANK ROAD

JEFF WESTFALL (Continued) **1024761505**

	ENCINITAS, CA 92024
Contact country:	Not reported
Contact telephone:	909-563-0616
Contact email:	INFO@JJANDSCONSTRUCTION.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	JEFF WESTFALL
Owner/operator address:	1809 MILLBANK ROAD
	ENCINITAS, CA 92024
Owner/operator country:	Not reported
Owner/operator telephone:	909-563-0616
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	JEFF WESTFALL
Owner/operator address:	1809 MILLBANK ROAD
	ENCINITAS, CA 92024
Owner/operator country:	Not reported
Owner/operator telephone:	909-563-0616
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

B9 ARCO **LUST** **S104735655**
SSE 1766 HWY 101 N **N/A**
< 1/8 ENCINITAS, CA 92024
0.094 mi.
497 ft. Site 2 of 2 in cluster B

Relative: Lower
Actual: 58 ft.

LUST REG 9:

Region:	9
Status:	Preliminary site assessment workplan submitted
Case Number:	9UT4078
Local Case:	H04837-001
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank
Source:	Tank
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Soil only
Date Found:	06/21/2000
Date Stopped:	06/21/2000
Confirm Date:	/ /
Submit Workplan:	8/29/00
Prelim Assess:	/ /
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	06/21/2000
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.51
GW Depth:	Not reported
Beneficial Use:	No Beneficial groundwater use
NPDES Number:	Not reported
Priority:	Low priority. Priority ranking can change over time.
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

C10 IMPERIAL STATIONS INC **EDR Hist Auto** **1021501678**
SSE 1766 N COAST HIGHWAY 101 **N/A**
< 1/8 ENCINITAS, CA 92024
0.108 mi.
569 ft. Site 1 of 7 in cluster C

Relative: Lower
Actual: 58 ft.

EDR Hist Auto

Year:	Name:	Type:
1997	NANAK PETRO INC	Gasoline Service Stations
1998	NANAK PETRO INC	Gasoline Service Stations
1999	IMPERIAL STATIONS INC	Gasoline Service Stations
2000	IMPERIAL STATIONS INC	Gasoline Service Stations
2005	ARCO GAS & GO	Gasoline Service Stations, NEC
2006	ARCO GAS & GO	Gasoline Service Stations, NEC

IMPERIAL STATIONS INC (Continued) **1021501678**

2007	ARCO GAS & GO	Gasoline Service Stations, NEC
2008	ARCO GAS & GO	Gasoline Service Stations, NEC
2011	IMPERIAL STATIONS INC	Gasoline Service Stations
2012	IMPERIAL STATIONS INC	Gasoline Service Stations
2013	IMPERIAL STATIONS INC	Gasoline Service Stations
2014	IMPERIAL STATIONS INC	Gasoline Service Stations

C11 **ARCO** **SWEEPS UST** **S106922764**
SSE **1766 N HIGHWAY 101** **N/A**
< 1/8 **LEUCADIA, CA 92024**
0.108 mi.
569 ft. **Site 2 of 7 in cluster C**

Relative:
Lower

Actual:
58 ft.

SWEEPS UST:

Name:	ARCO
Address:	1766 N HIGHWAY 101
City:	LEUCADIA
Status:	Active
Comp Number:	4837
Number:	9
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000001
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	3

Name:	ARCO
Address:	1766 N HIGHWAY 101
City:	LEUCADIA
Status:	Active
Comp Number:	4837
Number:	9
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000002
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	ARCO
Address:	1766 N HIGHWAY 101
City:	LEUCADIA
Status:	Active

ARCO (Continued) **S106922764**

Comp Number:	4837
Number:	9
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000003
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

Name:	ARCO
Address:	1766 N HIGHWAY 101
City:	LEUCADIA
Status:	Not reported
Comp Number:	4837
Number:	Not reported
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000004
Tank Status:	Not reported
Capacity:	280
Active Date:	Not reported
Tank Use:	PETROLEUM
STG:	WASTE
Content:	Not reported
Number Of Tanks:	1

C12 **IMPERIAL STATIONS, INC** **UST** **U004262107**
SSE **1766 N HWY 101** **N/A**
< 1/8 **ENCINITAS, CA 92024**
0.108 mi.
569 ft. **Site 3 of 7 in cluster C**

Relative:
Lower

Actual:
58 ft.

UST:

Name:	IMPERIAL STATIONS, INC
Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Facility ID:	37-000-201254
Permitting Agency:	San Diego County Department of Environmental Health
Latitude:	33.07907
Longitude:	-117.30754

C13 SSE < 1/8 0.108 mi. 569 ft. | **IMPERIAL STATIONS INC #4**
1766 N COAST HIGHWAY 101
ENCINITAS, CA 92024 | **RCRA NonGen / NLR** | **1024817428**
CAL000321592

Site 4 of 7 in cluster C

Relative: Lower

Actual: 58 ft.

RCRA NonGen / NLR:

Date form received by agency:	06/29/2007
Facility name:	IMPERIAL STATIONS INC #4
Facility address:	1766 N COAST HIGHWAY 101 ENCINITAS, CA 92024-1021
EPA ID:	CAL000321592
Mailing address:	8221 GARDEN GROVE BLVD GARDEN GROVE, CA 92844-1008
Contact:	DAVID BERRI
Contact address:	8221 GARDEN GROVE BLVD GARDEN GROVE, CA 92844-1008
Contact country:	Not reported
Contact telephone:	949-852-2200
Contact email:	TAREKW@BERRIBROTHERS.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	DAVID BERRI
Owner/operator address:	8221 GARDEN GROVE BLVD GARDEN GROVE, CA 92844
Owner/operator country:	Not reported
Owner/operator telephone:	949-852-2200
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	IMPERIAL STATIONS INC
Owner/operator address:	8221 GARDEN GROVE BLVD GARDEN GROVE, CA 92844
Owner/operator country:	Not reported
Owner/operator telephone:	949-852-2200
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No

IMPERIAL STATIONS INC #4 (Continued) **1024817428**

On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

C14 **FAST GAS** **HIST UST** **U001571339**
SSE **1766 N COAST HIGHWAY 101** **N/A**
< 1/8 **ENCINITAS, CA 92024**
0.108 mi.
569 ft. **Site 5 of 7 in cluster C**

Relative:
Lower

Actual:
58 ft.

HIST UST:

Name:	FAST GAS
Address:	1766 N COAST HIGHWAY 101
City,State,Zip:	ENCINITAS, CA 92024
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000011133
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	6197539819
Owner Name:	KAYO OIL COMPANY
Owner Address:	1221 E. MAIN STREET
Owner City,St,Zip:	CHATTANOOGA, TN 37408
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	1972
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test
Tank Num:	002
Container Num:	2
Year Installed:	1972
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test
Tank Num:	003
Container Num:	3
Year Installed:	1972
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM

FAST GAS (Continued) **U001571339**

Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 004
Container Num: 4
Year Installed: 1972
Tank Capacity: 00000280
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: Visual

C15 **ARCO** **SAN DIEGO CO. SAM** **S106916218**
SSE **1766 N HY 101** **SAN DIEGO CO LOP** **N/A**
< 1/8 **ENCINITAS, CA 92024** **CERS**
0.108 mi.
569 ft. **Site 6 of 7 in cluster C**

Relative:
Lower

Actual:
58 ft.

SAN DIEGO CO. SAM:
Name: ARCO
Address: 1766 N HY 101
City,State,Zip: ENCINITAS, CA 920241021
Case Number: H04837-001
Agency: DEH Site Assessment & Mitigation
Funding: **LOP - Federal Fund**
Facility Type: GW With No Beneficial Use Designation
Facility Status: Closed Case
Date: 6/12/2002
Date Began: 6/21/2000

SAN DIEGO CO LOP:
Name: ARCO
Address: 1766 N HY 101
City,State,Zip: ENCINITAS, CA 92024-1021
Record ID: DEH2000-LSAM-H04837-001
Record Status: Completed
Opened Date: 06/21/2000
Parcel Number: 254-060-29-00
Case Type: LOP - Local Oversight Program
Historical Name: ARCO I-4 (IMPERIAL STATION)
SWRCB Global ID: T0607399253
Funding: F - LOP Federal Fund
Lead Agency: DEH/SAM
Lead Agency Date: 06/21/2000
Census Tract: 177.01
Community: Encinitas
Jurisdiction: ENCINITAS
Watershed Basin Number: 904.51
Water Purveyor: SAN DIEGUITO WATER DISTRICT LAND
Fire Agency: SAN DIEGUITO WATER DISTRICT LAND
Latitude: 33.0799312
Longitude: -117.3078004
X MapCoord: 6237646.707
Y MapCoord: 1974363.326

CERS:
Name: ARCO

ARCO (Continued) **S106916218**

Address: 1766 N HY 101
City,State,Zip: ENCINITAS, CA 920241021
Site ID: 217498
CERS ID: T0607399253
CERS Description: Leaking Underground Storage Tank Cleanup Site

---

C16 SSE < 1/8 0.108 mi. 569 ft. **FAST GAS 1766 N HWY 101 LEUCADIA, CA 92024** **LUST San Diego Co. HMMD CERS HAZ WASTE HIST UST CERS TANKS CERS** **S109279364 N/A**

Site 7 of 7 in cluster C

Relative: Lower

Actual: 58 ft.

LUST:
Name: ARCO
Address: 1766 N HY 101
City,State,Zip: ENCINITAS, CA 920241021
Lead Agency: SAN DIEGO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607399253
Global Id: T0607399253
Latitude: 33.079106
Longitude: -117.307503
Status: Completed - Case Closed
Status Date: 06/12/2002
Case Worker: Not reported
RB Case Number: 9UT4078
Local Agency: Not reported
File Location: Local Agency
Local Case Number: H04837-001
Potential Media Affect: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

LUST:
Global Id: T0607399253
Action Type: ENFORCEMENT
Date: 08/29/2000
Action: Notice of Responsibility

Global Id: T0607399253
Action Type: ENFORCEMENT
Date: 06/12/2002
Action: Closure/No Further Action Letter

LUST:
Global Id: T0607399253
Status: Open - Case Begin Date
Status Date: 06/21/2000

Global Id: T0607399253
Status: Completed - Case Closed
Status Date: 06/12/2002

HMMD SAN DIEGO:
Name: IMPERIAL STATIONS, INC

FAST GAS (Continued) **S109279364**

Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	201254
Business Type:	6HK28
EPA Id Number:	CAL000321592
APN:	254-060-29-00
Last HMMD Inspection:	08/28/2012
Facility Telephone:	760-944-9864
Permit Status:	OPEN
Permit Expiration:	12/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	IMPERIAL STATIONS, INC
Facility Mailing Address:	8221 GARDEN GROVE BL
Facility Mailing City:	GARDEN GROVE
Facility Mailing State:	CA
Facility Mailing Zip:	92844
UST Owner:	IMPERIAL STATIONS INC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL FUEL
Other Information:	UNDERGROUND TANK 201254 T004
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 201254 T003
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 201254 T001
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 201254 T002
Material Waste:	Material

FAST GAS (Continued) **S109279364**

Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV3105
Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/24/2010
Violation Code: 6HV3269
Violation: UST SYSTEM NOT CONT. MONITORED W/VPH
Violation Citation: UST system not continuously monitored using Vacuum/Pressure/Hydrostatic (VPH) system (for tank installs on or after 7/1/04). 25290.1 (d)&(e)
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/29/2008
Violation Code: 6HV3152
Violation: ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation: All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity: ACTIVE

FAST GAS (Continued) **S109279364**

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/19/2009
Violation Code:	6HV3263
Violation:	MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation:	Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity:	ACTIVE

UST:

UST Name:	UNDERGROUND TANK 201254 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T002
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	12000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE

FAST GAS (Continued) **S109279364**

Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	8000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

Name:	IMPERIAL STATIONS, INC
Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	201254
Business Type:	6HK28
EPA Id Number:	CAL000321592
APN:	254-060-29-00
Last HMMD Inspection:	08/28/2012
Facility Telephone:	760-944-9864
Permit Status:	OPEN
Permit Expiration:	12/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	IMPERIAL STATIONS, INC
Facility Mailing Address:	8221 GARDEN GROVE BL
Facility Mailing City:	GARDEN GROVE
Facility Mailing State:	CA
Facility Mailing Zip:	92844
UST Owner:	IMPERIAL STATIONS INC
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL FUEL
Other Information:	UNDERGROUND TANK 201254 T004
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254

FAST GAS (Continued) **S109279364**

Update Date: 11/02/2012
Case Number: 8006-61-9
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 201254 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T001
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV3105

FAST GAS (Continued) **S109279364**

Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/24/2010
Violation Code: 6HV3269
Violation: UST SYSTEM NOT CONT. MONITORED W/VPH
Violation Citation: UST system not continuously monitored using Vacuum/Pressure/Hydrostatic (VPH) system (for tank installs on or after 7/1/04). 25290.1 (d)&(e)
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/29/2008
Violation Code: 6HV3152
Violation: ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation: All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/19/2009
Violation Code: 6HV3263
Violation: MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation: Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity: ACTIVE

UST:
UST Name: UNDERGROUND TANK 201254 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000

FAST GAS (Continued) **S109279364**

UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	12000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	8000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

Name:	IMPERIAL STATIONS, INC
Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAL000321592
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	949-852-2200
Permit Status:	Permit Renewed
Permit Expiration:	Not reported

FAST GAS (Continued) **S109279364**

Date Last Updated:	04/19/2018
Facility Owner:	Not reported
Facility Mailing Address:	8221 GARDEN GROVE BLVD, GARDEN GROVE, CA 92844
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	Y
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5701541
Return To Compliance Date:	2017-08-17T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	32194
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2017-08-17T11:38:00.000
Violation Code:	2030043 (RD) Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly. 23 CCR 2638(a), 2641(j)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	4213049
Return To Compliance Date:	2013-08-28T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	91
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2013-08-28T08:37:00.000
Violation Code:	2030026 Failure of line leak detector to detect a leak and/or failure of audible and visual alarm. 23 CCR 16 2636(f)(2), 2666.

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	4213049
Return To Compliance Date:	2013-09-14T00:00:00.000

FAST GAS (Continued) **S109279364**

Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	0
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2013-08-28T08:37:00.000
Violation Code:	2030012 Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system. 23 CCR 16 2715(c)(6), 2715(f)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	4976633
Return To Compliance Date:	2014-11-17T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	0
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2014-08-21T09:41:00.000
Violation Code:	2030016 Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected. 23 CCR 16 2631(g), 2632(c)(2)(A)&(B), 2633(c), 2636(f).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	2014-10-14T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	91
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2014-10-09T14:29:00.000
Violation Code:	2030054 Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed. 23 CCR 16 2635(b), 2715(c)(2).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank

FAST GAS (Continued) **S109279364**

Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	2014-10-14T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	03
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2014-10-09T14:29:00.000
Violation Code:	2030025 Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. 23 CCR 16 2636(f)(2).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	2014-10-13T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	87
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2014-10-09T14:29:00.000
Violation Code:	2030036 Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5475887
Return To Compliance Date:	2016-08-18T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	32194
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2016-08-18T13:19:00.000
Violation Code:	2060023 Failure of a UST system installed on or after July 1, 2004 to

FAST GAS (Continued) **S109279364**

be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5475887
Return To Compliance Date:	2016-09-17T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	32194
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2016-08-18T13:19:00.000
Violation Code:	2030013 Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented. 23 CCR 2715

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5701541
Return To Compliance Date:	Not reported
Nov:	Not reported
Violation Classification:	Not reported
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2017-08-17T11:38:00.000
Violation Code:	2010007 Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance. HSC 25292.2, 25299.30-25299.34; 23 CCR 2711; 2808.1, 2809-2809.2

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5701541
Return To Compliance Date:	2017-08-17T00:00:00.000

FAST GAS (Continued) **S109279364**

Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	31440
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2017-08-17T11:38:00.000
Violation Code:	2030036 (RP) Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90% full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30m before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95% of capacity; and activate an audible alarm at least 5m before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95% of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 2635(b)(2), 2665

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5949674
Return To Compliance Date:	Not reported
Nov:	Not reported
Violation Classification:	Not reported
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2018-08-17T14:36:00.000
Violation Code:	2010012 Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the CUPA to determine whether the UST systems are in compliance. HSC 6.7 25293

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5949674
Return To Compliance Date:	2018-09-16T00:00:00.000
Nov:	No
Violation Classification:	Not reported
Underground Storage Tank Id:	31440
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2018-08-17T14:36:00.000
Violation Code:	2030013 Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser

FAST GAS (Continued) **S109279364**

containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2), 2715(c)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	2015-08-20T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2014-10-09T14:29:00.000
Violation Code:	HMD0138 Manifest signed by the Treatment, Storage, Disposal Facility (TSDF) not available for inspection. 66262.40(a).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	2015-09-21T00:00:00.000
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2019-02-02T01:12:08.000
Inspection Date:	2014-10-09T14:29:00.000
Violation Code:	1010008 Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date. For facilities with invenntory that exceed EPCRA thresholds; failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages HSC 6.95 25508.2 / 19 CCR 4 2729.5(c)

UST DTL:

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	IMPERIAL STATIONS, INC
Tankid:	32194
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2019-02-02T01:12:19.000

FAST GAS (Continued) **S109279364**

Tank Capacityin Gallons:	8000
Tank Contents:	Diesel
Type Of Tank:	Double Wall

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	IMPERIAL STATIONS, INC
Tankid:	31440
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2019-02-02T01:12:19.000
Tank Capacityin Gallons:	20000
Tank Contents:	Regular Unleaded
Type Of Tank:	Double Wall

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	IMPERIAL STATIONS, INC
Tankid:	31441
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2019-02-02T01:12:19.000
Tank Capacityin Gallons:	20000
Tank Contents:	Regular Unleaded
Type Of Tank:	Double Wall

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	IMPERIAL STATIONS, INC
Tankid:	31442
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2019-02-02T01:12:19.000
Tank Capacityin Gallons:	12000
Tank Contents:	Premium Unleaded
Type Of Tank:	Double Wall

Waste and Materials:

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0179446

FAST GAS (Continued) **S109279364**

Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-10-25T16:19:48.000
Chemical Name:	Gasoline Unleaded With Ethanol
Common Name:	87 Gasoline - Tank 1 & 2
Case Number:	8006-61-9

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0179448
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-10-25T16:19:48.000
Chemical Name:	Gasoline Premium With Ethanol
Common Name:	91 Gasoline - Tank 3
Case Number:	8006-61-9

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0153982
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-10-25T16:19:48.000
Chemical Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Common Name:	WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0153983
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-10-25T16:19:48.000
Chemical Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Common Name:	FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0206325
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2019-02-02T01:12:17.000
Chemical Name:	Gasoline Unleaded With Ethanol
Common Name:	87 Gasoline - Tank 1 & 2
Case Number:	8006-61-9

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0206326
Trade Secret:	N
Hazardous Material Type:	Mixture

FAST GAS (Continued) **S109279364**

Last Updated:	2019-02-02T01:12:17.000
Chemical Name:	Ultra Low Sulfer Diesel
Common Name:	Diesel #2 - Tank 4
Case Number:	68476-34-6
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HCHEM-0206327
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2019-02-02T01:12:17.000
Chemical Name:	Gasoline Premium With Ethanol
Common Name:	91 Gasoline - Tank 3
Case Number:	8006-61-9
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HWAST-0178107
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-02-02T01:12:18.000
Chemical Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Common Name:	WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2019-HWAST-0178108
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-02-02T01:12:18.000
Chemical Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Common Name:	FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0130763
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-02-21T01:28:08.000
Chemical Name:	Gasoline Unleaded With Ethanol
Common Name:	87 Gasoline - Tank 1 & 2
Case Number:	8006-61-9
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0130764
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-02-21T01:28:08.000
Chemical Name:	Ultra Low Sulfer Diesel

FAST GAS (Continued) **S109279364**

Common Name:	Diesel #2 - Tank 4
Case Number:	68476-34-6
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0130765
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-02-21T01:28:08.000
Chemical Name:	Gasoline Premium With Ethanol
Common Name:	91 Gasoline - Tank 3
Case Number:	8006-61-9
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HWAST-0109274
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-02-21T01:28:09.000
Chemical Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Common Name:	WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HWAST-0109275
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-02-21T01:28:09.000
Chemical Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Common Name:	FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0179447
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-10-25T16:19:48.000
Chemical Name:	Ultra Low Sulfer Diesel
Common Name:	Diesel #2 - Tank 4
Case Number:	68476-34-6

Name:	IMPERIAL STATIONS, INC
Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	201254
Business Type:	6HK28
EPA Id Number:	CAL000321592
APN:	254-060-29-00
Last HMMD Inspection:	08/28/2012
Facility Telephone:	760-944-9864

FAST GAS (Continued) **S109279364**

Permit Status:	OPEN
Permit Expiration:	12/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	IMPERIAL STATIONS, INC
Facility Mailing Address:	8221 GARDEN GROVE BL
Facility Mailing City:	GARDEN GROVE
Facility Mailing State:	CA
Facility Mailing Zip:	92844
UST Owner:	IMPERIAL STATIONS INC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL FUEL
Other Information:	UNDERGROUND TANK 201254 T004
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	PREMIUM UNLEADED
Other Information:	UNDERGROUND TANK 201254 T003
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 201254 T001
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	8006-61-9
Name:	REGULAR UNLEADED
Other Information:	UNDERGROUND TANK 201254 T002
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information:	WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES

FAST GAS (Continued) **S109279364**

Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported
Permit Number:	201254
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information:	FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Violations Active Permits:

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/28/2012
Violation Code:	6HV0228
Violation:	CONTAINER NOT KEPT CLOSED
Violation Citation:	Failed to keep container closed. CFR 265.173
Activity:	ACTIVE
Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/28/2012
Violation Code:	6HV3105
Violation:	NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation:	Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity:	ACTIVE
Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/24/2010
Violation Code:	6HV3269
Violation:	UST SYSTEM NOT CONT. MONITORED W/VPH
Violation Citation:	UST system not continuously monitored using Vacuum/Pressure/Hydrostatic (VPH) system (for tank installs on or after 7/1/04). 25290.1 (d)&(e)
Activity:	ACTIVE
Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/29/2008
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE
Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/19/2009
Violation Code:	6HV3263
Violation:	MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation:	Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632

FAST GAS (Continued) **S109279364**

Activity: ACTIVE

UST:

UST Name: UNDERGROUND TANK 201254 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 12000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T004
Last Update: 2012-11-02 14:17:38
Permit Number: 201254

FAST GAS (Continued) **S109279364**

Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	8000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

CERS HAZ WASTE:

Site ID:	37846
CERS ID:	10367329
CERS Description:	Hazardous Waste Generator

Violations:

Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	08-17-2017
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 09/05/2017. Inspection Sequence ID:5701541;Tank ID:31440,31441,31442,32194;Violation Description:Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance. HSC 25292.2, 25299.30-25299.34; 23 CCR 2711; 2808.1, 2809-2809.2
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS

Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	10-09-2014
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description:	Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs.
Violation Notes:	Returned to compliance on 10/14/2014. Inspection Sequence ID:5157324;Tank ID:03;Violation Description:Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. 23 CCR 16 2636(f)(2).
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS

FAST GAS (Continued) **S109279364**

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 10/13/2014. Inspection Sequence ID:5157324;Tank ID:87,91,03;Violation Description:Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-21-2014
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.
Violation Notes: Returned to compliance on 11/17/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-28-2013
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)
Violation Description: Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of

FAST GAS (Continued) **S109279364**

hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system.

Violation Notes: Returned to compliance on 09/14/2013.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/20/2015. Inspection Sequence ID:5157324;Violation:HMD0138 Manifest signed by the Treatment, Storage, Disposal Facility (TSDF) not available for inspection. 66262.40(a).
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2018
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2).
Violation Notes: Returned to compliance on 09/16/2018. Inspection Sequence ID:5949674;Tank ID:31440,31441,31442,32194;Violation Description:Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2), 2715(c)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846

FAST GAS (Continued) **S109279364**

Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2017
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 08/17/2017. Inspection Sequence ID:5701541;Tank ID:31440;Violation Description:(RP) Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90% full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30m before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95% of capacity; and activate an audible alarm at least 5m before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95% of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 2635(b)(2), 2665
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-18-2016
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been properly trained.
Violation Notes: Returned to compliance on 09/17/2016. Inspection Sequence ID:5475887;Tank ID:32194;Violation Description:Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the

FAST GAS (Continued) **S109279364**

proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented. 23 CCR 2715

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2018
Citation: HSC 6.7 25293 - California Health and Safety Code, Chapter 6.7, Section(s) 25293
Violation Description: Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the UPA to determine whether the UST systems are in compliance.
Violation Notes: Returned to compliance on 09/16/2018. Inspection Sequence ID:5949674;Tank ID:31440,31441,31442,32194;Violation Description:Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the CUPA to determine whether the UST systems are in compliance. HSC 6.7 25293
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2017
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 08/17/2017. Inspection Sequence ID:5701541;Tank ID:32194;Violation Description:(RD) Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly. 23 CCR 2638(a), 2641(j)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 09/21/2015. Inspection Sequence ID:5157324
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-18-2016
Citation: HSC 6.7 25290.1(d) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(d)

FAST GAS (Continued) **S109279364**

Violation Description: Failure of a UST system installed on or after July 1, 2004 to be designed and constructed with a monitoring system capable of detecting the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment.
Violation Notes: Returned to compliance on 08/18/2016. Inspection Sequence ID:5475887;Tank ID:32194,31442,31441,31440;Violation Description:Failure of a UST system installed on or after July 1, 2004 to be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: 23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)
Violation Description: Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed.
Violation Notes: Returned to compliance on 10/14/2014. Inspection Sequence ID:5157324;Tank ID:91;Violation Description:Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed. 23 CCR 16 2635(b), 2715(c)(2).
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-28-2013
Citation: 23 CCR 16 2666(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2666(c)
Violation Description: Failure of line leak detector to detect a leak and/or failure of audible and visual alarm.
Violation Notes: Returned to compliance on 08/28/2013.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5701541
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

FAST GAS (Continued) **S109279364**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4213049
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4213049
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:5949674
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4213049
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	No

FAST GAS (Continued) **S109279364**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:5949674
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:5949674
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health

FAST GAS (Continued) **S109279364**

Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5701541
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5701541
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

FAST GAS (Continued) **S109279364**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	Property Owner
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	Environmental Contact
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	8221 GARDEN GROVE BLVD
Affiliation City:	GARDEN GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92844
Affiliation Phone:	Not reported

FAST GAS (Continued) **S109279364**

Affiliation Type Desc:	Legal Owner
Entity Name:	David Berri
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(714) 801-3918

Affiliation Type Desc:	Parent Corporation
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	UST Tank Operator
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	UST Tank Owner
Entity Name:	IMPERIAL STATIONS INC
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported

FAST GAS (Continued) **S109279364**

Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Document Preparer
Entity Name:	Tarek Wazne
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	8221 GARDEN GROVE BLVD
Affiliation City:	GARDEN GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92844
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Tarek Wazne
Entity Title:	GM
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 944-9864
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Tarek Wazne
Entity Title:	GM
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(949) 852-2200

HIST UST:

Name:	FAST GAS
Address:	1766 N HWY 101

FAST GAS (Continued) **S109279364**

City,State,Zip:	LEUCADIA, CA 92024
File Number:	0002B5BF
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B5BF.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CERS TANKS:

Name:	IMPERIAL STATIONS, INC
Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	37846
CERS ID:	10367329
CERS Description:	Underground Storage Tank

Violations:

Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	08-17-2017
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 09/05/2017. Inspection Sequence ID:5701541;Tank ID:31440,31441,31442,32194;Violation Description:Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance. HSC 25292.2, 25299.30-25299.34; 23 CCR 2711; 2808.1, 2809-2809.2
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	10-09-2014
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description:	Failure of the pressurized piping to meet one or more of the following

FAST GAS (Continued) **S109279364**

requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs.

Violation Notes: Returned to compliance on 10/14/2014. Inspection Sequence ID:5157324;Tank ID:03;Violation Description:Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. 23 CCR 16 2636(f)(2).

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

Violation Notes: Returned to compliance on 10/13/2014. Inspection Sequence ID:5157324;Tank ID:87,91,03;Violation Description:Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-21-2014
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.

FAST GAS (Continued) **S109279364**

Violation Notes: Returned to compliance on 11/17/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-28-2013
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)
Violation Description: Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system.
Violation Notes: Returned to compliance on 09/14/2013.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/20/2015. Inspection Sequence ID:5157324;Violation:HMD0138 Manifest signed by the Treatment, Storage, Disposal Facility (TSDF) not available for inspection. 66262.40(a).
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2018
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2).
Violation Notes: Returned to compliance on 09/16/2018. Inspection Sequence ID:5949674;Tank ID:31440,31441,31442,32194;Violation Description:Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check

FAST GAS (Continued) **S109279364**

that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2), 2715(c)

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2017
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 08/17/2017. Inspection Sequence ID:5701541;Tank ID:31440;Violation Description:(RP) Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90% full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30m before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95% of capacity; and activate an audible alarm at least 5m before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95% of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 2635(b)(2), 2665
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-18-2016
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect

FAST GAS (Continued) **S109279364**

for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been properly trained.

Violation Notes: Returned to compliance on 09/17/2016. Inspection Sequence ID:5475887;Tank ID:32194;Violation Description:Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented. 23 CCR 2715

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2018
Citation: HSC 6.7 25293 - California Health and Safety Code, Chapter 6.7, Section(s) 25293
Violation Description: Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the UPA to determine whether the UST systems are in compliance.
Violation Notes: Returned to compliance on 09/16/2018. Inspection Sequence ID:5949674;Tank ID:31440,31441,31442,32194;Violation Description:Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the CUPA to determine whether the UST systems are in compliance. HSC 6.7 25293
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2017
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 08/17/2017. Inspection Sequence ID:5701541;Tank ID:32194;Violation Description:(RD) Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly. 23 CCR 2638(a), 2641(j)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014

FAST GAS (Continued) **S109279364**

Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes:	Returned to compliance on 09/21/2015. Inspection Sequence ID:5157324
Violation Division:	San Diego County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	08-18-2016
Citation:	HSC 6.7 25290.1(d) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(d)
Violation Description:	Failure of a UST system installed on or after July 1, 2004 to be designed and constructed with a monitoring system capable of detecting the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment.
Violation Notes:	Returned to compliance on 08/18/2016. Inspection Sequence ID:5475887;Tank ID:32194,31442,31441,31440;Violation Description:Failure of a UST system installed on or after July 1, 2004 to be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	10-09-2014
Citation:	23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)
Violation Description:	Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed.
Violation Notes:	Returned to compliance on 10/14/2014. Inspection Sequence ID:5157324;Tank ID:91;Violation Description:Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed. 23 CCR 16 2635(b), 2715(c)(2).
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	08-28-2013
Citation:	23 CCR 16 2666(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2666(c)
Violation Description:	Failure of line leak detector to detect a leak and/or failure of audible and visual alarm.
Violation Notes:	Returned to compliance on 08/28/2013.

FAST GAS (Continued) **S109279364**

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5701541
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-21-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:4976633
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:4213049
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-28-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:4935718
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:4213049
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:5949674
Eval Division: San Diego County Department of Env Health
Eval Program: HW

FAST GAS (Continued) **S109279364**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:4213049
Eval Division: San Diego County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 08-28-2013
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:4935718
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-09-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Tank HT202 Inspection ID:5157324
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:5949674
Eval Division: San Diego County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Fernandez Juan Inspection ID:5949674
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-18-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5475887
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

FAST GAS (Continued) **S109279364**

Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5701541
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2017
Violations Found:	No
Eval Type:	Routine done by local agency

FAST GAS (Continued) **S109279364**

Eval Notes:	Inspector: Beacon Ellen Inspection ID:5701541
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	Property Owner
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA

FAST GAS (Continued) **S109279364**

Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	Environmental Contact
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	8221 GARDEN GROVE BLVD
Affiliation City:	GARDEN GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92844
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	David Berri
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(714) 801-3918

Affiliation Type Desc:	Parent Corporation
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	UST Tank Operator
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	UST Tank Owner
Entity Name:	IMPERIAL STATIONS INC
Entity Title:	Not reported

FAST GAS (Continued) **S109279364**

Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880

Affiliation Type Desc:	Document Preparer
Entity Name:	Tarek Wazne
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	8221 GARDEN GROVE BLVD
Affiliation City:	GARDEN GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92844
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Tarek Wazne
Entity Title:	GM
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 944-9864

FAST GAS (Continued) **S109279364**

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Tarek Wazne
Entity Title:	GM
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(949) 852-2200

CERS:

Name:	IMPERIAL STATIONS, INC
Address:	1766 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	37846
CERS ID:	10367329
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	08-17-2017
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 09/05/2017. Inspection Sequence ID:5701541;Tank ID:31440,31441,31442,32194;Violation Description:Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance. HSC 25292.2, 25299.30-25299.34; 23 CCR 2711; 2808.1, 2809-2809.2
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS

Site ID:	37846
Site Name:	IMPERIAL STATIONS, INC
Violation Date:	10-09-2014
Citation:	23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Description:	Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs.
Violation Notes:	Returned to compliance on 10/14/2014. Inspection Sequence ID:5157324;Tank ID:03;Violation Description:Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. 23 CCR 16 2636(f)(2).
Violation Division:	San Diego County Department of Env Health
Violation Program:	UST
Violation Source:	CERS

FAST GAS (Continued) **S109279364**

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 10/13/2014. Inspection Sequence ID:5157324;Tank ID:87,91,03;Violation Description:Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-21-2014
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)
Violation Description: Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.
Violation Notes: Returned to compliance on 11/17/2014.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-28-2013
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)
Violation Description: Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of

FAST GAS (Continued) **S109279364**

hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system.

Violation Notes: Returned to compliance on 09/14/2013.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/20/2015. Inspection Sequence ID:5157324;Violation:HMD0138 Manifest signed by the Treatment, Storage, Disposal Facility (TSDF) not available for inspection. 66262.40(a).
Violation Division: San Diego County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2018
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2).
Violation Notes: Returned to compliance on 09/16/2018. Inspection Sequence ID:5949674;Tank ID:31440,31441,31442,32194;Violation Description:Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(f)(2), 2715(c)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846

FAST GAS (Continued) **S109279364**

Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2017
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 08/17/2017. Inspection Sequence ID:5701541;Tank ID:31440;Violation Description:(RP) Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90% full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30m before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95% of capacity; and activate an audible alarm at least 5m before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95% of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 2635(b)(2), 2665
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-18-2016
Citation: 23 CCR 16 2715(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)
Violation Description: Failure to comply with one or more of the following designated operator (DO) monthly inspection requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been properly trained.
Violation Notes: Returned to compliance on 09/17/2016. Inspection Sequence ID:5475887;Tank ID:32194;Violation Description:Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the

FAST GAS (Continued) **S109279364**

proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented. 23 CCR 2715

Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2018
Citation: HSC 6.7 25293 - California Health and Safety Code, Chapter 6.7, Section(s) 25293
Violation Description: Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the UPA to determine whether the UST systems are in compliance.
Violation Notes: Returned to compliance on 09/16/2018. Inspection Sequence ID:5949674;Tank ID:31440,31441,31442,32194;Violation Description:Failure to maintain UST records of monitoring, testing, repairing, and closure in sufficient detail to enable the CUPA to determine whether the UST systems are in compliance. HSC 6.7 25293
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-17-2017
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 08/17/2017. Inspection Sequence ID:5701541;Tank ID:32194;Violation Description:(RD) Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly. 23 CCR 2638(a), 2641(j)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 09/21/2015. Inspection Sequence ID:5157324
Violation Division: San Diego County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-18-2016
Citation: HSC 6.7 25290.1(d) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(d)

FAST GAS (Continued) **S109279364**

Violation Description: Failure of a UST system installed on or after July 1, 2004 to be designed and constructed with a monitoring system capable of detecting the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment.
Violation Notes: Returned to compliance on 08/18/2016. Inspection Sequence ID:5475887;Tank ID:32194,31442,31441,31440;Violation Description:Failure of a UST system installed on or after July 1, 2004 to be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 10-09-2014
Citation: 23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)
Violation Description: Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed.
Violation Notes: Returned to compliance on 10/14/2014. Inspection Sequence ID:5157324;Tank ID:91;Violation Description:Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed. 23 CCR 16 2635(b), 2715(c)(2).
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Site ID: 37846
Site Name: IMPERIAL STATIONS, INC
Violation Date: 08-28-2013
Citation: 23 CCR 16 2666(c) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2666(c)
Violation Description: Failure of line leak detector to detect a leak and/or failure of audible and visual alarm.
Violation Notes: Returned to compliance on 08/28/2013.
Violation Division: San Diego County Department of Env Health
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-17-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Inspector: Beacon Ellen Inspection ID:5701541
Eval Division: San Diego County Department of Env Health
Eval Program: UST
Eval Source: CERS

FAST GAS (Continued) **S109279364**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4213049
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4213049
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:5949674
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4213049
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	No

FAST GAS (Continued) **S109279364**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:5949674
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:5949674
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health

FAST GAS (Continued) **S109279364**

Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	08-28-2013
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4935718
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-09-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Tank HT202 Inspection ID:5157324
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5701541
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-17-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5701541
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

FAST GAS (Continued) **S109279364**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-18-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5475887
Eval Division:	San Diego County Department of Env Health
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Beacon Ellen Inspection ID:5172725
Eval Division:	San Diego County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-21-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Inspector: Fernandez Juan Inspection ID:4976633
Eval Division:	San Diego County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS

Affiliation:

Affiliation Type Desc:	Property Owner
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	Environmental Contact
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	8221 GARDEN GROVE BLVD
Affiliation City:	GARDEN GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92844
Affiliation Phone:	Not reported

FAST GAS (Continued) **S109279364**

Affiliation Type Desc:	Legal Owner
Entity Name:	David Berri
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(714) 801-3918

Affiliation Type Desc:	Parent Corporation
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	UST Tank Operator
Entity Name:	Imperial Stations Inc.
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	UST Tank Owner
Entity Name:	IMPERIAL STATIONS INC
Entity Title:	Not reported
Affiliation Address:	8221 Garden Grove Blvd.,
Affiliation City:	Garden Grove
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92844
Affiliation Phone:	(949) 852-2200

Affiliation Type Desc:	CUPA District
Entity Name:	San Diego County Env Health
Entity Title:	Not reported
Affiliation Address:	PO Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported

FAST GAS (Continued) **S109279364**

Affiliation Zip:	92112-9261
Affiliation Phone:	(858) 505-6880
Affiliation Type Desc:	Document Preparer
Entity Name:	Tarek Wazne
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	8221 GARDEN GROVE BLVD
Affiliation City:	GARDEN GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92844
Affiliation Phone:	Not reported
Affiliation Type Desc:	Identification Signer
Entity Name:	Tarek Wazne
Entity Title:	GM
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	IMPERIAL STATIONS, INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(760) 944-9864
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	Tarek Wazne
Entity Title:	GM
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(949) 852-2200

17 West 1/8-1/4 0.126 mi. 664 ft. | **MAY & JOHN MCISAAC**
1833 PARLIAMENT ROAD
ENCINITAS, CA 92024 | **RCRA NonGen / NLR** | **1024747527**
CAC002967304

Relative: Higher

Actual: 87 ft.

RCRA NonGen / NLR:

Date form received by agency:	06/20/2018
Facility name:	MAY & JOHN MCISAAC
Facility address:	1833 PARLIAMENT ROAD ENCINITAS, CA 92024
EPA ID:	CAC002967304
Contact:	MAY & JOHN MCISAAC
Contact address:	1833 PARLIAMENT ROAD ENCINITAS, CA 92024
Contact country:	Not reported
Contact telephone:	760-815-2352
Contact email:	CINDYEDWARDS@ALLIANCE-ENVIRO.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	MAY & JOHN MCISAAC
Owner/operator address:	1833 PARLIAMENT ROAD ENCINITAS, CA 92024
Owner/operator country:	Not reported
Owner/operator telephone:	760-815-2352
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	MAY & JOHN MCISAAC
Owner/operator address:	1833 PARLIAMENT ROAD ENCINITAS, CA 92024
Owner/operator country:	Not reported
Owner/operator telephone:	760-815-2352
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

MAY & JOHN MCISAAC (Continued) **1024747527**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

D18 **EATON BEACH ESTATES, INC.** **SAN DIEGO CO. SAM** **S104761204**
ENE **224 ANDREW AV** **CPS-SLIC** **N/A**
1/8-1/4 **ENCINITAS, CA 92024** **San Diego Co. HMMD**
0.216 mi. **NPDES**
1140 ft. **Site 1 of 2 in cluster D** **CIWQS**
CERS

Relative:
Higher

Actual:
74 ft.

SAN DIEGO CO. SAM:

Name:	EATON BEACH ESTATES, INC.
Address:	224 ANDREW AV
City,State,Zip:	ENCINITAS, CA 92024
Case Number:	H99138-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	9/6/2006
Date Began:	3/15/2005

CPS-SLIC:

Name:	EATON BEACH ESTATES, INC.
Address:	224 ANDREW AV
City,State,Zip:	ENCINITAS, CA 92024
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	09/06/2006
Global Id:	T06019755099
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H99138-001
Latitude:	33.082185
Longitude:	-117.304957
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Name:	HAGEN-RENAKER
Address:	224 ANDREW AV
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	199138
Business Type:	6HKAG

EATON BEACH ESTATES, INC. (Continued) **S104761204**

EPA Id Number:	Not reported
APN:	216-052-10-00
Last HMMD Inspection:	07/12/1989
Facility Telephone:	619-753-1495
Permit Status:	INAC
Permit Expiration:	07/12/1989
Date Last Updated:	11/02/2012
Facility Owner:	JOHN RENAKER
Facility Mailing Address:	351 UNION ST
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024-2640
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

NPDES:

Name:	EATON BEACH ESTATES
Address:	224 ANDREW AVENUE
City,State,Zip:	LEUCADIA, CA 92024
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	9 37C368212
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	03/10/2016
Operator Name:	Shea Homes Limited Partnership
Operator Address:	9990 Mesa Rim Road
Operator City:	San Diego
Operator State:	California
Operator Zip:	92121

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	9
Regulatory Measure ID:	440789

EATON BEACH ESTATES, INC. (Continued) **S104761204**

Order Number:	Not reported
Regulatory Measure Type:	Construction
Place ID:	Not reported
WDID:	9 37C368212
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/10/2016
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	11/06/2013
Processed Date:	11/12/2013
Status:	Terminated
Status Date:	03/10/2016
Place Size:	2
Place Size Unit:	Acres
Contact:	Bryan Binney
Contact Title:	Not reported
Contact Phone:	858-526-6529
Contact Phone Ext:	Not reported
Contact Email:	bryan.binney@sheahomes.com
Operator Name:	Shea Homes Limited Partnership
Operator Address:	9990 Mesa Rim Road
Operator City:	San Diego
Operator State:	California
Operator Zip:	92121
Operator Contact:	Bryan Binney
Operator Contact Title:	Not reported
Operator Contact Phone:	858-526-6529
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	bryan.binney@sheahomes.com
Operator Type:	Private Business
Developer:	Shea Homes Limited Partnership
Developer Address:	9990 Mesa Rim Road
Developer City:	San Diego
Developer State:	California
Developer Zip:	92121
Developer Contact:	Bryan Binney
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	N
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	N
Constype Below Ground Ind:	N
Constype Cable Line Ind:	N
Constype Comm Line Ind:	N
Constype Commertial Ind:	N
Constype Electrical Line Ind:	N
Constype Gas Line Ind:	N
Constype Industrial Ind:	N
Constype Other Description:	Not reported
Constype Other Ind:	N
Constype Recons Ind:	N

EATON BEACH ESTATES, INC. (Continued) **S104761204**

Constype Residential Ind:	Y
Constype Transport Ind:	N
Constype Utility Description:	Not reported
Constype Utility Ind:	N
Constype Water Sewer Ind:	N
Dir Discharge Uswater Ind:	N
Receiving Water Name:	Not reported
Certifier:	Bryan Binney
Certifier Title:	VP, Operations
Certification Date:	06-NOV-13
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000002
Status:	Terminated
Agency Number:	0
Region:	9
Regulatory Measure ID:	440789
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	9 37C368212
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/12/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/10/2016
Discharge Name:	Shea Homes Limited Partnership
Discharge Address:	9990 Mesa Rim Road
Discharge City:	San Diego
Discharge State:	California
Discharge Zip:	92121
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported

EATON BEACH ESTATES, INC. (Continued) **S104761204**

Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

CIWQS:

Name:	EATON BEACH ESTATES
Address:	224 ANDREW AVENUE
City,State,Zip:	LEUCADIA, CA 92024
Agency:	Shea Homes Limited Partnership
Agency Address:	9990 Mesa Rim Road Suite 200, San Diego, CA 92121
Place/Project Type:	Construction - Residential
SIC/NAICS:	Not reported
Region:	9
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	9 37C368212
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	11/12/2013
Termination Date:	03/10/2016
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported

EATON BEACH ESTATES, INC. (Continued) **S104761204**

Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.08219
Longitude: -117.30496

CERS:
Name: EATON BEACH ESTATES, INC.
Address: 224 ANDREW AV
City,State,Zip: ENCINITAS, CA 92024
Site ID: 209825
CERS ID: T06019755099
CERS Description: Cleanup Program Site

D19 **BARRETT AMERICAN** **LUST** **S107619741**
ENE **236 ANDREW AV** **SAN DIEGO CO. SAM** **N/A**
1/8-1/4 **ENCINITAS, CA 92024** **SAN DIEGO CO LOP**
0.232 mi. **CERS**
1227 ft. **Site 2 of 2 in cluster D**

Relative:
Higher

Actual:
76 ft.

LUST:
Name: BARRETT AMERICAN
Address: 236 ANDREW AV
City,State,Zip: ENCINITAS, CA 92024
Lead Agency: SAN DIEGO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019729886
Global Id: T06019729886
Latitude: 33.082392
Longitude: -117.30424
Status: Completed - Case Closed
Status Date: 05/04/2006
Case Worker: EM
RB Case Number: Not reported
Local Agency: SAN DIEGO COUNTY LOP
File Location: Local Agency
Local Case Number: 199128-001
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T06019729886
Contact Type: Local Agency Caseworker
Contact Name: EWAN MOFFAT
Organization Name: SAN DIEGO COUNTY LOP
Address: P.O. Box 129261
City: San Diego
Email: ewan.moffat@sdcounty.ca.gov
Phone Number: Not reported

LUST:
Global Id: T06019729886
Action Type: Other
Date: 06/07/2005
Action: Leak Began

Global Id: T06019729886

BARRETT AMERICAN (Continued) **S107619741**

Action Type: Other
Date: 06/07/2005
Action: Leak Discovery

Global Id: T06019729886
Action Type: Other
Date: 06/07/2005
Action: Leak Stopped

Global Id: T06019729886
Action Type: Other
Date: 08/04/2005
Action: Leak Reported

Global Id: T06019729886
Action Type: ENFORCEMENT
Date: 05/04/2006
Action: Closure/No Further Action Letter

Global Id: T06019729886
Action Type: ENFORCEMENT
Date: 08/05/2005
Action: Notice of Responsibility

LUST:
Global Id: T06019729886
Status: Open - Case Begin Date
Status Date: 06/07/2005

Global Id: T06019729886
Status: Completed - Case Closed
Status Date: 05/04/2006

SAN DIEGO CO. SAM:
Name: BARRETT AMERICAN
Address: 236 ANDREW AV
City,State,Zip: ENCINITAS, CA 92024
Case Number: 226452
Agency: DEH Site Assessment & Mitigation
Funding: LOP - Federal Fund
Facility Type: Soils Only
Facility Status: Closed Case
Date: 5/4/2006
Date Began: 6/7/2005

SAN DIEGO CO LOP:
Name: BARRETT AMERICAN
Address: 236 ANDREW AVE
City,State,Zip: ENCINITAS, CA 92024
Record ID: DEH2005-LSAM-199128-001
Record Status: Completed
Opened Date: 08/04/2005
Parcel Number: 216-052-09-00
Case Type: LOP - Local Oversight Program
Historical Name: BARRETT AMERICAN

BARRETT AMERICAN (Continued) **S107619741**

SWRCB Global ID:	T06019729886
Funding:	F - LOP Federal Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	08/04/2005
Census Tract:	Not reported
Community:	Not reported
Jurisdiction:	Not reported
Watershed Basin Number:	Not reported
Water Purveyor:	Not reported
Fire Agency:	Not reported
Latitude:	Not reported
Longitude:	Not reported
X MapCoord:	Not reported
Y MapCoord:	Not reported

CERS:

Name:	BARRETT AMERICAN
Address:	236 ANDREW AV
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	226498
CERS ID:	T06019729886
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	EWAN MOFFAT - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

20
SSE
1/4-1/2
0.287 mi.
1513 ft.

GAYLORD BAHLMANN INC
1657 VULCAN
ENCINITAS, CA 92024

SAN DIEGO CO. SAM
CPS-SLIC
San Diego Co. HMMD
HIST UST
CERS

S100741523
N/A

Relative:
Lower

Actual:
61 ft.

SAN DIEGO CO. SAM:

Name:	FORMER FOXPOINT FARMS, NOW CORAL COVE
Address:	1657 N VULCAN AV
City,State,Zip:	ENCINITAS, CA 92024
Case Number:	H99292-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	8/19/2008
Date Began:	Not reported

CPS-SLIC:

Name:	FORMER FOXPOINT FARMS, NOW CORAL COVE
Address:	1657 N VULCAN AV
City,State,Zip:	ENCINITAS, CA 92024

GAYLORD BAHLMANN INC (Continued) **S100741523**

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	08/19/2008
Global Id:	SLT19776403
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H99292-001
Latitude:	33.077623
Longitude:	-117.304386
Case Type:	Cleanup Program Site
Case Worker:	KH
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Name:	FOXPOINT FARMS
Address:	1657 N VULCAN AV
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	199292
Business Type:	6HKAG
EPA Id Number:	Not reported
APN:	254-061-01-00
Last HMMD Inspection:	03/22/2004
Facility Telephone:	760-942-7526
Permit Status:	INAC
Permit Expiration:	04/06/2000
Date Last Updated:	11/02/2012
Facility Owner:	FOX POINT FARMS
Facility Mailing Address:	P.O. BOX 230816
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92023-
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

HIST UST:

Name:	GAYLORD BAHLMANN INC
Address:	1657 VULCAN
City,State,Zip:	ENCINITAS, CA 92024
File Number:	0002B368
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B368.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported

GAYLORD BAHLMANN INC (Continued) **S100741523**

Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CERS:

Name:	FORMER FOXPOINT FARMS, NOW CORAL COVE
Address:	1657 N VULCAN AV
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	199245
CERS ID:	SLT19776403
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	KEVIN HEATON - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

E21 **FIRST AMERICAN BANK PROPERTY** **LUST** **S100726852**
SSE **1508 HWY 101 N** **N/A**
1/4-1/2 **ENCINITAS, CA 92024**
0.459 mi.
2426 ft. **Site 1 of 6 in cluster E**

Relative:
Lower

Actual:
58 ft.

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT3252
Local Case:	H32587-001
Substance:	Waste Oil
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Not reported
How Stopped:	Not reported
Source:	Not reported
Cause:	Not reported
Lead Agency:	Local Agency
Case Type:	Other ground water affected

FIRST AMERICAN BANK PROPERTY (Continued) **S100726852**

Date Found:	10/04/1996
Date Stopped:	/ /
Confirm Date:	/ /
Submit Workplan:	Not reported
Prelim Assess:	10/04/1996
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	10/04/1996
Enforce Date:	Not reported
Closed Date:	3/7/97
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.51
GW Depth:	13'
Beneficial Use:	NBNOC
NPDES Number:	Not reported
Priority:	Medium priority
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

F22 **WESTON FAMILY TRUST** **CPS-SLIC** **S120762622**
ENE **510 LA COSTA AVENUE** **HAZNET** **N/A**
1/4-1/2 **ENCINITAS, CA 92024** **CERS**
0.473 mi.
2498 ft. **Site 1 of 2 in cluster F**

Relative:
Higher

Actual:
80 ft.

CPS-SLIC:

Name:	LA COSTA 48
Address:	510 LA COSTA AVENUE
City,State,Zip:	ENCINITAS, CA 92024
Region:	STATE
Facility Status:	**Open - Active**
Status Date:	05/19/2017
Global Id:	T10000010402
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	DEH2017-LSAM-000439
Latitude:	33.08668
Longitude:	-117.30141
Case Type:	Cleanup Program Site
Case Worker:	JC
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HAZNET:

Name:	WESTON FAMILY TRUST
Address:	510 LA COSTA AVENUE
City,State,Zip:	ENCINITAS, CA 92024

WESTON FAMILY TRUST (Continued) **S120762622**

Year:	2017
GEPAID:	CAC002897558
Contact:	DAVID MEYER
Telephone:	7603108836
Mailing Name:	Not reported
Mailing Address:	P.O. BOX 234293
Mailing City,St,Zip:	ENCINITAS, CA 92024
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	0.834
CA Waste Code:	133-Aqueous solution with total organic residues 10 percent or more
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	San Diego

Name:	WESTON FAMILY TRUST
Address:	510 LA COSTA AVENUE
City,State,Zip:	ENCINITAS, CA 92024
Year:	2017
GEPAID:	CAC002897558
Contact:	DAVID MEYER
Telephone:	7603108836
Mailing Name:	Not reported
Mailing Address:	P.O. BOX 234293
Mailing City,St,Zip:	ENCINITAS, CA 92024
Gen County:	San Diego
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Tons:	0.834
CA Waste Code:	133-Aqueous solution with total organic residues 10 percent or more
Method:	H039-Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	San Diego

CERS:

Name:	LA COSTA 48
Address:	510 LA COSTA AVENUE
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	421732
CERS ID:	T10000010402
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JAMES CLAY - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

E23 SSE 1/4-1/2 0.477 mi. 2517 ft. | **FIRST AMERICAN BANK PROPE** | **HIST CORTESE** | **S105024451** | **N/A**
1508 101
LEUCADIA, CA 92024

Site 2 of 6 in cluster E

Relative: Lower
Actual: 58 ft.

HIST CORTESE:

edr_fname:	FIRST AMERICAN BANK PROPE
edr_fadd1:	1508 101
City,State,Zip:	LEUCADIA, CA 92024
Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT3252

E24 SSE 1/4-1/2 0.477 mi. 2517 ft. | **ART WOLDENGA AND/OR JOE STIX** | **LUST** | **S106922878** | **SWEEPS UST** | **N/A** | **CERS**
1508 N HIGHWAY 101
LEUCADIA, CA 92024

Site 3 of 6 in cluster E

Relative: Lower
Actual: 58 ft.

LUST:

Name:	ART WOLDENGA AND/OR JOE STIX
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 92024
Lead Agency:	SAN DIEGO COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302005
Global Id:	T0607302005
Latitude:	33.073881
Longitude:	-117.306014
Status:	Completed - Case Closed
Status Date:	03/07/1997
Case Worker:	Not reported
RB Case Number:	9UT3252
Local Agency:	Not reported
File Location:	Local Agency
Local Case Number:	H32587-001
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

LUST:

Global Id:	T0607302005
Action Type:	Other
Date:	10/04/1996
Action:	Leak Began
Global Id:	T0607302005
Action Type:	ENFORCEMENT
Date:	02/18/1997
Action:	Closure/No Further Action Letter - #H32587-001
Global Id:	T0607302005
Action Type:	Other
Date:	10/04/1996
Action:	Leak Discovery
Global Id:	T0607302005
Action Type:	Other

ART WOLDENGA AND/OR JOE STIX (Continued) **S106922878**

Date:	10/04/1996
Action:	Leak Reported
Global Id:	T0607302005
Action Type:	ENFORCEMENT
Date:	03/07/1997
Action:	Closure/No Further Action Letter

LUST:

Global Id:	T0607302005
Status:	Open - Case Begin Date
Status Date:	10/04/1996
Global Id:	T0607302005
Status:	Completed - Case Closed
Status Date:	03/07/1997

SWEEPS UST:

Name:	ART WOLDENGA AND/OR JOE STIX
Address:	1508 N HIGHWAY 101
City:	LEUCADIA
Status:	Active
Comp Number:	32587
Number:	9
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-032587-000001
Tank Status:	A
Capacity:	1000
Active Date:	Not reported
Tank Use:	OIL
STG:	P
Content:	Not reported
Number Of Tanks:	1

CERS:

Name:	ART WOLDENGA AND/OR JOE STIX
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	206836
CERS ID:	T0607302005
CERS Description:	Leaking Underground Storage Tank Cleanup Site

E25 SSE 1/4-1/2 0.477 mi. 2517 ft. | **LEUCADIA AUTO BODY 1508 N HY 101 ENCINITAS, CA 92024** | **SAN DIEGO CO. SAM CERS** | **S106916039 N/A**

Site 4 of 6 in cluster E

Relative: Lower
Actual: 58 ft.

SAN DIEGO CO. SAM:

Name:	LEUCADIA AUTO BODY
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 920241444
Case Number:	H05014-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	9/11/1996
Date Began:	6/20/1996

Name:	LEUCADIA AUTO BODY
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 920241444
Case Number:	H05014-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	8/20/1997
Date Began:	4/22/1997

CERS:

Name:	LEUCADIA AUTO BODY
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 920241444
Site ID:	204436
CERS ID:	T0608127646
CERS Description:	Cleanup Program Site

Name:	LEUCADIA AUTO BODY
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 920241444
Site ID:	204436
CERS ID:	T0608121580
CERS Description:	Cleanup Program Site

E26 SSE 1/4-1/2 0.477 mi. 2517 ft. | **ART WOLDENGA AND/OR JOE STIX 1508 N HY 101 ENCINITAS, CA 92024** | **SAN DIEGO CO. SAM SAN DIEGO CO LOP** | **S106916363 N/A**

Site 5 of 6 in cluster E

Relative: Lower
Actual: 58 ft.

SAN DIEGO CO. SAM:

Name:	ART WOLDENGA AND/OR JOE STIX
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 92024
Case Number:	H32587-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - Federal Fund**
Facility Type:	Soils Only
Facility Status:	Closed Case

ART WOLDENGA AND/OR JOE STIX (Continued) **S106916363**

Date: 3/7/1997
Date Began: 10/4/1996

SAN DIEGO CO LOP:

Name:	ART WOLDENGA AND/OR JOE STIX
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 92024
Record ID:	DEH1996-LSAM-H32587-001
Record Status:	Completed
Opened Date:	10/04/1996
Parcel Number:	254-054-53-00
Case Type:	LOP - Local Oversight Program
Historical Name:	FIRST AMERICAN BANK PROPERTY
SWRCB Global ID:	T0607302005
Funding:	F - LOP Federal Fund
Lead Agency:	DEH/SAM
Lead Agency Date:	10/04/1996
Census Tract:	177.01
Community:	Encinitas
Jurisdiction:	ENCINITAS
Watershed Basin Number:	904.51
Water Purveyor:	SAN DIEGUITO WATER DISTRICT LAND
Fire Agency:	SAN DIEGUITO WATER DISTRICT LAND
Latitude:	33.0742535
Longitude:	-117.3061284
X MapCoord:	6238141.599
Y MapCoord:	1972282.543

E27 **LEUCADIA AUTO BODY** **CPS-SLIC** **S106064578**
SSE **1508 N HY 101** **San Diego Co. HMMD** **N/A**
1/4-1/2 **ENCINITAS, CA 92024**
0.477 mi.
2517 ft. **Site 6 of 6 in cluster E**

Relative:
Lower

Actual:
58 ft.

CPS-SLIC:

Name:	LEUCADIA AUTO BODY
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 920241444
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	08/20/1997
Global Id:	T0608121580
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H05014-002
Latitude:	33.073912
Longitude:	-117.306025
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Stoddard solvent / Mineral Spriits / Distillates
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LEUCADIA AUTO BODY (Continued) **S106064578**

Name:	LEUCADIA AUTO BODY
Address:	1508 N HY 101
City,State,Zip:	ENCINITAS, CA 920241444
Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	09/11/1996
Global Id:	T0608127646
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H05014-001
Latitude:	33.073912
Longitude:	-117.306025
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Name:	SCOTT'S AUTOMOTIVE
Address:	1508 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	135453
Business Type:	6HK26
EPA Id Number:	CAL000144802
APN:	DEH-135453
Last HMMD Inspection:	02/11/2010
Facility Telephone:	760-632-7096
Permit Status:	OPEN
Permit Expiration:	03/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	SCOTT R. DAILEY
Facility Mailing Address:	1508 N HY 101 A
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024-
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	135453
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information:	AQUEOUS BRAKE WASHER
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

LEUCADIA AUTO BODY (Continued) **S106064578**

Permit Number: 135453
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 221 WASTE OIL & MIXED OIL
Other Information: WASTE OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 135453
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information: Not reported
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 135453
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: GAS & OIL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 08/21/2006
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 02/20/2003
Violation Code: 6HV0201
Violation: WASTE CONTAINER NOT CLOSED
Violation Citation: Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity: ACTIVE

Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 08/05/2004
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 135453
Update Date: 11/02/2012

LEUCADIA AUTO BODY (Continued) **S106064578**

Inspection Date:	08/05/2004
Violation Code:	6HV0201
Violation:	WASTE CONTAINER NOT CLOSED
Violation Citation:	Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity:	ACTIVE

Name:	SCOTT'S AUTOMOTIVE
Address:	1508 N HWY 101
City,State,Zip:	ENCINITAS, CA 92024
Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	cal000144802
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	760-632-7096
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	03/23/2018
Facility Owner:	Not reported
Facility Mailing Address:	1508 N Highway 101 Unit A, Encinitas, CA 92024
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-135453
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	4091821
Return To Compliance Date:	2014-08-14T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2019-02-20T00:00:00.000
Inspection Date:	2014-08-14T08:26:00.000
Violation Code:	1010007 Failure to submit a revised business plan upon a substantial change in the handler's operations; HSC 6.95 25505(b).

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-135453
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5491001

LEUCADIA AUTO BODY (Continued) **S106064578**

Return To Compliance Date:	2016-10-12T00:00:00.000
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2019-02-20T00:00:00.000
Inspection Date:	2016-08-15T13:21:00.000
Violation Code:	3010002 Failed to obtain and/or maintain an active EPA ID. 22 CCR 66262.12

Waste and Materials:

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HCHEM-0114948
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2018-03-23T02:32:28.000
Chemical Name:	Carbon Dioxide
Common Name:	Carbon Dioxide
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HCHEM-0114949
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2018-03-23T02:32:28.000
Chemical Name:	LUBRICATING OIL
Common Name:	LUBRICATING OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0096409
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-03-23T02:32:28.000
Chemical Name:	WASTE 221 WASTE OIL & MIXED OIL
Common Name:	WASTE OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0096410
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-03-23T02:32:28.000
Chemical Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Common Name:	WASTE ANTIFREEZE
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed

LEUCADIA AUTO BODY (Continued) **S106064578**

Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0096411
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2018-03-23T02:32:28.000
Chemical Name:	WASTE Parts washer
Common Name:	Parts washer
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0164640
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-02-20T02:38:19.000
Chemical Name:	WASTE 221 WASTE OIL & MIXED OIL
Common Name:	WASTE OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0164641
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-02-20T02:38:19.000
Chemical Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Common Name:	WASTE ANTIFREEZE
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HWAST-0164642
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2019-02-20T02:38:19.000
Chemical Name:	WASTE Parts washer
Common Name:	WASTE Parts washer
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2018-HCHEM-0190174
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2019-02-20T02:38:19.000
Chemical Name:	LUBRICATING OIL
Common Name:	LUBRICATING OIL
Case Number:	Not reported

F28 ENE 1/4-1/2 0.497 mi. 2622 ft. | **LA COSTA HOTEL**
516 LA COSTA AVE
ENCINITAS, CA 92024

Site 2 of 2 in cluster F

CPS-SLIC **S123531209**
CERS **N/A**

Relative: Higher

Actual: 78 ft.

CPS-SLIC:

Name:	LA COSTA HOTEL
Address:	516 LA COSTA AVE
City,State,Zip:	ENCINITAS, CA 92024
Region:	STATE
Facility Status:	**Open - Active**
Status Date:	01/31/2019
Global Id:	T10000012696
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	DEH2019-LSAM-000534
Latitude:	33.0845946373618
Longitude:	-117.300229755685
Case Type:	Cleanup Program Site
Case Worker:	EM
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	LA COSTA HOTEL
Address:	516 LA COSTA AVE
City,State,Zip:	ENCINITAS, CA 92024
Site ID:	515704
CERS ID:	T10000012696
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	EWAN MOFFAT - SAN DIEGO COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	P.O. Box 129261
Affiliation City:	San Diego
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Count: 3 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CARLSBAD	S109348922	COCA COLA BOTTLING TRUCK SPIL	0 HWY I5 NORTH OF LA COSTA EXI	92011	SAN DIEGO CO. SAM
ENCINITAS	S108407071	GREYSTONE HOMES PROPERTY	N CORNER OF VULCAN & S	92024	SAN DIEGO CO. SAM
ENCINITAS	S111828646	OLIVENHAIN AND COAST HIGHWAY 101 S	MANCHESTER AVE AND PACIFIC COA	92024	CIWQS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/03/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 41

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 36

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/13/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/10/2018
Date Data Arrived at EDR: 03/08/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/13/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/12/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 41

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 42

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/03/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/10/2018
Date Data Arrived at EDR: 03/08/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 54

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/20/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 34

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 34

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/28/2019
Date Data Arrived at EDR: 06/28/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 26

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 32

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 49

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/24/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 40

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 06/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 03/07/2019
Date Data Arrived at EDR: 04/03/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 50

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/07/2019
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/18/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/03/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/07/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/07/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019
Date Data Arrived at EDR: 03/28/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 34

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/05/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/07/2019
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 39

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 36

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 04/18/2019
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 11

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 35

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/19/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 04/09/2019
Number of Days to Update: 18

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/23/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/24/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 11/02/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 41

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/18/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/15/2019
Date Data Arrived at EDR: 05/16/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 63

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 05/29/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 54

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 51

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/13/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/05/2019
Number of Days to Update: 31

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/18/2019
Date Data Arrived at EDR: 03/19/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 41

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 34

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 64

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/09/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 05/08/2019
Number of Days to Update: 27

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/11/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 43

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/11/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 70

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 06/28/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 26

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 27

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/24/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 05/17/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/22/2019
Date Data Arrived at EDR: 05/23/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 56

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 29

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 06/05/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 47

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/10/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/20/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 63

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 07/16/2019
Number of Days to Update: 70

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/16/2019
Date Data Arrived at EDR: 05/17/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 13

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 05/30/2019
Date Data Arrived at EDR: 05/31/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 53

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 05/13/2019
Date Data Arrived at EDR: 05/16/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 63

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/15/2019
Date Data Arrived at EDR: 04/16/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 66

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/17/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 54

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 06/25/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 04/16/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 66

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/04/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 13

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 53

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 05/23/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 53

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/23/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 9

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/09/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 07/16/2019
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/12/2019
Number of Days to Update: 42

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/12/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 18

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/12/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 69

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 06/18/2019
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/06/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 79

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 06/28/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/31/2019
Date Data Arrived at EDR: 05/31/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 63

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 11/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 38

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/17/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/16/2019
Date Data Arrived at EDR: 05/23/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 56

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/19/2019
Date Data Arrived at EDR: 05/23/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 60

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 53

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 06/18/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 06/04/2019
Date Made Active in Reports: 07/23/2019
Number of Days to Update: 49

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/16/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/28/2019
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 05/09/2019
Date Data Arrived at EDR: 05/10/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 68

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/19/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 63

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/09/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/30/2019
Number of Days to Update: 35

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/22/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/10/2019
Date Data Arrived at EDR: 06/12/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 42

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 06/20/2019
Number of Days to Update: 76

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 05/03/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 07/16/2019
Number of Days to Update: 70

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/01/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/17/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

1900 N HIGHWAY 101
1900 N HIGHWAY 101
ENCINITAS, CA 92024

TARGET PROPERTY COORDINATES

Latitude (North):	33.080586 - 33˚ 4' 50.11''
Longitude (West):	117.308105 - 117˚ 18' 29.18''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	471243.6
UTM Y (Meters):	3660071.5
Elevation:	66 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641296 ENCINITAS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

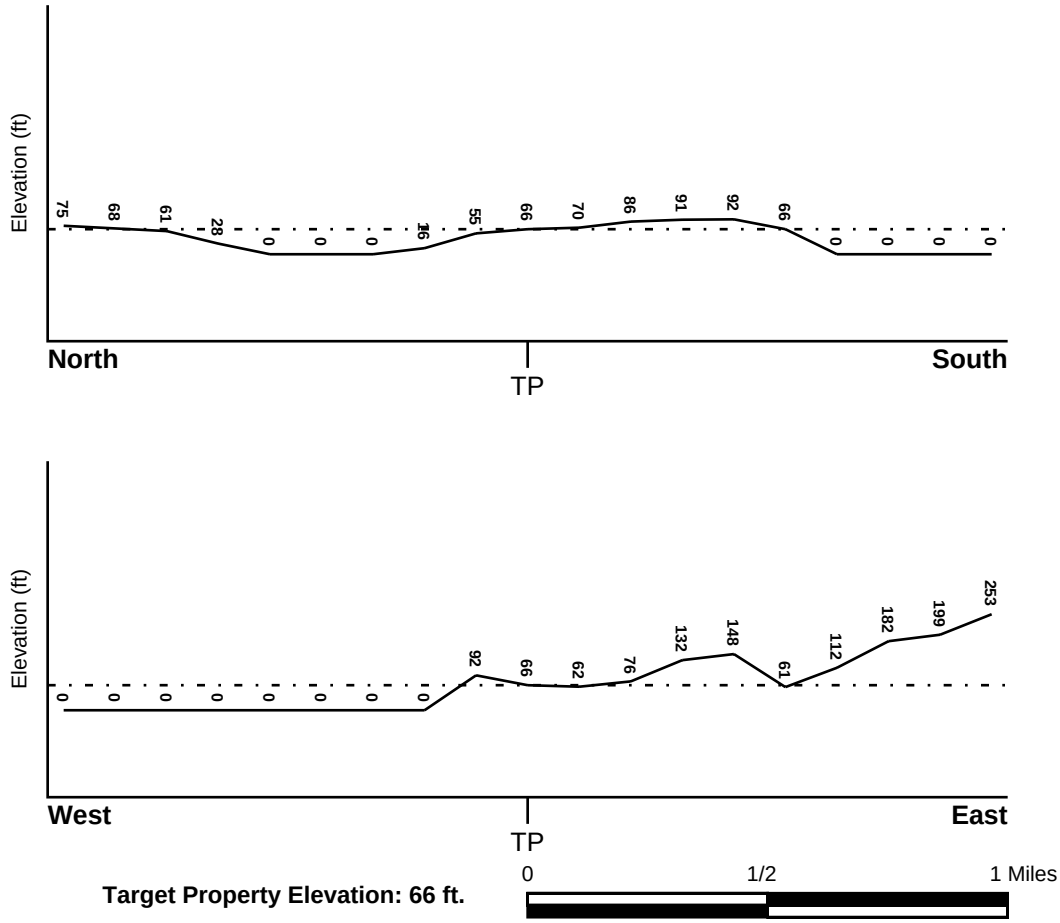
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 66 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06073C1035G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06073C1030G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ENCINITAS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

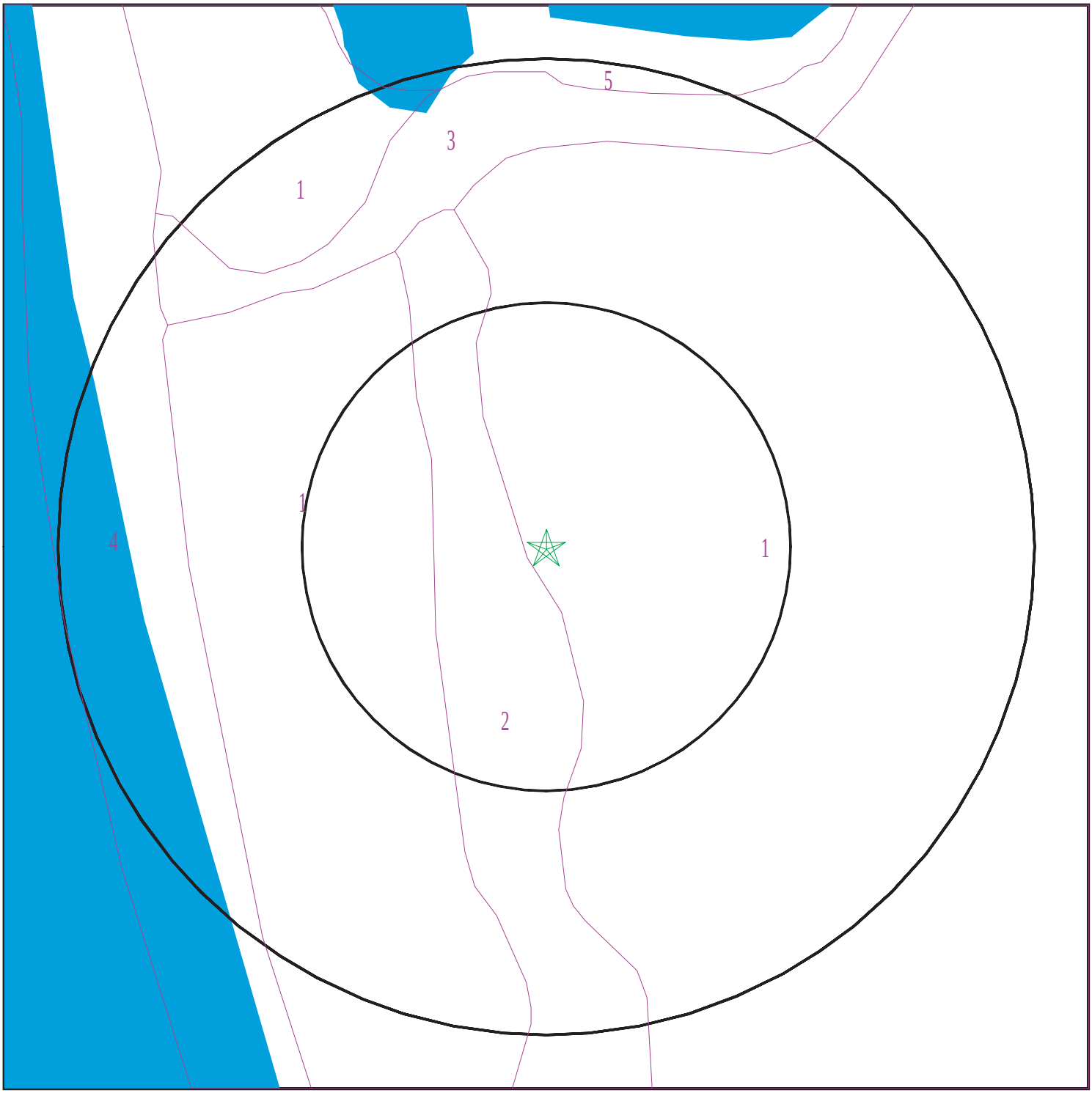
Era:	Cenozoic
System:	Tertiary
Series:	Eocene
Code:	Te *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5744045.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	1900 N Highway 101	CLIENT:	Hovey Environmental
ADDRESS:	1900 N Highway 101 Encinitas CA 92024	CONTACT:	Caroline Hovey
		INQUIRY #:	5744045.2s
LAT/LONG:	33.080586 / 117.308105	DATE:	August 07, 2019 3:06 pm

Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: TERRACE ESCARPMENTS

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: COASTAL BEACHES

Soil Surface Texture: coarse sand

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.1
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.1

Soil Map ID: 5

Soil Component Name: LAKES AND LAGOONS

Soil Surface Texture: coarse sand

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

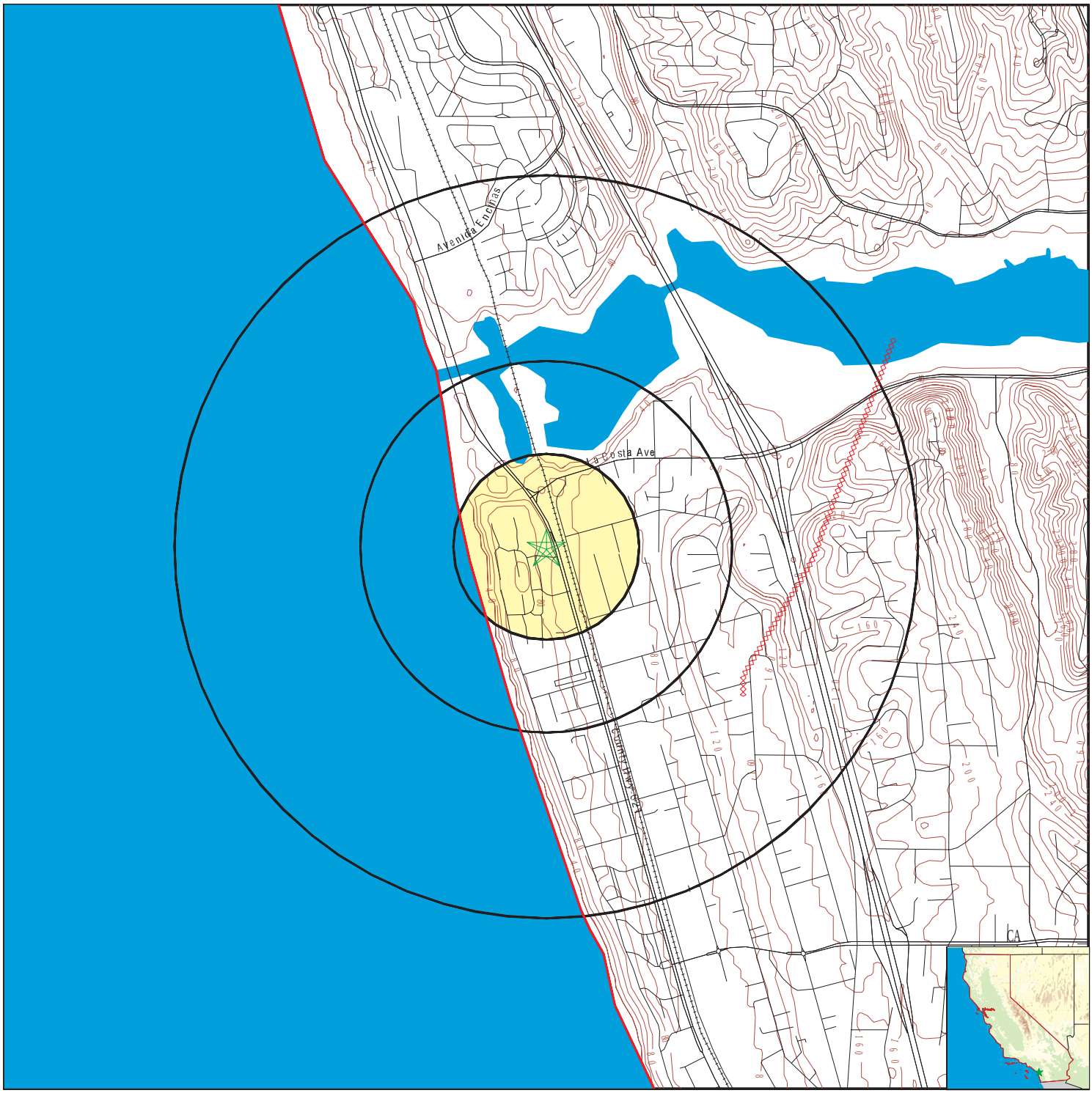
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 5744045.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

N

SITE NAME: 1900 N Highway 101 ADDRESS: 1900 N Highway 101 Encinitas CA 92024 LAT/LONG: 33.080586 / 117.308105	CLIENT: Hovey Environmental CONTACT: Caroline Hovey INQUIRY #: 5744045.2s DATE: August 07, 2019 3:06 pm

Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92024	42	5

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 92024

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX F

SITE SPECIFIC INFORMATION

USER-PROVIDED INFORMATION

ENVIRONMENTAL LIEN SEARCH

AIRCRE

SELLER'S MANDATORY DISCLOSURE STATEMENT

(Required by law on transactions involving non-residential properties in California)
DO NOT USE THIS FORM WITH REGARD TO THE SALE OF RESIDENTIAL PROPERTIES

This disclosure statement is intended to be a part of the ☑ STANDARD OFFER, AGREEMENT AND ESCROW INSTRUCTIONS FOR PURCHASE OF REAL ESTATE (See paragraph 9.1(a) of said document) or ☐ _____ (the "**Purchase Agreement**") dated July 29, 2019, regarding that certain real property commonly known as (street address, city, state, zip): 1900 N Coast Hwy 101, Encinitas, California 92024 (the "**Property**") wherein Gary Dewitt, The Gary Dewitt Trust is the Seller and Encinitas Beach Plaza Venture, LLC, or Assignee is the Buyer. Note: This disclosure statement is not designed nor intended to be used in place of the standard Property Information Sheet published BY AIR CRE ("AIR"). Both documents should be used in every transaction involving a sale.

In order to comply with State law concerning disclosures to a potential purchaser, Seller elects to:

☐ A. Utilize a report prepared by a professional consultant which has been approved by the AIR, i.e., **First American Natural Hazard Disclosures**, (800) 527-0027, or JCP Property Disclosure Reports, (800) 748-5233. A copy of their report is attached hereto. **(Complete paragraph 8, 9, 10, 12 and 13 and sign this statement in the place provided.)**

☑ B. Utilize a report prepared by Disclosure Source, with phone number: 800-880-9123. A copy of their report is attached hereto. **(Complete paragraphs 8, 9 10, 12, and 13, sign this Statement in the place provided, and attach a copy of The Commercial Property Owner's Guide to Earthquake Safety.)**

☐ C. Complete this Disclosure Statement without the assistance of a professional consultant. **(Complete paragraphs 1 through 13 and sign this Statement in the place provided. Remember to attach a copy of The Commercial Property Owner's Guide to Earthquake Safety.)**

---

1. EARTHQUAKE FAULT ZONES. If the Property is located within a delineated Earthquake Fault Zone (a zone that encompasses a potentially or recently active trace of an earthquake fault that is deemed by the State Geologist to constitute a potential hazard to structures from surface faulting or fault creep), California Public Resources Code §2621 et seq. mandates that prospective purchasers be advised that the Property is located within such a Zone, and that its development may require a geologic report from a state registered geologist. In accordance with such law, Buyer is hereby informed that the Property ☐ is or ☐ is not within a delineated Earthquake Fault Zone.

2. SEISMIC HAZARD ZONES. If the Property is located within a Seismic Hazard Zone as delineated on a map prepared by the California Division of Mines and Geology, California Public Resources Code §2690 et seq. mandates that prospective purchasers be advised that the Property is located within such a Zone. In accordance with such law, Buyer is hereby informed that the Property ☐ is or ☐ is not within a Seismic Hazard Zone.

3. EARTHQUAKE SAFETY. If (1) the improvements on the Property were constructed prior to 1975, and (2) said improvements include structures with (i) pre-cast (e.g., tilt-up) concrete or reinforced masonry walls together with wood frame floors or roofs or (ii) unreinforced masonry walls, Buyer must be provided with a copy of The Commercial Property Owner's Guide to Earthquake Safety (the "Booklet") published by the California Seismic Safety Commission. Buyer is hereby informed that the Property:

☐ (a) meets the foregoing requirements, and a copy of the Booklet and a completed "Commercial Property Earthquake Weakness Disclosure Report" is attached hereto. Within five business days of Buyer's receipt of said Disclosure Report, Buyer shall deliver a duly countersigned copy of the same to Escrow Holder, with a copy to Seller and Seller's Broker. Escrow Holder is hereby instructed that the Escrow shall not close unless and until Escrow Holder has received the Disclosure Report duly signed by both Seller and Buyer.

☐ (b) does not meet the foregoing requirements requiring the delivery of the Booklet.

4. FIRE PROTECTION. If the Property is located within a designated State Responsibility Area as delineated on a map prepared by the California Department of Forestry, California Public Resources Code §4136 mandates that prospective purchasers be advised that the Property is located within a wildland area which may contain substantial forest fire risks and hazards, that the State may not be responsible to provide fire protection services, and that the Property may be subject to the requirements of Public Resources Code §4291 which requires the periodic removal of brush, the maintenance of firebreaks, and other similar activities. In accordance with such law, Buyer is hereby informed that the Property ☐ is or ☐ is not within a designated State Responsibility Area.

5. FIRE HAZARD. If the Property is located within an area designated as a Very High Fire Hazard Severity Zone pursuant to Government Code §51178 et seq, §51183.5 mandates that prospective purchasers be advised that the Property is located within such a zone and that the Property may be subject to various maintenance, design and/or construction requirements and/or restrictions. In accordance with such law, Buyer is hereby informed that the Property ☐ is or ☐ is not within a designated Very High Fire Hazard Severity Zone.

6. AREA OF POTENTIAL FLOODING. If the Property is located within an area of potential flooding in the event of the failure of a dam as shown on an inundation map designated pursuant to Government Code §8589.5, §8589.4 mandates that prospective purchasers be advised that the Property is located within such an area. In accordance with such law, Buyer is hereby informed that the Property ☐ is or ☐ is not within a designated area of potential flooding.

7. FLOOD HAZARD AREAS. If the Property is located within a designated Federal Flood Hazard Area as delineated on a map prepared by the Federal Emergency Management Agency, Federal law, ie. 42 U.S.C. §4104a, mandates that prospective purchasers be advised that the Property is located within an area having special

_____ _____
INITIALS INITIALS

© 2017 AIR CRE. All Rights Reserved.

flood hazards and that flood insurance may be required as a condition to obtaining financing. In accordance with such law, Buyer is hereby informed that the Property ☐ is or ☐ is not within a designated Federal Flood Hazard Area.

8. FLOOD DISASTER INSURANCE. If the Seller or Seller's predecessor-in-interest has previously received Federal flood disaster assistance and said assistance was conditioned upon obtaining and maintaining flood insurance on the Property, Federal law, ie. 42 U.S.C. §5154a, mandates that prospective purchasers be advised that they will be required to maintain such insurance on the Property and that if said insurance is not maintained and the Property is thereafter damaged by a flood disaster, the purchaser may be required to reimburse the Federal Government for the disaster relief provided. Buyer is hereby informed that to the best of the Seller's knowledge Federal flood disaster assistance ☐ has or ☒ has not been previously received with regard to the Property. Note: if such disaster assistance has been received, the law specifies that the required notice be "contained in documents evidencing the transfer of ownership".

9. WATER HEATER BRACING. If the Property contains one or more water heaters, Seller is required by California Health and Safety Code §19211 to certify to the Buyer that all such water heaters have been braced, strapped and/or anchored in accordance with law. Buyer is hereby advised that the required bracing, strapping and/or anchors: ☐ have been installed ☒ have not been installed, or ☐ Seller does not know whether they have been installed.

10. PRESENCE OF MOLD. If the seller or transferor of property knows of the presence of mold that affects the property and the mold either exceeds permissible exposure limits or poses a health threat then Health and Safety Code §26140, et seq. mandates that prospective purchasers be advised in writing of such mold. In accordance with such law, Buyer is hereby informed that the undersigned ☐ does or ☒ does not know of the presence of such mold effecting the Property.

11. TITLE INSURANCE. In the event that the Purchase Agreement does not at present provide that title insurance will be obtained, Buyer is strongly urged to consider purchasing such insurance, and, in accordance with California Civil Code §1057.6, is advised as follows:

IMPORTANT: IN A PURCHASE OR EXCHANGE OF REAL PROPERTY, IT MAY BE ADVISABLE TO OBTAIN TITLE INSURANCE IN CONNECTION WITH THE CLOSE OF ESCROW SINCE THERE MAY BE PRIOR RECORDED LIENS AND ENCUMBRANCES WHICH AFFECT YOUR INTEREST IN THE PROPERTY BEING ACQUIRED. A NEW POLICY OF TITLE INSURANCE SHOULD BE OBTAINED IN ORDER TO ENSURE YOUR INTEREST IN THE PROPERTY THAT YOU ARE ACQUIRING.

12. HAZARDOUS SUBSTANCES. Seller is required by California Health and Safety Code §25359.7 to notify potential buyers of the presence of any hazardous substance that Seller knows, or has reasonable cause to believe, is located on or beneath the Property. In accordance with such law, Buyer is hereby notified that: ☒ Seller neither knows nor has reasonable cause to believe that any hazardous substance is on or beneath the Property, or ☐ Seller knows or has reasonable cause to believe that the following hazardous substances are on or beneath the Property: _____.

13. OTHER. _____

PLEASE NOTE:

While the information contained in or attached to this Disclosure Statement is believed to be accurate as of the date that it was prepared, the applicable laws and the areas covered by the various natural hazard zones, etc. can change from time to time. Prior to the close of escrow, Buyer may wish to again check the status of the Property. Also, the city and/or county in which the Property is located may have established natural hazard zones in addition to those listed above. Buyer is advised to check with the appropriate local agency or agencies.

The descriptions contained within the above disclosure paragraphs are not intended to be full and complete dissertations of all of the possible ramifications to the Buyer and/or the Property. In the event that this document indicates that the Property is affected by one or more of the disclosures, Buyer is advised to:

1. **Review the applicable laws in their entirety.**
2. **Seek advice of counsel as to the legal consequences of the items disclosed.**
3. **Retain appropriate consultants to review and investigate the impact of said disclosures.**

Likewise no representation or recommendation is made BY AIR CRE or by any broker as to the legal sufficiency, legal effect, or consequences of this document or the Purchase Agreement to which it relates. Signatures to this Statement accomplished by means of electronic signature or similar technology shall be legal and binding.

Date: 7-30-19, 2019

SELLER
Gary Dewitt, The Gary Dewitt Trust

By: _____
Name Printed: Gary Dewitt
Title: _____

Receipt of the above Seller's Mandatory Disclosure Statement is hereby acknowledged:

Date: _____, 2019

BUYER
Encinitas Beach Plaza Venture, LLC, or Assignee

By: _____
Name Printed: Lawrence Jackel
Title: President

AIR CRE * https://www.aircre.com * 213-687-8777 * contracts@aircre.com

_____ _____
INITIALS INITIALS

© 2017 AIR CRE. All Rights Reserved.

AIRCRE

PROPERTY INFORMATION SHEET

(For the sale or leasing of non-residential properties)

PREFACE:

Purpose: This Statement is NOT a warranty as to the actual condition of the Property/Premises. The purpose is, instead, to provide the brokers and the potential buyer/lessee with important information about the Property/Premises which is currently in the actual knowledge of the Owner and which the Owner is required by law to disclose.

Actual Knowledge: For purposes of this Statement the phrase 'actual knowledge' means: the awareness of a fact, or the awareness of sufficient information and circumstances so as to cause one to believe that a certain situation or condition probably exists.

TO WHOM IT MAY CONCERN:

Gary Dewitt, The Gary Dewitt Trust ("**Owner**"), owns the Property/Premises commonly known as (street address, city, state, zip) 1900 N Coast Hwy 101, Encinitas, California 92024 located in the County of San Diego, and generally described as (describe briefly the nature of the Premises or Property) the property along with the buildings located thereon consisting of approximately 35,283 square feet of land area (hereinafter "**Property**"), and certifies that:

1. **Material Physical Defects.** Owner has no actual knowledge of any material physical defects in the Property or any improvements and structures thereon, including, but not limited to the roof, except (if there are no exceptions write "NONE"): None.

2. **Equipment.**
   A. Owner has no actual knowledge that the heating, ventilating, air conditioning, plumbing, loading doors, electrical and lighting systems, life safety systems, security systems and mechanical equipment existing on the Property as of the date hereof, if any, are not in good operating order and condition, except (if there are no exceptions write "NONE"): None.
   B. Owner has no actual knowledge of any leases, financing agreements, liens or other agreements affecting any equipment which is being included with the Property, except (if there are no exceptions write "NONE"): None.

3. **Soil Conditions.** Owner has no actual knowledge that the Property has any slipping, sliding, settling, flooding, ponding or any other grading, drainage or soil problems, except (if there are no exceptions write "NONE"): None.

4. **Utilities.** Owner represents and warrants that the Property is served by the following utilities (check the appropriate boxes) ☐ public sewer system and the cost of installation thereof has been fully paid, ☐ private septic system, ☒ electricity, ☒ natural gas, ☒ domestic water, ☒ telephone, and ☐ other: _____.

5. **Insurance.** Owner has no actual knowledge of any insurance claims filed regarding the Property during the preceding 3 years, except (if there are no exceptions write "NONE"): None.

6. **Compliance With Laws.** Owner has no actual knowledge of any aspect or condition of the Property which violates applicable laws, rules, regulations, codes, or covenants, conditions or restrictions, or of improvements or alterations made to the Property without a permit where one was required, or of any unfulfilled order or directive of any applicable government agency or of any casualty insurance company that any work of investigation, remediation, repair, maintenance or improvement is to be performed on the Property, except (if there are no exceptions write "NONE"): None.

7. **Hazardous Substances and Mold.**
   A. Owner has no actual knowledge of the Property ever having been used as a waste dump, of the past or present existence of any above or below ground storage tanks on the Property, or of the current existence on the Property of asbestos, transformers containing PCB's or any hazardous, toxic or infectious substance whose nature and/or quantity of existence, use, manufacture or effect, render it subject to Federal, state or local regulation, investigation, remediation or removal as potentially injurious to public health or welfare, except (if there are no exceptions write "NONE"): None.
   B. Owner represents and warrants that it is not currently, and never has been engaged in the business of hauling waste, and never stored hazardous substances on the Property, except (if there are no exceptions write "NONE"): Previous Tenant Stored Waste Oil in a designated, enclosed area
   C. Owner has no actual knowledge of the existence on the Property of hazardous levels of any mold or fungi defined as toxic under applicable state or Federal law, except (if there are no exceptions write "NONE"): None.

8. **Fire Damage.** Owner has no actual knowledge of any structure on the Property having suffered material fire damage, except (if there are no exceptions write "NONE"): None.

9. **Actions, Suits or Proceedings.** Owner has no actual knowledge that any actions, suits or proceedings are pending or threatened before any court, arbitration tribunal, governmental department, commission, board, bureau, agency or instrumentality that would affect the Property or the right or ability of an owner or tenant to convey, occupy or utilize the Property, except (if there are no exceptions write "NONE"): None.
   Owner has not served any Notices of Default on any of the tenants of the Property which have not been resolved except (if there are no exceptions write "NONE"): _____.

10. **Governmental Proceedings.** Owner has no actual knowledge of any existing or contemplated condemnation, environmental, zoning, redevelopment agency plan or other land use regulation proceedings which could detrimentally affect the value, use and operation of the Property, except (if there are no exceptions write "NONE"): None.

_____ INITIALS

_____ INITIALS

© 2017 AIR CRE. All Rights Reserved.

11. **Unrecorded Title Matters.** Owner has no actual knowledge of any encumbrances, covenants, conditions, restrictions, easements, licenses, liens, charges or other matters which affect the title of the Property that are not recorded in the official records of the county recorder where the Property is located, except (if there are no exceptions write "NONE"): None.

12. **Leases.** Owner has no actual knowledge of any leases, subleases or other tenancy agreements affecting the Property, except (if there are no exceptions write "NONE"): Except as provided in the rent roll. There are currently four tenants. Owner to provide leases and estoppels.

13. **Options.** Owner has no actual knowledge of any options to purchase, rights of first refusal, rights of first offer or other similar agreements affecting the Property, except (if there are no exceptions write "NONE"): None

14. **Short Sale/Foreclosure.** The ability of the Owner to complete a sale of the Property ☐ is contingent ☒ is not contingent upon obtaining the consent of one or more lenders to conduct a 'short sale', ie. a sale for less that the amount owing on the Property. (This paragraph only needs to be completed if this Property Information Sheet is being completed in connection with the proposed sale of the Property) One or more of any loans secured by the Property ☐ is ☒ is not in foreclosure.

15. **Energy Efficiency.** The Property ☐ has ☒ has not been granted an energy efficiency rating or certification such as one from the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) or ☐ Seller/Lessor does not know if the Property has been granted such a rating or certificate. If such a rating or certification has been obtained please describe the rating or certification and provide the name of the organization that granted it: _____.

16. **Other.** (It will be presumed that there are no additional items which warrant disclosure unless they are set forth herein): Ø.

The statements herein will be relied upon by brokers, buyers, lessees, lenders and others. Therefore, Owner and/or the Owner's Property Manager has reviewed and modified this printed statement as necessary to accurately and completely state all the known material facts concerning the Property. To the extent such modifications are not made, this statement may be relied upon as printed. This statement, however, shall not relieve a buyer or lessee of responsibility for independent investigation of the Property. Owner agrees to promptly notify, in writing, all appropriate parties of any material changes which may occur in the statements contained herein from the date this statement is signed until title to the Property is transferred, or the lease is executed. Signatures to this Statement accomplished by means of electronic signature or similar technology shall be legal and binding.

Date: _____, 2019
(fill in date of execution)

OWNER
Gary Dewitt, The Gary Dewitt Trust

By: _____
Name Printed: Gary Dewitt
Title: _____

Buyer/lessee hereby acknowledges receipt of a copy of this Property Information Sheet on 7/30/19, 2019. (Fill in date received)

BUYER/LESSEE
Encinitas Beach Plaza Venture, LLC, or Assignee

By: _____
Name Printed: Lawrence Jackel
Title: President

AIR CRE * https://www.aircre.com * 213-687-8777 * contracts@aircre.com
NOTICE: No part of these works may be reproduced in any form without permission in writing.

_____ INITIALS

_____ INITIALS

© 2017 AIR CRE. All Rights Reserved.

1900 N Highway 101

1900 N Highway 101
Encinitas, CA 92024

Inquiry Number: 5744045.7
August 08, 2019

EDR Environmental Lien and AUL Search

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

1900 N Highway 101
1900 N Highway 101
Encinitas, CA 92024

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

RESEARCH SOURCE

Source 1:

San Diego Recorder
San Diego, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed
Title is vested in:	Gary Donald DeWitt Trustee
Title received from:	Gary Donald DeWitt
Deed Dated	9/10/2004
Deed Recorded:	11/10/2004
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	
Miscellaneous Comments:	
Legal Description:	See Exhibit
Legal Current Owner:	Gary Donald DeWitt Trustee
Parcel # / Property Identifier:	2160410600
Comments:	See Exhibit

Deed Exhibit 1

Fee
3p
1cm

DOC # 2004-1069183

NOV 10, 2004 1:26 PM
OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 14.00
OC: OC
PAGES: 3

2004-1069183

Recorded at Request of and When Recorded, Return to:

RUSSELL E. GRIFFITH, ESQ.
ROCHELLE & GRIFFITH, LLP.
1991 VILLAGE PARK WAY, SUITE 105
ENCINITAS, CA 92024

Mail Tax Statements to:

Gary DeWitt, Trustee
785 Neptune Avenue
Encinitas, CA 92024

12043

Space Above for Recorder's Use Only

QUITCLAIM DEED

THE UNDERSIGNED GRANTOR(s) DECLARE(s)
DOCUMENTARY TRANSFER TAX is None ($0.00)
City of Encinitas
Parcel No. 216-041-06
(X) Grantor(s) transfer is to substitute Grantor(s) as Trustee in their place and stead, and,

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, GARY DONALD DE WITT hereby REMISES, RELEASES AND FOREVER QUITCLAIMS to GARY DE WITT, TRUSTEE OF THE GARY DEWITT TRUST, dated September 8, 2004, the following described real property in the City of Encinitas, County of San Diego, State of California:

See Attachment A attached hereto and incorporated by this reference.

Dated: 9-10-04, 2004

GARY DONALD DE WITT

12044

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN DIEGO)

On September 10, 2004, before me, Kelly M Sobolewski, a notary public, personally appeared GARY DONALD DE WITT personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Signature)

KELLY M. SOBOLEWSKI
Comm. # 1479630
NOTARY PUBLIC - CALIFORNIA
San Diego County
My Comm. Expires March 30, 2008

12045

Attachment A

That portion of the Southwest Quarter of Section 33, Township 12 South, Range 4 West, San Bernardino Meridian, in the City of Encinitas, County of San Diego, State of California, according to the Official Plat thereof, described as follows:

Beginning at the intersection of the South line of said Section 33, with the center line of Department of Public Works' Survey from Encinitas to Oceanside, Road XI-SD-2-B, which said intersection is Engineer's Station 127 plus 96.78 of said Survey, and which said Station bears South 89°53'00" West (record bearing in deed recorded in Book 297, Page 324 of Official Records, San Diego County, North 89°58'00" West) 894.79 feet from a two-inch iron pipe set in concrete at the South Quarter corner of said Section 33, as shown on Record of Survey Map No. 528, filed in the Office of the County Recorder, February 7, 1936; thence along the South line of said Section 33, South 89°53'00" West (deed recorded South 89°58'00" West) 251.95 feet; thence North 02°01'00" West, 185.00 feet; thence North 76°55'46" East, 210.00 feet, more or less, to an intersection with the above-mentioned center line of the California State Highway right-of-way, said point of intersection being a point in the arc of a curve concave Southwesterly and having a radius of 2,400.00 feet and a central angle of 31°05'48"; thence in a Southeasterly direction along the arc of said curve to the end thereof; thence South 15°43'15" East a distance of 35.41 feet to the Point of Beginning.

APN 216-041-06

1900 Highway 101
Leucadia, California

APPENDIX G

CERTIFICATION AND STATEMENT OF LIMITING CONDITIONS

HOVEY ENVIRONMENTAL
www.hoveyenvironmental.com ◊ info@hoveyenvironmental.com
2929 Chatsworth Blvd ◊ San Diego California 92106
Phone 619.203.9774 ◊ Fax 619.923.3055

CERTIFICATION AND STATEMENT OF LIMITING CONDITIONS FOR PHASE I ENVIRONMENTAL SITE ASSESSMENT

SUBJECT PROPERTY:	1900 N Highway 101	Encinitas	CA	92024
	STREET ADDRESS	CITY	STATE	ZIP

CLIENT NAME: ~~Fenway Properties~~ Encinitas Beach Plaza Venture, LLC, Attn: Bryan Smith PROJECT #: 19454-01

READ THE AGREEMENT CAREFULLY – IT IS A LEGALLY BINDING CONTRACT

Certification: Hovey Environmental LLC certifies to the Principal Parties; and Hovey Environmental LLC and the Principal Parties agree that:

1. Hovey Environmental LLC has no present or contemplated future (a) partnership with Principal Parties nor (b) any interest in the property inspected which could adversely affect the Hovey Environmental LLC's ability to perform an objective inspection; and neither the employment of Hovey Environmental LLC to conduct the inspection, nor the compensation for it, is contingent on the results of the inspection.
2. Hovey Environmental LLC has no personal interest in or bias with respect to the subject matter of the inspection report or any parties who may be part of a financial transaction involving the property. The conclusions and recommendations of the report are not based in whole or in part upon the race, color, creed, sex, or national origin of any of the Principal Parties.
3. Hovey Environmental LLC will personally inspect the property, both inside and out and will make visual inspection of adjacent properties, to the extent possible by readily available access. The inspection does not include the removal of any soil, water or air samples, the moving of furniture or fixtures, or any type of inspection that would require extraordinary effort to access.
4. All contingent and limiting conditions are contained herein (imposed by the terms of the inspection assignment or by the undersigned affecting the conclusions and recommendations contained in the report.)
5. The Inspection and Inspection report will be performed in accordance with ASTM 1527-13, Code of Federal Regulations Part 312 *Standard Practices for All Appropriate Inquiries*, and made in conformity with and is subject to the requirements of the Code of Professional Ethics of the Environmental Assessment Association.
6. All opinions, conclusions, and recommendations concerning the inspected property that are set forth in the inspection report will be prepared by Hovey Environmental LLC. No change of any item in the report shall be made by anyone other than Hovey Environmental LLC, and Hovey Environmental LLC shall have no responsibility for any such unauthorized change.

Client Signature

Contingent and Limiting Conditions: The certification of Hovey Environmental LLC appearing in the environmental inspection report is subject to the following conditions and to such other specific and limiting conditions as are set forth by Hovey Environmental LLC in the report.

1. Hovey Environmental LLC assumes no responsibility for matters of a legal nature affecting the property inspected or the title thereto. The property is inspected assuming responsible ownership.
2. Any sketch appearing in or attached to the inspection report, or any statement of dimensions, capacities, quantities or distances, are approximate and are included to assist the reader in visualizing the property and the use is limited to this purpose. Hovey Environmental LLC will make no survey of the property.
3. Hovey Environmental LLC is not required to give testimony or appear in court because of having made the inspection with reference to the property in question, unless arrangements have been previously made thereof. If Hovey Environmental LLC is called to give testimony as a result of the Environmental Inspection, additional fees will be charged at Hovey Environmental LLC's then current fee rates for any time spent including but not limited to research, consultation, additional inspection time, preparation of reports, travel, time waiting to testify and court appearances or depositions or sworn statements.
4. This report is not intended to have any direct effect on the value of the property inspected but simply to provide a visual Environmental Assessment solely for the benefit of the Principal Parties.
5. Hovey Environmental LLC assumes that there are no hidden, unapparent, or latent conditions or defects in or of the property, subsoil, or structures, other than those noted on the inspection report or any addendum to the report which the Inspector will include. Hovey Environmental LLC assumes no responsibility for such conditions or for the inspection, engineering, or repair which might be required to discover or correct such factors. The Phase I ESA is an inspection only. Hovey Environmental LLC will not take samples from the property or perform any tests on the property as part of this agreement.
6. Information, estimates and opinions furnished to Hovey Environmental LLC, and contained in the report, were obtained from sources considered reliable and believed to be true and correct on the date they were obtained. However, Hovey Environmental LLC has made no independent investigation as to such matters and undertakes no responsibility for the accuracy of such items, including but not limited to federal, state, and local government databases, historical archives, maps, tax files, title records, and land use records.
7. The Inspection and Inspection Report are made by Hovey Environmental LLC solely for the benefit and personal use of the Principal Parties. Disclosure of the contents of the Inspection Report is governed by the Bylaws and Regulations of the Environmental Assessment Association. No disclosure may be made of the Inspection Report without the prior written consent of Hovey Environmental LLC and Hovey Environmental LLC undertakes no responsibility for harm or damages to any party other than the Principal Parties arising from or in any way connected to the report.
8. Neither the Inspection Report, any part thereof, nor any copy of the same (including conclusions or recommendations, the identity of the Inspector, professional designation, reference to any professional organization, or the firm with which the inspector is connected), shall be used for any purposes by anyone but the Principal Parties. The report shall not be conveyed by anyone to the public through advertising, public relations, news, sales, or other media, without the prior written consent and approval of Hovey Environmental LLC.

Client Signature

9. This Agreement and the documents referred to herein constitute the entire Agreement between the parties hereto and supercede any and all prior representations, discussions or agreements whether written or oral. No amendment, change or variance from this Agreement shall be binding on either party unless mutually agreed to in writing and signed by the parties hereto. If any provision of this agreement is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable and binding on the parties.
10. THE INSPECTION AND INSPECTION REPORT DO NOT CONSITUTE A WARRANTY, GUARANTEE OR INSURANCE POLICY OF ANY KIND. There are no warranties, guarantees or insurance available or provided by Hovey Environmental LLC.

Having read and fully understanding this Agreement, I hereby authorize the inspection of the subject property.

$2,000
Environmental Assessment Fee

July 31, 2019
Agreement Date

Client's Signature

Encinitas Beach Plaza Venture, LLC
Client's Name and Company (if applicable)

674 Via de la Valle #310, Solana Beach, CA 92075
Street Address City State Zip

bsmith@fenway ca.com
Email

(858) 436-3616
Daytime Phone

(858) 444-5709
Mobile Phone

(858) 436-3636
Fax

Caroline Hovey, CMC, CES, REA-08115
Principal Environmental Specialist
Hovey Environmental LLC

APPENDIX H
QUALIFICATIONS OF ENVIRONMENTAL ASSESSOR

CAROLINE HOVEY, ***CMC, CES, REA-08115***
Principal Environmental Specialist
Hovey Environmental LLC

EXPERIENCE

2002 - present

PRINCIPAL ENVIRONMENTAL SPECIALIST: Hovey Environmental LLC

- Moisture and microbial evaluations and testing
- Microbial remediation protocols and post-remediation verification
- Environmental site assessments (Phase I ESA)
- Consultation and expert witness services
- Air, water, soil quality evaluations and testing

1994 – 2001

ENVIRONMENTAL RESEARCH ASSOCIATE: Granberry & Assoc., Chemical, Safety, and Environmental Consultants; Winter Park, FL

- Indoor air quality assessments / sick building syndrome analyses
- Environmental site assessments
- Research of legal cases dealing with hazards in the chemical industry
- Assist safety audits of manufacturing plants
- Audit industrial compliance with government regulations, including OSHA, NFPA, etc.

1998 – 2000

ENVIRONMENTAL SCIENTIST: South Florida Water Management District; Kissimmee Department; West Palm Bch, FL

- Primary Investigator, River Channel Vegetation study: data collection, trend analysis, and reporting
- Interagency coordination of exotic plant management
- Field collection, data processing of the River Channel Geomorphology study
- Construction and maintenance of vegetation database for Kissimmee River and associated floodplain
- Maintenance of Kissimmee River / Everglades herbarium
- Weekly Hydrologic Monitoring Reports

1996 - 1998

ENVIRONMENTAL ASSISSTANT: St. John's River Water Management District, Land Management Division; Melbourne, FL

- Assistance with burn planning / mapping and participation in prescribed burns
- Wildlife inventories, including bird counts
- Preparation of St. Sebastian River Buffer Preserve for public use (trail marking, fence construction and destruction, etc.)

1994 – present

WETLANDS RESEARCH VOLUNTEER: Various organizations

- Compiled and summarized 20+ years of ornithological data of an isolated wetland area
- Assistance with exotic weed management programs
- Collection of environmental data, hydrophone recording
- Beach profiling data collection
- Collection of sea water samples

EDUCATION & TRAINING

FLORIDA INSTITUTE OF TECHNOLOGY; Melbourne, FL
BS Environmental Science
Cum Laude Graduate

Environmental Solutions Association
Series 200 Mold Inspection Course

Certified Mold Inspectors & Contractors Institute
Mold Assessment and Remediation Training

Continuing Education through Environmental Data Resources
Due Diligence at Dawn Seminars

Continuing Education through IAQA and AIHA
Local Chapter Meetings and Seminars
National Conventions

PUBLICATIONS, PROFESSIONAL AFFILIATIONS, & CERTIFICATIONS

Council-Certified Microbial Consultant; American Indoor Air Quality Council
#0704045

Indoor Air Quality Association, San Diego Chapter Advisory Board Member
Member #17519

Environmental Solutions Association
Certified Mold Inspector, Certification #0373

American Industrial Hygienists Association
Member #173057

Registered Environmental Assessor, State of California
Member #08115 prior to program dissolution by the state

Environmental Assessment Association
Certified Environmental Specialist, Certification # 73923
Certified Environmental Inspector, Certification # 73923

California Real Estate Inspection Association
Affiliate Member

Certified Mold Inspectors & Contractors Institute
Certified Toxic Mold Investigator
Certified Mold Remediator

PUBLICATION: "Macrophyte communities within the channelized Kissimmee River: expectations for restoration."
Aquaphyte Newsletter. 20 (1): 1 – 5.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX J-2
PHASE I ENVIRONMENTAL SITE ASSESSMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

HOVEY ENVIRONMENTAL
www.hoveyenvironmental.com ◊ info@hoveyenvironmental.com
2929 Chatsworth Blvd ◊ San Diego California 92106
Phone 619.203.9774 ◊ Fax 619.923.3055

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

REPORT

1950 N. Coast Highway 101
(APN 216-041-20-000)
2100 N. Coast Highway 101
(APN 216-041-26-000)
Vacant Parcel
(APN 216-041-21-000)

Encinitas, California 92024

November 8, 2017

Submitted To:
Fenway Capital Advisors
Attn: Bryan Smith

Submitted By:
Caroline Hovey, CMC, CES, REA-08115
Principal Environmental Specialist
Hovey Environmental LLC

Report #17013-01

TABLE OF CONTENTS

Executive Summary 1

1 Introduction 2

2 Site Description 6

3 User Provided Information / Interview 7

4 Site Reconnaissance 8

5 Records Review 9

5.1 Physical Setting Data 9

5.2 Historical Use Data 10

5.3 Environmental & Regulatory Data 12

6 Data Gaps 13

7 Non-Scope Considerations 13

8 Findings and Opinions 14

9 Conclusion 14

10 Signature of Environmental Assessor 15

TABLES AND FIGURES

Table 1.1 Physical setting sources reviewed during the Phase I ESA. 4

Table 1.2 Historical sources reviewed during the Phase I ESA. 4

Table 1.3 Regulatory records reviewed during the Phase I ESA. 4

APPENDICES

Appendix A: Vicinity Map

Appendix B: Site Plan

Appendix C: Site Photographs

Appendix D: Historical Research Documentation

Appendix E: Regulatory Records Documentation

Appendix F: User-Provided Information

Appendix G: Signed Assessment Agreement

Appendix H: Qualifications of Caroline Hovey, Hovey Environmental LLC

EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) was performed at 1950 N. Coast Highway 101, 2100 N. Coast Highway 101, and the vacant parcel to the south of these addresses in Encinitas, California. The site assessment included a site reconnaissance, evaluation of the physical setting of the subject property and surrounding area, investigation into historic uses of the subject property, and review of government databases relating to the site and surrounding area. All practices conformed to ASTM standard 1527-13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and 40 CFR 312 "Standards and Practices for All Appropriate Inquiries."

The assessor's parcel numbers for the subject property are:

2100 N. Coast Highway 101: 216-041-26-000

1950 N. Coast Highway 101: 216-041-20-000

Vacant parcel to the south of the above addresses (no known physical address): 216-041-21-000

The subject property consists of three parcels. The northern most parcel at 2100 N. Coast Highway 101 is currently undeveloped but was previously used as a mobile home park and residential site. The parcel at 1950 N. Coast Highway 101 is the site of a vacant restaurant. This parcel along with the vacant parcel to the south was previously part of an agricultural tract.

The surrounding area is primarily residential with some light retail. A site reconnaissance was performed on November 3, 2017. No visual indications of environmental degradation or a recognized environmental condition were noted on site.

The subject property is not listed with any regulatory agencies in relation to the use, handling, storage, or disposal of potentially hazardous materials. A previous Phase I Environmental Site Assessment was conducted in 2001 at 2100 N. Coast Highway. Phase I and Phase II Environmental Site Assessments, including soils testing was conducted at 1950 N. Coast Highway in 2007. Findings of these assessments found no indications of a recognized environmental condition on site at that time.

There are seven sites listed with releases of hazardous materials to the soil, groundwater, or air within a one-mile radius of the subject property. Review of contaminant monitoring reports along with local topography and hydrology indicates a low probability of contamination migration to the subject property.

Hovey Environmental LLC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) and 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiries) at the property located at 1950 and 2100 N. Coast Highway in Encinitas. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.

1 INTRODUCTION

This report summarizes the findings of the Phase I Environmental Site Assessment (ESA) at three parcels of land located at 1950 N. Coast Highway 101 (APN 216-041-20-000), 2100 N. Coast Highway 101 (APN 216-041-26-000), and the vacant parcel to the south of these addresses (APN 216-041-21-000). The properties are located in Encinitas, California. The ESA was performed in accordance with the recommended practices described in the American Society of Testing Materials (ASTM) Standard E 1527-13: "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and 40 CFR 312 "Standards and Practices for All Appropriate Inquiries." The purpose of the ESA is to determine the existence of or potential for any recognized environmental conditions. A recognized environmental condition is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." (ASTM E1527-13).

The Phase I ESA was requested by Bryan Smith of Fenway Capital Advisors as part of the due diligence in the purchase of the property.

The ESA was conducted by performing a site reconnaissance, historic review, review of physical setting of the subject property and surrounding area, and review of city, county, state, and federal databases.

The site reconnaissance included an on-site inspection of the property with observations made that could indicate a recognized environmental condition. Detailed notes and photographs were taken to corroborate any observations made. Physical characteristics of the subject property and surrounding area were reviewed to determine the likelihood for contaminant migration to or from the subject property. Table 1.1 lists documents reviewed in relation to physical characteristics of the area.

A property owner questionnaire relating to present and past activities on the subject property was reviewed along with previous Phase I and II Environmental Site Assessments conducted at the properties. Historical records were reviewed to determine all past uses on the property and any pertinent practices in the surrounding area that may indicate a recognized environmental condition on the property. Table 1.2 lists historical documents reviewed.

Records were obtained from government and historical sources. Regulatory records review included searches of entities or conditions surrounding the property that have the potential to create a recognized environmental condition on the property. Table 1.3 lists federal, state, and local government databases and records searched for environmental contamination information.

The Phase I Environmental Site Assessment was limited to the scope outlined above and to what was reasonably ascertainable. Data gaps encountered in the review of records relating to the property are described in section 6 of this report.

All aspects of the Phase I ESA were performed by Caroline Hovey. Mrs. Hovey meets the requirements for an environmental professional, as defined by 40 CFR 312 and ASTM 1527-13 (see Appendix H for further details.)

Table 1.1 Physical setting sources reviewed during the Phase I ESA.

ACRONYM	DESCRIPTION / SOURCE	SEARCH RADIUS
USGS DEM	United States Geologic Survey 7.5' Digital Elevation Model	regional
FEMA	Flood Zone Data	regional
NWI	National Wetlands Inventory	regional
AQUIFLOW	general direction of groundwater	1.0 mile radius
USGS	Geologic Age and Rock Stratigraphic Unit	1.0 mile radius
STATSGO	State Soil Geographic Database	1.0 mile radius
SSURGO	Soil Survey Geographic Database	1.0 mile radius
PWS	Public Water Systems	1.0 mile radius
PWS ENF	Public Water Systems Violation and Enforcement Data	1.0 mile radius
USGS Water Wells	USGS National Water Inventory System (NWIS)	1.0 mile radius
Water Well Database	Department of Water Resources	1.0 mile radius
California Drinking Water Quality Database	Department of Health Services	1.0 mile radius
California Oil and Gas Well Locations	Department of Conservation	1.0 mile radius
RADON	Department of Health Services, EPA, & USGS Databases	regional
Airport Landing Facilities	Private and public use landing facilities	regional
Epicenters	World earthquake epicenters, Richter 5 or greater	regional

Table 1.2 Historical sources reviewed during the Phase I ESA.

DESCRIPTION / SOURCE	SEARCH RADIUS
City Directory	subject property and adjacent properties
Building Permits	subject property
Sanborn Fire Insurance Maps	subject property
Aerial Photography	regional
USGS Topographic Maps	regional

Table 1.3 Regulatory records reviewed during the Phase I ESA.

ACRONYM	DESCRIPTION	SEARCH RADIUS
NPL	National Priority List	1.0 miles
NPL LIENS	Federal Superfund Liens	1.0 miles
DELISTED NPL	National Priority List Deletions	1.0 miles
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	0.5 miles
CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	0.5 miles
RCRA CORRACTS	Resource Conservation & Recovery Act Corrective Action Report	1.0 miles
RCRA-TSDF	Treatment, Storage and Disposal facility	0.5 miles
RCRA-LQG	RCRA - Large Quantity Generators	0.25 miles
RCRA-SQG	RCRA - Small Quantity Generators	0.25 miles
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	0.25 miles
US ENG CONTROLS	Engineering Controls Sites List	0.5 miles
US INST CONTROL	Sites with Institutional Controls	0.5 miles
LUCIS	Land Use Control Information System	0.5 miles
ERNS	Emergency Response Notification System	subject property
RESPONSE	State Response Sites, state equivalent NPL	1.0 miles
ENVIROSTOR	EnviroStor Database, state equivalent CERCLIS	1.0 miles
SWF/LF (SWIS)	Solid Waste Information System	0.5 miles
LUST	Leaking Underground Storage Tanks	0.5 miles
SLIC	Statewide Spills, Leaks, Investigation & Cleanup Cost Recovery Listings	0.5 miles

Table 1.3 Regulatory records reviewed during the Phase I ESA (continued).

ACRONYM	DESCRIPTION	SEARCH RADIUS
UST	Active Underground Storage Tank Facilities	0.25 miles
VCP	Voluntary Cleanup Program Properties	0.5 miles
US BROWNFIELDS	A Listing of Brownfields Sites	0.5 miles
ODI	Open Dump Inventory	0.5 miles
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	0.5 miles
WMUDS/SWAT	Waste Management Unit Database	0.5 miles
SWRCY	Recycler Database	0.5 miles
HAULERS	Registered Waste Tire Haulers Listing	subject property
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	0.5 miles
HIST CAL-SITES	Calsites Database; potential or confirmed hazardous substance release properties	1.0 miles
SCH	School Property Evaluation Program	0.25 miles
TOXIC PITS	Toxic Pits Cleanup Act Sites	1.0 miles
CDL	Clandestine Drug Labs	subject property
CA FID UST	Facility Inventory Database of Underground Storage Tanks	0.25 miles
HIST UST	Hazardous Substance Storage Container Database of Underground Storage Tanks	0.25 miles
SWEEPS UST	Statewide Environmental Evaluation & Planning System Underground Storage Tank Listing	0.25 miles
LIENS 2	CERCLA Lien Information	subject property
LIENS	Environmental Liens Listing	subject property
DEED	Deed Restriction Listing	subject property
HMIRS	Hazardous Materials Information Reporting System	subject property
CHMIRS	California Hazardous Material Incident Report System	subject property
LDS	Land Disposal Sites Listing	subject property
MCS	Military Cleanup Sites Listing	subject property
RCRA NonGen / NLR	RCRA - Non Generators	0.25 miles
DOT OPS	Incident and Accident Data	subject property
DOD	Department of Defense Sites	1.0 miles
FUDS	Formerly Used Defense Sites	1.0 miles
CONSENT	Superfund (CERCLA) Consent Decrees	1.0 miles
ROD	Records Of Decision	1.0 miles
UMTRA	Uranium Mill Tailings Sites	0.5 miles
MINES	Mines Master Index File	0.25 miles
TRIS	Toxic Chemical Release Inventory System	subject property
TSCA	Toxic Substances Control Act	subject property
FTTS	FIFRA/ TSCA Tracking System - Federal Insecticide, Fungicide, & Rodenticide Act / Toxic Substances Control Act	subject property
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	subject property
ICIS	Integrated Compliance Information System	subject property
PADS	PCB Activity Database System	subject property
MLTS	Material Licensing Tracking System	subject property
FINDS	Facility Index System/Facility Registry System	subject property
RAATS	RCRA Administrative Action Tracking System	subject property
RMP	Risk Management Plans	subject property
BRS	Biennial Reporting System	subject property
CA BOND EXP. PLAN	Bond Expenditure Plan	1.0 miles
NPDES	NPDES Permits Listing	subject property
UIC	UIC Listing of underground control injection wells	subject property
CORTESE	"Cortese" Hazardous Waste & Substances Sites List	0.5 miles
HIST CORTESE	Hazardous Waste & Substance Site List	0.5 miles
NOTIFY 65	Proposition 65 Records	1.0 miles
DRYCLEANERS	Cleaner Facilities	0.25 miles
WIP	Well Investigation Program Case List	0.25 miles
ENF	Enforcement Action Listing	subject property
HAZNET	Facility and Manifest Data	subject property
EMI	Emissions Inventory Data	subject property
INDIAN RESERV	Indian Reservations	1.0 miles
US FIN ASSUR	Financial Assurance Information	subject property
PCB TRANSFORMER	PCB Transformer Registration Database	subject property

Table 1.3 Regulatory records reviewed during the Phase I ESA (continued).

ACRONYM	DESCRIPTION	SEARCH RADIUS
MWMP	Medical Waste Management Program Listing	0.25 miles
COAL ASH DOE	Steam-Electric Plan Operation Data	subject property
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	0.5 miles
HWT	Registered Hazardous Waste Transporter Database	0.25 miles
HWP	EnviroStor Permitted Facilities Listing	1.0 miles
2020 COR ACTION	2020 Corrective Action Program List	0.25 miles
WDS	Waste Discharge System	subject property
US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem	subject property
EPA WATCH LIST	EPA watch list	subject property
EDR MGP	EDR Proprietary Manufactured Gas Plants	1.0 miles
EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	0.25 miles
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	0.25 miles
HMMD	Hazardous Materials Management Division Database	subject property

2 SITE DESCRIPTION

The subject property is located at 1950 and 2100 N. Coast Highway101 and the vacant property to the south of these addresses in Encinitas, California. The property is situated at the top of a coastal bluff and is accessed from the east side of each parcel. The total property size of all three parcels is approximately 8 acres. Two of the three parcels are currently undeveloped.

There is one structure at the developed site (1950 N. Coast Highway 101). This is a restaurant site that is currently unoccupied.

The subject property utilizes city water. Wastewater is handled by city sewage system. Storm drains run from the property to N. Coast Highway on the east.

The surrounding area is primarily residential with some light commercial use. A vicinity map is provided in Appendix A and sketch of the subject property is provided in Appendix B.

There are no known environmental liens or activity and use limitations on the property. There are no known valuation reductions due to environmental issues on site.

3 USER PROVIDED INFORMATION / INTERVIEWS

Property information supplied by the owners, users, and other persons is provided in Appendix F. A transaction screen questionnaire was completed by William Dodds, the asset/development manager. The questionnaire states the property has been under the current ownership for approximately 10 – 11 years. The properties have been used as a restaurant site (1950 N. Coast Highway 101) and mobile home park (2100 N. Coast Highway 101). All improvements related to the mobile home park were removed prior to 2001.

The questionnaire indicates there was previous storage of hazardous materials related to pool maintenance. These materials have since been removed from the site.

A Phase I Environmental Site Assessment was conducted by Padre Associates at 2100 N. Coast Highway 101 in April 2001. The property was vacant at the time of the assessment. Findings of the assessment indicated no known recognized environmental conditions on site and no further evaluations or testing were recommended at that time.

A Phase I Environmental Site Assessment was conducted by RBF Consulting at 1950 N. Coast Highway 101 in April 2007. Results of the Phase I site assessment indicated potential concerns due to historic agricultural practices on site as well as potential contamination due to the property's close proximity to N. Coast Highway 101. An unmarked metal pipe was also noted in the report. Further review and soils testing was recommended.

A Phase II Environmental Site Assessment was conducted by Environ at 1950 N. Coast Highway 101 in June 2007. Soil sampling was conducted throughout the property for organochlorine and arsenic to evaluate the potential for contamination due to previous agricultural activities. Soil sampling was conducted along the eastern edge of the property for lead to evaluate the potential for contamination from the nearby roadway. The metal pipe on site was evaluated. Findings and conclusions of the Phase II ESA indicated no adverse impact from prior agricultural activities or contamination from the nearby roadway. The pipe was determined to be part of a fire suppression system. No further testing or evaluations were recommended.

4 SITE RECONNAISSANCE

The subject property was visited on November 3, 2017. A sketch of the site is provided in Appendix B and photographs from the site reconnaissance are provided in Appendix C.

William Dodds was on site during the site reconnaissance at 1950 N. Coast Highway 101 and the vacant parcel to the south of this property. A survey crew was on site during the site reconnaissance at 2100 N. Coast Highway 101.

There are no fence lines or other demarcations separating the three parcels.

There is a residential community immediately adjacent to the subject property at the west side of 1950 N. Coast Highway 101 and the vacant parcel, and south side of 2100 N. Coast Highway 101. There is a small restaurant (Roberto's Mexican Restaurant) to the south of 1950 N. Coast Highway 101 and east of the vacant parcel. The property to the north of 2100 N. Coast Highway 101 is a parking area for a public park. The parcels at 1950 and 2100 N. Coast Highway 101 are bordered by the roadway to the east.

There was no unusually stained soil or damaged vegetation that would indicate a hazardous substances release or spill noted at any of the three parcels.

The parcel at 1950 N. Coast Highway 101 is the only site that is currently developed. Most of this parcel consists of a driveway and parking area. There is a vacant restaurant at the north side of the property. The east side of the property is unimproved.

The interior of the vacant restaurant was accessed. There were no hazardous materials storage observed on site and no visual indications of a recognized environmental condition throughout the three parcels.

5 RECORDS REVIEW

5.1 PHYSICAL SETTING DATA

Information on topography, hydrology, and environmentally sensitive lands was accessed for the subject property and surrounding area. The records reviewed are listed in Table 1.1 (Page 4), and is provided in detail in Appendix E.

The property is located at 33° 4’ 52.95” latitude by 117° 28’ 31.06” longitude. The approximate elevation at this location is 79 feet above sea level. The highest elevation of the surrounding area is approximately 239 feet above sea level located one mile to the east. The property is situated on a coastal bluff and there is a lower elevation between the subject property and the highest surrounding areas.

Information on groundwater flow and soil type was obtained to determine the ease with which contaminants from surrounding properties can reach the subject property. There is no data provided on groundwater flow rates and direction; however, given the overall topography of the region groundwater is likely to flow primarily from east to west towards the shoreline. The dominant soil type of this area is loamy coarse sand. This soil type is well drained with moderate infiltration rates.

There are wetlands and sensitive lands located in close proximity of the subject property to the west and north. The Pacific Ocean is within 1/8 of a mile to the west and Batiquitos Lagoon is within 1/8 of a mile to the north of the subject property.

5.2 HISTORICAL USE DATA

Several historic records and databases were reviewed to determine past practices at the subject property. The records searched are listed in Table 1.2 (Page 4) and detailed results are provided in Appendix D. Historic data was obtained from building permit reports, city directories, aerial photographs, historic topographic maps, and historic county records. The subject property is outlined in red on the topographic maps and aerial photographs. Sanborn fire insurance maps were not available for the subject property.

City directories dating back to 1970 through 2014 were reviewed to determine past businesses on site as well as the surrounding area. The property at 2100 N. Coast Highway 101 was listed as Noah's Ark Trailer Park from 1970 – 1985. From 1992 – 1995 there were several residences listed at this address. There are no further listings in the city directories for 2100 N. Coast Highway 101 after 1995.

The property at 1950 N. Coast Highway was listed first listed in the city directories under the names Horizon Restaurant and Provocative Inc in 1985. From 1995 – 2000 the property was listed as La Costa Gardens. A search of this business indicates it was a restaurant. In 2005 the listing at this location changed to Davina's Cabo Grill. It remained under this listing until 2010. There are no further listings at the property.

Listings on the adjacent properties were primarily residential with some retail and commercial. The property at 1967 N. Coast Highway 101 had multiple retail listings from 1992 to 2014. None of the listings were businesses that would be associated with the handling, use, storage, or disposal of hazardous materials. This property is located across N. Coast Highway 101 to the east.

The property at 1900 N. Coast Highway 101 had multiple retail listings from 1970 – 1980. From 1985 – 2014 there were various listings for equipment and truck rentals. This is the property currently occupied by Roberto's Mexican Food to the south of the subject property.

Building permits were issued for 1950 N. Coast Highway 101 in 2008, 2003, 2002, 2000, 1992, and 1990. Permits pertained to remodeling and repair activities. There were no permits reviewed for 2100 N. Coast Highway 101.

Historic topographic maps are available for the years 1893 - 2012. Aerial photographs are available from 1939 - 2012. Structures are visible at the property at 2100 N. Coast Highway as far back as 1947. Portions of the trailer park may have been on site as early as 1953, and were clearly visible in the aerial photographs from 1967 – 1994. The next aerial photograph, taken in 2005 shows vacant land at this location, indicating the trailer park and residences were removed sometime between 1994 and 2005. The property remains vacant in the following aerial photographs through 2012.

The property located at 1950 N. Coast Highway 101 appears to have agricultural activities in the aerial photograph from 1939. From 1953 – 1964 there appears to be continued agriculture on the west side of the property. A structure is first noted on site in the aerial photograph of 1979. This structure remains consistent in the aerial photographs through 2012. This is the vacant restaurant that is still on site today.

The parcel of land to the south of 1950 N. Coast Highway 101 appears vacant and undeveloped in the aerial photographs. This parcel was part of the agricultural land noted in the earlier aerial photographs.

Based on the historical sources and information provided by the user, the property at 2100 N. Coast Highway 101 was developed as far back as the 1940's; however, all improvements were removed between 1995 and 2000 and the property has remained undeveloped since that time. The property at 1950 N. Coast Highway 101 as well as the parcel to the south were previously part of an agricultural tract of land. In the mid to late 1970's the property at 1950 N. Coast Highway 101 was developed for use as a restaurant. The structure on site has remained mostly unchanged since that time, other than various remodeling and repairs to the structure.

5.3 ENVIRONMENTAL & REGULATORY DATA

Table 1.3 (Page 4) lists all federal, state, and local databases accessed to obtain information on potential environmental hazards at the subject property and in the surrounding area. Research results are provided in Appendix E.

The subject properties were not listed in any federal, state, or local databases searched.

Seven properties within a one-mile radius were listed in the local, county, state, and federal databases searched. The closest property is at 1865 North Vulcan Avenue. This is the site of a soil contamination clean-up in 2012 due to the presence of organochlorine pesticides. Soil was excavated and the case has since been closed. Due to the lower elevation and topographic variation, it is highly unlikely that this site has impacted the subject properties.

Three sites were identified with leaking underground storage tanks within one-half mile of the subject properties. Remedial action has taken place and the cases have been closed at each of these sites. These locations are all at lower elevation compared to the subject property and it is highly unlikely that they will have impacted the subject property.

There is one site identified in the databases at a higher elevation compared to the subject property. This is located at 510 La Costa Avenue and is approximately one-half mile from the subject property. This property is undergoing site assessments due to the presence of underground storage tanks. Based on the location, distance from the subject property and local topography, this site is unlikely to contaminate the subject property.

All sites within a one-third (1/3) mile radius were evaluated using the Environmental Data Resources Vapor Encroachment Screen (VEC). Results revealed no sites with potential vapor encroachment to the subject property.

Review of the regulatory data for businesses located at the subject and those within a one-mile radius of the subject property revealed a low likelihood of environmental contamination on site due to contaminant migration or a previous release at the site.

6 DATA GAPS

No data gaps were encountered in the Phase I Environmental Site Assessment. All areas of the subject property were accessible for on-site inspection. Complete historical data was available for the subject property.

7 NON-SCOPE CONSIDERATIONS

The Phase I Environmental Site Assessment does not include evaluations or testing for moisture intrusion or subsequent microbial growth which could become an indoor air contaminant.

The Phase I ESA does not include evaluations or testing for asbestos or lead based paint. The presence of these substances in building materials are not considered a hazard unless disturbed. Any demolition, renovations, remodeling, repair, or repainting activities at the subject property should be done in accordance with the EPA Renovation, Repair, and Repainting Rule (RRP Rule), as well as the Clean Air Act Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP).

Based on the age of the vacant restaurant at 1950 N. Coast Highway 101, asbestos and lead-based paint may be present. Based on the condition of this structure, microbial contamination may be present. Evaluations and testing are recommended prior to any remodel or repair of the property.

8 FINDINGS AND OPINIONS

The environmental assessment performed at 1950 N. Coast Highway 101, 2100 N. Coast Highway 101, and the vacant parcel to the south of these properties revealed no areas of potential environmental degradation on site. The site reconnaissance revealed no visual indications of a recognized environmental condition.

Historic records indicate prior uses of the subject property include agricultural, residential, and a restaurant. Historic review revealed no indications of a recognized environmental condition due to previous uses of the subject property.

Investigation into environmental degradation in the surrounding areas revealed a low probability that the subject property contains a recognized environmental condition due to contamination migration from the surrounding area. While the surrounding area has multiple areas identified as containing a recognized environmental condition local topography, hydrology, and physical characteristics indicate a low probability of contaminants traveling to the subject property from these sites.

9 CONCLUSION

Hovey Environmental LLC has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) and 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiries) at 1950 N. Coast Highway 101, 2100 N. Coast Highway 101, and the parcel to the south of these addresses. This assessment has revealed no evidence of recognized environmental conditions in connection with the property. No further environmental review is recommended at this time.

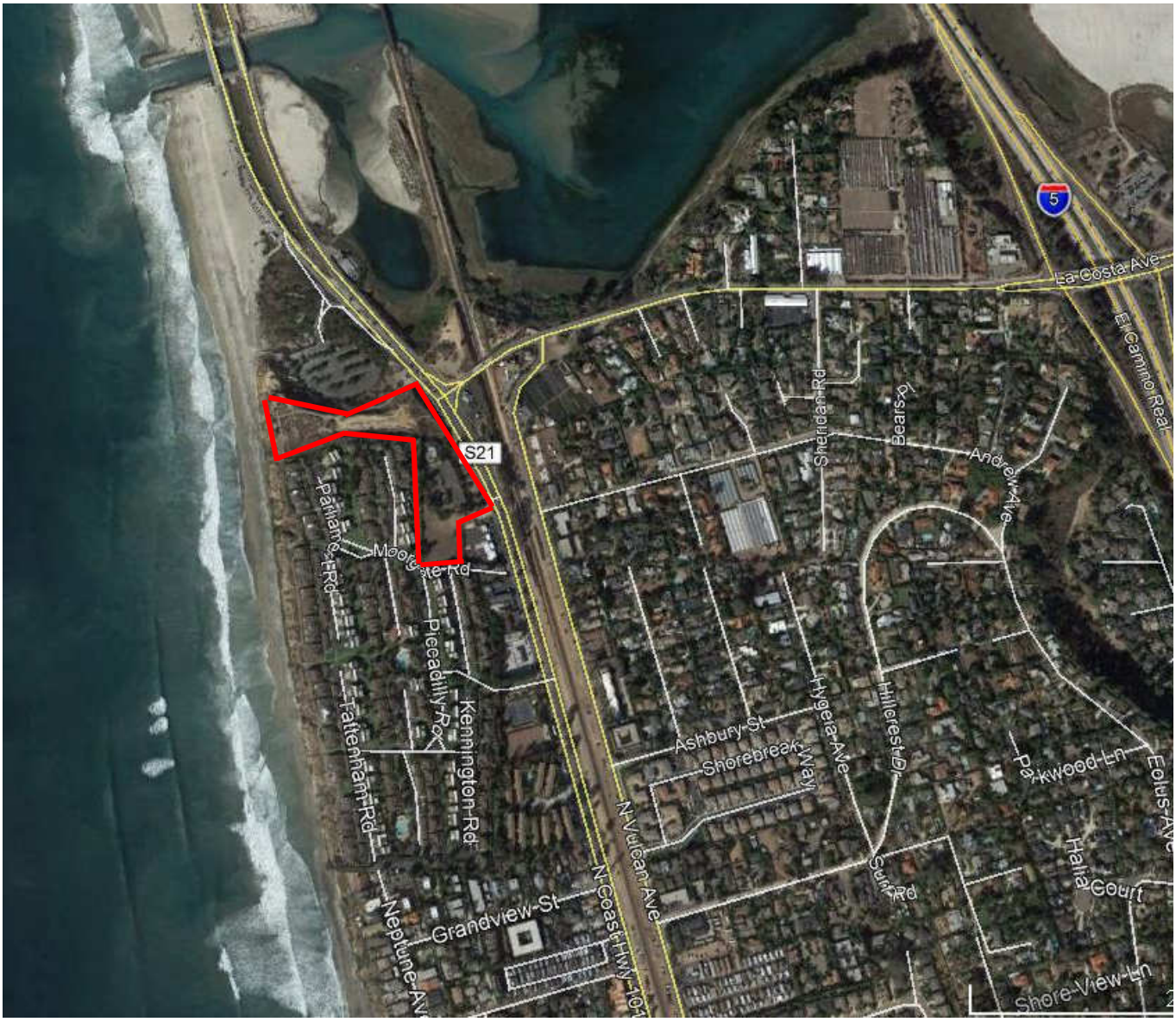
10 SIGNATURE OF INSPECTOR

I certify that the above findings, opinions, and recommendations are true and accurate to the best of my knowledge, and represent the most current knowledge of environmental assessment methods.

Caroline Hovey, CMC, CES, REA-08115
Principal Environmental Specialist
Hovey Environmental LLC

APPENDIX A

VICINITY MAP



APPENDIX B

SITE LAYOUT

Property boundary lines are approximate

2100 N. Coast Highway 101 (APN 216-041-26-000)

1950 N. Coast Highway 101 (APN 216-041-20-000)

Southern most parcel (APN 216-041-21-000)

APPENDIX C

SITE PHOTOGRAPHS

1950 – East side of property facing SE

1950 – Center of property facing N

1950 – Center of property facing S

1950 – SW corner of property facing SW

1950 – Center of property facing W

1950 – South side of property facing S

N. Coast Highway 101 facing N

N. Coast Highway 101 facing E

1950 – SE corner of property facing NW

N. Coast Highway 101 facing E

1950 – South side of property facing W

1950 – N side of property facing W

N. Coast Highway 101 facing S

1950 – West side of restaurant facing S

2100 – East side of property facing N

South Parcel – Center of property facing S

2100 – South side of property facing W

1950 – West side of property facing N

1950 – Nonhazardous waste

South Parcel – West side of property facing W

1950 – West side of property facing S

South Parcel – North side of property facing E

Residential community SW of subject properties

South Parcel – South side of property facing E

Residential community west of subject properties

South Parcel – East side of property facing N

South parcel – South side of property facing E

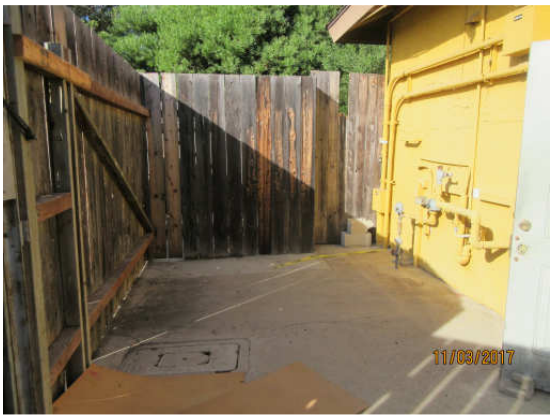
South Parcel – North side of property facing W

South Parcel – West side of property facing N

South Parcel – NE corner of property facing SW

South Parcel – SE corner of property facing W

1950 – interior of restaurant



1950 – South side of restaurant

1950 – interior of restaurant

1950 – interior of restaurant

1950 – interior of restaurant

1950 – interior of restaurant

1950 – interior of restaurant

1950 – interior of restaurant

2100 – North side of property facing NW

1950 – interior of restaurant

2100 – Center of property facing W

1950 – interior of restaurant

2100 – South side of property facing E

2100 – North side of property facing W

2100 – Center of property facing E

2100 – South side of property facing E

2100 – East side of property facing W

2100 – Center of property facing E

2100 – East side of property facing N

2100 – West side of property facing NW

N. Coast Highway 101 & Batiquitos Lagoon

2100 & 1950 – East side of properties facing S

2100 – East side of property facing S

APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

CITY DIRECTORY

SANBORN FIRE INSURANCE MAPS

PROPERTY TAX MAPS

BUILDING PERMIT REPORT

HISTORIC TOPOGRAPHIC MAPS

AERICAL PHOTOGRAPHS

Fenway - Encinitas
1950 N. Coast Highway 101
Encinitas, CA 92024

Inquiry Number: 5095677.5
November 02, 2017

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by infoUSA®

Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1985	☑	☐	Haines Criss-Cross Directory
1980	☑	☐	Haines Criss-Cross Directory
1976	☑	☐	Haines Criss-Cross Directory
1970	☑	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

1950 N. Coast Highway 101
Encinitas, CA 92024

Year	*CD Image*	*Source*
N 101		
2014	pg A1	EDR Digital Archive
2010	pg A3	EDR Digital Archive
2005	pg A5	EDR Digital Archive
2000	pg A7	EDR Digital Archive
1992	pg A10	EDR Digital Archive
1985	pg A12	Haines Criss-Cross Directory
1980	pg A13	Haines Criss-Cross Directory
1980	pg A14	Haines Criss-Cross Directory
1976	pg A15	Haines Criss-Cross Directory
1970	pg A16	Haines Criss-Cross Directory
1970	pg A17	Haines Criss-Cross Directory
N COAST HIGHWAY 101		
2014	pg A2	EDR Digital Archive
2010	pg A4	EDR Digital Archive
2005	pg A6	EDR Digital Archive
2000	pg A8	EDR Digital Archive
N HIGHWAY 101		
1995	pg A9	EDR Digital Archive
1992	pg A11	EDR Digital Archive

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2014

1750	LEUCADIA SEABLUFF VLLG COMMNTY
1766	CANCUN MEXICAN & SEAFOOD
	IMPERIAL STATIONS INC
1900	PENSKE TRUCK RENTAL
1967	CULLEN J
	HYNDMAN & HYNDMAN ARCHITECTS A
	PROFESSIONAL SPORTS MARKETING
	RE/MAX
2050	ELI HOWARD SURF SCHOOL
	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N COAST HIGHWAY 101 2014

1750	LEUCADIA SEABLUFF VLLG COMMNTY
1766	CANCUN MEXICAN & SEAFOOD
	IMPERIAL STATIONS INC
1784	BEATTY, MICHAEL J
	JOHNSON, GREG
	MADDEN, JEFFREY
	ROWAN, MAKANA
1786	CARLSON, DANIEL
	GERSTL, CARRIE L
	NESBITT, TED
	VAUGHN, JOYCE R
1900	PENSKE TRUCK RENTAL
1967	CULLEN J
	HYNDMAN & HYNDMAN ARCHITECTS A
	HYNDMAN, DENNIS E
	PROFESSIONAL SPORTS MARKETING
	RE/MAX
2050	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2010

1750	LEUCADIA SEABLUFF VILLAGE
	LEUCADIA SEABLUFF VLLG COMMNTY
1766	SUBWAY SANDWICHS
1786	ISEN ALICIA
1900	DONNA DEULING
	HAIR STUDIO 1900
	TIMELESS TEAK FURNISHINGS
1950	DAVINAS CABO GRILL
1967	ANSWER STUDIOS INC
	CULLEN J
	LACOSTA ENGINEERING
	PACSHORE INC
	PROFESSIONAL SPORTS MARKETING
	RE/MAX
	SPORT USA SIGN GROUP INC
	VIXEN INC
2050	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N COAST HIGHWAY 101 2010

1750	LEUCADIA SEABLUFF VILLAGE
	LEUCADIA SEABLUFF VLLG COMMNTY
1766	SUBWAY SANDWICHS
1784	GRUPP, CHRISTINE L
	KNUTSON, FORREST
	LOUDIS, KRISTIN A
	MADDEN, JEFFREY
1786	ENGERAN, JENNIFER
	ISEN ALICIA
	KOBRIN, DIANA
	SCANLON, FRANK
	WATERBURY, COURTNEY
1900	DONNA DEULING
	HAIR STUDIO 1900
	TIMELESS TEAK FURNISHINGS
1950	DAVINAS CABO GRILL
1967	ANSWER STUDIOS INC
	CULLEN J
	LACOSTA ENGINEERING
	PACSHORE INC
	PROFESSIONAL SPORTS MARKETING
	RE/MAX
	SPORT USA SIGN GROUP INC
	VIXEN INC
2050	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2005

1750	LEUCADIA SEABLUFF VILLAGE
	LEUCADIA SEABLUFF VLLG COMMNTY
1766	ARCO GAS & GO
1786	COLLECTORS COTTAGE
	J WALTER MANAGEMENT INC
1900	DONNA DEULING
	REBEL RENTS INC
	ROBERTOS MEXICAN FOOD
1950	DAVINAS CABO GRILL
1967	ANSWER STUDIOS INC
	CULLEN J
	DUPLACK DONNA
	PROFESSIONAL SPORTS MARKETING
	SPORT USA SIGN GROUP INC
2050	SAN ELIJO CAMP STORE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N COAST HIGHWAY 101 2005

1750	LEUCADIA SEABLUFF VILLAGE
	LEUCADIA SEABLUFF VLLG COMMNTY
1766	ARCO GAS & GO
1784	BARRAGAN, EDUARDO
	BAUMAN, ROTTEN R
	CARSNER, STEPHANIE
	GILLES, JENNIFER
	TURCIOS, INES A
1786	AMOLSCH, L R
	COLE, JENNIFER
	COLLECTORS COTTAGE
	ENGERAN, JENNIFER
	GREETIS, GARY
	ISEN, ALICIA
	J WALTER MANAGEMENT INC
	JOHNSON, KELLY R
	MORALES, JORGE A
	SMITH, CAROL A
1900	DONNA DEULING
	REBEL RENTS INC
	ROBERTOS MEXICAN FOOD
1950	DAVINAS CABO GRILL
1967	ANSWER STUDIOS INC
	CULLEN J
	DUPLACK DONNA
	MACFARLANE, ROBERT
	PROFESSIONAL SPORTS MARKETING
	SPORT USA SIGN GROUP INC
2050	SAN ELIJO CAMP STORE
2100	BARNETT, THOMAS C

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 2000

1750	LEUCADIA SEABLUFF VILLAGE
	PCM OF CAL SEABLUFFS
1766	IMPERIAL STATIONS INC
1786	COLLECTORS COTTAGE
1900	CORAL REEF WET SUITS
	REBEL RENTS INC
	TIMELESS TEAK FURNISHINGS
1950	LACOSTA GARDENS
1967	BARELMANN ROBERT H
	DUPLACK DONNA
	STANDARD ACCOUNTING

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N COAST HIGHWAY 101 2000

1750	LEUCADIA SEABLUFF VILLAGE
	PCM OF CAL SEABLUFFS
1766	IMPERIAL STATIONS INC
1784	BUSHMAN, LYNN M
	RESNICK, JUDY A
	ROSS, MIRANDA
	ROTHEMUND, PETER
	TOMANEK, ERICA L
1786	ALCAIDE, CESAR
	CARDOZO, JESUS
	CHACON, BLAS
	COLLECTORS COTTAGE
	COVARRUBIAS, S
	ESPINOZA, RUFINO
	FARIAS, JAVIER
	GALLARDO, MAURO
1900	CORAL REEF WET SUITS
	REBEL RENTS INC
	TIMELESS TEAK FURNISHINGS
1950	LACOSTA GARDENS
	SMULL, KRIS B
1967	BARELMANN ROBERT H
	DUPLACK DONNA
	STANDARD ACCOUNTING
2050	SENATE, TERRY

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N HIGHWAY 101 1995

1766	OCCUPANT UNKNOWNN
1784	HAYWARD, BRIAN M
1786	DIEGO, F T
	ROCHA, MANUEL
1900	RYDER TRUCK RENTAL ONE WAY
1950	LACOSTA GARDENS INC
1967	BARELMANN ROBERT H
	LACOSTA ENGINEERING
2100	BARNETT, THOMAS C
	BELL, E B
	KEOUGHAN, JOE
	VICKERY, GLEN A

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N 101 1992

1900	NORTH COUNTY EQUIPMENT INC
1967	LACOSTA ENGINEERING
	SILVER PACIFIC RE & INVESTMEN

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N HIGHWAY 101 1992

1786	MALDONADO, A
	PACHECO, G G
	ROCHA, MANUEL
1900	NORTH COUNTY EQUIPMENT INC
1967	LACOSTA ENGINEERING
2100	BELL, E B
	COHEN, DONALD A
	KEOUGHAN, JOE

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1985

1650	LEUCADIA LORE LTD	753-1993	
1652	XXXX	00	
1660	LOG CABIN MOTEL	753-6711	
1680	XXXX	00	
1750	SEABLUFF VLG CMNTY	753-2333	7
	SEABLUFF VLG TENNIS	436-2496	2
1766	FAST GAS	753-9819	8
1784	MEYER P D	436-6606	4
1786½	COLLECTORS COTTAGE	436-7937	2
1900	ATTIC THE	753-5606	8
	CA RENTAL ASN	753-5582	3
	HANDY EQPMNT RNTLS	942-9940	2
	HANDY EQUIP RENTL	753-5582	3
	NORTH CST LAWNMOWER	753-5583	4
1950	HORIZON RESTAURANT	942-7114	4
	PROVOCATIVE INC	574-6495	4
2100.....	NOAHS ARK TRLR PK		
8	BARNETT THOS C	753-0817	8
	BELL E B	942-2010	4
	DEVRIES DWAYNE	942-3214	+5
	KEOUGHAN JOE	753-3936	4
	MINEHAN JAS M	942-3174	2
4	NIMS M R	436-3076	
2	PARKER VINCENT L	436-9739	1
	ROBERTS B A	436-9495	4
	RUSSELL JAS P	942-7048	+5
2100.....			
★	208 BUS	127 RES	88 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1980

1650★	LEUCADIA LORE LTD	753-1993	3
1652★	MOORE HORACE REALTY	753-7395	3
1660★	LOG CABIN MOTEL	753-6711	
1680★	HAPPY PEDDLER	942-3404	+0
	HARVEY ELLEN S	753-2728	+0
★	TAX&TREASURES	436-4113	+0
1750★	SEABLUFF VLG CMNTY	753-2333	7
1766★	FAST GAS	753-9819	8
1784	APARTMENTS		
	BAXTER RON	436-7307	+0
	DOUGLAS TERRY	436-2081	+0
	KANTOR DENNIS	436-0509	+0
	LIONNE C	436-7253	+0
	NORDSTROM J	942-1153	+0
	SMITH M	436-6745	9
1784			
1786★	COLLECTORS COTTAGE	436-7937	+0
184B★	JJ AUTOMOTIVE	942-3577	+0
1900★	ATTIC THE	753-5606	8
★	LEUCADIA POTTERY	753-6049	+0
★	MARINA PACIFIC RLTY	753-7212	+0
★	PURE FUN SURFBRDS	436-0644	4
★	RANCHO DEL MR ESCRW	753-7011	+0
★	SIMMONS RAY CNSLTNT	753-6049	+0
1950★	MICHAELS RESTARUNT	753-9194	+0
2005	XXXX	00	
2100	NOAHS ARK TRLR PK		
8	BARNETT THOS C	753-0817	8
	BREEN JON	942-2725	+0
	COPOULOS G P	436-9188	9

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1980

HWY 101 N 92024 CONT

6	EUBANK JERALD C	436-8797	8
5	EUBANK ROBERT G	942-1219	9
	FLICKINGER JAS R	436-1987	+0
	FLINT K A	436-9188	9
	GRIMM RICHARD E	436-4090	+0
4	NIMS M R	436-3076	5
	PARKER VINCENT L	436-9739	8
7	RICHARDS CURTIS W	436-4634	7
	SKIDMORE BILL	753-3936	9

2100

* 157 BUS 148 RES 107 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1976

```
 1636*HANGING TORTOISE    753-9672 5
 1646*VILLAGE FORGE THE   753-1641
 1650*LEUCADIA LORE LTD   753-1993 3
 1652*MOORE HORACE REALTY753-7395 3
 1660*LOG CABIN MOTEL     753-6711
 1680*PEDDLARS VLG PRDUCE753-9871 0
 1750*SEA BLUFFS BCH&RCQT436-4535+6
 1766*FAST GAS            753-9819+6
 1784 KNAPP J M           753-8896+6
 1786*WOLVERINE MOTEL     753-4981 1
1786½ SMITH TERRENCE F    753-4793+6
 1900*AQUATIC POOLS       753-9602 3
      *PURE FUN SURFBRDS  436-0644 4
      *TRI CITY PEST CNTRL753-6994 5
 2005 ANNIS LENORE        436-5275+6
      ROGERS RICHARD F    436-5275+6
2100....NOAHS ARK TRLR PK
   5  HOLMES CHAS S       436-1035 5
      MAYER GEO E         436-5179+6
   6  NIMS M R            436-3076 5
      PARKER VINCENT L    436-9739+6
      TEAGUE W R          753-3881+6
   8  WEAVER ALEX R       753-9981 4
2100.......................
 NO # DEAN MARK            753-4397 3
 NO #*LAPALOMA THEATRE     753-4397 3
     * 110 BUS  117 RES    78 NEW
```

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1970

1624	SANDS MOBILE HM PK	
	BALDWIN E R	753-7167
	COLVIN MARVIS	753-8082
	ENWRIGHT GEO	753-1517+0
	GATES KENNETH E	753-8715+0
	HAYES CARL W	753-8077
	MALLONEE HOWARD D	753-7621+0
	MINER J G	753-6185+0
	NELSON V H	753-5090
	NORTON MICHAEL T	753-8097
1636*	PALMER REAL ESTATE	753-0341+0
1646*	VILLAGE FORGE THE	753-1641
1660*	LOG CABIN MOTEL	753-6711
1680*	PEDDLARS VLG PRODUCE	753-9871+0
	PICKETT DON	753-4378
1766*	ABC HANCOCK	753-9791+0
1784*	PACIFIC MOTEL	753-3088
	WYCKOFF L E PFTE	753-3088
1786	RUSSELL EZRA M	753-1479+0
	SMITH HAROLD D B	753-4793
1900*	SNAVELY GEO L	753-3032
2005*	OCEAN VSTA MOTEL	753-1913
2100	NOAHS ARK TRLR PK	
	BAUGH ARTHUR H	753-7905
	BAXTER ANN	753-0240+0
	BLIESE E W MRS	753-7357
	DAVIDSON RAY J	753-3686
	DAWSON CLIFFORD	753-7082+0
	DEAVAULT CHARLOTTE	753-7423+0
	DUFFELL JOHN F	753-1325
	GIBSON E B	753-6875+0
	GRANVILLE ROY	753-6961
	HADLEY PAUL F	753-1584
	HAYES ROBT B	753-3868+0
	MCFARLIN A L	753-5468+0
	MCLELLAN HARRY K	753-7078
	MEYER ELOISE F	753-7294
	MILES LAVILLA	753-6654
	NEWCOM RICHARD W	753-8212
	*NOAHS ARK TRLR PARK	753-4494
	PAUP ARCH D	753-0362+0

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

N 101 1970

RAWSON MARJORIE F	753-5142
ROBBINS JESSIE D	753-8106
SIMONSON MARGUERITE	753-5652
SIMONSON RAE L	753-5652
SNYDER JOHN R	753-8744+0
SOULAR THEODORE P	753-0065+0
SULLIVAN GARNET F	753-1406
WATSON GEO	753-5315
WICKNICK WM G	753-5329

* 71 BUS 98 RES 68 NEW

Fenway - Encinitas

1950 N. Coast Highway 101

Encinitas, CA 92024

Inquiry Number: 5095677.3

November 02, 2017

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

11/02/17

Site Name:	Client Name:
Fenway - Encinitas	Hovey Environmental
1950 N. Coast Highway 101	2929 Chatsworth Blvd
Encinitas, CA 92024	San Diego, CA 92106-0000
EDR Inquiry # 5095677.3	Contact: Caroline Hovey

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Hovey Environmental were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 18D5-431E-B900

PO # NA

Project 17013

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 18D5-431E-B900

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Hovey Environmental (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Fenway - Encinitas
1950 N. Coast Highway 101
Encinitas, CA 92024

Inquiry Number: 5095677.6
November 02, 2017

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

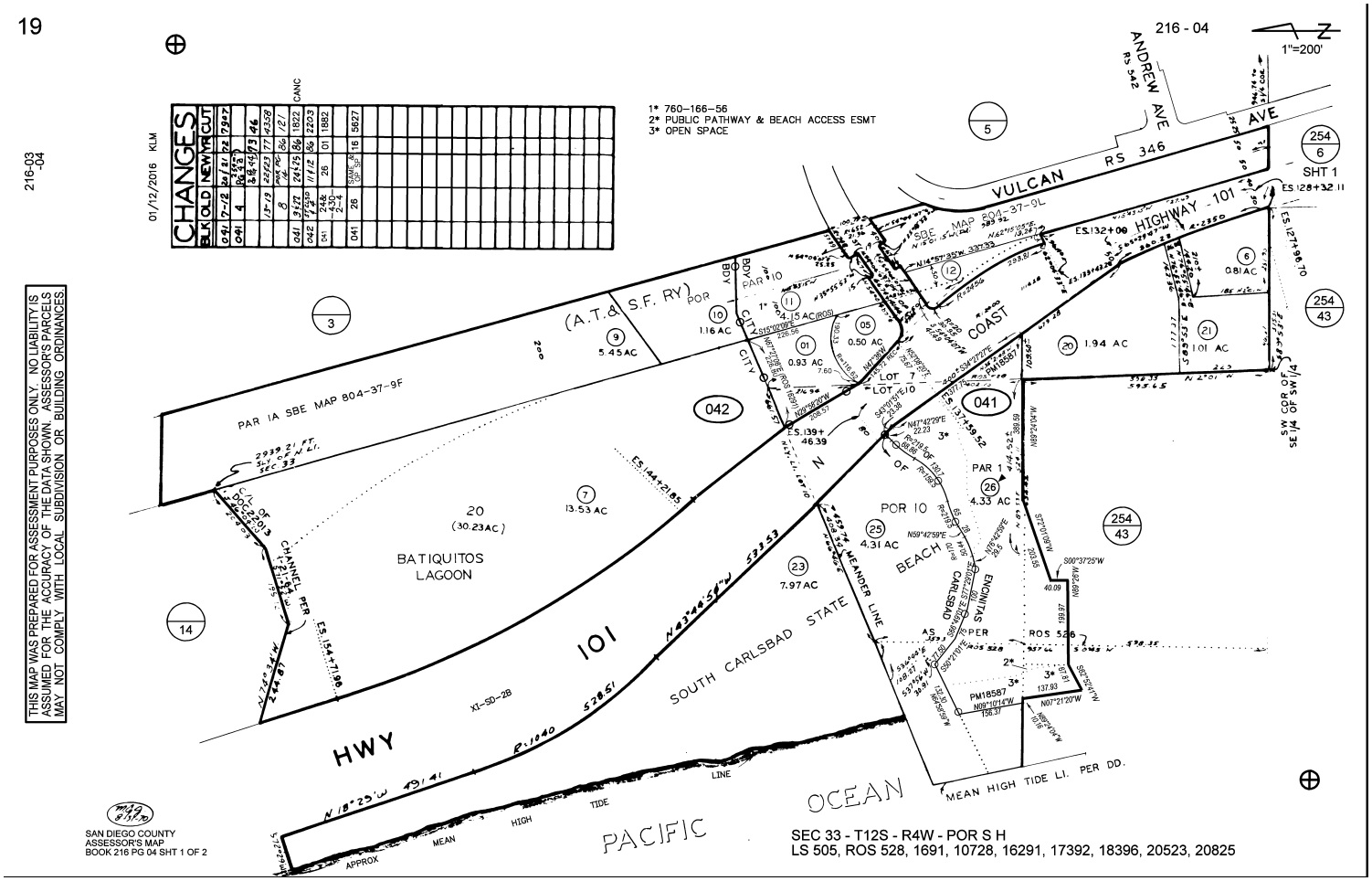
Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.


19
216-03
-04
01/12/2016 KLM
CHANGES
BLK OLD NEW MR CUT
041 7-12 20/21 72 7947
041 4 2-3 (2-3) 73 146
15-19 22/23 77 4338
8 PAR PC 86 1271
041 3/12 24/25 86 1822
042 27/30 11/12 86 2203
041 2-8 26 01 1882
430-
2-4
041 26 SUBD SUBP 16 5627
CANC
1* 760-166-56
2* PUBLIC PATHWAY & BEACH ACCESS ESMT
3* OPEN SPACE
216 - 04
1"=200'
ANDREW AVE
RS 542
VULCAN AVE
RS 346
HIGHWAY 101
SHT 1
ES 128+32.11
ES 127+96.70
254
6
254
43
SW COR OF SE1/4 OF SW1/4
ES 132+00
SDE MAP 804-37-9L
PAR 1A SBE MAP 804-37-9F
(A.T.& S.F. RY)
POR
PAR 10
CITY
BDY
1.16 AC
5.45 AC
4.15 AC (ROS)
0.50 AC
0.93 AC
LOT 7
LOT 10
COAST
0.81 AC
1.94 AC
1.01 AC
042
041
ES 139+46.39
ES 144+21.85
ES 154+71.96
20
(30.23 AC)
13.53 AC
BATIQUITOS
LAGOON
CHANNEL PER
DOC 2013
14
3
5
HWY
101
XI-SD-28
R=1040
N43°44'54"W 533.53
SOUTH CARLSBAD STATE
BEACH
POR 10
4.31 AC
7.97 AC
MEANDER LINE
PAR 1
4.33 AC
CARLSBAD
ENCINITAS
AS PER
ROS 528
PM18587
N07°21'20"W
S00°37'25"W
N89°26'04"W
S77°01'00"W
N59°42'59"E
N18°25'W 491.41
APPROX
MEAN
HIGH
TIDE
LINE
PACIFIC
OCEAN
MEAN HIGH TIDE LI. PER DD.
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.
SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PG 04 SHT 1 OF 2
SEC 33 - T12S - R4W - POR S H
LS 505, ROS 528, 1691, 10728, 16291, 17392, 18396, 20523, 20825

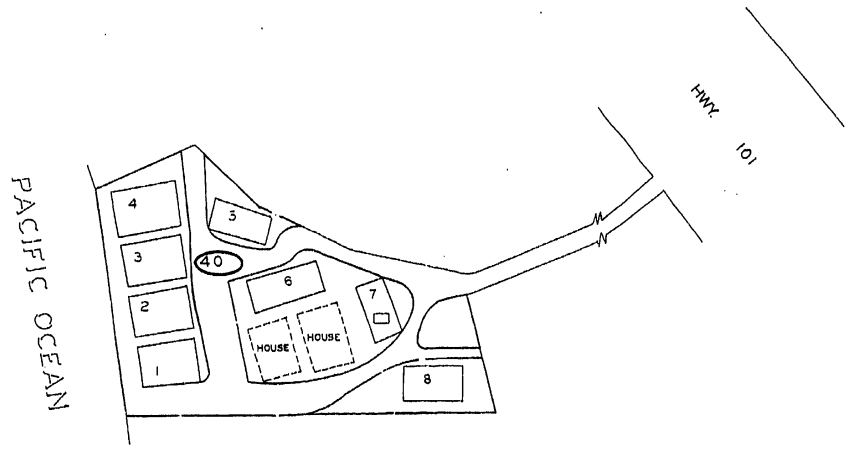
1-800-345-7334

SCALE IN 1/10 OF AN INCH

19

216-04
SHT. 2

NO SCALE



SPACE	PARCEL NUMBER
1 TO 8	772-160-40-01 TO 08

9-9-97 RG

CHANGES

BLK	OLD	NEW	YR	CUT
40	Pick-Up	07	97	9241
	KILL	07	98	1082

216-05

SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PAGE 04 SHT. 2

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

NIM'S SUNSET SHORES MOBILE HOME PARK
MAPPED FOR MOBILE HOME ASSESSMENT ONLY

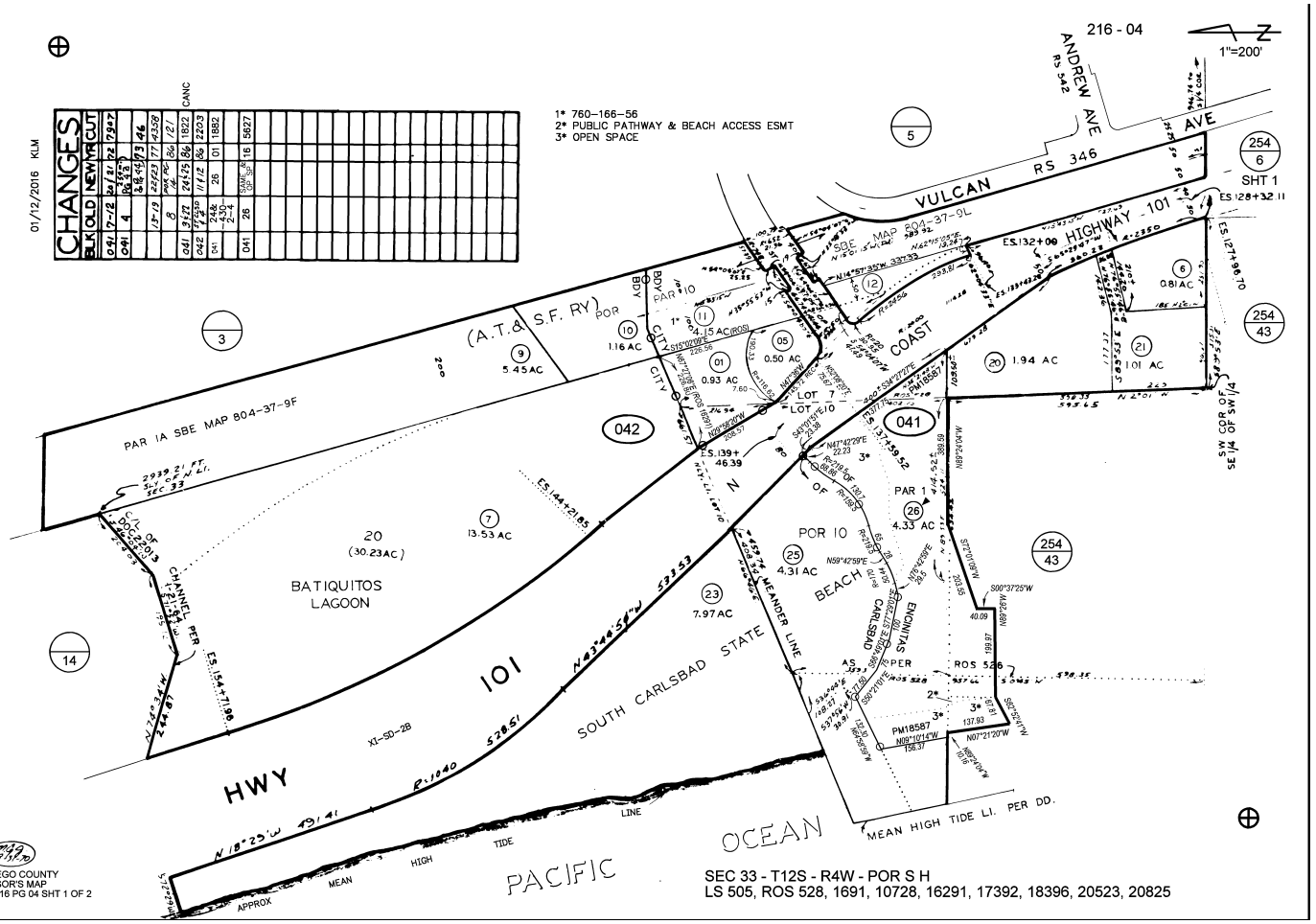
OCT 1 3 1997

216-03
-04

01/12/2016 KLM

CHANGES					
BLK	OLD	NEW	MRG	CUT	
041	7-12	20/21	22	7947	
041	4	23/24 (Pt 23)			
		3&4	45/73	46	
	13-19	22/23	77	4338	
	8	PAR PC	86	1211	
041	3/12	24/25	86	1822	CANC
042	27&30	11/12	86	2203	
041	2&8	25	01	1882	
	430-2-4				
041	26	SUBD SUBP	16	5627	

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.



SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PG 04 SHT 1 OF 2

SEC 33 - T12S - R4W - POR S H
LS 505, ROS 528, 1691, 10728, 16291, 17392, 18396, 20523, 20825

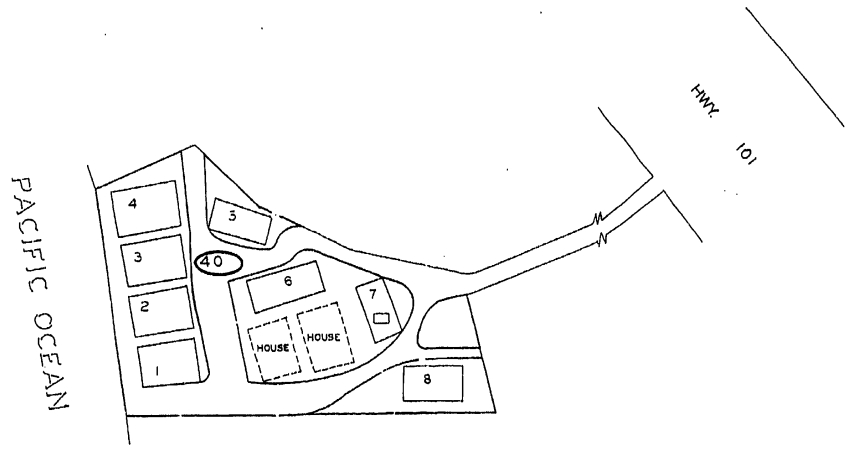
1-800-345-7334

SCALE IN 1/10 OF AN INCH

19

216-04
SHT. 2

NO SCALE



SPACE	PARCEL NUMBER
1 TO 8	772-160-40-01 TO 08

9-9-97 RG

CHANGES

BLK	OLD	NEW	YR	CUT
40	Pick-Up	07	97	9241
	KILL	07	98	1082

216-05

SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PAGE 04 SHT. 2

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

NIM'S SUNSET SHORES MOBILE HOME PARK
MAPPED FOR MOBILE HOME ASSESSMENT ONLY

OCT 1 3 1997

19

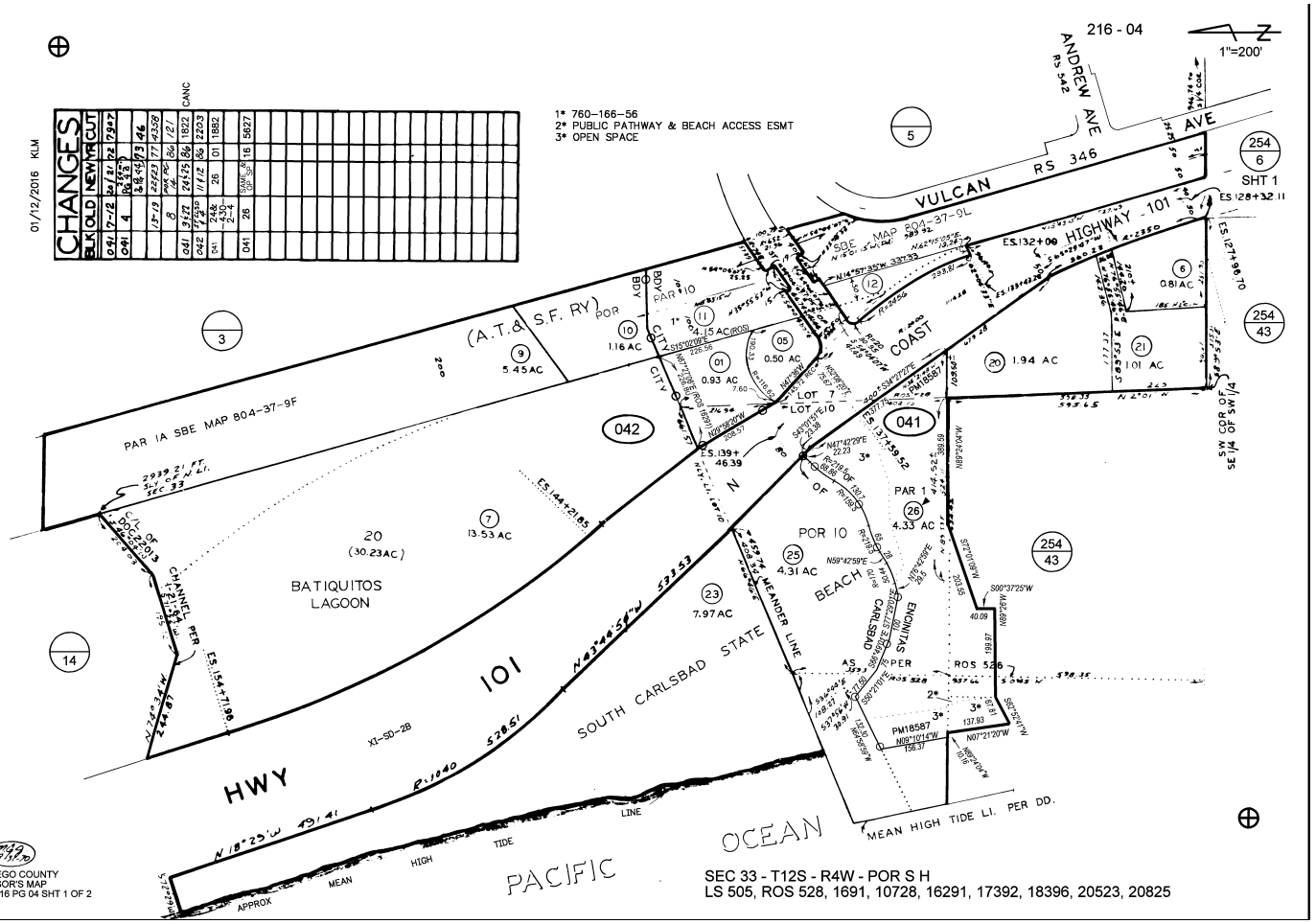
216-03
-04

01/12/2016 KLM

CHANGES																							
BLK	OLD	NEW	MRC	UT																			
041	7-12	20/21	02	7947																			
041	4	20/21 (Pt 3?)																					
		3&4	95/96	73	46																		
		15-19	22/23	77	4338																		
		8	PAR PC	86	121																		
041	3/27	24/25	86	1822																			
042	27-35	11/12	86	2203																			
041	2-8	26	01	1882																			
	430-2-4	SUBDIV SUBP	16	5627																			
041	26																						

CANC

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.



SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PG 04 SHT 1 OF 2

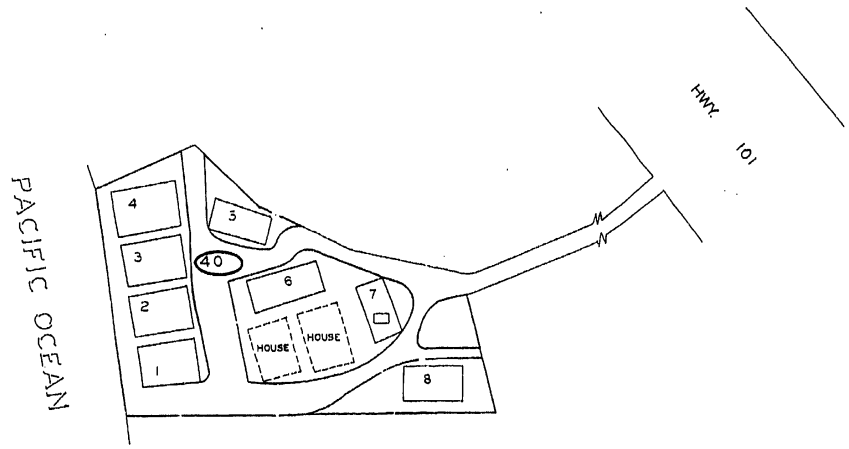
SEC 33 - T12S - R4W - POR S H
LS 505, ROS 528, 1691, 10728, 16291, 17392, 18396, 20523, 20825

1-800-345-7334

SCALE IN 1/10 OF AN INCH

216-04
SHT. 2

NO SCALE



SPACE	PARCEL NUMBER
1 TO 8	772-160-40-01 TO 08

9-9-97 RG

CHANGES

BLK	OLD	NEW	YR	CUT
40	Pick-Up	07	97	9241
	KILL	07	98	1082

SAN DIEGO COUNTY
ASSESSOR'S MAP
BOOK 216 PAGE 04 SHT. 2

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

NIM'S SUNSET SHORES MOBILE HOME PARK
MAPPED FOR MOBILE HOME ASSESSMENT ONLY

OCT 1 3 1997

Fenway - Encinitas
1950 N. Coast Highway 101
Encinitas, CA 92024

Inquiry Number: 5095677.8
November 02, 2017

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

About This Report

Executive Summary

Findings

Glossary

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILD FAX® PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Hovey Environmental on Nov 02, 2017.

TARGET PROPERTY

1950 N. Coast Highway 101
Encinitas, CA 92024

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Encinitas

Year	*Source*	*TP*	*Adjoining*
2015	City of Encinitas, Planning and Building		X
2014	City of Encinitas, Planning and Building		X
2013	City of Encinitas, Planning and Building		X
2012	City of Encinitas, Planning and Building		X
2011	City of Encinitas, Planning and Building		X
2010	City of Encinitas, Planning and Building		X
2009	City of Encinitas, Planning and Building		X
2008	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2007	City of Encinitas, Planning and Building		X
2006	City of Encinitas, Planning and Building		X
2005	City of Encinitas, Planning and Building		X
2004	City of Encinitas, Planning and Building		X
2003	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2002	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
2001	City of Encinitas, Planning and Building		X
2000	City of Encinitas, Planning and Building		X
	City of Encinitas, Planning and Building	X	
1999	City of Encinitas, Planning and Building		X
1998	City of Encinitas, Planning and Building		X
1997	City of Encinitas, Planning and Building		X
1996	City of Encinitas, Planning and Building		X
1995	City of Encinitas, Planning and Building		X
1994	City of Encinitas, Planning and Building		X
1993	City of Encinitas, Planning and Building		X
1992	City of Encinitas, Planning and Building		X

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1992	City of Encinitas, Planning and Building	X	
1991	City of Encinitas, Planning and Building		
1990	City of Encinitas, Planning and Building	X	
1989	City of Encinitas, Planning and Building		X
1988	City of Encinitas, Planning and Building		X
1987	City of Encinitas, Planning and Building		
1986	City of Encinitas, Planning and Building		
1985	City of Encinitas, Planning and Building		
1984	City of Encinitas, Planning and Building		
1983	City of Encinitas, Planning and Building		
1982	City of Encinitas, Planning and Building		
1981	City of Encinitas, Planning and Building		
1980	City of Encinitas, Planning and Building		
1979	City of Encinitas, Planning and Building		
1978	City of Encinitas, Planning and Building		
1977	City of Encinitas, Planning and Building		
1976	City of Encinitas, Planning and Building		
1975	City of Encinitas, Planning and Building		
1974	City of Encinitas, Planning and Building		
1973	City of Encinitas, Planning and Building		
1972	City of Encinitas, Planning and Building		
1971	City of Encinitas, Planning and Building		

San Diego County

Year	Source	TP	Adjoining
2017	San Diego County, Development Services		
2016	San Diego County, Development Services		
2015	San Diego County, Development Services		
2014	San Diego County, Development Services		
2013	San Diego County, Development Services		

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Encinitas
Years: 1971-2015
Source: City of Encinitas, Planning and Building, Encinitas, CA
Phone: (760) 633-2730

Name: San Diego County
Years: 2013-2017
Source: San Diego County, Development Services, ENCINITAS, CA
Phone: (619) 446-5000

Name: Carlsbad
Years: 2011-2017
Source: City of Carlsbad, Building Department, CARLSBAD, CA
Phone: (760) 602-2700

Name: Escondido
Years: 1992-2017
Source: City of Escondido, Building Division, Escondido, CA
Phone: (760) 839-4647

Name: Fresno County Unincorporated Area
Years: 1969-2017
Source: Fresno County, Public Works and Planning, SANGER, CA
Phone: (559) 600-4078

Name: Oceanside
Years: 1990-2017
Source: City of Oceanside, Development Services, OCEANSIDE, CA
Phone: (760) 435-3950

Name: San Bernardino County
Years: 2002-2017
Source: San Bernardino County, Land Use, Building & Safety, PHELAN, CA
Phone: (909) 387-8311

Name: San Marcos
Years: 2007-2017
Source: City of San Marcos, Building Division, San Marcos, CA
Phone: (760) 744-1050 x3241

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

1950 N. Coast Highway 101
Encinitas, CA 92024

1950 N COAST HIGHWAY 101

Date:	**5/22/2008**
Permit Type:	**EBP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	08-00000679
Status:	
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	

Date:	**3/25/2003**
Permit Type:	**EBP**
Description:	**EATING/DRINKING-TI/REMODEL/REPAIR**
Permit Description:	**BUILDING PERMIT**
Work Class:	EATING/DRINKING-TI/REMODEL/REPAIR
Proposed Use:	
Permit Number:	03-00000408
Status:	
Valuation:	$25,000.00
Contractor Company:	
Contractor Name:	EMERCON INC.

TARGET PROPERTY FINDINGS

Date: **3/25/2003**
Permit Type: **EEP**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: EATING/DRINKING-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 03-00000408
Status:
Valuation: $25,000.00
Contractor Company:
Contractor Name: EMERCON INC.

Date: **3/25/2003**
Permit Type: **FPO**
Description: **EATING/DRINKING-TI/REMODEL/REPAIR**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: EATING/DRINKING-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 03-00000408
Status:
Valuation: $25,000.00
Contractor Company:
Contractor Name: EMERCON INC.

Date: **12/5/2002**
Permit Type: **EEP**
Description: **ELECTRIC-MISCELLANEOUS**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 02-00002524
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: EMERCON INC.

TARGET PROPERTY FINDINGS

Date: **8/9/2000**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 00-00001312
Status:
Valuation: $2,363.00
Contractor Company:
Contractor Name: BOO BOO'S GRAPHICS

Date: **8/9/2000**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class: SIGN(S)
Proposed Use:
Permit Number: 00-00001312
Status:
Valuation: $2,363.00
Contractor Company:
Contractor Name: BOO BOO'S GRAPHICS

Date: **6/11/1992**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 92-00000777
Status:
Valuation: $2,098.00
Contractor Company:
Contractor Name: CLEAR COMMUNICATIONS

TARGET PROPERTY FINDINGS

Date: **6/11/1992**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 92-00000777
Status:
Valuation: $2,098.00
Contractor Company:
Contractor Name: CLEAR COMMUNICATIONS

Date: **7/26/1990**
Permit Type: **EBP**
Description: **SIGN(S)**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 90-00000694
Status:
Valuation: $2,625.00
Contractor Company:
Contractor Name:

Date: **7/26/1990**
Permit Type: **EEP**
Description: **SIGN(S)**

Permit Description: **ELECTRIC PERMIT-NON RESID**
Work Class:
Proposed Use:
Permit Number: 90-00000694
Status:
Valuation: $2,625.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date:	**4/11/1990**
Permit Type:	**EBP**
Description:	**SIGN(S)**
Permit Description:	**BUILDING PERMIT**
Work Class:	SIGN(S)
Proposed Use:	
Permit Number:	90-00000320
Status:	
Valuation:	$2,575.00
Contractor Company:	
Contractor Name:	

Date:	**4/11/1990**
Permit Type:	**EEP**
Description:	**SIGN(S)**
Permit Description:	**ELECTRIC PERMIT-NON RESID**
Work Class:	SIGN(S)
Proposed Use:	
Permit Number:	90-00000320
Status:	
Valuation:	$2,575.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ANDREW AVE

129 ANDREW AVE

C.O. Issued Date:	**2/22/1999**
Date:	**2/16/1999**
Permit Type:	**EBP**
Description:	**REROOF**
Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	99-00000248
Status:	
Valuation:	$2,600.00
Contractor Company:	
Contractor Name:	SPECIALTY ROOFING

Date:	**9/30/1988**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	88-00000959
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FOSTER PLUMBING

ADJOINING PROPERTY FINDINGS

130 ANDREW AVE

Date:	**1/16/2014**
Permit Type:	**EEPD**
Description:	**ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	13-00001857
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAN DIEGO COUNTY SOLAR INC

Date:	**8/16/1995**
Permit Type:	**EPPD**
Description:	**PLUMBING-SUPPLEMENTAL PERMIT**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	95-00000983
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MISSION POOLS OF ESCONDIDO INC

C.O. Issued Date:	**8/31/1995**
Date:	**6/2/1995**
Permit Type:	**EBP**
Description:	**SWIMMING POOL (RESIDENTIAL/PRIVATE)**
Permit Description:	**BUILDING PERMIT**
Work Class:	SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:	
Permit Number:	95-00000615
Status:	
Valuation:	$23,063.00
Contractor Company:	
Contractor Name:	MISSION POOLS OF ESCONDIDO INC

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/31/1995**
Date: **6/2/1995**
Permit Type: **EEPD**
Description: **SWIMMING POOL (RESIDENTIAL/PRIVATE)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SWIMMING POOL (RESIDENTIAL/PRIVATE)
Proposed Use:
Permit Number: 95-00000615
Status:
Valuation: $23,063.00
Contractor Company:
Contractor Name: MISSION POOLS OF ESCONDIDO INC

132 ANDREW AVE

Date: **10/27/2014**
Permit Type: **EBP**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EEPD**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/27/2014**
Permit Type: **EMPD**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EPPD**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **ZFMR**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **FIRE MITIGATION RES. MARCH 06**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/27/2014**
Permit Type: **ZFRF**
Description: **DWELLING,ACC. UNIT-NEW ++++++++++++++++++++**

Permit Description: **FIRE FEES RESIDENTIAL-JULY2009**
Work Class:
Proposed Use:
Permit Number: 14-00000977
Status:
Valuation: $43,792.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EBP**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EEPD**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **10/27/2014**
Permit Type: **EMPD**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

Date: **10/27/2014**
Permit Type: **EPPD**
Description: **DWELLING,LEGALIZE EXISTING UNIT(S) +++++++++**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000978
Status:
Valuation: $70,133.00
Contractor Company:
Contractor Name:

Date: **9/18/2002**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 02-00002018
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

138 ANDREW AVE

Date:	**2/19/2009**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	09-00000182
Status:	
Valuation:	$2,007.00
Contractor Company:	
Contractor Name:	RESCUE ROOTER

HAYMARKET RD

1837 HAYMARKET RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000348
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/15/1999**
Date: **3/16/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000416
Status:
Valuation: $3,384.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000114
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000114
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000114
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

1839 HAYMARKET RD

C.O. Issued Date: **7/15/1999**
Date: **3/16/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00000415
Status:
Valuation: $3,384.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 99-00000115
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 99-00000115
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/15/1999**
Date: **2/26/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:
Permit Number: 99-00000115
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

1841 HAYMARKET RD

Date: **10/16/2012**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

ADJOINING PROPERTY FINDINGS

Date: **10/16/2012**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

Date: **10/16/2012**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

Date: **10/16/2012**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001056
Status:
Valuation: $100,000.00
Contractor Company:
Contractor Name: HUETTERBUILT INC

ADJOINING PROPERTY FINDINGS

Date: **10/14/1998**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 98-00001589
Status:
Valuation: $7,350.00
Contractor Company:
Contractor Name: BRADY, JOHN

Date: **10/14/1998**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 98-00001589
Status:
Valuation: $7,350.00
Contractor Company:
Contractor Name: BRADY, JOHN

1843 HAYMARKET RD

C.O. Issued Date: **12/9/1999**
Date: **9/15/1999**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00001097
Status:
Valuation: $33,482.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **12/9/1999**
Date: **9/15/1999**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00001097
Status:
Valuation: $33,482.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **12/9/1999**
Date: **9/15/1999**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 99-00001097
Status:
Valuation: $33,482.00
Contractor Company:
Contractor Name: BRADY, JOHN

1844 HAYMARKET RD

C.O. Issued Date: **4/15/2003**
Date: **12/13/2002**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000704
Status:
Valuation: $25,802.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **4/15/2003**
Date: **12/13/2002**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000704
Status:
Valuation: $25,802.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **4/15/2003**
Date: **12/13/2002**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000704
Status:
Valuation: $25,802.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **6/13/1995**
Date: **2/14/1995**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 94-00001273
Status:
Valuation: $30,056.00
Contractor Company:
Contractor Name: CASELINE DOOR & TRIM INC

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/13/1995**
Date: **2/14/1995**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 94-00001273
Status:
Valuation: $30,056.00
Contractor Company:
Contractor Name: CASELINE DOOR & TRIM INC

1846 HAYMARKET RD

Date: **2/14/2006**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00000246
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **3/17/2005**
Date: **12/13/2002**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 02-00000703
Status:
Valuation: $18,178.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/11/2001**
Date: **5/15/2000**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 99-00001153
Status:
Valuation: $2,500.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/11/2001**
Date: **5/15/2000**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 99-00001153
Status:
Valuation: $2,500.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **2/6/1991**
Date: **9/25/1989**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 89-00000956
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/6/1991**
Date: **9/25/1989**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 89-00000956
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **2/6/1991**
Date: **9/25/1989**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 89-00000956
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name:

1859 HAYMARKET RD

Date: **8/8/2014**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000657
Status:
Valuation: $900.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **3/5/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000352
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **10/22/2004**
Date: **8/20/2004**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 04-00001274
Status:
Valuation: $29,808.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **10/22/2004**
Date: **8/20/2004**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 04-00001274
Status:
Valuation: $29,808.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1860 HAYMARKET RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000353
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**8/2/2001**
Date:	**5/14/2001**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,SINGLE FAMILY-TI/REMODEL/R
Proposed Use:	
Permit Number:	01-00000901
Status:	
Valuation:	$3,000.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**10/27/1994**
Date:	**8/30/1994**
Permit Type:	**EBP**
Description:	**SKYLIGHT(S)**
Permit Description:	**BUILDING PERMIT**
Work Class:	SKYLIGHT(S)
Proposed Use:	
Permit Number:	94-00000837
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	S & T CONSTRUCTION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **10/27/1994**
Date: **8/30/1994**
Permit Type: **EEPD**
Description: **SKYLIGHT(S)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: SKYLIGHT(S)
Proposed Use:
Permit Number: 94-00000837
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: S & T CONSTRUCTION

1863 HAYMARKET RD

Date: **10/10/2012**
Permit Type: **EEPD**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001261
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: NATIONAL CONSTRUCTION RENTALS

C.O. Issued Date: **8/28/2001**
Date: **8/1/2001**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 01-00001322
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/28/2001**
Date: **8/1/2001**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 01-00001322
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name: BRADY, JOHN

Date: **12/29/1994**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 94-00001335
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

1864 HAYMARKET RD

Date: **2/19/2008**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000238
Status:
Valuation: $21,420.00
Contractor Company:
Contractor Name: JUST WATER HEATERS INC

ADJOINING PROPERTY FINDINGS

1866 HAYMARKET RD

C.O. Issued Date: **8/27/1993**
Date: **5/28/1993**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 93-00000648
Status:
Valuation: $10,000.00
Contractor Company:
Contractor Name: CAL COAST CONSTRUCTION

C.O. Issued Date: **8/27/1993**
Date: **5/28/1993**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 93-00000648
Status:
Valuation: $10,000.00
Contractor Company:
Contractor Name: CAL COAST CONSTRUCTION

C.O. Issued Date: **8/27/1993**
Date: **5/28/1993**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 93-00000648
Status:
Valuation: $10,000.00
Contractor Company:
Contractor Name: CAL COAST CONSTRUCTION

ADJOINING PROPERTY FINDINGS

1870 HAYMARKET RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**

Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000355
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**3/31/1998**
Date:	**1/30/1998**
Permit Type:	**EBP**
Description:	**FIREPLACE/BBQ/FIREPIT**

Permit Description:	**BUILDING PERMIT**
Work Class:	FIREPLACE/BBQ/FIREPIT
Proposed Use:	
Permit Number:	97-00001723
Status:	
Valuation:	$1,900.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**3/31/1998**
Date:	**1/30/1998**
Permit Type:	**EPPD**
Description:	**FIREPLACE/BBQ/FIREPIT**

Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	FIREPLACE/BBQ/FIREPIT
Proposed Use:	
Permit Number:	97-00001723
Status:	
Valuation:	$1,900.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1873 HAYMARKET RD

Date: **1/5/2015**
Permit Type: **EEPD**
Description: **ELECTRIC-ROOF MOUNTED PHOTO VOLTAIC SYSTEM**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00002255
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SAN DIEGO COUNTY SOLAR INC

Date: **3/29/2000**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 00-00000501
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1876 HAYMARKET RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000356
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**9/24/2007**
Date:	**7/30/2007**
Permit Type:	**EBP**
Description:	**SKYLIGHT(S)**
Permit Description:	**BUILDING PERMIT**
Work Class:	SKYLIGHT(S)
Proposed Use:	
Permit Number:	07-00001028
Status:	
Valuation:	$6,650.00
Contractor Company:	
Contractor Name:	SKYLIGHT PROS INC

ADJOINING PROPERTY FINDINGS

LA COSTA AVE

116 LA COSTA AVE

Date:	**7/22/2008**
Permit Type:	**EBP**
Description:	**GARAGE/CARPORT (RESIDENTIAL)-NEW**
Permit Description:	**BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	08-00000610
Status:	
Valuation:	$17,952.00
Contractor Company:	
Contractor Name:	

Date:	**7/22/2008**
Permit Type:	**EEPD**
Description:	**GARAGE/CARPORT (RESIDENTIAL)-NEW**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	08-00000610
Status:	
Valuation:	$17,952.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **9/25/2007**
Permit Type: **EBP**
Description: **GARAGE/CARPORT (RESID)-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 07-00001301
Status:
Valuation: $2,672.00
Contractor Company:
Contractor Name:

Date: **8/16/2006**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 06-00001161
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **8/4/2006**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 06-00001097
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/5/2007**
Date: **10/4/2005**
Permit Type: **EBP**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 05-00000504
Status:
Valuation: $53,968.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **2/5/2007**
Date: **10/4/2005**
Permit Type: **EEPD**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 05-00000504
Status:
Valuation: $53,968.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **2/5/2007**
Date: **10/4/2005**
Permit Type: **EPPD**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 05-00000504
Status:
Valuation: $53,968.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/5/2007**
Date: **10/4/2005**
Permit Type: **FPM**
Description: **DWELLING,ACC. UNIT-NEW**

Permit Description: **DEPT. MITIGATION PERMIT**
Work Class: DWELLING,ACC. UNIT-NEW ++++++++++++
Proposed Use:
Permit Number: 05-00000504
Status:
Valuation: $53,968.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/18/2003**
Date: **2/26/2003**
Permit Type: **EBP**
Description: **GARAGE/CARPORT (RESIDENTIAL)-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: GARAGE/CARPORT (RESIDENTIAL)-NEW
Proposed Use:
Permit Number: 03-00000111
Status:
Valuation: $15,180.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/18/2003**
Date: **2/26/2003**
Permit Type: **EEPD**
Description: **GARAGE/CARPORT (RESIDENTIAL)-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: GARAGE/CARPORT (RESIDENTIAL)-NEW
Proposed Use:
Permit Number: 03-00000111
Status:
Valuation: $15,180.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **3/21/1996**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 96-00000365
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **3/21/1996**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 96-00000366
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **2/14/1996**
Permit Type: **EEPD**
Description: **PLUMBING-GAS (RESET METER-NO WORK PROPOSED)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 96-00000204
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **2/14/1996**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (RESET METER-NO WORK PROPOSED)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 96-00000204
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

124 LA COSTA AVE

Date: **8/30/2005**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 05-00001343
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

Date: **3/18/2005**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 05-00000410
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/10/2006**
Date: **2/8/2005**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-NEW**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-NEW ++++++++
Proposed Use:
Permit Number: 04-00001880
Status:
Valuation: $403,942.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/10/2006**
Date: **2/8/2005**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-NEW ++++++++
Proposed Use:
Permit Number: 04-00001880
Status:
Valuation: $403,942.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/10/2006**
Date: **2/8/2005**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-NEW**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-NEW ++++++++
Proposed Use:
Permit Number: 04-00001880
Status:
Valuation: $403,942.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/10/2006**
Date: **2/8/2005**
Permit Type: **FPM**
Description: **DWELLING,SINGLE FAMILY-NEW**

Permit Description: **DEPT. MITIGATION PERMIT**
Work Class: DWELLING,SINGLE FAMILY-NEW ++++++++
Proposed Use:
Permit Number: 04-00001880
Status:
Valuation: $403,942.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/10/2006**
Date: **2/8/2005**
Permit Type: **FPO**
Description: **DWELLING,SINGLE FAMILY-NEW**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,SINGLE FAMILY-NEW ++++++++
Proposed Use:
Permit Number: 04-00001880
Status:
Valuation: $403,942.00
Contractor Company:
Contractor Name:

Date: **8/5/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00001415
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **1/18/1995**
Permit Type: **EBP**
Description: **DWELLING,ACC. UNIT-DEMO/REMOVE**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 95-00000028
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

N VULCAN AVE

1845 N VULCAN AVE

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000851
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

1853 N VULCAN AVE

Date: **3/19/2009**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 09-00000300
Status:
Valuation: $19,373.00
Contractor Company:
Contractor Name: ACTION COMFORT SYSTEMS

Date: **1/19/2006**
Permit Type: **EPPD**
Description: **PLUMBING-WATER REPIPE**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00000091
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PIPES PLUMBING

Date: **12/14/2005**
Permit Type: **EPPD**
Description: **PLUMBING-WATER REPIPE**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 05-00001915
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PIPES PLUMBING

ADJOINING PROPERTY FINDINGS

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000819
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

1865 N VULCAN AVE

Date: **6/24/2009**
Permit Type: **EBP**
Description: **DWELLING,SFD W/ACC UNIT-DEMO/REMOVE ---------**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 09-00000653
Status:
Valuation: $4,500.00
Contractor Company:
Contractor Name: SILVERLINE CONSTRUCTION

Date: **2/23/1993**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 93-00000177
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: WELCH PLUMBING

ADJOINING PROPERTY FINDINGS

Date: **9/29/1988**
Permit Type: **EPPD**
Description: **PLUMBING-SEWER (NEW/CONVERSION/REPAIR)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 88-00000952
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

1873 N VULCAN AVE

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000820
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

1887 N VULCAN AVE

Date:
Permit Type:
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number:
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

1939 N VULCAN AVE

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000821
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

1967 N VULCAN AVE

Date: **10/9/2012**
Permit Type: **EPPD**
Description: **PLUMBING-GAS (INSTALL/REPAIR)**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001255
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: UNIQUE RENOVATIONS

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000822
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

Date: **5/10/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-CONVERT TO UNDERGROUND SERVICE**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000852
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SOUTHERN CONTRACTING CO

ADJOINING PROPERTY FINDINGS

PARLIAMENT RD

1819 PARLIAMENT RD

Date:	**10/8/2012**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**ENC PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	12-00001253
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CALIFORNIA DELTA MECHANICAL IN

Date:	**3/1/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000332
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001554
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

1821 PARLIAMENT RD

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001555
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **1/5/1999**
Date: **9/11/1998**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00001455
Status:
Valuation: $4,524.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **1/5/1999**
Date: **9/11/1998**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00001455
Status:
Valuation: $4,524.00
Contractor Company:
Contractor Name:

1822 PARLIAMENT RD

Date: **6/10/2003**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 03-00001141
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/5/2003**
Date: **5/22/2003**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00000802
Status:
Valuation: $41,043.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/5/2003**
Date: **5/22/2003**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00000802
Status:
Valuation: $41,043.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/5/2003**
Date: **5/22/2003**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00000802
Status:
Valuation: $41,043.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/5/2003**
Date: **5/22/2003**
Permit Type: **FPO**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00000802
Status:
Valuation: $41,043.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000553
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1823 PARLIAMENT RD

Date: **11/10/2005**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 05-00001600
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name:

Date: **11/10/2005**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 05-00001600
Status:
Valuation: $20,000.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001556
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

Date: **9/15/1999**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 99-00001554
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

1824 PARLIAMENT RD

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000554
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

1827 PARLIAMENT RD

Date:	**3/1/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000333
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**9/18/2003**
Date:	**8/11/2003**
Permit Type:	**EBP**
Description:	**REROOF**
Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	03-00001557
Status:	
Valuation:	$760.00
Contractor Company:	
Contractor Name:	DILS ROOFING

Date:	**12/27/1994**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	94-00001311
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	COAST PLUMBING & MECHANICAL

ADJOINING PROPERTY FINDINGS

1828 PARLIAMENT RD

Date:	**3/1/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000334
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**5/9/2003**
Date:	**1/28/2003**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	02-00001715
Status:	
Valuation:	$6,880.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**5/9/2003**
Date:	**1/28/2003**
Permit Type:	**EEPD**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	02-00001715
Status:	
Valuation:	$6,880.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

Date: **11/4/2002**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 02-00002345
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BRADY, JOHN

Date: **10/31/2002**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 02-00002217
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/9/2003**
Date: **9/4/2002**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00000963
Status:
Valuation: $20,734.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/9/2003**
Date: **9/4/2002**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00000963
Status:
Valuation: $20,734.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/9/2003**
Date: **9/4/2002**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00000963
Status:
Valuation: $20,734.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000555
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

1829 PARLIAMENT RD

Date: **3/26/2009**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00001332
Status:
Valuation: $7,925.00
Contractor Company:
Contractor Name:

Date: **3/26/2009**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001332
Status:
Valuation: $7,925.00
Contractor Company:
Contractor Name:

Date: **3/26/2009**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00001332
Status:
Valuation: $7,925.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **5/19/2008**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 08-00000568
Status:
Valuation: $7,440.00
Contractor Company:
Contractor Name: WEBER ARCHITECTURE & CONST

Date: **5/19/2008**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000568
Status:
Valuation: $7,440.00
Contractor Company:
Contractor Name: WEBER ARCHITECTURE & CONST

Date: **5/19/2008**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000568
Status:
Valuation: $7,440.00
Contractor Company:
Contractor Name: WEBER ARCHITECTURE & CONST

ADJOINING PROPERTY FINDINGS

Date: **5/19/2008**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 08-00000568
Status:
Valuation: $7,440.00
Contractor Company:
Contractor Name: WEBER ARCHITECTURE & CONST

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001558
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

1830 PARLIAMENT RD

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000556
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

1832 PARLIAMENT RD

C.O. Issued Date:	**8/9/2002**
Date:	**3/13/2002**
Permit Type:	**EBP**
Description:	**REROOF**

Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	02-00000557
Status:	
Valuation:	$1,400.00
Contractor Company:	
Contractor Name:	DILS ROOFING

C.O. Issued Date:	**12/29/1994**
Date:	**9/14/1994**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:	
Permit Number:	94-00000880
Status:	
Valuation:	$500.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

1833 PARLIAMENT RD

Date: **9/20/2012**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001136
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name:

Date: **9/20/2012**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001136
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name:

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000335
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001559
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **3/15/2002**
Date: **1/8/2002**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 01-00002259
Status:
Valuation: $6,571.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **3/15/2002**
Date: **1/8/2002**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 01-00002259
Status:
Valuation: $6,571.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1834 PARLIAMENT RD

Date:	**12/3/2013**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	13-00001711
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WALTER ANDERSON PLUMBING INC

C.O. Issued Date:	**8/9/2002**
Date:	**3/13/2002**
Permit Type:	**EBP**
Description:	**REROOF**
Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	02-00000558
Status:	
Valuation:	$1,400.00
Contractor Company:	
Contractor Name:	DILS ROOFING

ADJOINING PROPERTY FINDINGS

1835 PARLIAMENT RD

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001560
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **8/12/1999**
Date: **2/18/1998**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 98-00000153
Status:
Valuation: $2,047.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/12/1999**
Date: **2/18/1998**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 98-00000153
Status:
Valuation: $2,047.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/21/1997**
Date: **2/27/1997**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 97-00000148
Status:
Valuation: $17,700.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/21/1997**
Date: **2/27/1997**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 97-00000148
Status:
Valuation: $17,700.00
Contractor Company:
Contractor Name:

1838 PARLIAMENT RD

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000336
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/24/2004**
Date: **7/24/2003**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00001213
Status:
Valuation: $5,936.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **6/24/2004**
Date: **7/24/2003**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00001213
Status:
Valuation: $5,936.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000559
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/25/1998**
Date: **9/15/1997**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 97-00001236
Status:
Valuation: $500.00
Contractor Company:
Contractor Name: DELPHI GROUP

Date: **2/28/1996**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 96-00000276
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: DELPHI GROUP

Date: **2/28/1996**
Permit Type: **EPPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 96-00000276
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: DELPHI GROUP

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/18/1996**
Date: **2/15/1996**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 95-00001491
Status:
Valuation: $5,775.00
Contractor Company:
Contractor Name: DELPHI GROUP

C.O. Issued Date: **6/18/1996**
Date: **2/15/1996**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 95-00001491
Status:
Valuation: $5,775.00
Contractor Company:
Contractor Name: DELPHI GROUP

1840 PARLIAMENT RD

Date: **1/23/2004**
Permit Type: **EEPD**
Description: **ELECTRIC-SUPPLEMENTAL PERMIT**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 04-00000130
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **4/28/2004**
Date: **9/10/2003**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 03-00001051
Status:
Valuation: $22,110.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **4/28/2004**
Date: **9/10/2003**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 03-00001051
Status:
Valuation: $22,110.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **4/28/2004**
Date: **9/10/2003**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 03-00001051
Status:
Valuation: $22,110.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **4/28/2004**
Date: **9/10/2003**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 03-00001051
Status:
Valuation: $22,110.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000560
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1845 PARLIAMENT RD

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000337
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001561
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

Date: **5/24/2000**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 00-00000821
Status:
Valuation: $2,500.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

Date: **11/4/1999**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 99-00001754
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **12/8/1999**
Date: **6/23/1999**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 99-00001052
Status:
Valuation: $2,070.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

C.O. Issued Date: **12/8/1999**
Date: **6/23/1999**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 99-00001052
Status:
Valuation: $2,070.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

1846 PARLIAMENT RD

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000338
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000561
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **1/20/2000**
Date: **11/4/1999**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00001251
Status:
Valuation: $6,066.00
Contractor Company:
Contractor Name: YOUNG, GARY E. GEN. CONTRACTOR

C.O. Issued Date: **1/20/2000**
Date: **11/4/1999**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00001251
Status:
Valuation: $6,066.00
Contractor Company:
Contractor Name: YOUNG, GARY E. GEN. CONTRACTOR

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **1/20/2000**
Date: **11/4/1999**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00001251
Status:
Valuation: $6,066.00
Contractor Company:
Contractor Name: YOUNG, GARY E. GEN. CONTRACTOR

1847 PARLIAMENT RD

Date: **10/10/2012**
Permit Type: **EEPD**
Description: **ELECTRIC-CONSTRUCTION/TEMPORARY POWER**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001260
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: NATIONAL CONSTRUCTION RENTALS

Date: **9/26/2005**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 05-00001469
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/25/2006**
Date: **4/5/2005**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002127
Status:
Valuation: $43,634.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/25/2006**
Date: **4/5/2005**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002127
Status:
Valuation: $43,634.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/25/2006**
Date: **4/5/2005**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002127
Status:
Valuation: $43,634.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001562
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

Date: **11/4/1999**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 99-00001755
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **12/8/1999**
Date: **6/28/1999**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 99-00000980
Status:
Valuation: $2,070.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

1848 PARLIAMENT RD

C.O. Issued Date:	**8/9/2002**
Date:	**3/13/2002**
Permit Type:	**EBP**
Description:	**REROOF**

Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	02-00000562
Status:	
Valuation:	$1,400.00
Contractor Company:	
Contractor Name:	DILS ROOFING

1850 PARLIAMENT RD

C.O. Issued Date:	**6/1/2005**
Date:	**12/20/2004**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**

Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	04-00002011
Status:	
Valuation:	$13,806.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **6/1/2005**
Date: **12/20/2004**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002011
Status:
Valuation: $13,806.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000563
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1851 PARLIAMENT RD

Date: **10/4/2013**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 13-00001166
Status:
Valuation: $44,380.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **10/4/2013**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001166
Status:
Valuation: $44,380.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

Date: **10/4/2013**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001166
Status:
Valuation: $44,380.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

Date: **10/4/2013**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00001166
Status:
Valuation: $44,380.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000339
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001563
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **7/6/2004**
Date: **1/17/2003**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 03-00000139
Status:
Valuation: $1,932.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/30/2001**
Date: **8/19/2001**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 00-00001749
Status:
Valuation: $5,643.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **5/30/2001**
Date: **3/19/2001**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 00-00001749
Status:
Valuation: $5,643.00
Contractor Company:
Contractor Name:

1852 PARLIAMENT RD

Date: **10/25/2011**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00001372
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ANDERSON, WALTER PLUMBING INC

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000564
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1855 PARLIAMENT RD

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001564
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **9/1/2004**
Date: **10/30/2002**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00001943
Status:
Valuation: $33,464.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/1/2004**
Date: **10/30/2002**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00001943
Status:
Valuation: $33,464.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/1/2004**
Date: **10/30/2002**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00001943
Status:
Valuation: $33,464.00
Contractor Company:
Contractor Name: BRADY, JOHN

1856 PARLIAMENT RD

Date: **8/11/2014**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 14-00001171
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **3/20/2014**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 14-00000149
Status:
Valuation: $61,656.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

Date: **3/20/2014**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000149
Status:
Valuation: $61,656.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

Date: **3/20/2014**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000149
Status:
Valuation: $61,656.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **3/20/2014**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000149
Status:
Valuation: $61,656.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000340
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000565
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

1857 PARLIAMENT RD

C.O. Issued Date:	**9/18/2003**
Date:	**8/11/2003**
Permit Type:	**EBP**
Description:	**REROOF**

Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	03-00001565
Status:	
Valuation:	$760.00
Contractor Company:	
Contractor Name:	DILS ROOFING

1858 PARLIAMENT RD

C.O. Issued Date:	**8/9/2002**
Date:	**3/13/2002**
Permit Type:	**EBP**
Description:	**REROOF**

Permit Description:	**BUILDING PERMIT**
Work Class:	REROOF
Proposed Use:	
Permit Number:	02-00000566
Status:	
Valuation:	$1,400.00
Contractor Company:	
Contractor Name:	DILS ROOFING

ADJOINING PROPERTY FINDINGS

1860 PARLIAMENT RD

Date:	**10/8/2007**
Permit Type:	**EBR**
Description:	**REVISION TO PLANS-NO NEW FLOOR AREAS**
Permit Description:	**BUILDING PERMIT/PLAN REV.**
Work Class:	
Proposed Use:	
Permit Number:	07-00001359
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BELL CONSTRUCTION

C.O. Issued Date:	**5/13/2008**
Date:	**9/17/2007**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	07-00000462
Status:	
Valuation:	$10,877.00
Contractor Company:	
Contractor Name:	BELL CONSTRUCTION

C.O. Issued Date:	**5/13/2008**
Date:	**9/17/2007**
Permit Type:	**EEPD**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	07-00000462
Status:	
Valuation:	$10,877.00
Contractor Company:	
Contractor Name:	BELL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/13/2008**
Date: **9/17/2007**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 07-00000462
Status:
Valuation: $10,877.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000567
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1861 PARLIAMENT RD

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000341
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001566
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **7/9/1999**
Date: **8/18/1999**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00000352
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/9/1999**
Date: **8/18/1999**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00000352
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/9/1999**
Date: **3/18/1999**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00000352
Status:
Valuation: $30,247.00
Contractor Company:
Contractor Name: BRADY, JOHN

1862 PARLIAMENT RD

Date: **4/5/2005**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 05-00000485
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **12/12/2005**
Date: **12/16/2004**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002015
Status:
Valuation: $27,300.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **12/12/2005**
Date: **12/16/2004**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002015
Status:
Valuation: $27,300.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **12/12/2005**
Date: **12/16/2004**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002015
Status:
Valuation: $27,300.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **12/12/2005**
Date: **12/16/2004**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00002015
Status:
Valuation: $27,300.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000568
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1863 PARLIAMENT RD

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001567
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **2/17/2000**
Date: **7/30/1999**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00000951
Status:
Valuation: $35,699.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/17/2000**
Date: **7/30/1999**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00000951
Status:
Valuation: $35,699.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **2/17/2000**
Date: **7/30/1999**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00000951
Status:
Valuation: $35,699.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **2/17/2000**
Date: **7/30/1999**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00001112
Status:
Valuation: $3,384.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/17/2000**
Date: **7/30/1999**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 99-00001112
Status:
Valuation: $3,384.00
Contractor Company:
Contractor Name: BRADY, JOHN

1866 PARLIAMENT RD

Date: **9/24/2012**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001182
Status:
Valuation: $6,000.00
Contractor Company:
Contractor Name: SHOWCASR VINYL WINDOWS INC

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000342
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000569
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1867 PARLIAMENT RD

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000343
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001568
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

1868 PARLIAMENT RD

Date:	**5/10/2004**
Permit Type:	**EBR**
Description:	**REVISION TO PLANS-NO NEW FLOOR AREAS**
Permit Description:	**BUILDING PERMIT/PLAN REV.**
Work Class:	
Proposed Use:	
Permit Number:	04-00000766
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MACDUFFEE, JERRY

C.O. Issued Date:	**12/20/2004**
Date:	**2/12/2004**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	03-00002139
Status:	
Valuation:	$16,975.00
Contractor Company:	
Contractor Name:	MACDUFFEE, JERRY

C.O. Issued Date:	**12/20/2004**
Date:	**2/12/2004**
Permit Type:	**EEPD**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	03-00002139
Status:	
Valuation:	$16,975.00
Contractor Company:	
Contractor Name:	MACDUFFEE, JERRY

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **12/20/2004**
Date: **2/12/2004**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 03-00002139
Status:
Valuation: $16,975.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

C.O. Issued Date: **12/20/2004**
Date: **2/12/2004**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 03-00002139
Status:
Valuation: $16,975.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

C.O. Issued Date: **3/12/2004**
Date: **8/5/2003**
Permit Type: **EBP**
Description: **GARAGE/CARPORT (RESID)-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: GARAGE/CARPORT (RESID)-TI/REMODEL/R
Proposed Use:
Permit Number: 03-00001494
Status:
Valuation: $300.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000570
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

1869 PARLIAMENT RD

C.O. Issued Date: **1/31/2008**
Date: **4/26/2007**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 07-00000341
Status:
Valuation: $28,516.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

C.O. Issued Date: **1/31/2008**
Date: **4/26/2007**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 07-00000341
Status:
Valuation: $28,516.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **1/31/2008**
Date: **4/26/2007**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 07-00000341
Status:
Valuation: $28,516.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001569
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **7/30/1999**
Date: **7/28/1998**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00001166
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/30/1999**
Date: **7/28/1998**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00001166
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

1870 PARLIAMENT RD

Date: **9/30/2013**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 13-00000617
Status:
Valuation: $11,702.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

Date: **9/30/2013**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00000617
Status:
Valuation: $11,702.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **9/30/2013**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00000617
Status:
Valuation: $11,702.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

Date: **9/30/2013**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 13-00000617
Status:
Valuation: $11,702.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

Date: **10/2/2012**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001053
Status:
Valuation: $150,000.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **10/2/2012**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001053
Status:
Valuation: $150,000.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

Date: **10/2/2012**
Permit Type: **EMPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001053
Status:
Valuation: $150,000.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

Date: **10/2/2012**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001053
Status:
Valuation: $150,000.00
Contractor Company:
Contractor Name: FIGONE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **11/5/2003**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 03-00002154
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

C.O. Issued Date: **6/22/2004**
Date: **10/22/2003**
Permit Type: **EBP**
Description: **GARAGE/CARPORT (RESID)-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: GARAGE/CARPORT (RESID)-TI/REMODEL/R
Proposed Use:
Permit Number: 03-00002083
Status:
Valuation: $300.00
Contractor Company:
Contractor Name: MACDUFFEE, JERRY

C.O. Issued Date: **7/17/2003**
Date: **4/22/2003**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00000760
Status:
Valuation: $17,410.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/17/2003**
Date: **4/22/2003**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 03-00000760
Status:
Valuation: $17,410.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/16/2003**
Date: **1/10/2003**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00002568
Status:
Valuation: $17,123.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **7/16/2003**
Date: **1/10/2003**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00002568
Status:
Valuation: $17,123.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **7/16/2003**
Date: **1/10/2003**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:
Permit Number: 02-00002568
Status:
Valuation: $17,123.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000571
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **5/19/1999**
Date: **3/19/1999**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 99-00000192
Status:
Valuation: $2,208.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1872 PARLIAMENT RD

Date:	**11/28/2005**
Permit Type:	**EEPD**
Description:	**ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	05-00001819
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**4/26/2006**
Date:	**8/8/2005**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	05-00000996
Status:	
Valuation:	$23,500.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

C.O. Issued Date:	**4/26/2006**
Date:	**8/8/2005**
Permit Type:	**EEPD**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	05-00000996
Status:	
Valuation:	$23,500.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **4/26/2006**
Date: **8/8/2005**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 05-00000996
Status:
Valuation: $23,500.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **4/26/2006**
Date: **8/8/2005**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 05-00000996
Status:
Valuation: $23,500.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **8/9/2002**
Date: **3/13/2002**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 02-00000572
Status:
Valuation: $1,400.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/16/1998**
Date: **11/18/1997**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 97-00001667
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/21/1997**
Date: **4/21/1997**
Permit Type: **EBP**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 97-00000198
Status:
Valuation: $2,208.00
Contractor Company:
Contractor Name: BENCHMARK BUILDERS

C.O. Issued Date: **5/21/1997**
Date: **4/21/1997**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-TI/REMODEL/REPAIR**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-TI/REMODEL/REPAIR
Proposed Use:
Permit Number: 97-00000198
Status:
Valuation: $2,208.00
Contractor Company:
Contractor Name: BENCHMARK BUILDERS

ADJOINING PROPERTY FINDINGS

1873 PARLIAMENT RD

Date: **9/27/2012**
Permit Type: **EBP**
Description: **PATIO COVER (RESIDENTIAL)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00001209
Status:
Valuation: $800.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

Date: **9/27/2012**
Permit Type: **EEPD**
Description: **PATIO COVER (RESIDENTIAL)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 12-00001209
Status:
Valuation: $800.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

Date: **3/1/2012**
Permit Type: **EBP**
Description: **BLDG-MISCELLANEOUS**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 12-00000344
Status:
Valuation: $11,750.00
Contractor Company:
Contractor Name: DEL MAR PACIFIC ACQUISITION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001570
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

C.O. Issued Date: **10/5/2001**
Date: **8/2/2001**
Permit Type: **EBP**
Description: **PATIO COVER (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: PATIO COVER (RESIDENTIAL)
Proposed Use:
Permit Number: 01-00001463
Status:
Valuation: $896.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

C.O. Issued Date: **10/5/2001**
Date: **8/2/2001**
Permit Type: **EEPD**
Description: **PATIO COVER (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: PATIO COVER (RESIDENTIAL)
Proposed Use:
Permit Number: 01-00001463
Status:
Valuation: $896.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **3/12/2001**
Date: **9/29/2000**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 00-00001363
Status:
Valuation: $31,584.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

C.O. Issued Date: **3/12/2001**
Date: **9/29/2000**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 00-00001363
Status:
Valuation: $31,584.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

C.O. Issued Date: **3/12/2001**
Date: **9/29/2000**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 00-00001363
Status:
Valuation: $31,584.00
Contractor Company:
Contractor Name: BELL CONSTRUCTION

ADJOINING PROPERTY FINDINGS

1875 PARLIAMENT RD

Date: **2/19/2014**
Permit Type: **EEPD**
Description: **ELECTRIC-SERVICE INCREASE/RELOCATION/NEW**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 14-00000259
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: A C STAMPFLI ELECTRIC INC

Date: **3/22/2010**
Permit Type: **EBP**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 10-00000231
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: M S R CONSTRUCTION INC.

Date: **3/22/2010**
Permit Type: **EEPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 10-00000231
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: M S R CONSTRUCTION INC.

ADJOINING PROPERTY FINDINGS

Date: **3/22/2010**
Permit Type: **EMPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 10-00000231
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: M S R CONSTRUCTION INC.

Date: **3/22/2010**
Permit Type: **EPPD**
Description: **DWELLING,SINGLE FAMILY-TI/REMODEL/REPAIR**

Permit Description: **ENC PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 10-00000231
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: M S R CONSTRUCTION INC.

C.O. Issued Date: **9/18/2003**
Date: **8/11/2003**
Permit Type: **EBP**
Description: **REROOF**

Permit Description: **BUILDING PERMIT**
Work Class: REROOF
Proposed Use:
Permit Number: 03-00001571
Status:
Valuation: $760.00
Contractor Company:
Contractor Name: DILS ROOFING

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **9/3/1998**
Date: **5/14/1998**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00000675
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/3/1998**
Date: **5/14/1998**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00000675
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/3/1998**
Date: **5/14/1998**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 98-00000675
Status:
Valuation: $28,200.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **2/25/1998**
Date: **1/6/1998**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 97-00001815
Status:
Valuation: $2,047.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **2/25/1998**
Date: **1/6/1998**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 97-00001815
Status:
Valuation: $2,047.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

WILTON RD

1806 WILTON RD

Date:	**8/11/2011**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	11-00001042
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ACTION AIR CONDITIONING

C.O. Issued Date:	**11/18/1992**
Date:	**10/27/1992**
Permit Type:	**EBP**
Description:	**FIREPLACE/BBQ/FIREPIT**
Permit Description:	**BUILDING PERMIT**
Work Class:	FIREPLACE/BBQ/FIREPIT
Proposed Use:	
Permit Number:	92-00001413
Status:	
Valuation:	$3,500.00
Contractor Company:	
Contractor Name:	S & T CONSTRUCTION

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **11/18/1992**
Date: **10/27/1992**
Permit Type: **EPPD**
Description: **FIREPLACE/BBQ/FIREPIT**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: FIREPLACE/BBQ/FIREPIT
Proposed Use:
Permit Number: 92-00001413
Status:
Valuation: $3,500.00
Contractor Company:
Contractor Name: S & T CONSTRUCTION

1807 WILTON RD

Date: **4/1/2008**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00001825
Status:
Valuation: $2,184.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

C.O. Issued Date: **3/26/2008**
Date: **1/19/2007**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **BUILDING PERMIT**
Work Class: DECK (RESIDENTIAL)
Proposed Use:
Permit Number: 06-00001825
Status:
Valuation: $2,184.00
Contractor Company:
Contractor Name: HUETTERBUILT CONSTRUCTION

ADJOINING PROPERTY FINDINGS

1809 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000359
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**11/7/2003**
Date:	**9/19/2003**
Permit Type:	**EBP**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	03-00001704
Status:	
Valuation:	$1,692.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**11/7/2003**
Date:	**9/19/2003**
Permit Type:	**EEPD**
Description:	**DWELLING,SINGLE FAMILY-ADDITION**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DWELLING,SINGLE FAMILY-ADDITION
Proposed Use:	
Permit Number:	03-00001704
Status:	
Valuation:	$1,692.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date: **6/22/1999**
Date: **11/19/1998**
Permit Type: **EBP**
Description: **FIREPLACE/BBQ/FIREPIT**

Permit Description: **BUILDING PERMIT**
Work Class: FIREPLACE/BBQ/FIREPIT
Proposed Use:
Permit Number: 98-00002071
Status:
Valuation: $1,900.00
Contractor Company:
Contractor Name:

1815 WILTON RD

Date: **12/1/2010**
Permit Type: **EMPD**
Description: **MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**

Permit Description: **ENC MECHANICAL PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 10-00001336
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BERCKS OLD TIME PLUMBING

Date: **9/5/2006**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 06-00001249
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ALL STAR WATER HEATERS INC

ADJOINING PROPERTY FINDINGS

1816 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000361
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**7/22/2004**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	04-00001345
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MY PLUMBER/SAN DIEGO LP

ADJOINING PROPERTY FINDINGS

1818 WILTON RD

C.O. Issued Date: **9/9/2004**
Date: **5/18/2004**
Permit Type: **EBP**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **BUILDING PERMIT**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00000540
Status:
Valuation: $16,450.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/9/2004**
Date: **5/18/2004**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00000540
Status:
Valuation: $16,450.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **9/9/2004**
Date: **5/18/2004**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 04-00000540
Status:
Valuation: $16,450.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1819 WILTON RD

Date:	**10/10/2012**
Permit Type:	**EEPD**
Description:	**ELECTRIC-CONSTRUCTION/TEMPORARY POWER**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	12-00001262
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NATIONAL CONSTRUCTION RENTALS

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000362
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**4/11/2011**
Permit Type:	**EEPD**
Description:	**ELECTRIC-MISCELLANEOUS**
Permit Description:	**ENC ELECTRIC PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	11-00000385
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NEW LIFE CONSTRUCTION COMPANY

ADJOINING PROPERTY FINDINGS

1820 WILTON RD

Date:	**4/10/2007**
Permit Type:	**EPPD**
Description:	**PLUMBING-WATER HEATER (INSTALL/REPLACE)**
Permit Description:	**PLUMBING PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	07-00000482
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CALIFORNIA DELTA MECHANICAL IN

1821 WILTON RD

C.O. Issued Date:	**11/4/2006**
Date:	**7/11/2006**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	06-00000873
Status:	
Valuation:	$13,252.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **11/4/2006**
Date: **7/11/2006**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 06-00000873
Status:
Valuation: $13,252.00
Contractor Company:
Contractor Name:

C.O. Issued Date: **11/4/2006**
Date: **7/11/2006**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 06-00000873
Status:
Valuation: $13,252.00
Contractor Company:
Contractor Name:

Date: **11/13/2001**
Permit Type: **EPPD**
Description: **PLUMBING-WATER HEATER (INSTALL/REPLACE)**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 01-00002172
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FOSTER, A & J PLUMBING

ADJOINING PROPERTY FINDINGS

1824 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000363
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

C.O. Issued Date:	**5/31/1996**
Date:	**12/29/1994**
Permit Type:	**EBP**
Description:	**DECK (RESIDENTIAL)**
Permit Description:	**BUILDING PERMIT**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	94-00001338
Status:	
Valuation:	$1,727.00
Contractor Company:	
Contractor Name:	AMY, ED CONST

ADJOINING PROPERTY FINDINGS

1825 WILTON RD

Date:	**3/5/2012**
Permit Type:	**EBP**
Description:	**BLDG-MISCELLANEOUS**
Permit Description:	**ENC BUILDING PERMIT**
Work Class:	
Proposed Use:	
Permit Number:	12-00000364
Status:	
Valuation:	$11,750.00
Contractor Company:	
Contractor Name:	DEL MAR PACIFIC ACQUISITION

Date:	**11/18/1997**
Permit Type:	**EBR**
Description:	**REVISION TO PLANS-NO NEW FLOOR AREAS**
Permit Description:	**BUILDING PERMIT/PLAN REV.**
Work Class:	
Proposed Use:	
Permit Number:	97-00001664
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**5/26/1998**
Date:	**9/30/1997**
Permit Type:	**EBP**
Description:	**DWELLING,CONDO-ADDITION**
Permit Description:	**BUILDING PERMIT**
Work Class:	DWELLING,CONDO-ADDITION
Proposed Use:	
Permit Number:	97-00001123
Status:	
Valuation:	$67,460.00
Contractor Company:	
Contractor Name:	BRADY, JOHN

ADJOINING PROPERTY FINDINGS

C.O. Issued Date: **5/26/1998**
Date: **9/30/1997**
Permit Type: **EEPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **ELECTRIC PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 97-00001123
Status:
Valuation: $67,460.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/26/1998**
Date: **9/30/1997**
Permit Type: **EPPD**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **PLUMBING PERMIT-DWELLING**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 97-00001123
Status:
Valuation: $67,460.00
Contractor Company:
Contractor Name: BRADY, JOHN

C.O. Issued Date: **5/26/1998**
Date: **9/30/1997**
Permit Type: **FPO**
Description: **DWELLING,CONDO-ADDITION**

Permit Description: **DEPT. PERMIT OTHER FEES**
Work Class: DWELLING,CONDO-ADDITION
Proposed Use:
Permit Number: 97-00001123
Status:
Valuation: $67,460.00
Contractor Company:
Contractor Name: BRADY, JOHN

ADJOINING PROPERTY FINDINGS

1826 WILTON RD

Date:	**12/10/2014**
Permit Type:	**EMPD**
Description:	**MECH-HEATING/AIR COND.- NEW, REPLACE, REPAIR**
Permit Description:	**ENC MECHANICAL PERMIT-DWELLING**
Work Class:	
Proposed Use:	
Permit Number:	14-00002196
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ASI HASTINGS, INC

C.O. Issued Date:	**10/21/2008**
Date:	**11/29/2007**
Permit Type:	**EBP**
Description:	**DECK (RESIDENTIAL)**
Permit Description:	**BUILDING PERMIT**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	07-00001523
Status:	
Valuation:	$1,625.00
Contractor Company:	
Contractor Name:	

C.O. Issued Date:	**10/21/2008**
Date:	**11/29/2007**
Permit Type:	**EEPD**
Description:	**DECK (RESIDENTIAL)**
Permit Description:	**ELECTRIC PERMIT-DWELLING**
Work Class:	DECK (RESIDENTIAL)
Proposed Use:	
Permit Number:	07-00001523
Status:	
Valuation:	$1,625.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

1827 WILTON RD

Date: **5/10/2011**
Permit Type: **EBR**
Description: **REVISION TO PLANS-NO NEW FLOOR AREAS**

Permit Description: **ENC BUILDING PERMIT/PLAN REV.**
Work Class:
Proposed Use:
Permit Number: 11-00000520
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **3/21/2011**
Permit Type: **EBP**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ENC BUILDING PERMIT**
Work Class:
Proposed Use:
Permit Number: 11-00000036
Status:
Valuation: $12,000.00
Contractor Company:
Contractor Name: DEAN PORTER CONSTRUCTION

Date: **3/21/2011**
Permit Type: **EEPD**
Description: **DECK (RESIDENTIAL)**

Permit Description: **ENC ELECTRIC PERMIT-DWELLING**
Work Class:
Proposed Use:
Permit Number: 11-00000036
Status:
Valuation: $12,000.00
Contractor Company:
Contractor Name: DEAN PORTER CONSTRUCTION

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

Fenway - Encinitas

1950 N. Coast Highway 101

Encinitas, CA 92024

Inquiry Number: 5095677.4

November 02, 2017

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

11/02/17

Site Name:	Client Name:
Fenway - Encinitas	Hovey Environmental
1950 N. Coast Highway 101	2929 Chatsworth Blvd
Encinitas, CA 92024	San Diego, CA 92106-0000
EDR Inquiry # 5095677.4	Contact: Caroline Hovey

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Hovey Environmental were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: 17013

Coordinates:

Latitude:	33.081376 33° 4' 53" North
Longitude:	-117.308627 -117° 18' 31" West
UTM Zone:	Zone 11 North
UTM X Meters:	471195.79
UTM Y Meters:	3660350.70
Elevation:	76.12' above sea level

Maps Provided:

2012	1898
1997	1893
1975	
1968	
1949	
1948	
1947	
1901	

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Encinitas
2012
7.5-minute, 24000

1997 Source Sheets

Encinitas
1997
7.5-minute, 24000
Aerial Photo Revised 1997

1975 Source Sheets

Encinitas
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1968 Source Sheets

Encinitas
1968
7.5-minute, 24000
Aerial Photo Revised 1967

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949 Source Sheets

Encinitas
1949
7.5-minute, 24000
Aerial Photo Revised 1947

1948 Source Sheets

Encinitas
1948
7.5-minute, 24000
Aerial Photo Revised 1947

1947 Source Sheets

OCEANSIDE
1947
15-minute, 50000

1901 Source Sheets

Oceanside
1901
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1898 Source Sheets

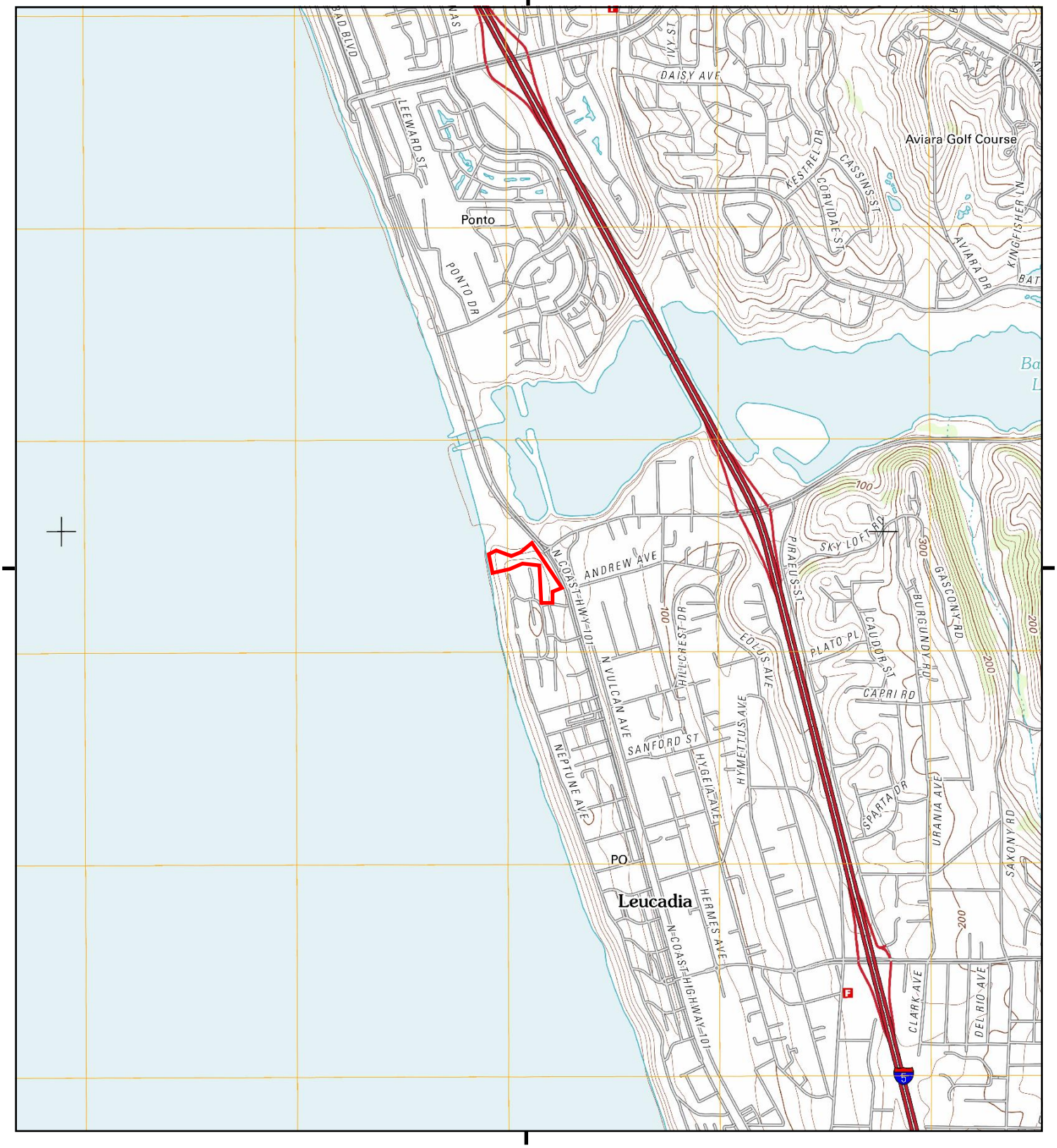
Oceanside
1898
15-minute, 62500

1893 Source Sheets

Oceanside
1893
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

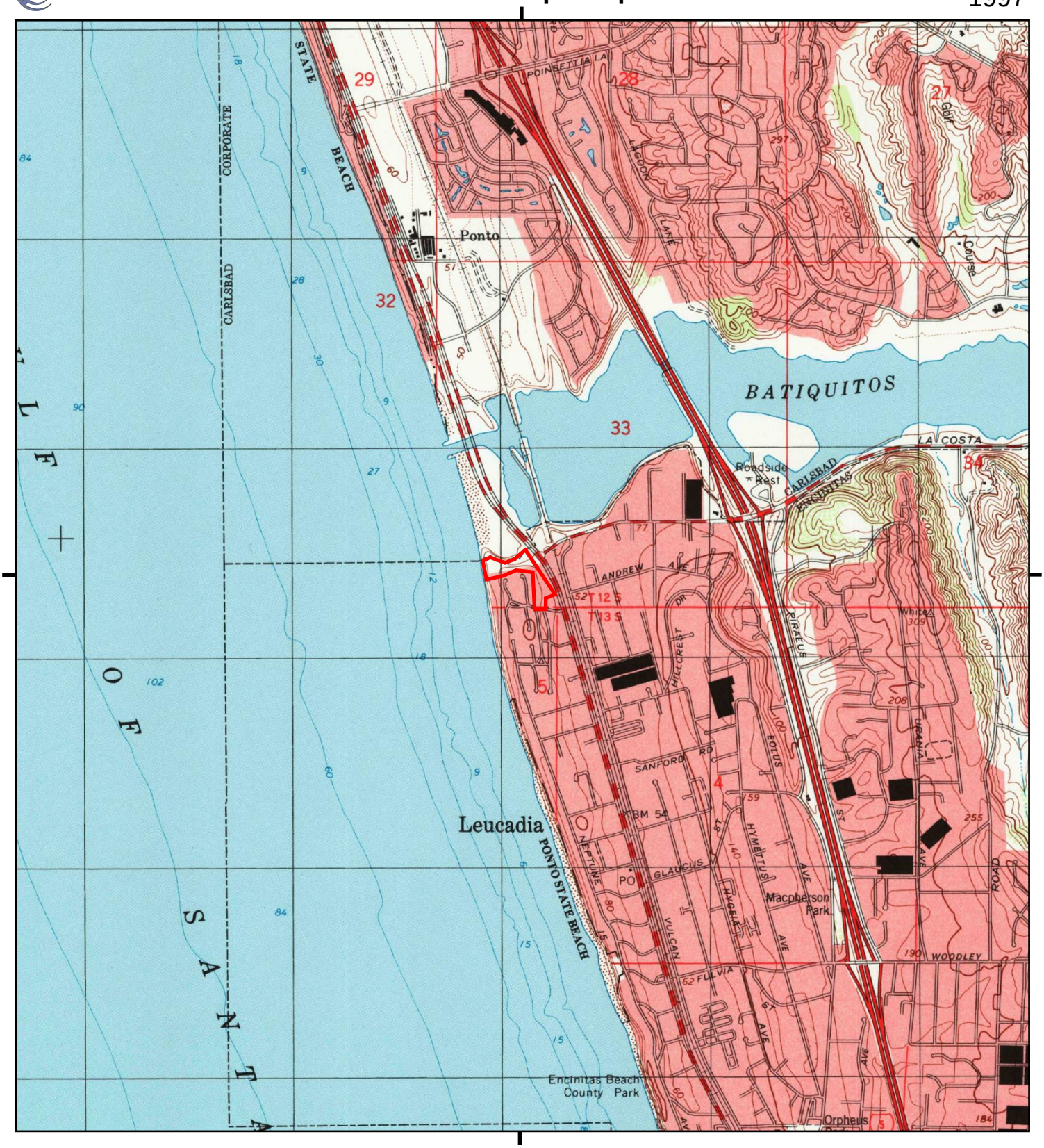
TP, Encinitas, 2012, 7.5-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1997



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

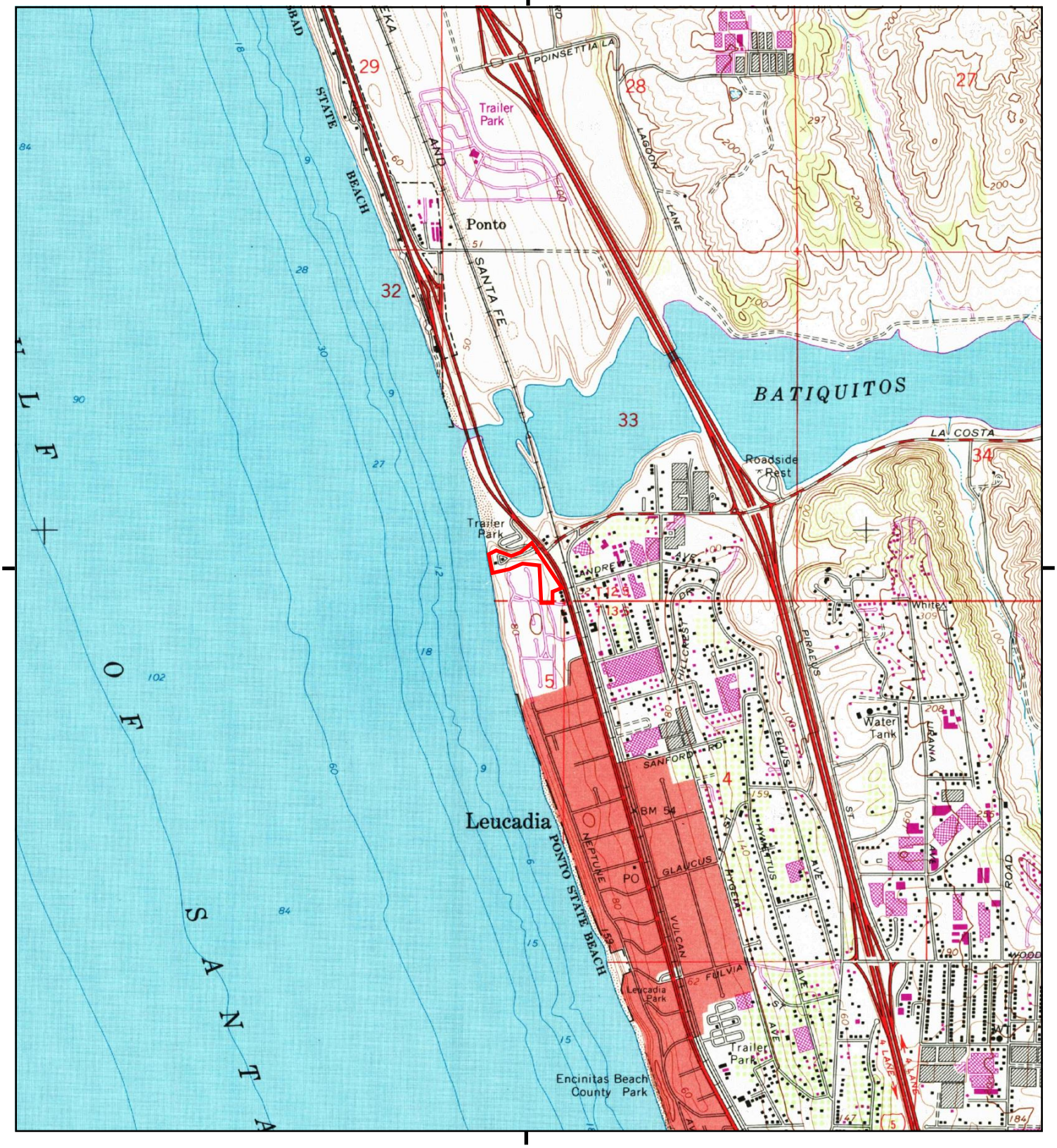
TP, Encinitas, 1997, 7.5-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1975



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

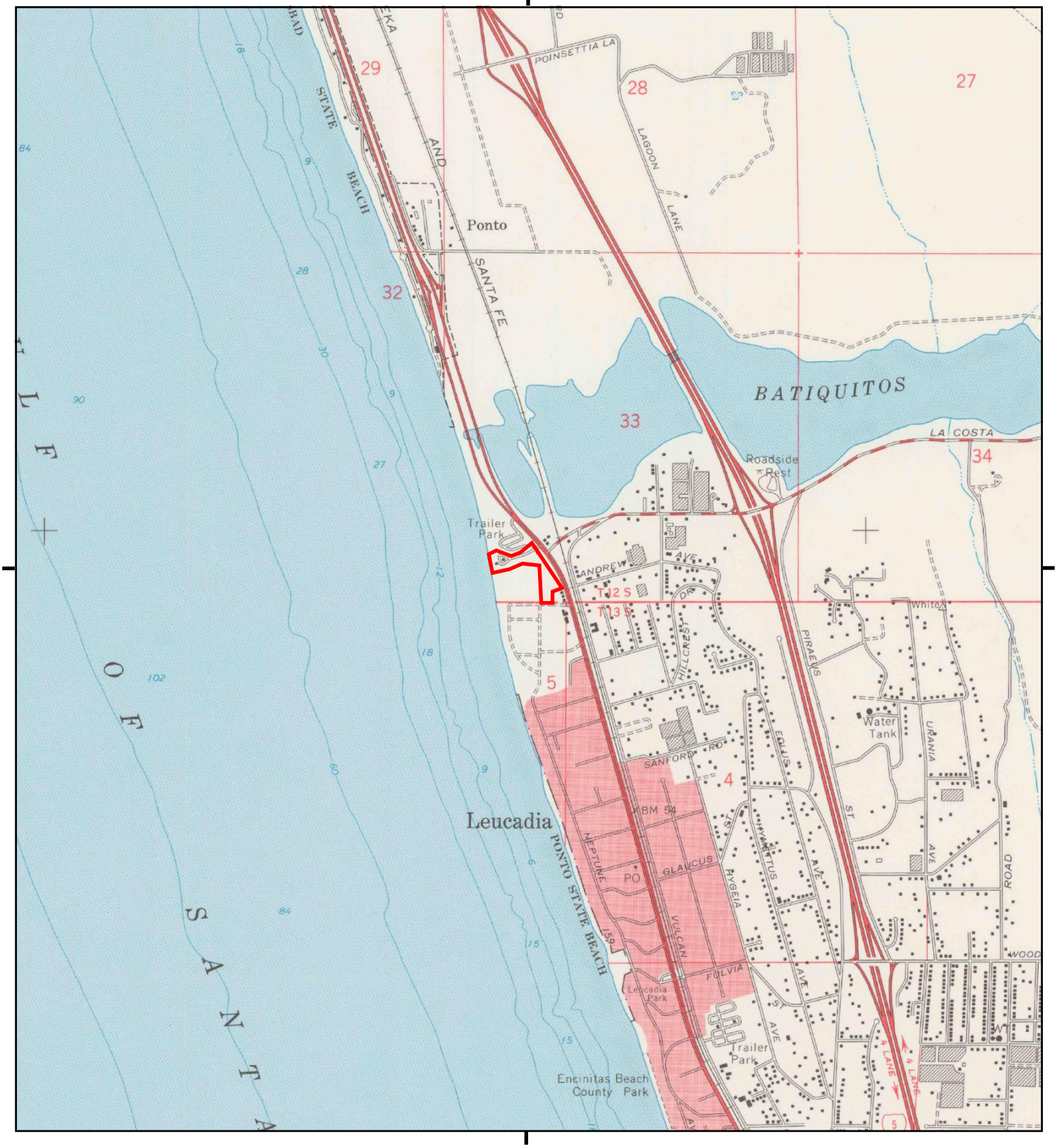
TP, Encinitas, 1975, 7.5-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

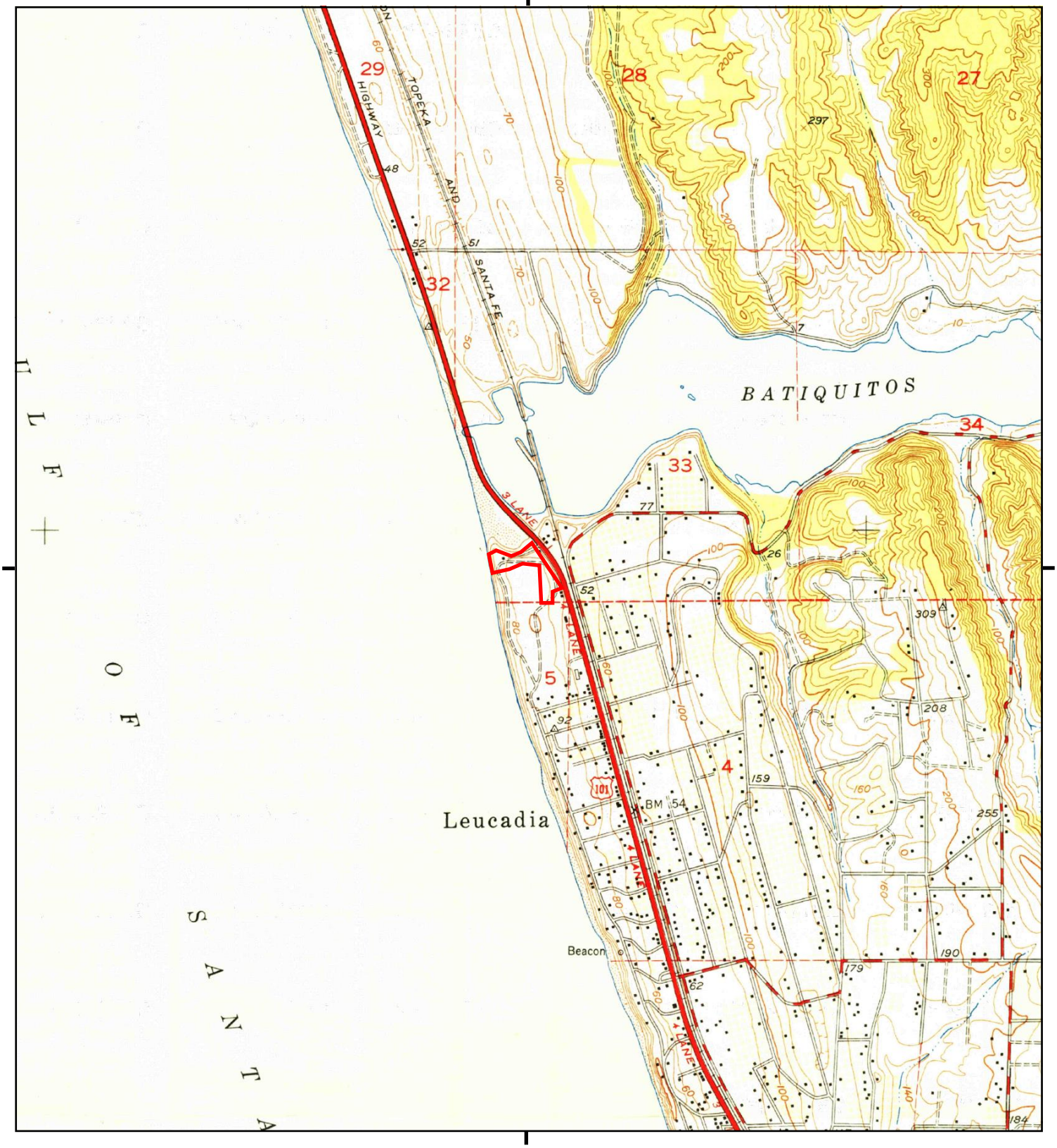
TP, Encinitas, 1968, 7.5-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1949



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

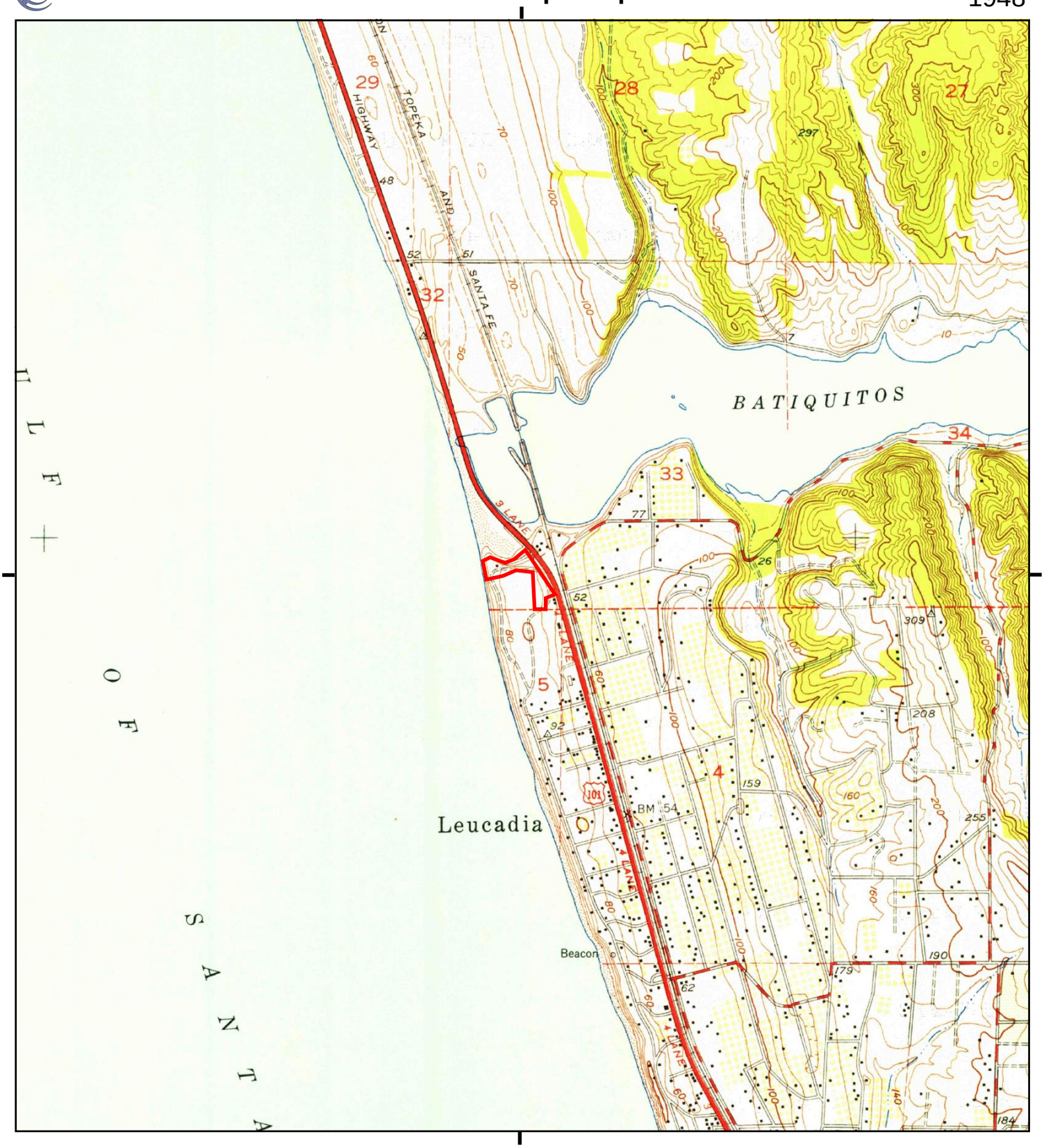
TP, Encinitas, 1949, 7.5-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1948



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

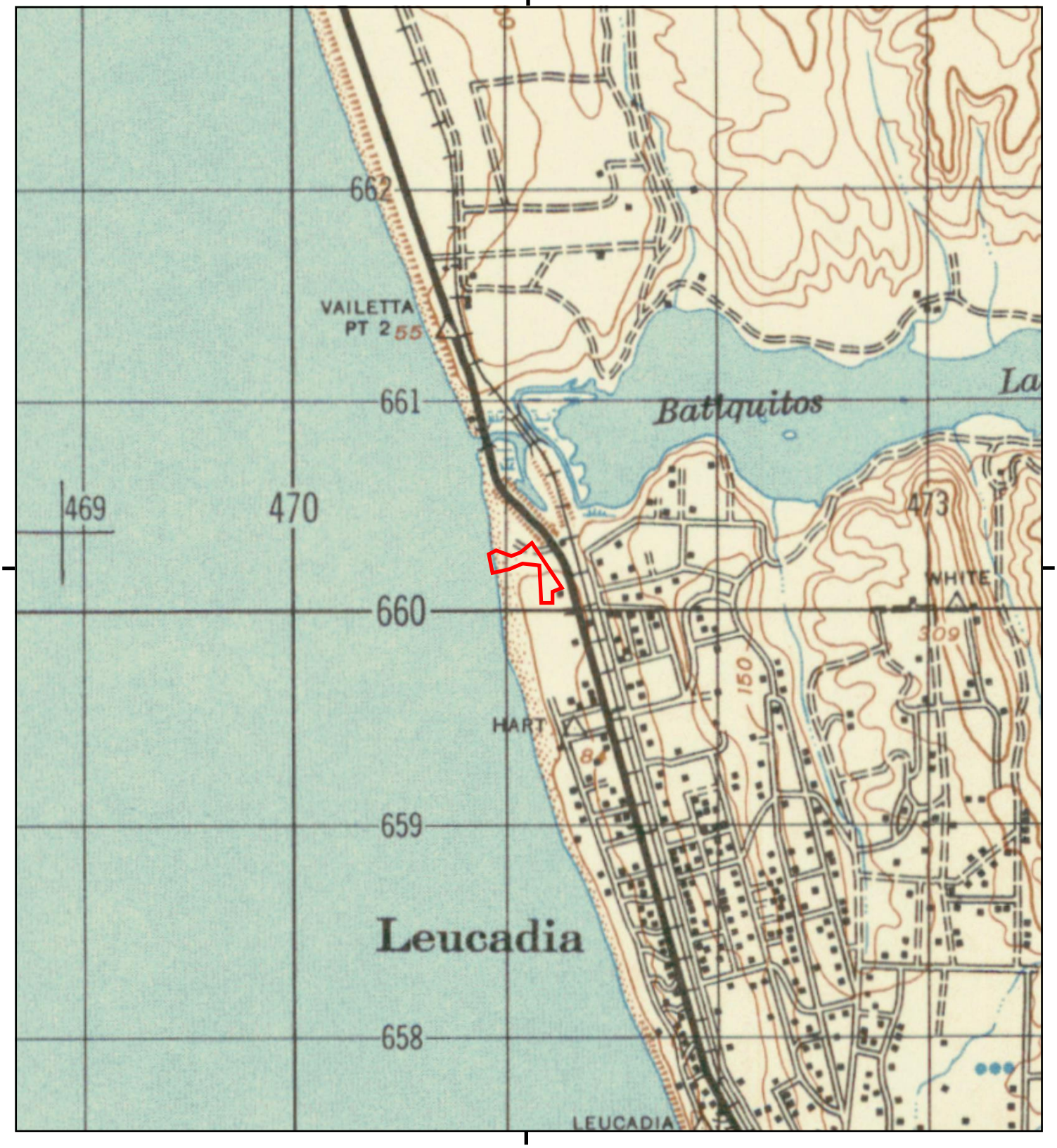
TP, Encinitas, 1948, 7.5-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1947



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

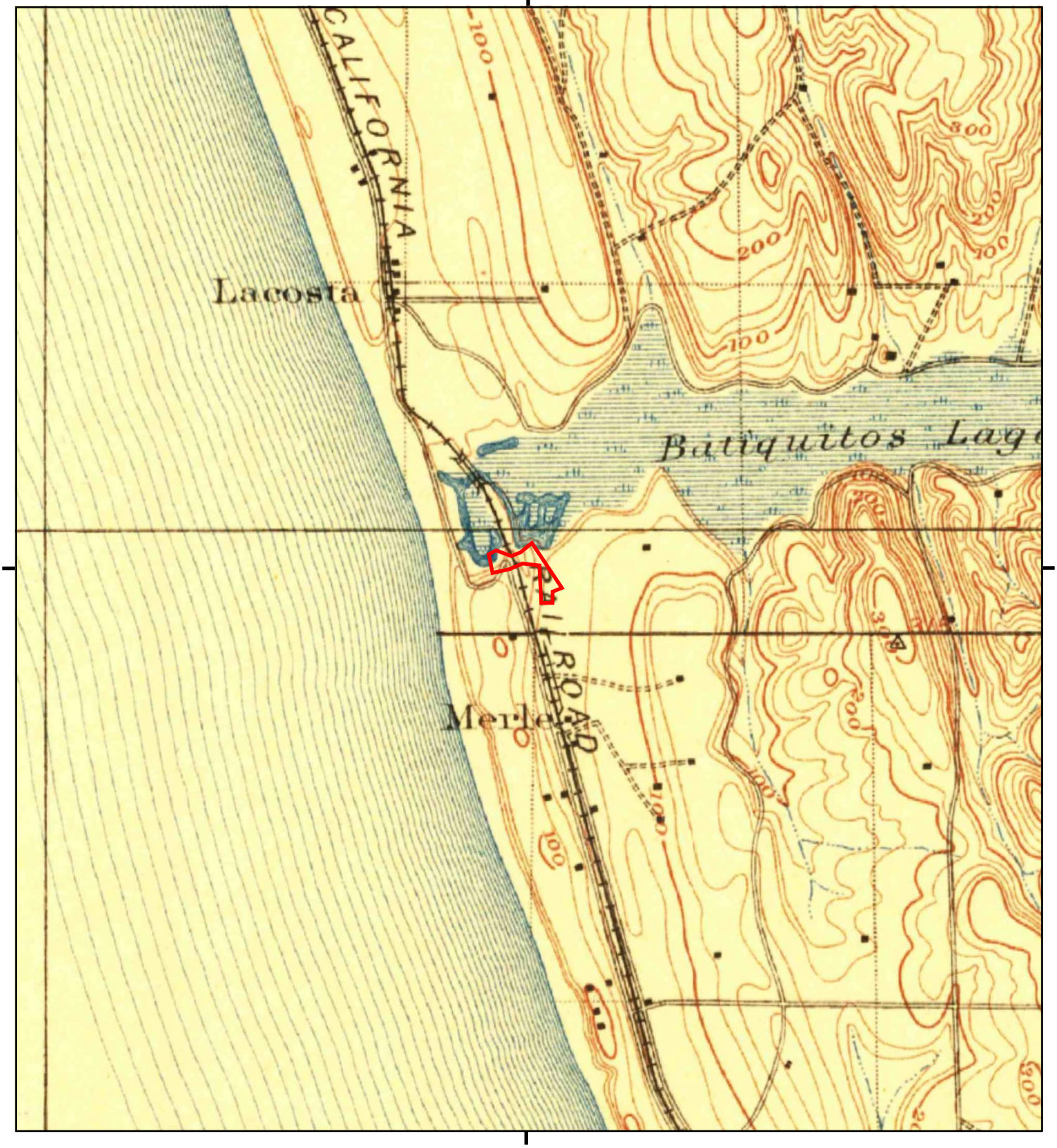
TP, OCEANSIDE, 1947, 15-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1901



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

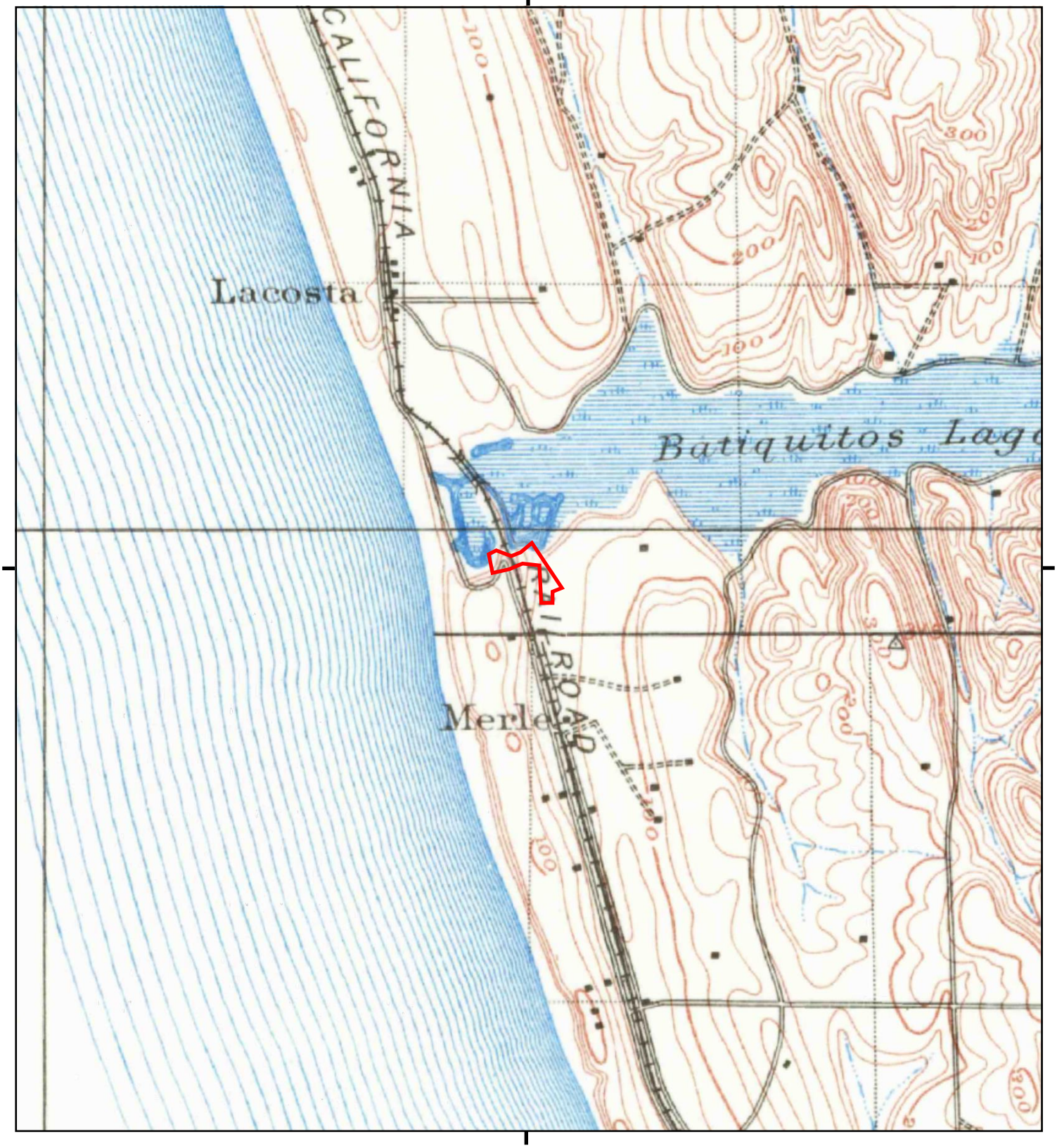
TP, Oceanside, 1901, 15-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1898



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Oceanside, 1898, 15-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Historical Topo Map

1893

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Oceanside, 1893, 15-minute

SITE NAME: Fenway - Encinitas
ADDRESS: 1950 N. Coast Highway 101
Encinitas, CA 92024
CLIENT: Hovey Environmental

N

Fenway - Encinitas

1950 N. Coast Highway 101

Encinitas, CA 92024

Inquiry Number: 5095677.12

November 02, 2017

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

11/02/17

Site Name:

Fenway - Encinitas
1950 N. Coast Highway 101
Encinitas, CA 92024
EDR Inquiry # 5095677.12

Client Name:

Hovey Environmental
2929 Chatsworth Blvd
San Diego, CA 92106-0000
Contact: Caroline Hovey

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1990	1"=500'	Flight Date: September 06, 1990	USDA
1985	1"=500'	Flight Date: September 13, 1985	USDA
1979	1"=500'	Flight Date: February 13, 1979	EDR Proprietary Landiscor
1970	1"=500'	Flight Date: March 06, 1970	EDR Proprietary Landiscor
1967	1"=500'	Flight Date: May 07, 1967	USGS
1964	1"=500'	Flight Date: April 09, 1964	USDA
1953	1"=500'	Flight Date: April 14, 1953	USDA
1947	1"=500'	Flight Date: January 15, 1947	USGS
1939	1"=500'	Flight Date: April 16, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

INQUIRY #: 5095677.12
YEAR: 2012
= 500'
N
EDR

INQUIRY #: 5095677.12
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 5095677.12
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 5095677.12

YEAR: 2005

= 500'

N

EDR

INQUIRY #: 5095677.12
YEAR: 1994
= 500'
N
EDR

INQUIRY #: 5095677.12
YEAR: 1990
= 500'
N
EDR

INQUIRY #: 5095677.12

YEAR: 1985

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1979

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1970

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1967

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1964

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1953

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1947

= 500'

N

EDR

INQUIRY #: 5095677.12

YEAR: 1939

= 500'

N

EDR

APPENDIX E

REGULATORY RECORDS DOCUMENTATION

LOCAL, STATE, AND FEDERAL

REGULATORY DATABASE FINDINGS

REGIONAL PHYSICAL SETTING DATA

Fenway - Encinitas
1950 N. Coast Highway 101
Encinitas, CA 92024

Inquiry Number: 5095677.2s
November 02, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	49
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-10
Physical Setting Source Map Findings	A-12
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1950 N. COAST HIGHWAY 101
ENCINITAS, CA 92024

COORDINATES

Latitude (North):	33.0813760 - 33˚ 4' 52.95''
Longitude (West):	117.3086270 - 117˚ 18' 31.05''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	471195.2
UTM Y (Meters):	3660159.2
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641296 ENCINITAS, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1950 N. COAST HIGHWAY 101
ENCINITAS, CA 92024

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	5-UNIT RESIDENTIAL P	1865 NORTH VULCAN AV	SLIC	Lower	427, 0.081, SE
A2	ARCO	1766 N HY 101	LUST, San Diego Co. HMMD, HIST UST	Lower	526, 0.100, SSE
A3	ARCO	1766 N HY 101	SAN DIEGO CO. SAM	Lower	526, 0.100, SSE
A4	ARCO	1766 HWY 101 N	LUST	Lower	526, 0.100, SSE
A5	ARCO	1766 N HIGHWAY 101	SWEEPS UST	Lower	526, 0.100, SSE
A6	FAST GAS	1766 N COAST HIGHWAY	HIST UST	Lower	528, 0.100, SSE
A7	IMPERIAL STATIONS IN	1766 N COAST HIGHWAY	EDR Hist Auto	Lower	528, 0.100, SSE
A8	IMPERIAL STATIONS, I	1766 N HWY 101	UST	Lower	528, 0.100, SSE
B9	EATON BEACH ESTATES,	224 ANDREW AV	SAN DIEGO CO. SAM, SLIC, San Diego Co. HMMD, NPDES	Lower	1047, 0.198, East
B10	BARRETT AMERICAN	236 ANDREW AV	LUST, SAN DIEGO CO. SAM	Lower	1133, 0.215, East
11	FORMER FOXPOINT FARM	1657 N VULCAN AV	SAN DIEGO CO. SAM, SLIC, San Diego Co. HMMD, HIST...	Lower	1482, 0.281, SSE
C12	FIRST AMERICAN BANK	1508 HWY 101 N	LUST	Lower	2368, 0.448, SSE
13	LA COSTA 48	510 LA COSTA AVENUE	SLIC	Higher	2385, 0.452, ENE
C14	FIRST AMERICAN BANK	1508 101	HIST CORTESE	Lower	2459, 0.466, SSE
C15	ART WOLDENGA AND/OR	1508 N HY 101	SAN DIEGO CO. SAM	Lower	2459, 0.466, SSE
C16	LEUCADIA AUTO BODY	1508 N HY 101	SAN DIEGO CO. SAM	Lower	2459, 0.466, SSE
C17	SCOTT'S AUTOMOTIVE	1508 N HWY 101	SLIC, San Diego Co. HMMD	Lower	2459, 0.466, SSE
C18	ART WOLDENGA AND/OR	1508 N HY 101	LUST, SWEEPS UST	Lower	2459, 0.466, SSE
19	GREYSTONE HOMES PROP	NONE N CORNER OF VUL	SLIC	Lower	2628, 0.498, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List

EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR..... EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
San Diego Co. HMMD	Hazardous Materials Management Division Database
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program

EXECUTIVE SUMMARY

UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner	EDR Exclusive Historic Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there are 6 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO Case Number: H04837-001 Facility Status: Closed Case	1766 N HY 101	SSE 0 - 1/8 (0.100 mi.)	A3	29
EATON BEACH ESTATES, Case Number: H99138-001 Facility Status: Closed Case	***224 ANDREW AV***	***E 1/8 - 1/4 (0.198 mi.)***	***B9***	***33***
BARRETT AMERICAN Case Number: 226452 Facility Status: Closed Case	***236 ANDREW AV***	***E 1/8 - 1/4 (0.215 mi.)***	***B10***	***37***
FORMER FOXPOINT FARM Case Number: H99292-001 Facility Status: Closed Case	***1657 N VULCAN AV***	***SSE 1/4 - 1/2 (0.281 mi.)***	***11***	***38***
ART WOLDENGA AND/OR Case Number: H32587-001 Facility Status: Closed Case	1508 N HY 101	SSE 1/4 - 1/2 (0.466 mi.)	C15	41
LEUCADIA AUTO BODY Case Number: H05014-001 Case Number: H05014-002 Facility Status: Closed Case	1508 N HY 101	SSE 1/4 - 1/2 (0.466 mi.)	C16	42

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO Database: LUST, Date of Government Version: 06/12/2017 Status: Completed - Case Closed Global Id: T0607399253	***1766 N HY 101***	***SSE 0 - 1/8 (0.100 mi.)***	***A2***	***9***
ARCO Database: LUST REG 9, Date of Government Version: 03/01/2001 Status: Preliminary site assessment workplan submitted Case Number: 9UT4078	1766 HWY 101 N	SSE 0 - 1/8 (0.100 mi.)	A4	29
BARRETT AMERICAN Database: LUST, Date of Government Version: 06/12/2017	***236 ANDREW AV***	***E 1/8 - 1/4 (0.215 mi.)***	***B10***	***37***

Status: Completed - Case Closed
Global Id: T06019729886

FIRST AMERICAN BANK	1508 HWY 101 N	SSE 1/4 - 1/2 (0.448 mi.)	C12	40

Database: LUST REG 9, Date of Government Version: 03/01/2001
Status: Case Closed
Case Number: 9UT3252
Closed Date: 3/7/97

ART WOLDENGA AND/OR	***1508 N HY 101***	***SSE 1/4 - 1/2 (0.466 mi.)***	***C18***	***47***

Database: LUST, Date of Government Version: 06/12/2017
Status: Completed - Case Closed
Global Id: T0607302005

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there are 6 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LA COSTA 48	510 LA COSTA AVENUE	ENE 1/4 - 1/2 (0.452 mi.)	13	41

Database: SLIC, Date of Government Version: 06/12/2017
Facility Status: Open - Active
Global Id: T10000010402

Lower Elevation	Address	Direction / Distance	Map ID	Page
5-UNIT RESIDENTIAL P	1865 NORTH VULCAN AV	SE 0 - 1/8 (0.081 mi.)	1	8

Database: SLIC, Date of Government Version: 06/12/2017
Facility Status: Completed - Case Closed
Global Id: T10000003413

EATON BEACH ESTATES,	***224 ANDREW AV***	***E 1/8 - 1/4 (0.198 mi.)***	***B9***	***33***

Database: SLIC, Date of Government Version: 06/12/2017
Facility Status: Completed - Case Closed
Global Id: T06019755099

FORMER FOXPOINT FARM	***1657 N VULCAN AV***	***SSE 1/4 - 1/2 (0.281 mi.)***	***11***	***38***

Database: SLIC, Date of Government Version: 06/12/2017
Facility Status: Completed - Case Closed
Global Id: SLT19776403

SCOTT'S AUTOMOTIVE	***1508 N HWY 101***	***SSE 1/4 - 1/2 (0.466 mi.)***	***C17***	***42***

Database: SLIC, Date of Government Version: 06/12/2017
Facility Status: Completed - Case Closed
Global Id: T0608127646
Global Id: T0608121580

GREYSTONE HOMES PROP	NONE N CORNER OF VUL	SSE 1/4 - 1/2 (0.498 mi.)	19	48

Database: SLIC, Date of Government Version: 06/12/2017
Facility Status: Completed - Case Closed
Global Id: T0608184037

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
IMPERIAL STATIONS, I Database: UST, Date of Government Version: 06/12/2017 Facility Id: 37-000-201254	1766 N HWY 101	SSE 0 - 1/8 (0.100 mi.)	A8	33

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO Status: A Tank Status: A Comp Number: 4837	1766 N HIGHWAY 101	SSE 0 - 1/8 (0.100 mi.)	A5	30

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO	***1766 N HY 101***	***SSE 0 - 1/8 (0.100 mi.)***	***A2***	***9***
FAST GAS Facility Id: 00000011133	1766 N COAST HIGHWAY	SSE 0 - 1/8 (0.100 mi.)	A6	32

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST AMERICAN BANK Reg Id: 9UT3252	1508 101	SSE 1/4 - 1/2 (0.466 mi.)	C14	41

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

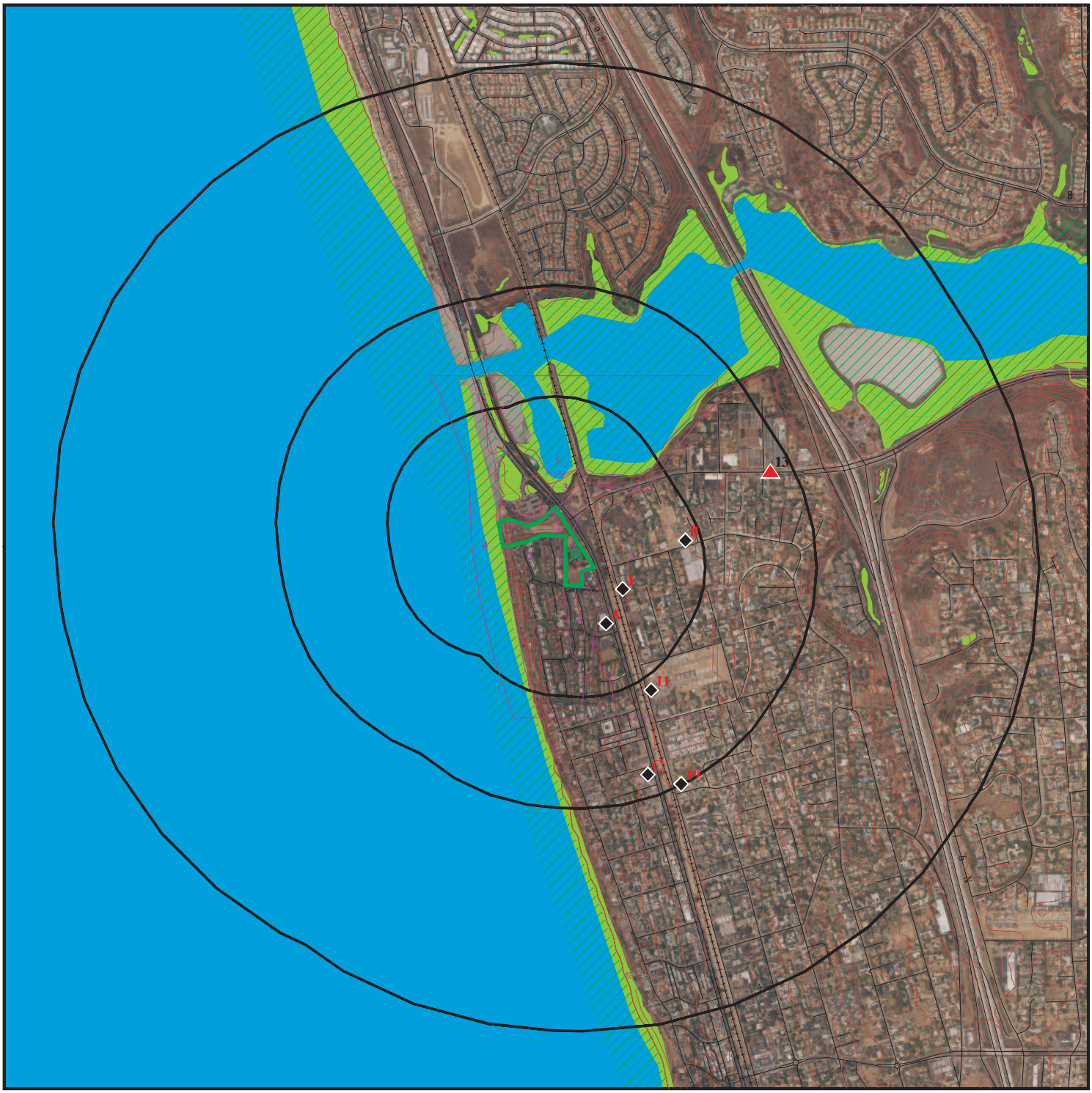
Lower Elevation	Address	Direction / Distance	Map ID	Page
IMPERIAL STATIONS IN	1766 N COAST HIGHWAY	SSE 0 - 1/8 (0.100 mi.)	A7	33

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
COCA COLA BOTTLING TRUCK SPIL	SAN DIEGO CO. SAM
GREYSTONE HOMES PROPERTY	SAN DIEGO CO. SAM

OVERVIEW MAP - 5095677.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

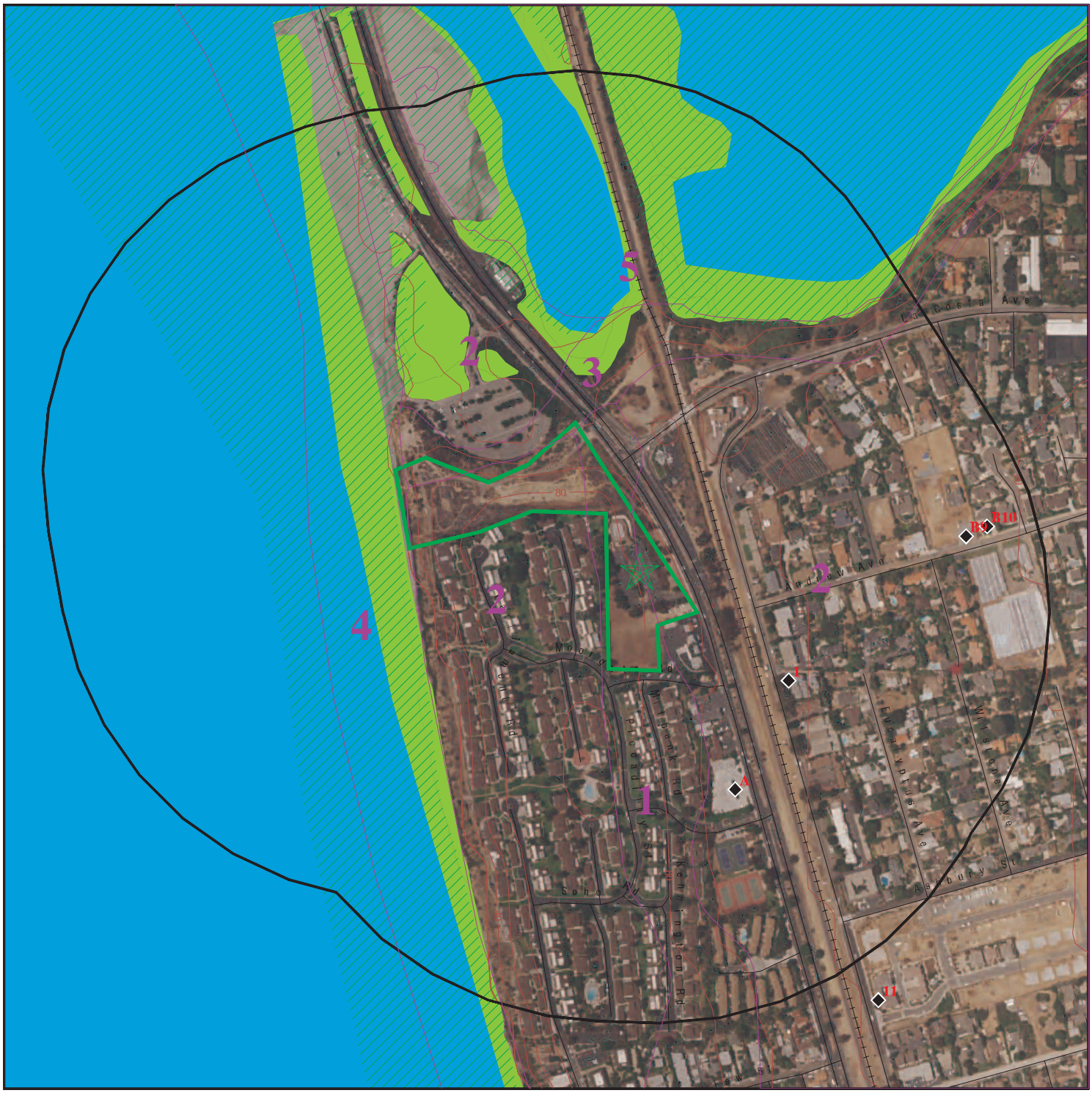
Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fenway - Encinitas	CLIENT: Hovey Environmental
ADDRESS: 1950 N. Coast Highway 101 Encinitas CA 92024	CONTACT: Caroline Hovey INQUIRY #: 5095677.2s
LAT/LONG: 33.081376 / 117.308627	DATE: November 02, 2017 3:06 pm

Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 5095677.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fenway - Encinitas	CLIENT: Hovey Environmental
ADDRESS: 1950 N. Coast Highway 101 Encinitas CA 92024	CONTACT: Caroline Hovey INQUIRY #: 5095677.2s
LAT/LONG: 33.081376 / 117.308627	DATE: November 02, 2017 3:07 pm

Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
SAN DIEGO CO. SAM	0.500		1	2	3	NR	NR	6

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LUST	0.500		2	1	2	NR	NR	5
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		1	1	4	NR	NR	6
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
San Diego Co. HMMD	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		2	0	NR	NR	NR	2
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	9	4	10	0	0	23

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 SE < 1/8 0.081 mi. 427 ft. | **5-UNIT RESIDENTIAL PROPERTY**
1865 NORTH VULCAN AVENUE
ENCINITAS, CA 92024 | **SLIC** | **S111346985**
N/A

Relative: Lower

Actual: 58 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	03/20/2012
Global Id:	T10000003413
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H39778-001
Latitude:	33.080164
Longitude:	-117.306632
Case Type:	Cleanup Program Site
Case Worker:	CF
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	DEH Case #H39778-001 was opened under the Voluntary Assistance Program (VAP) to mitigate soil impacted by organochlorine pesticides. Former residences on the properties at 1859 and 1869 North Vulcan Avenue in Encinitas were demolished circa 2006 in anticipation of planned new residential construction. Preliminary grading of the properties was performed following demolition activities. Redevelopment is currently planned that would result in the construction of five residential units. Due to prior agricultural use of the property, testing of site soils for organochlorine pesticides was recommended in a Phase I Environmental Assessment Report and Limited Soil Sampling Report (Geocon, 2011). Twelve soil samples were initially collected from six hand-augered borings to a maximum depth of 1.0 foot below ground surface (bgs). A direct-push rig was used to collect an additional eight samples from depths of 2.0 and 3.0 feet bgs, respectively, at four of the hand auger boring locations. The soil samples were tested for arsenic and organochlorine pesticides. Arsenic was not detected in the 20 samples submitted for laboratory analysis. Four organochlorine pesticides were detected in the samples, including 4,4-DDE, 4,4-DDT, chlordane, and heptachlor. Chlordane was detected in all of the samples, but concentrations in eight of these samples exceeded its residential California Human Health Screening Level (CHHSL) of 0.43 milligrams per kilogram (mg/kg). The CHHSL was not exceeded in the samples collected below a depth of 2 feet. The detected chlordane concentrations ranged from 0.14 to 2.14 mg/kg. Analytical results for the other detected organochlorine pesticides did not exceed their respective residential CHHSLs. A remedial action plan (RAP) was submitted for review under the VAP in November 2011. The RAP proposed removal of soil at the property characterized by chlordane concentrations that equaled or exceeded its residential CHSSL. The RAP was conditionally approved by DEH on January 25, 2012. Excavation activities at the site began on January 31, 2012. Two, high-volume, air samplers were in operation during earth-moving activities. An initial lift was removed to a depth of 1.5 feet bgs. The excavated soil was temporarily stockpiled in the northeast corner of the site. Thirteen verification soil samples were then collected at a frequency of one sample per 25 x 25-foot grid. Chlordane concentrations detected in seven of the

5-UNIT RESIDENTIAL PROPERTY (Continued) **S111346985**

verification samples exceeded its residential CHHSL. Additional excavation was then performed at the seven soil sampling locations to depths of 2 to 3 feet bgs. The stockpiled soil was transported offsite for disposal. A second round of verification sampling was performed at these locations and an initial sample was collected beneath the former stockpile location. Results for the samples indicated that further soil removal was necessary at two sampling locations. The excavation was advanced to a depth of four feet and a third round of verification sampling was performed at these two locations. Analytical results for these two samples were below the residential CHSSL for chlordane. No further excavation was performed. The remaining excavated soil at the site was transported offsite to a disposal facility. A total of 978 tons of soil was exported to an off-site disposal facility. Fill materials imported from a quarry was used to backfill the excavation. Based on the removal of pesticide-impacted soil from the site, the consultant (Stantec) has recommended no further action at the site and case closure. DEH concurs with these recommendations.

Click here to access the California GeoTracker records for this facility:

A2 **ARCO** **LUST** **S109279364**
SSE **1766 N HY 101** **San Diego Co. HMMD** **N/A**
< 1/8 **ENCINITAS, CA 92024** **HIST UST**
0.100 mi.
526 ft. **Site 1 of 7 in cluster A**

Relative:
Lower

Actual:
58 ft.

LUST:

Region:	STATE
Global Id:	T0607399253
Latitude:	33.079106
Longitude:	-117.307503
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/12/2002
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT4078
LOC Case Number:	H04837-001
File Location:	Local Agency
Potential Media Affect:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607399253
Status:	Completed - Case Closed
Status Date:	06/12/2002
Global Id:	T0607399253
Status:	Open - Case Begin Date
Status Date:	06/21/2000

Regulatory Activities:

Global Id:	T0607399253

ARCO (Continued) **S109279364**

Action Type: ENFORCEMENT
Date: 08/29/2000
Action: Notice of Responsibility

HMMD SAN DIEGO:
Permit Number: 201254
Business Type: 6HK28
EPA Id Number: CAL000321592
APN: 254-060-29-00
Last HMMD Inspection: 08/28/2012
Facility Telephone: 760-944-9864
Permit Status: OPEN
Permit Expiration: 12/31/2012
Date Last Updated: 11/02/2012
Facility Owner: IMPERIAL STATIONS, INC
Facility Mailing Address: 8221 GARDEN GROVE BL
Facility Mailing City: GARDEN GROVE
Facility Mailing State: CA
Facility Mailing Zip: 92844
UST Owner: IMPERIAL STATIONS INC
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):
Permit Number: 201254
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL FUEL
Other Information: UNDERGROUND TANK 201254 T004
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 201254 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T001
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254

ARCO (Continued) **S109279364**

Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/24/2010
Violation Code: 6HV3269
Violation: UST SYSTEM NOT CONT. MONITORED W/VPH
Violation Citation: UST system not continuously monitored using Vacuum/Pressure/Hydrostatic (VPH) system (for tank installs on or after 7/1/04). 25290.1 (d)&(e)
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/29/2008
Violation Code: 6HV3152
Violation: ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation: All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/19/2009
Violation Code: 6HV3263
Violation: MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation: Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012

ARCO (Continued) **S109279364**

Inspection Date: 08/28/2012
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV3105
Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity: ACTIVE

UST:
UST Name: UNDERGROUND TANK 201254 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 12000
UST Contents: PREMIUM UNLEADED

ARCO (Continued) **S109279364**

Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	8000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

Permit Number:	201254
Business Type:	6HK28
EPA Id Number:	CAL000321592
APN:	254-060-29-00
Last HMMD Inspection:	08/28/2012
Facility Telephone:	760-944-9864
Permit Status:	OPEN
Permit Expiration:	12/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	IMPERIAL STATIONS, INC
Facility Mailing Address:	8221 GARDEN GROVE BL
Facility Mailing City:	GARDEN GROVE
Facility Mailing State:	CA
Facility Mailing Zip:	92844
UST Owner:	IMPERIAL STATIONS INC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	201254
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL FUEL
Other Information:	UNDERGROUND TANK 201254 T004
Material Waste:	Material
Hazardous Categories 1:	FIRE

ARCO (Continued) **S109279364**

Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 201254 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T001
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:
Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/24/2010
Violation Code: 6HV3269
Violation: UST SYSTEM NOT CONT. MONITORED W/VPH
Violation Citation: UST system not continuously monitored using Vacuum/Pressure/Hydrostatic (VPH) system (for tank installs on or after 7/1/04). 25290.1 (d)&(e)
Activity: ACTIVE

ARCO (Continued) **S109279364**

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/29/2008
Violation Code: 6HV3152
Violation: ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation: All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/19/2009
Violation Code: 6HV3263
Violation: MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation: Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: 201254
Update Date: 11/02/2012
Inspection Date: 08/28/2012
Violation Code: 6HV3105
Violation: NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation: Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity: ACTIVE

UST:

UST Name: UNDERGROUND TANK 201254 T001
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL

ARCO (Continued) **S109279364**

Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T003
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	12000
UST Contents:	PREMIUM UNLEADED
Other Content Info:	PREMIUM UNLEADED
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name:	UNDERGROUND TANK 201254 T004
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	8000
UST Contents:	DIESEL
Other Content Info:	DIESEL
Reg Status:	ACTIVE
Remove Close Date:	Not reported
Year Installed:	2005-12-01 00:00:00
Pipe Type:	DOUBLE WALL
Delivery System:	PRESSURE
Monitor Code:	43
UST Monitor Method:	DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

Permit Number:	Not reported
Business Type:	Not reported
EPA Id Number:	CAL000321592
APN:	Not reported
Last HMMD Inspection:	Not reported
Facility Telephone:	949-852-2200
Permit Status:	Permit Renewed
Permit Expiration:	Not reported
Date Last Updated:	04/19/2017

ARCO (Continued) **S109279364**

Facility Owner: Not reported
Facility Mailing Address: 8221 GARDEN GROVE BLVD, GARDEN GROVE, CA 92844
Facility Mailing City: Not reported
Facility Mailing State: Not reported
Facility Mailing Zip: Not reported
UST Owner: Y
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: N
Generate Medical Waste: Not reported

Inspection Violation:
Record ID: DEH2003-HUPFP-201254
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-201254
Program Element: Underground Storage Tank
Inspection Type: Routine
Inspection Number: 4213049
Return To Compliance Date: Not reported
Nov: No
Violation Classification: Class I
Underground Storage Tank Id: 91
Container/Tank Id: Not reported
Last Update: 2017-02-22T01:14:31.000
Inspection Date: 08/28/2013
Violation Code: 2030026 Failure of line leak detector to detect a leak and/or failure of audible and visual alarm. 23 CCR 16 2636(f)(2), 2666.

Record ID: DEH2003-HUPFP-201254
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-201254
Program Element: Underground Storage Tank
Inspection Type: Routine
Inspection Number: 4213049
Return To Compliance Date: Not reported
Nov: No
Violation Classification: Class I
Underground Storage Tank Id: 0
Container/Tank Id: Not reported
Last Update: 2017-02-22T01:14:31.000
Inspection Date: 08/28/2013
Violation Code: 2030012 Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system. 23 CCR 16 2715(c)(6), 2715(f)

Record ID: DEH2003-HUPFP-201254
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-201254
Program Element: Underground Storage Tank

ARCO (Continued) **S109279364**

Inspection Type:	Return To Compliance (RTC)
Inspection Number:	4935718
Return To Compliance Date:	08/28/2013
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	91
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/28/2013
Violation Code:	2030026 Failure of line leak detector to detect a leak and/or failure of audible and visual alarm. 23 CCR 16 2636(f)(2), 2666.

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Return To Compliance (RTC)
Inspection Number:	4935718
Return To Compliance Date:	09/14/2013
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	0
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/28/2013
Violation Code:	2030012 Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system. 23 CCR 16 2715(c)(6), 2715(f)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	4976633
Return To Compliance Date:	11/17/2014
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	0
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/21/2014
Violation Code:	2030016 Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected. 23 CCR 16 2631(g), 2632(c)(2)(A)&(B), 2633(c), 2636(f).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254

ARCO (Continued) **S109279364**

Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	08/20/2015
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	HMD0138 Manifest signed by the Treatment, Storage, Disposal Facility (TSDF) not available for inspection. 66262.40(a).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	10/14/2014
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	91
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	2030054 Failure to comply with one or more of the following: maintain the spill bucket in good condition, containment free of debris/liquid, and/or to remove the contents of the spill bucket when a release/leak/spill was observed. 23 CCR 16 2635(b), 2715(c)(2).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	10/14/2014
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	03
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	2030025 Failure of the pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. 23 CCR 16 2636(f)(2).

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Hazardous Materials Release Response Plans

ARCO (Continued) **S109279364**

Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	09/21/2015
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	1010008 Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date. For facilities with invenntory that exceed EPCRA thresholds; failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages HSC 6.95 25508.2 / 19 CCR 4 2729.5(c)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	10/13/2014
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	03
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	2030036 Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	10/13/2014
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	87
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	2030036 Failure of the overfill prevention system to meet one of the

ARCO (Continued) **S109279364**

following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5157324
Return To Compliance Date:	10/13/2014
Nov:	No
Violation Classification:	Class I
Underground Storage Tank Id:	91
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	10/09/2014
Violation Code:	2030036 Failure of the overfill prevention system to meet one of the following requirements: 1. Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or 2. Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or 3. Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or 4. Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. 23 CCR 16 2635(b)(2), 2665.

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5475887
Return To Compliance Date:	08/18/2016
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	31440
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/18/2016
Violation Code:	2060023 Failure of a UST system installed on or after July 1, 2004 to be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting

ARCO (Continued) **S109279364**

water intrusion into the secondary containment. HSC 25290.1(d)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5475887
Return To Compliance Date:	08/18/2016
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	31441
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/18/2016
Violation Code:	2060023 Failure of a UST system installed on or after July 1, 2004 to be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5475887
Return To Compliance Date:	08/18/2016
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	31442
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/18/2016
Violation Code:	2060023 Failure of a UST system installed on or after July 1, 2004 to be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Program Element:	Underground Storage Tank
Inspection Type:	Routine
Inspection Number:	5475887
Return To Compliance Date:	08/18/2016
Nov:	No
Violation Classification:	Class II
Underground Storage Tank Id:	32194
Container/Tank Id:	Not reported
Last Update:	2017-02-22T01:14:31.000
Inspection Date:	08/18/2016
Violation Code:	2060023 Failure of a UST system installed on or after July 1, 2004 to

ARCO (Continued) **S109279364**

be designed and constructed so as to detect the entry of the liquid or vapor-phase of the hazardous substance stored in the primary containment into the secondary containment and capable of detecting water intrusion into the secondary containment. HSC 25290.1(d)

Record ID: DEH2003-HUPFP-201254
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-201254
Program Element: Underground Storage Tank
Inspection Type: Routine
Inspection Number: 5475887
Return To Compliance Date: 09/17/2016
Nov: No
Violation Classification: Minor
Underground Storage Tank Id: 32194
Container/Tank Id: Not reported
Last Update: 2017-02-22T01:14:31.000
Inspection Date: 08/18/2016
Violation Code: 2030013 Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented. 23 CCR 2715

UST DTL:

Record ID: DEH2003-HUPFP-201254
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-201254
Facility Type (Ust Facility): Motor Vehicle Fueling
Tank Owner Name: IMPERIAL STATIONS, INC
Tankid: 31440
Tank Status: Active
Date Ust Permanently Closed: Not reported
Tank Use: Motor Vehicle Fueling
Piping System Type: Pressure
Last Updated: 2017-04-19T13:30:13.000
Tank Capacityin Gallons: 20000
Tank Contents: Regular Unleaded
Type Of Tank: Double Wall

Record ID: DEH2003-HUPFP-201254
Permit Status: Permit Renewed
Active Permit: Y
Facility Id Number: 37-000-201254
Facility Type (Ust Facility): Motor Vehicle Fueling
Tank Owner Name: IMPERIAL STATIONS, INC
Tankid: 31441
Tank Status: Active
Date Ust Permanently Closed: Not reported
Tank Use: Motor Vehicle Fueling

ARCO (Continued) **S109279364**

Piping System Type:	Pressure
Last Updated:	2017-04-19T13:30:13.000
Tank Capacityin Gallons:	20000
Tank Contents:	Regular Unleaded
Type Of Tank:	Double Wall

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	IMPERIAL STATIONS, INC
Tankid:	31442
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2017-04-19T13:30:13.000
Tank Capacityin Gallons:	12000
Tank Contents:	Premium Unleaded
Type Of Tank:	Double Wall

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-201254
Facility Type (Ust Facility):	Motor Vehicle Fueling
Tank Owner Name:	IMPERIAL STATIONS, INC
Tankid:	32194
Tank Status:	Active
Date Ust Permanently Closed:	Not reported
Tank Use:	Motor Vehicle Fueling
Piping System Type:	Pressure
Last Updated:	2017-04-19T13:30:13.000
Tank Capacityin Gallons:	8000
Tank Contents:	Diesel
Type Of Tank:	Double Wall

Waste and Materials:

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0130763
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2017-02-22T01:14:36.000
Chemical Name:	Gasoline Unleaded With Ethanol
Common Name:	87 Gasoline - Tank 1 & 2
Case Number:	8006-61-9

Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0130764
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2017-02-22T01:14:36.000

ARCO (Continued) **S109279364**

Chemical Name:	Ultra Low Sulfer Diesel
Common Name:	Diesel #2 - Tank 4
Case Number:	68476-34-6
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HCHEM-0130765
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2017-02-22T01:14:36.000
Chemical Name:	Gasoline Premium With Ethanol
Common Name:	91 Gasoline - Tank 3
Case Number:	8006-61-9
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HWAST-0109274
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-02-22T01:14:37.000
Chemical Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Common Name:	WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported
Record ID:	DEH2003-HUPFP-201254
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2017-HWAST-0109275
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-02-22T01:14:37.000
Chemical Name:	WASTE 352 ORGANIC SOLIDS (OTHER)
Common Name:	FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Case Number:	Not reported

Permit Number:	201254
Business Type:	6HK28
EPA Id Number:	CAL000321592
APN:	254-060-29-00
Last HMMD Inspection:	08/28/2012
Facility Telephone:	760-944-9864
Permit Status:	OPEN
Permit Expiration:	12/31/2012
Date Last Updated:	11/02/2012
Facility Owner:	IMPERIAL STATIONS, INC
Facility Mailing Address:	8221 GARDEN GROVE BL
Facility Mailing City:	GARDEN GROVE
Facility Mailing State:	CA
Facility Mailing Zip:	92844
UST Owner:	IMPERIAL STATIONS INC
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Y
Subject To APSA:	Not reported
Generate Haz Waste:	Y

ARCO (Continued) **S109279364**

Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Inventory Active Permits (not SQG Medical):

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL FUEL
Other Information: UNDERGROUND TANK 201254 T004
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: PREMIUM UNLEADED
Other Information: UNDERGROUND TANK 201254 T003
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T001
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: 8006-61-9
Name: REGULAR UNLEADED
Other Information: UNDERGROUND TANK 201254 T002
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information: WATER & FUEL HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Permit Number: 201254
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 352 ORGANIC SOLIDS (OTHER)
Other Information: FUEL FILTERS HAULER: HAZARDOUS TECHNOLOGIES
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

ARCO (Continued) **S109279364**

Violations Active Permits:

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/24/2010
Violation Code:	6HV3269
Violation:	UST SYSTEM NOT CONT. MONITORED W/VPH
Violation Citation:	UST system not continuously monitored using Vacuum/Pressure/Hydrostatic (VPH) system (for tank installs on or after 7/1/04). 25290.1 (d)&(e)
Activity:	ACTIVE

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/29/2008
Violation Code:	6HV3152
Violation:	ALL MAINT/MONITOR RECORDS NOT AVAILABLE
Violation Citation:	All maintenance/monitoring/calibration/ repair records not available. 25293; 2712 (b)
Activity:	ACTIVE

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/19/2009
Violation Code:	6HV3263
Violation:	MONITOR SYSTEM NOT ALL FUNCTIONAL
Violation Citation:	Monitoring system components &/or devices are not all functional. 2630, 2641(j), 2632
Activity:	ACTIVE

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/28/2012
Violation Code:	6HV0228
Violation:	CONTAINER NOT KEPT CLOSED
Violation Citation:	Failed to keep container closed. CFR 265.173
Activity:	ACTIVE

Permit Number:	201254
Update Date:	11/02/2012
Inspection Date:	08/28/2012
Violation Code:	6HV3105
Violation:	NO CURRENT FINANCIAL RESPONSIBILITY
Violation Citation:	Current evidence of financial responsibility not available. 25292.2(a), 25299.33; 2809
Activity:	ACTIVE

UST:

UST Name:	UNDERGROUND TANK 201254 T001
Last Update:	2012-11-02 14:17:38
Permit Number:	201254
Tank Type:	DOUBLE WALL
Additional Id:	NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons:	20000
UST Contents:	REGULAR UNLEADED
Other Content Info:	REGULAR UNLEADED
Reg Status:	ACTIVE

ARCO (Continued) **S109279364**

Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T002
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 20000
UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T003
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 12000
UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS; CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

UST Name: UNDERGROUND TANK 201254 T004
Last Update: 2012-11-02 14:17:38
Permit Number: 201254
Tank Type: DOUBLE WALL
Additional Id: NT2442 (POST JULY 1, 2004 INSTALLATION),RT5182,RT5
Capacity Gallons: 8000
UST Contents: DIESEL
Other Content Info: DIESEL
Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 2005-12-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE
Monitor Code: 43
UST Monitor Method: DW TANK DW PRESSURIZED PIPE W INTERSTITIAL HYDROSTATIC SUMPS & UDCS;

ARCO (Continued) **S109279364**

CONSTANT VACUUM FOR TANK AND PIPING WITH POSITIVE SHUT-OFF & ALA

HIST UST:

File Number:	0002B5BF
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B5BF.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

A3 **ARCO** **SAN DIEGO CO. SAM** **S106916218**
SSE **1766 N HY 101** **N/A**
< 1/8 **ENCINITAS, CA 92024**
0.100 mi.
526 ft. **Site 2 of 7 in cluster A**

Relative:
Lower

Actual:
58 ft.

SAN DIEGO CO. SAM:

Case Number:	H04837-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - Federal Fund**
Facility Type:	GW With No Beneficial Use Designation
Facility Status:	Closed Case
Date:	6/12/2002
Date Began:	6/21/2000

A4 **ARCO** **LUST** **S104735655**
SSE **1766 HWY 101 N** **N/A**
< 1/8 **ENCINITAS, CA 92024**
0.100 mi.
526 ft. **Site 3 of 7 in cluster A**

Relative:
Lower

Actual:
58 ft.

LUST REG 9:

Region:	9
Status:	Preliminary site assessment workplan submitted
Case Number:	9UT4078
Local Case:	H04837-001
Substance:	Gasoline
Qty Leaked:	Not reported

ARCO (Continued) **S104735655**

Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Tank Closure
How Stopped:	Close Tank
Source:	Tank
Cause:	Unknown
Lead Agency:	Local Agency
Case Type:	Soil only
Date Found:	06/21/2000
Date Stopped:	06/21/2000
Confirm Date:	/ /
Submit Workplan:	8/29/00
Prelim Assess:	/ /
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	06/21/2000
Enforce Date:	Not reported
Closed Date:	Not reported
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.51
GW Depth:	Not reported
Beneficial Use:	No Beneficial groundwater use
NPDES Number:	Not reported
Priority:	Low priority. Priority ranking can change over time.
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

A5 **ARCO** **SWEEPS UST** **S106922764**
SSE **1766 N HIGHWAY 101** **N/A**
< 1/8 **LEUCADIA, CA 92024**
0.100 mi.
526 ft. **Site 4 of 7 in cluster A**

Relative:
Lower

Actual:
58 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	4837
Number:	Not reported
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000004
Tank Status:	Not reported
Capacity:	280
Active Date:	Not reported
Tank Use:	PETROLEUM
STG:	WASTE
Content:	Not reported
Number Of Tanks:	1

Status:	Active
Comp Number:	4837

ARCO (Continued) **S106922764**

Number:	9
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000001
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	3

Status:	Active
Comp Number:	4837
Number:	9
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000002
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	4837
Number:	9
Board Of Equalization:	44-022114
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-004837-000003
Tank Status:	A
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

A6 SSE < 1/8 0.100 mi. 528 ft. | **FAST GAS**
1766 N COAST HIGHWAY 101
ENCINITAS, CA 92024

Site 5 of 7 in cluster A

HIST UST | **U001571339**
N/A

Relative: Lower

Actual: 58 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000011133
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	6197539819
Owner Name:	KAYO OIL COMPANY
Owner Address:	1221 E. MAIN STREET
Owner City,St,Zip:	CHATTANOOGA, TN 37408
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	1972
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test
Tank Num:	002
Container Num:	2
Year Installed:	1972
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test
Tank Num:	003
Container Num:	3
Year Installed:	1972
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor, Pressure Test
Tank Num:	004
Container Num:	4
Year Installed:	1972
Tank Capacity:	00000280
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Visual

A7
SSE
< 1/8
0.100 mi.
528 ft.

IMPERIAL STATIONS INC
1766 N COAST HIGHWAY 101
ENCINITAS, CA 92024

Site 6 of 7 in cluster A

EDR Hist Auto **1021501678**
N/A

Relative:
Lower

Actual:
58 ft.

EDR Hist Auto

Year:	Name:	Type:
1997	NANAK PETRO INC	Gasoline Service Stations
1998	NANAK PETRO INC	Gasoline Service Stations
1999	IMPERIAL STATIONS INC	Gasoline Service Stations
2000	IMPERIAL STATIONS INC	Gasoline Service Stations
2005	ARCO GAS & GO	Gasoline Service Stations, NEC
2006	ARCO GAS & GO	Gasoline Service Stations, NEC
2007	ARCO GAS & GO	Gasoline Service Stations, NEC
2008	ARCO GAS & GO	Gasoline Service Stations, NEC
2011	IMPERIAL STATIONS INC	Gasoline Service Stations
2012	IMPERIAL STATIONS INC	Gasoline Service Stations
2013	IMPERIAL STATIONS INC	Gasoline Service Stations
2014	IMPERIAL STATIONS INC	Gasoline Service Stations

A8
SSE
< 1/8
0.100 mi.
528 ft.

IMPERIAL STATIONS, INC
1766 N HWY 101
ENCINITAS, CA 92024

Site 7 of 7 in cluster A

UST **U004262107**
N/A

Relative:
Lower

Actual:
58 ft.

UST:

Facility ID:	37-000-201254
Permitting Agency:	San Diego County Department of Environmental Health
Latitude:	33.07907
Longitude:	-117.30754

B9
East
1/8-1/4
0.198 mi.
1047 ft.

EATON BEACH ESTATES, INC.
224 ANDREW AV
ENCINITAS, CA 92024

Site 1 of 2 in cluster B

SAN DIEGO CO. SAM **S104761204**
SLIC **N/A**
San Diego Co. HMMD
NPDES

Relative:
Lower

Actual:
74 ft.

SAN DIEGO CO. SAM:

Case Number:	H99138-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	9/6/2006
Date Began:	3/15/2005

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	09/06/2006
Global Id:	T06019755099
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H99138-001
Latitude:	33.082185
Longitude:	-117.304957

EATON BEACH ESTATES, INC. (Continued) **S104761204**

Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Permit Number:	199138
Business Type:	6HKAG
EPA Id Number:	Not reported
APN:	216-052-10-00
Last HMMD Inspection:	07/12/1989
Facility Telephone:	619-753-1495
Permit Status:	INAC
Permit Expiration:	07/12/1989
Date Last Updated:	11/02/2012
Facility Owner:	JOHN RENAKER
Facility Mailing Address:	351 UNION ST
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024-2640
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

NPDES:

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	9
Regulatory Measure Id:	440789
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	9 37C368212
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/10/2016
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	11/06/2013
PROCESSED DATE:	11/12/2013

EATON BEACH ESTATES, INC. (Continued) **S104761204**

STATUS CODE NAME:	Terminated
STATUS DATE:	03/10/2016
PLACE SIZE:	2
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Bryan Binney
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	858-526-6529
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	bryan.binney@sheahomes.com
OPERATOR NAME:	Shea Homes Limited Partnership
OPERATOR ADDRESS:	9990 Mesa Rim Road
OPERATOR CITY:	San Diego
OPERATOR STATE:	California
OPERATOR ZIP:	92121
OPERATOR CONTACT NAME:	Bryan Binney
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	858-526-6529
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	bryan.binney@sheahomes.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Shea Homes Limited Partnership
DEVELOPER ADDRESS:	9990 Mesa Rim Road
DEVELOPER CITY:	San Diego
DEVELOPER STATE:	California
DEVELOPER ZIP:	92121
DEVELOPER CONTACT NAME:	Bryan Binney
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	N
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N
CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	N
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	Y
CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Bryan Binney
CERTIFIER TITLE:	VP, Operations
CERTIFICATION DATE:	06-NOV-13
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAS000002
Facility Status:	Terminated

EATON BEACH ESTATES, INC. (Continued) **S104761204**

Agency Id:	0
Region:	9
Regulatory Measure Id:	440789
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	9 37C368212
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/12/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/10/2016
Discharge Name:	Shea Homes Limited Partnership
Discharge Address:	9990 Mesa Rim Road
Discharge City:	San Diego
Discharge State:	California
Discharge Zip:	92121
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported

EATON BEACH ESTATES, INC. (Continued) **S104761204**

CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

B10 **BARRETT AMERICAN** **LUST** **S107619741**
East **236 ANDREW AV** **SAN DIEGO CO. SAM** **N/A**
1/8-1/4 **ENCINITAS, CA 92024**
0.215 mi.
1133 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
76 ft.

LUST:

Region:	STATE
Global Id:	T06019729886
Latitude:	33.082392
Longitude:	-117.30424
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/04/2006
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	EM
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	199128-001
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T06019729886
Contact Type:	Local Agency Caseworker
Contact Name:	EWAN MOFFAT
Organization Name:	SAN DIEGO COUNTY LOP
Address:	P.O. Box 129261
City:	San Diego
Email:	ewan.moffat@sdcounty.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T06019729886
Status:	Completed - Case Closed
Status Date:	05/04/2006

BARRETT AMERICAN (Continued) **S107619741**

Global Id: T06019729886
Status: Open - Case Begin Date
Status Date: 06/07/2005

Regulatory Activities:

Global Id: T06019729886
Action Type: Other
Date: 08/04/2005
Action: Leak Reported

Global Id: T06019729886
Action Type: Other
Date: 06/07/2005
Action: Leak Began

Global Id: T06019729886
Action Type: ENFORCEMENT
Date: 08/05/2005
Action: Notice of Responsibility

Global Id: T06019729886
Action Type: Other
Date: 06/07/2005
Action: Leak Discovery

Global Id: T06019729886
Action Type: Other
Date: 06/07/2005
Action: Leak Stopped

SAN DIEGO CO. SAM:

Case Number: 226452
Agency: DEH Site Assessment & Mitigation
Funding: LOP - Federal Fund
Facility Type: Soils Only
Facility Status: Closed Case
Date: 5/4/2006
Date Began: 6/7/2005

11
SSE
1/4-1/2
0.281 mi.
1482 ft.

FORMER FOXPOINT FARMS, NOW CORAL COVE
1657 N VULCAN AV
ENCINITAS, CA 92024

SAN DIEGO CO. SAM **S100741523**
SLIC **N/A**
San Diego Co. HMMD
HIST UST

Relative:
Lower

Actual:
61 ft.

SAN DIEGO CO. SAM:

Case Number: H99292-001
Agency: DEH Site Assessment & Mitigation
Funding: Private - VAP
Facility Type: Soils Only
Facility Status: Closed Case
Date: 8/19/2008
Date Began: Not reported

SLIC:

FORMER FOXPOINT FARMS, NOW CORAL COVE (Continued) **S100741523**

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	08/19/2008
Global Id:	SLT19776403
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H99292-001
Latitude:	33.077623
Longitude:	-117.304386
Case Type:	Cleanup Program Site
Case Worker:	KH
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Permit Number:	199292
Business Type:	6HKAG
EPA Id Number:	Not reported
APN:	254-061-01-00
Last HMMD Inspection:	03/22/2004
Facility Telephone:	760-942-7526
Permit Status:	INAC
Permit Expiration:	04/06/2000
Date Last Updated:	11/02/2012
Facility Owner:	FOX POINT FARMS
Facility Mailing Address:	P.O. BOX 230816
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92023-
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

HIST UST:

File Number:	0002B368
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B368.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

FORMER FOXPOINT FARMS, NOW CORAL COVE (Continued) **S100741523**

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

C12 **FIRST AMERICAN BANK PROPERTY** **LUST** **S100726852**
SSE **1508 HWY 101 N** **N/A**
1/4-1/2 **ENCINITAS, CA 92024**
0.448 mi.
2368 ft. **Site 1 of 6 in cluster C**

Relative:
Lower

Actual:
58 ft.

LUST REG 9:

Region:	9
Status:	Case Closed
Case Number:	9UT3252
Local Case:	H32587-001
Substance:	Waste Oil
Qty Leaked:	0
Abate Method:	Not reported
Local Agency:	San Diego
How Found:	Not reported
How Stopped:	Not reported
Source:	Not reported
Cause:	Not reported
Lead Agency:	Local Agency
Case Type:	Other ground water affected
Date Found:	10/04/1996
Date Stopped:	/ /
Confirm Date:	/ /
Submit Workplan:	Not reported
Prelim Assess:	10/04/1996
Desc Pollution:	Not reported
Remed Plan:	/ /
Remed Action:	Not reported
Began Monitor:	Not reported
Release Date:	10/04/1996
Enforce Date:	Not reported
Closed Date:	3/7/97
Enforce Type:	Not reported
Pilot Program:	LOP
Basin Number:	904.51
GW Depth:	13’
Beneficial Use:	NBNOC
NPDES Number:	Not reported
Priority:	Medium priority
File Dispn:	Administratively opened on database, however no file physically exists
Interim Remedial Actions:	Not reported
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported

13 ENE 1/4-1/2 0.452 mi. 2385 ft. | **LA COSTA 48**
510 LA COSTA AVENUE
ENCINITAS, CA 92024 | **SLIC** | **S120762622**
N/A

Relative: Higher

Actual: 80 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Active**
Status Date:	05/19/2017
Global Id:	T10000010402
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	DEH2017-LSAM-000439
Latitude:	33.08668
Longitude:	-117.30141
Case Type:	Cleanup Program Site
Case Worker:	JC
Local Agency:	SAN DIEGO COUNTY LOP
RB Case Number:	Not reported
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

C14 SSE 1/4-1/2 0.466 mi. 2459 ft. | **FIRST AMERICAN BANK PROPE**
1508 101
LEUCADIA, CA 92024 | **HIST CORTESE** | **S105024451**
N/A

Site 2 of 6 in cluster C

Relative: Lower

Actual: 58 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	37
Reg By:	LTNKA
Reg Id:	9UT3252

C15 SSE 1/4-1/2 0.466 mi. 2459 ft. | **ART WOLDENGA AND/OR JOE STIX**
1508 N HY 101
ENCINITAS, CA 92024 | **SAN DIEGO CO. SAM** | **S106916363**
N/A

Site 3 of 6 in cluster C

Relative: Lower

Actual: 58 ft.

SAN DIEGO CO. SAM:

Case Number:	H32587-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**LOP - Federal Fund**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	3/7/1997
Date Began:	10/4/1996

C16 SSE 1/4-1/2 0.466 mi. 2459 ft. | **LEUCADIA AUTO BODY** | **SAN DIEGO CO. SAM** | **S106916039** | **N/A**
1508 N HY 101
ENCINITAS, CA 92024

Site 4 of 6 in cluster C

Relative: Lower

Actual: 58 ft.

SAN DIEGO CO. SAM:

Case Number:	H05014-001
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	9/11/1996
Date Began:	6/20/1996

Case Number:	H05014-002
Agency:	DEH Site Assessment & Mitigation
Funding:	**Private - VAP**
Facility Type:	Soils Only
Facility Status:	Closed Case
Date:	8/20/1997
Date Began:	4/22/1997

C17 SSE 1/4-1/2 0.466 mi. 2459 ft. | **SCOTT'S AUTOMOTIVE** | **SLIC** | **S106064578** | **N/A**
1508 N HWY 101 | **San Diego Co. HMMD**
ENCINITAS, CA 92024

Site 5 of 6 in cluster C

Relative: Lower

Actual: 58 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	09/11/1996
Global Id:	T0608127646
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H05014-001
Latitude:	33.073912
Longitude:	-117.306025
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	08/20/1997
Global Id:	T0608121580
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H05014-002
Latitude:	33.073912
Longitude:	-117.306025
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported

SCOTT'S AUTOMOTIVE (Continued) **S106064578**

RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Stoddard solvent / Mineral Spriits / Distillates
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

HMMD SAN DIEGO:

Permit Number:	135453
Business Type:	6HK26
EPA Id Number:	CAL000144802
APN:	DEH-135453
Last HMMD Inspection:	02/11/2010
Facility Telephone:	760-632-7096
Permit Status:	OPEN
Permit Expiration:	03/31/2013
Date Last Updated:	11/02/2012
Facility Owner:	SCOTT R. DAILEY
Facility Mailing Address:	1508 N HY 101 A
Facility Mailing City:	ENCINITAS
Facility Mailing State:	CA
Facility Mailing Zip:	92024-
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Inventory Active Permits (not SQG Medical):

Permit Number:	135453
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG
Other Information:	AQUEOUS BRAKE WASHER
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	135453
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 221 WASTE OIL & MIXED OIL
Other Information:	WASTE OIL
Material Waste:	Waste
Hazardous Categories 1:	Not reported
Hazardous Categories 2:	Not reported

Permit Number:	135453
Update Date:	11/02/2012
Case Number:	Not reported
Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Other Information:	Not reported
Material Waste:	Waste
Hazardous Categories 1:	Not reported

SCOTT'S AUTOMOTIVE (Continued) **S106064578**

Hazardous Categories 2: Not reported

Permit Number: 135453
Update Date: 11/02/2012
Case Number: Not reported
Name: WASTE 888 USED OIL FILTERS
Other Information: GAS & OIL FILTERS
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 02/20/2003
Violation Code: 6HV0201
Violation: WASTE CONTAINER NOT CLOSED
Violation Citation: Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity: ACTIVE

Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 08/05/2004
Violation Code: 6HV0135
Violation: MANIFESTS/RECEIPTS FOR 3 YEARS NOT ONSIT
Violation Citation: Hazardous waste manifests/receipts for 3 years are not maintained onsite to document proper disposal of hazardous waste. CCR 66262.40(a) & 25160.2(b)(3)
Activity: ACTIVE

Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 08/05/2004
Violation Code: 6HV0201
Violation: WASTE CONTAINER NOT CLOSED
Violation Citation: Hazardous waste containers are not kept closed while in storage. CCR 66265.173(a)
Activity: ACTIVE

Permit Number: 135453
Update Date: 11/02/2012
Inspection Date: 08/21/2006
Violation Code: 6HV0228
Violation: CONTAINER NOT KEPT CLOSED
Violation Citation: Failed to keep container closed. CFR 265.173
Activity: ACTIVE

Permit Number: Not reported
Business Type: Not reported
EPA Id Number: cal000144802
APN: Not reported
Last HMMD Inspection: Not reported
Facility Telephone: 760-632-7096
Permit Status: Permit Renewed
Permit Expiration: Not reported

SCOTT'S AUTOMOTIVE (Continued) **S106064578**

Date Last Updated:	04/07/2017
Facility Owner:	Not reported
Facility Mailing Address:	1508 N Highway 101 Unit A, Encinitas, CA 92024
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
UST Owner:	N
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Y
Treat Haz Waste:	N
Generate Medical Waste:	Not reported

Inspection Violation:

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-135453
Program Element:	Hazardous Materials Release Response Plans
Inspection Type:	Routine
Inspection Number:	4091821
Return To Compliance Date:	08/14/2014
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2017-02-22T02:34:24.000
Inspection Date:	08/14/2014
Violation Code:	1010007 Failure to submit a revised business plan upon a substantial change in the handler's operations; HSC 6.95 25505(b).

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Facility Id Number:	37-000-135453
Program Element:	Hazardous Waste Generator
Inspection Type:	Routine
Inspection Number:	5491001
Return To Compliance Date:	10/12/2016
Nov:	No
Violation Classification:	Minor
Underground Storage Tank Id:	Not reported
Container/Tank Id:	Not reported
Last Update:	2017-02-22T02:34:24.000
Inspection Date:	08/15/2016
Violation Code:	3010002 Failed to obtain and/or maintain an active EPA ID. 22 CCR 66262.12

Waste and Materials:

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HCHEM-0114948
Trade Secret:	N
Hazardous Material Type:	Pure
Last Updated:	2017-02-22T02:34:24.000

SCOTT'S AUTOMOTIVE (Continued) **S106064578**

Chemical Name:	Carbon Dioxide
Common Name:	Carbon Dioxide
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HCHEM-0114949
Trade Secret:	N
Hazardous Material Type:	Mixture
Last Updated:	2017-02-22T02:34:24.000
Chemical Name:	LUBRICATING OIL
Common Name:	LUBRICATING OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0096409
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-02-22T02:34:24.000
Chemical Name:	WASTE 221 WASTE OIL & MIXED OIL
Common Name:	WASTE OIL
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0096410
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-02-22T02:34:24.000
Chemical Name:	WASTE 342 ORGANIC LIQUIDS W/METALS
Common Name:	WASTE ANTIFREEZE
Case Number:	Not reported

Record ID:	DEH2002-HUPFP-135453
Permit Status:	Permit Renewed
Active Permit:	Y
Child Record Id:	DEH2016-HWAST-0096411
Trade Secret:	N
Hazardous Material Type:	Not reported
Last Updated:	2017-02-22T02:34:24.000
Chemical Name:	WASTE Parts washer
Common Name:	Parts washer
Case Number:	Not reported

C18 SSE 1/4-1/2 0.466 mi. 2459 ft. | **ART WOLDENGA AND/OR JOE STIX**
1508 N HY 101
ENCINITAS, CA 92024

LUST **S106922878**
SWEEPS UST **N/A**

Site 6 of 6 in cluster C

Relative: Lower

Actual: 58 ft.

LUST:

Region:	STATE
Global Id:	T0607302005
Latitude:	33.073881
Longitude:	-117.306014
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/07/1997
Lead Agency:	SAN DIEGO COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	9UT3252
LOC Case Number:	H32587-001
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id:	T0607302005
Status:	Completed - Case Closed
Status Date:	03/07/1997
Global Id:	T0607302005
Status:	Open - Case Begin Date
Status Date:	10/04/1996

Regulatory Activities:

Global Id:	T0607302005
Action Type:	ENFORCEMENT
Date:	02/18/1997
Action:	Closure/No Further Action Letter - #H32587-001
Global Id:	T0607302005
Action Type:	Other
Date:	10/04/1996
Action:	Leak Reported
Global Id:	T0607302005
Action Type:	Other
Date:	10/04/1996
Action:	Leak Began
Global Id:	T0607302005
Action Type:	Other
Date:	10/04/1996
Action:	Leak Discovery

SWEEPS UST:

Status:	Active

ART WOLDENGA AND/OR JOE STIX (Continued) **S106922878**

Comp Number:	32587
Number:	9
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	06-26-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	37-000-032587-000001
Tank Status:	A
Capacity:	1000
Active Date:	Not reported
Tank Use:	OIL
STG:	P
Content:	Not reported
Number Of Tanks:	1

19
SSE
1/4-1/2
0.498 mi.
2628 ft.

GREYSTONE HOMES PROPERTY
NONE N CORNER OF VULCAN & S
ENCINITAS, CA 92024

SLIC **S106916183**
N/A

Relative:
Lower

Actual:
64 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	03/01/2000
Global Id:	T0608184037
Lead Agency:	SAN DIEGO COUNTY LOP
Lead Agency Case Number:	H38423-001
Latitude:	33.0738767152889
Longitude:	-117.304547410959
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CARLSBAD	S109348922	COCA COLA BOTTLING TRUCK SPIL	0 HWY I5 NORTH OF LA COSTA EXI	92011	SAN DIEGO CO. SAM
ENCINITAS	S108407071	GREYSTONE HOMES PROPERTY	N CORNER OF VULCAN & S	92024	SAN DIEGO CO. SAM

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/08/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 99

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 10/06/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/11/2017	Source: EPA
Date Data Arrived at EDR: 07/21/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 10/20/2017
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/28/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 70

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/20/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017
Date Data Arrived at EDR: 06/13/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 94

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/14/2017
Date Data Arrived at EDR: 08/17/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 35

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 70

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/27/2017
Date Data Arrived at EDR: 06/28/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/20/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 09/11/2017
Date Data Arrived at EDR: 09/12/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 9

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 05/31/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 76

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/20/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/29/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/01/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 14

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 80

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 65

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 57

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/18/2017
Number of Days to Update: 65

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/12/2017
Date Data Arrived at EDR: 06/14/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 121

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/22/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/23/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/27/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 8

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/03/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 10/26/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 24

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 9

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 133

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2017
Date Data Arrived at EDR: 08/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 29

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/22/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/18/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/24/2017
Number of Days to Update: 63

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/21/2017
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/15/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/21/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/21/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/10/2017
Date Data Arrived at EDR: 10/10/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/11/2017
Date Data Arrived at EDR: 09/12/2017
Date Made Active in Reports: 11/01/2017
Number of Days to Update: 50

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/25/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 08/14/2017
Date Data Arrived at EDR: 08/17/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 61

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/07/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 79

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 09/11/2017
Date Data Arrived at EDR: 09/12/2017
Date Made Active in Reports: 10/18/2017
Number of Days to Update: 36

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/16/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 119

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 09/22/2017
Date Data Arrived at EDR: 09/22/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 18

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2017
Date Data Arrived at EDR: 07/11/2017
Date Made Active in Reports: 08/23/2017
Number of Days to Update: 43

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2017
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 49

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 104

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/05/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/17/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 66

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/18/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/24/2017
Number of Days to Update: 63

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 30

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 09/27/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 07/26/2017
Date Data Arrived at EDR: 07/28/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 77

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/03/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 07/21/2017
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 83

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 44

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/22/2017
Date Data Arrived at EDR: 09/22/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 24

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 09/22/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 08/03/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 74

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 07/24/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 82

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 5

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/17/2017
Date Data Arrived at EDR: 07/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 65

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/17/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 171

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 06/21/2017
Date Data Arrived at EDR: 06/23/2017
Date Made Active in Reports: 10/30/2017
Number of Days to Update: 129

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/24/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/14/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 69

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 63

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 10/26/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 07/03/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 15

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/27/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 14

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 09/27/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 40

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/22/2017
Date Data Arrived at EDR: 06/23/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 47

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 08/24/2017
Date Data Arrived at EDR: 08/25/2017
Date Made Active in Reports: 10/27/2017
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/04/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/11/2017
Date Made Active in Reports: 10/11/2017
Number of Days to Update: 61

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/11/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 41

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/09/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 43

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/09/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 77

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 35

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/14/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 69

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/14/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 69

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 3

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/03/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 07/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 47

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/03/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 08/11/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 66

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/01/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 85

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/07/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 69

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/06/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/03/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 109

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 4

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 08/28/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/18/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/15/2017
Date Data Arrived at EDR: 09/19/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/07/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/07/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/10/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 67

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/24/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/15/2017
Date Made Active in Reports: 10/24/2017
Number of Days to Update: 70

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 63

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 08/29/2017
Number of Days to Update: 69

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 06/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 43

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/05/2017
Date Data Arrived at EDR: 07/06/2017
Date Made Active in Reports: 08/22/2017
Number of Days to Update: 47

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 08/17/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 80

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 08/31/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 07/19/2017
Date Data Arrived at EDR: 08/11/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 66

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 07/21/2017
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 09/27/2017
Date Data Arrived at EDR: 09/28/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 18

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 08/21/2017
Date Data Arrived at EDR: 08/22/2017
Date Made Active in Reports: 10/25/2017
Number of Days to Update: 64

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/26/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 74

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/27/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 06/26/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 75

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/23/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/28/2017
Date Data Arrived at EDR: 09/12/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 9

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/12/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/29/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/25/2017
Number of Days to Update: 51

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/27/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 74

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/12/2017
Number of Days to Update: 70

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/16/2017
Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/11/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

FENWAY - ENCINITAS
1950 N. COAST HIGHWAY 101
ENCINITAS, CA 92024

TARGET PROPERTY COORDINATES

Latitude (North):	33.081376 - 33˚ 4' 52.95''
Longitude (West):	117.308627 - 117˚ 18' 31.06''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	471195.2
UTM Y (Meters):	3660159.2
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641296 ENCINITAS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

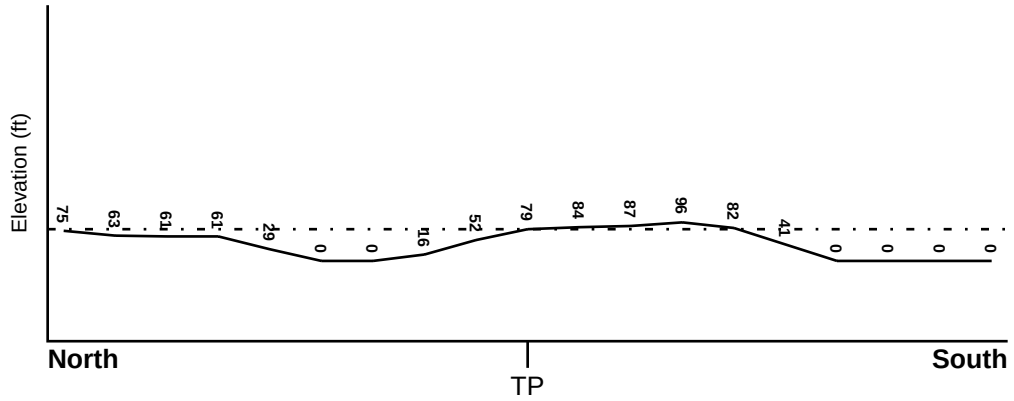
TOPOGRAPHIC INFORMATION

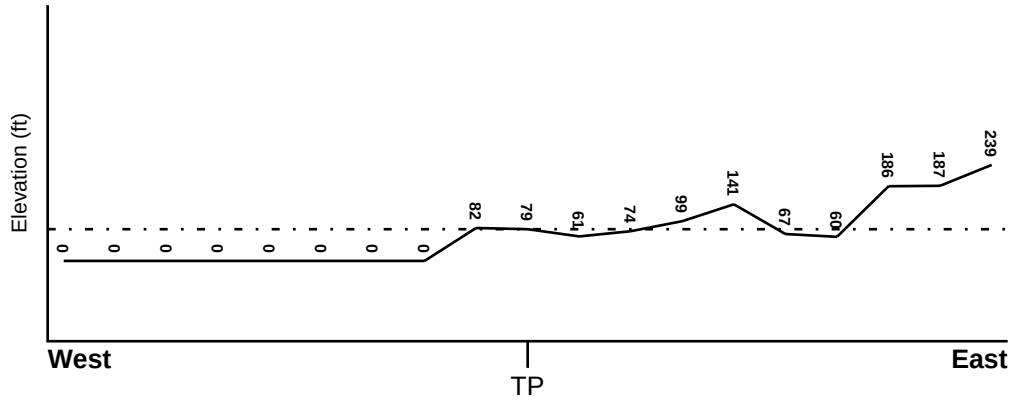
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

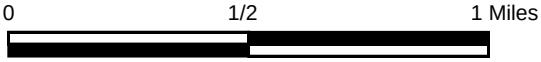
General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 79 ft.



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06073C1035G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06073C1030G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ENCINITAS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

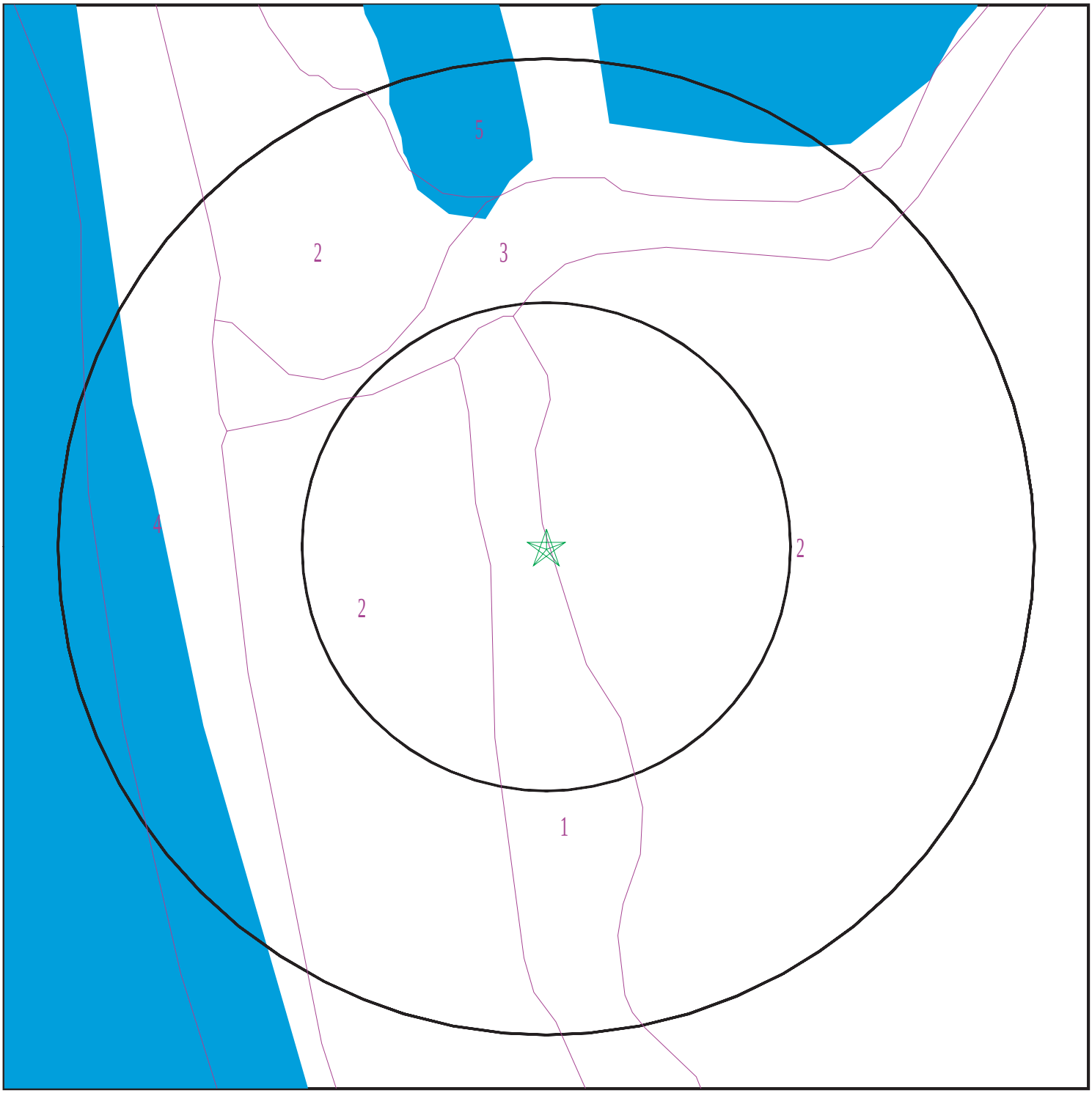
Era:	Cenozoic
System:	Tertiary
Series:	Eocene
Code:	Te *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5095677.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Fenway - Encinitas	CLIENT:	Hovey Environmental
ADDRESS:	1950 N. Coast Highway 101 Encinitas CA 92024	CONTACT:	Caroline Hovey
		INQUIRY #:	5095677.2s
LAT/LONG:	33.081376 / 117.308627	DATE:	November 02, 2017 3:07 pm

Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	9 inches	57 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
3	57 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: TERRACE ESCARPMENTS

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: COASTAL BEACHES

Soil Surface Texture: coarse sand

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.1

Soil Map ID: 5

Soil Component Name: LAKES AND LAGOONS

Soil Surface Texture: coarse sand

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

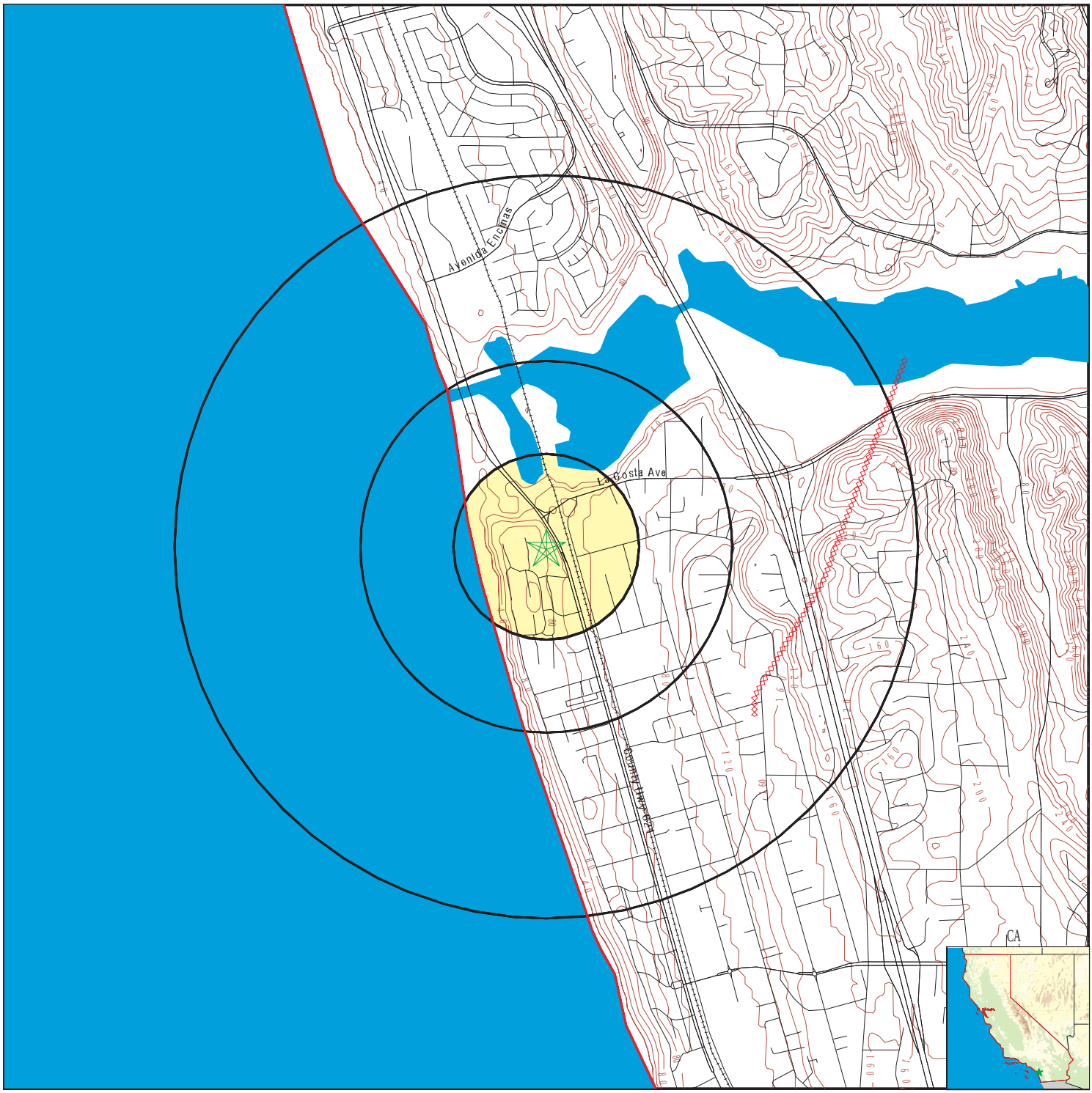
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 5095677.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

N

SITE NAME: Fenway - Encinitas ADDRESS: 1950 N. Coast Highway 101 Encinitas CA 92024 LAT/LONG: 33.081376 / 117.308627	CLIENT: Hovey Environmental CONTACT: Caroline Hovey INQUIRY #: 5095677.2s DATE: November 02, 2017 3:07 pm

Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92024	42	5

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 92024

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX F

SITE SPECIFIC INFORMATION

USER-PROVIDED INFORMATION

INTERVIEW DOCUMENTATION

PREVIOUS ENVIRONMENTAL SITE ASSESSMENT REPORTS

ENVIRONMENTAL LIEN SEARCH

HOVEY ENVIRONMENTAL
www.hoveyenvironmental.com ◊ info@hoveyenvironmental.com
2929 Chatsworth Blvd ◊ San Diego California 92106
Phone 619.203.9774 ◊ Fax 619.923.3055

QUESTIONNAIRE

FOR PHASE I ENVIRONMENTAL SITE ASSESSMENT

SUBJECT PROPERTY: 1950, 2100 N Coast Highway — Encinitas — CA — 92024
STREET ADDRESS — CITY — STATE — ZIP

ASSESSORS PARCEL NUMBERS: 216-041-20-000; 216-041-21-000; 216-041-26-000

CLIENT NAME: Fenway Capital Advisors, Attn: Bryan Smith (as affiliate of "Buyer")

PROJECT #: 17013-01

Name of Individual Completing Questionnaire: William J. Dodds

Title & Company of Individual Completing Questionnaire: Consultant

Affiliation to Subject Property: Asset / Development manager

All statements contained in this Questionaire made on behalf of W2007 Encinitas Resort Co., LLC and W2007 Encinitas I, LLC are limited to the actual present knowledge of William J. Dodds, without independent inquiry and without imputation thereto of the knowledge of any other persons or entities. Further, all statements contained herein are qualified by the information contained in the Due Diligence Items previously made available to Buyer.

Are there other individuals with direct knowledge of the subject property? If so, please provide their name, company, affiliation to the property, and contact information below.

_____

_____

_____

SUBJECT PROPERTY DESCRIPTION

3 parcels

Total Size Approx 8+ acres Size of developed Areas ____

How is property zoned ____ Is property vacant or improved yes

Is property currently occupied NO How long under current ownership since 2007/2008

Have previous Phase I or other Environmental reviews been done at the subject property? If so, when and for what reason? yes - see due diligence materials provided in HFF data room

Please provide all available environmental reports related to the subject property.

Current uses: 1. Vacant restaurant and parking lot Time closed over 5 years
2. Cell phone tower / facilities at restaurant site near the building Time ____ Past uses:
1. Resort parcel was previously used for/as a mobile home / trailer park. The "park" had small clubhouse and pool. Time ____
2. Time ____
3. Time ____ Structures on the property: 1. All trailers and trailer park improvements 2. were removed prior to 2001! Age ____
3. ____ Age ____

Can a property layout be faxed ____

Ground cover: ____

Asphalt yes Concrete yes

Grass yes Dirt yes

Vegetation yes Other ground cover ____

Land features Direction of slope multiple Approximate incline ____

Sensitive Lands / Wetlands yes - adjacent / North of resort site Size ____

Surface Water None noted Size ____ How is storm water handled sheet runoff / drainage into landscape areas. some storm water improvements along resort bluff edge

Herbicide/Pesticide use (type, quantity, frequency) ____

Utilities: septic or sewer sewer for restaurant; unknown for trailer park

well or (city water) _____ electricity or gas yes both at/near site

Are materials ever burned on the property unknown

Storage facilities _____

Hazardous materials storage pool chemicals at former trailer park; well documented in prior reports

Waste materials none noted

How long since excavation on the property Multiple years By Whom DPR was last GC

Why as part of access stairway project to state parks area in 2003/2004

Last time natural features manipulated unknown By Whom _____

Why —

Previous ESA's _____ By Whom _____

Why _____

Previous remediation work None known By Whom _____

Why _____

SURROUNDING PROPERTIES

General description of area: beach area

Uses of surrounding properties:

East Coast Hwy, Railroad tracks West: ocean / residential community

North State Parks parking lot South residential community / commercial

Proximity to:

gas station a mile or more south manufacturing plants unknown

waste treatment facility unknown water treatment facility unknown Is there any reason to suspect environmental contamination from adjoining properties No

QUESTIONNAIRE

1a. Did you observe evidence or do you have any prior knowledge that the *subject property* is currently or has been previously used for an **industrial use**?	yes	no	unknown
1b. Did you observe evidence or do you have any prior knowledge that any *adjoining properties* is currently or has been previously used for an **industrial use**?	yes	no	unknown
2a. Did you observe evidence or do you have any knowledge that the *subject property* is currently or has previously been used for any of the following (circle all that apply): • **gasoline station** • **motor repair facility** • **dry cleaners** • **photo developing laboratory** • **junkyard or landfill** • **waste treatment, storage, disposal, processing or recycling facility**	yes	no	unknown
2b. Did you observe evidence or do you have any knowledge that any *adjoining property* is currently or has previously been used for any of the following (circle all that apply): • **gasoline station** • **motor repair facility** • **dry cleaners** • **photo developing laboratory** • **junkyard or landfill** • **waste treatment, storage, disposal, processing or recycling facility**	yes	no	unknown
3. Did you observe evidence or do you have any knowledge that there are currently or have been previously any damaged or discarded **automotive or industrial batteries, pesticides, paints, or other chemicals** in individual containers > 5 gallons (19 L) in volume or 50 gallons (190 L) in the aggregate, stored on or used at the *subject property*?	yes	no	unknown
4. Did you observe evidence or do you have any knowledge that there are currently or have been previously any **industrial drums** (typically 55 gal) or sacks of chemicals located on the *subject property*?	yes	no	unknown
5. Did you observe evidence or do you have any prior knowledge that **fill dirt** has been brought onto the *subject property* **that originated from a contaminated site or is of unknown origin**?	yes	no	unknown

I believe empty 55 gal drum in trash area of restaurant; its always ~~been~~ empty

Drum was empty and used by restaurant for waste/trash.

6. Did you observe evidence or do you have any prior knowledge that there is currently or has been previously any **pits, ponds, or lagoons** located on the *subject property* in connection with waste treatment or waste disposal?	yes	no	unknown
7. Did you observe evidence or do you have any prior knowledge that there is currently or has been previously any **stained soil** on the *subject property*? Resort parcel - phase one indicates pool chemical but no current staining of soil	yes	no	unknown
8. Did you observe evidence or do you have any prior knowledge that there is currently or has been previously any **registered or unregistered storage tanks** (above or underground) located on the *subject property*?	yes	no	unknown
9. Did you observe evidence or do you have any prior knowledge that there is currently or has been previously any **vent pipes, fill pipes, or access ways** indicating a fill pipe protruding from the ground on the *subject property or adjacent to any structure* on the subject property?	yes	no	unknown
10. Is there currently evidence of **leaks, spill, or staining** by substances other than water, or **foul odors,** associated with flooring, drains, walls, ceilings, or exposed grounds on the *subject property*?	yes	no	unknown
11. If the *subject property* is served by a **private well or non-public water system,** is there evidence or do you have any knowledge that **contaminants** have been identified in the well or system, or that the well has been **designated as contaminated** by any government environmental / health agency?	yes	no	unknown
12. Do you have any knowledge of **environmental liens** or government notification relating to **past or recurrent violations of environmental laws** with respect to the *subject property*?	yes	no	unknown
13. Have you been informed of the current or past existence of **hazardous substances or petroleum products** with respect to the *subject property*? Review prior phase 1 environmental reports for Cabo site and resort site.	yes	no	unknown
14. Do you have any knowledge of any **environmental site assessment** of the property or facility that indicated the presence of **hazardous substances or petroleum products on, or contamination** of, the *subject property*, or **recommended further assessment** of the *subject property*?	yes	no	unknown

See prior phase 1 environmental reports for additional information

15. Do you know of any past, threatened, or pending **lawsuits or administrative proceedings** concerning a release or threatened release of any hazardous substance or petroleum products involving the *subject property* by any owner or occupant of the property? yes no unknown

16. Does the *subject property* **discharge waste water** (not including sanitary waste or storm water) onto or adjacent to the property and/or into a storm water system? yes no unknown

17. Do you have any prior knowledge that any **hazardous substances or petroleum products, unidentified waste materials, tires,** automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *subject property*? yes no unknown

18. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the **presence of PCB's**? yes no unknown

see electrical carrying equipt on poles along edge of property line for potential transformers.

Please provide details relating to any questions answered "yes" in the space provided. Attach additional sheets or informative documents if necessary.

Signature of party completing questionnaire

William Dodds
Name of party completing questionnaire

11/2/17
Date

DRAFT
PHASE I
ENVIRONMENTAL SITE ASSESSMENT

Approximate 2.95-Acre
CABO GRILL PROPERTY
APNs 216-041-20-00 and -21-00

City of Encinitas, County of San Diego,
State of California

Prepared in General Accordance with:
ASTM Standard 1527-05

For:

KSL La Costa Resort and Spa
21 Costa Del Mar Road
Carlsbad, California 92009
Contact: Mr. Jim Waples

By:

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618

April 2007

55-100374

April 20, 2007 55-100374

Mr. Jim Waples
KSL La Costa Resort and Spa
21 Costa Del Mar Road
Carlsbad, California 92009

SUBJECT: PHASE I ENVIRONMENTAL SITE ASSESSMENT
Approximate 2.95-Acre Cabo Grill Property (APNs 216-041-20-00 and -21-00)
Located in the City of Encinitas, County of San Diego, California

Dear Mr. Waples:

RBF Consulting (RBF) is pleased to submit this Phase I Environmental Site Assessment (ESA) for the above-referenced project, herein referenced as the "subject site." This ESA has been prepared to evaluate the potential presence of hazardous materials and the expected nature of the materials that may be on the subject site. This ESA has been prepared for the sole use of **KSL La Costa Resort and Spa** for the above-referenced subject site. Neither this ESA, nor any of the information contained herein, shall be used or relied upon for any purpose by any person or entity other than **KSL La Costa Resort and Spa**.

The Phase I ESA was performed in general accordance with American Standards for Testing and Materials (ASTM) Standard Practice E 1527-05, the scope of services, and inherent limitations presented in our proposal. The ESA is not intended to present specific quantitative information as to the actual presence of hazardous materials on or adjacent to the subject site, but is to identify the potential presence based on available information.

Should you or your staff have any questions after reviewing the attached report, please do not hesitate to contact me at 949/855-3686, or Richard Beck at 949/855-3687.

Sincerely,

Richard Beck, REA
Project Manager/Environmental Assessor
Environmental Services

Kristen Hurley
Environmental Analyst
Environmental Services

Statement of Quality Assurance

I have performed this ISA in accordance with generally accepted environmental practices and procedures, as of the date of this report. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area. The conclusions contained with this ISA are based upon site conditions I readily observed or were reasonably ascertainable and present at the time of the site inspection.

The conclusions and recommendations stated in this report are based upon personal observations made by employees of RBF and upon information provided by others. I have no reason to suspect or believe that the information provided is inaccurate.

Signature of RBF Analyst – *Kristen Hurley, Environmental Analyst*

_____

Signature

Statement of Quality Control

The objective of this Initial Site Assessment was to ascertain the potential presence or absence of environmental releases or threatened releases that could impact the subject site, as delineated by the Scope of Work. The procedure was to perform reasonable steps in accordance with the existing regulations, currently available technology, and generally accepted engineering practices in order to accomplish the stated objective.

The Scope of this ISA does not purport to encompass every report, record, or other form of documentation relevant to the subject site being evaluated. Additionally, this ISA does not include or address reasonable ascertainable Environmental Liens currently recorded against the subject site. To the best of my knowledge, this ISA has been performed in compliance with RBF standard operating procedures protocol for Phase I ESAs.

Signature of RBF Environmental Assessor/Project Manager – *Richard Beck, REA #08065*

_____

Signature/Environmental Assessor/Project Manager

Table of Contents

Page

1.0 Introduction

1.1 Subject Site 1
1.2 Executive Summary 5
1.3 Recommendations 9
1.4 Scope of Services and Methodology Used 10
1.5 Limiting Conditions of Assessment 12

2.0 Physical Setting

2.1 Subject Site Description 16
2.2 Topography 16
2.3 Current Uses of Adjoining Properties 17
2.4 Geologic Conditions 17
2.5 Biological Setting 18
2.6 Drainage and Hydrology 19
2.7 Groundwater and Water Wells 19

3.0 Historical and Regulatory Searches

3.1 Methodologies and Limiting Conditions 20
3.2 Historical Site Usage 20
3.3 Regulatory Sources 26

4.0 Site Reconnaissance

4.1 On-Site Observations 30
4.2 Off-Site Observations 32

5.0 Findings, Opinions, and Recommendations

5.1 Findings and Opinions 36
5.2 Formal Recommendations 37

6.0 References 40

LIST OF EXHIBITS

1. Regional Vicinity 2
2. Site Vicinity 3
3. Subject Site 4
4. Overview Map 7
5. On-Site Photographs 34
6. Off-Site Photographs 35

LIST OF TABLES

1. Summary of Findings 6
2. Identified Sites Within a One-Mile Radius of the Subject Site 27

APPENDIX

A. Terminology
B. EDR Database Search
C. Documentation
D. Qualifications

LIST OF ACRONYMS

ACM	Asbestos Containing Materials
APN	Assessor's Parcel Number
AST	Aboveground Storage Tank
AULs	Activity and Use Limitations
CEFD	City of Encinitas Fire Department
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System (maintained by the Environmental Protection Agency)
CFR	Code of Federal Regulations
CORRACTS	facilities subject to Coreective Action under RCRA
CPSC	United States Consumer Product Safety Commission
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DEH	County of San Diego Department of Environmental Health
DOGGR	California Department of Oil, Gas, and Geothermal Resources
DTSC	Department of Toxic Substances Control (Cypress Office)
EDR	Environmental Data Resources
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act (also known as SARA Title III), 42 U.S.C. §§11001-11050 *et seq*.)
ERNS	emergency response notification system
ESA	Environmental Site Assessment
FOIA	U.S. Freedom of Information Act (5 U.S.C. §552 as amended by Public Law No. 104-231, 110 Stat.)
FR	Federal Register
HREC	Historic Recognized Environmental Condition
ICs	Institutional Controls
LBP	Lead Based Paints
LUFT	Leaking Underground Fuel Tank
LUST	Leaking Underground Storage Tank

MSDS	Material Safety Data Sheet
msl	mean sea level
NCP	National Contingency Plan
NFRAP	former CERCLIS sites where no further remedial action is planned under CERCLA
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
PCBs	Polychlorinated Biphenyls
REC	Recognized Environmental Condition
RCRA	Resource Conservation and Recovery Act (as amended, 42 U.S.C. §§6901 *et seq*.)
RWQCB	Regional Water Quality Control Board (San Diego)
SBBM	San Bernardino Base and Meridian
SDFD	City of San Diego Fire Department
TPH	Total Petroleum Hydrocarbons
TRI	Toxics Release Inventory
TSDF	*hazardous waste* treatment, storage, or disposal facility
USGS	United States Geological Survey
UST	Underground Storage Tank

Section 1 Introduction

The purpose of conducting this Phase I Environmental Site Assessment (ESA) is to permit the use of this report to satisfy one of the requirements to qualify for the Innocent Landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability that constitutes all appropriate inquiry into the previous uses of the property in order to identify ***Recognized Environmental Conditions (RECs)****. As defined in American Standards for Testing and Materials (ASTM) Standard Practice E 1527-05, an* ***REC*** *is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include* ***"de minimis"*** *conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be "de minimis" are not RECs.*

1.1 SUBJECT SITE

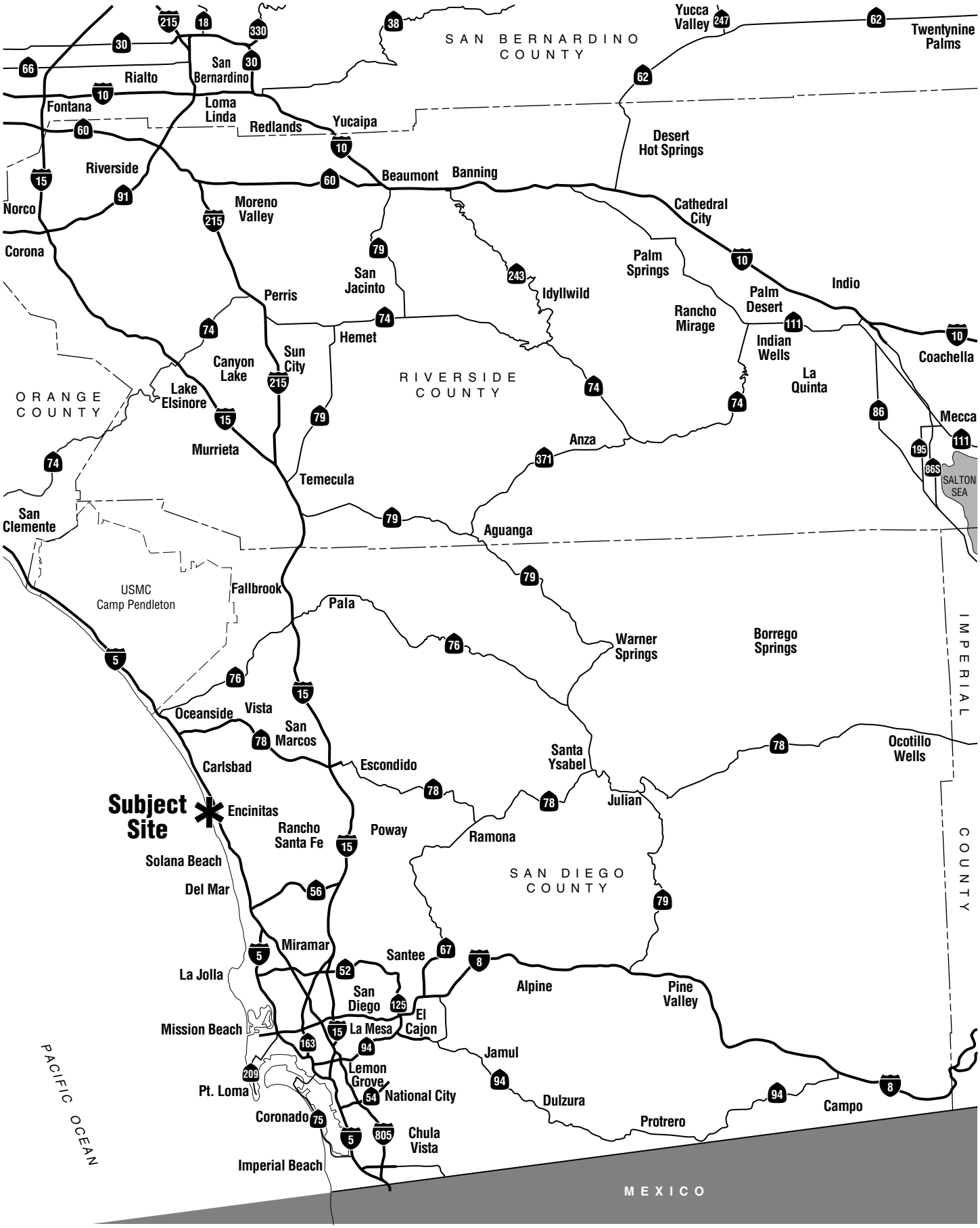
The Cabo Grill Property (Assessor's Parcel Numbers [APNs] 216-041-20-00 and -21-00), herein referred to as the "subject site", is located to the west of North Coast Highway 101 and to the south of the Batiquitos Lagoon, within the City of Encinitas, County of San Diego, State of California (T.12S, R.4W, Section 33, San Bernardino Base and Meridian [SBBM]) (refer to Exhibit 1, *Regional Vicinity*, and Exhibit 2, *Site Vicinity*).

Two (2) APNs (216-041-20-00 and -21-00) comprise the subject site with an approximate gross acreage of 2.95 acres. The subject site consists of one (1) structure and vacant land. The on-site structure (reported address 1950 North Coast Highway 101) is utilized for restaurant uses and is located within the northern portion of APN 216-041-20-00 (refer to Exhibit 3, *Subject Site*). On-site topography is sloping and is approximately 60 to 80 feet above mean sea level (msl), sloping to the east.

Overall, the subject site is primarily situated along the coastline of the developing area of Leucadia (within the City of Encinidas). Surrounding land uses consist of residential, commercial, and vacant land uses. Refer to Section 2.0, *Physical Setting*, for a complete description of on-site and off-site conditions.

1.1.1 Anticipated Future Uses

Specific future land uses remain undefined during the course of this ESA.



RBF CONSULTING

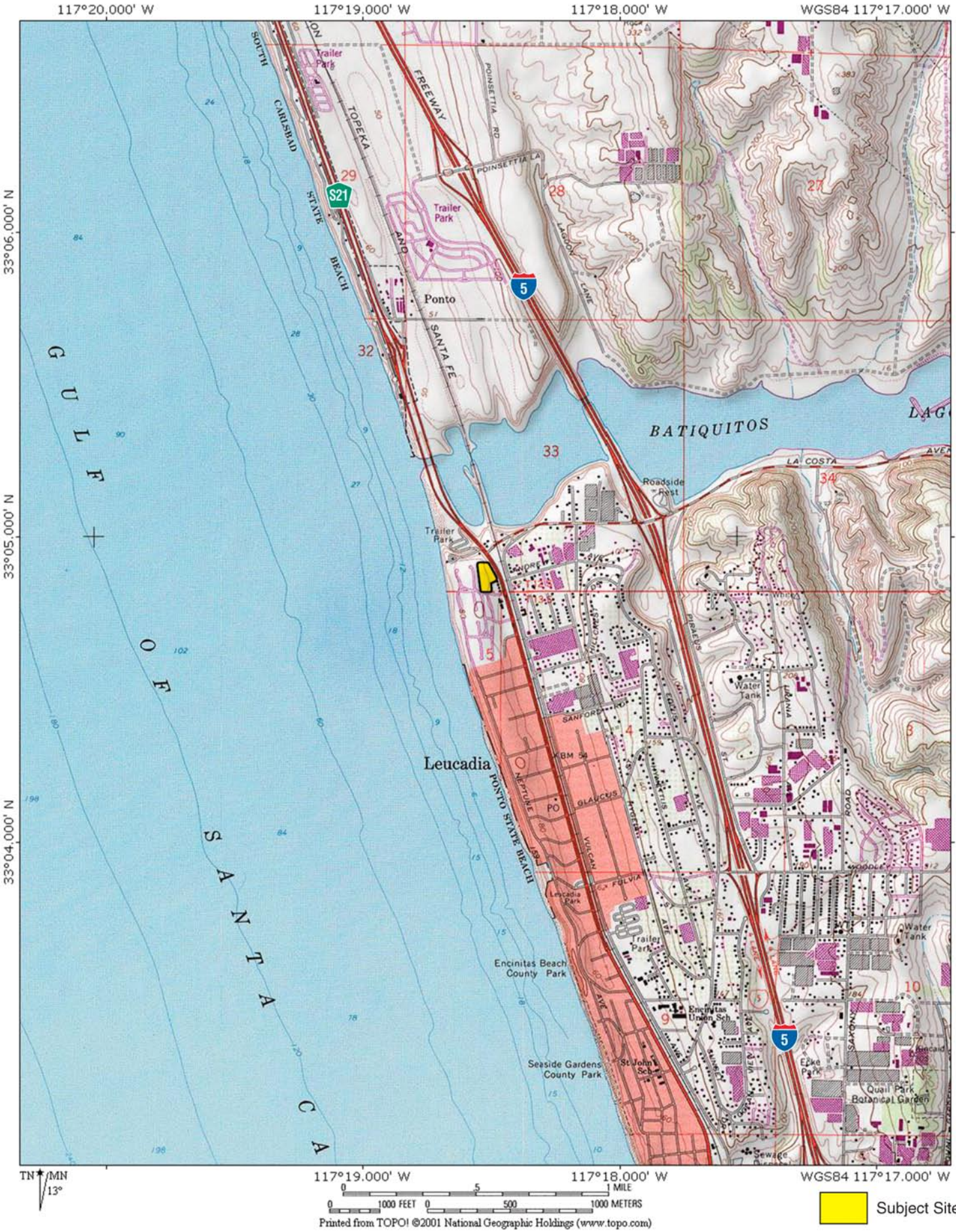
not to scale

4/11/07 JN 55-100374-13888

APPROXIMATE 2.59-ACRE
CABO GRILL PROPERTY • PHASE I ESA

Regional Vicinity

Exhibit 1



APPROXIMATE 2.59-ACRE
CABO GRILL PROPERTY • PHASE I ESA

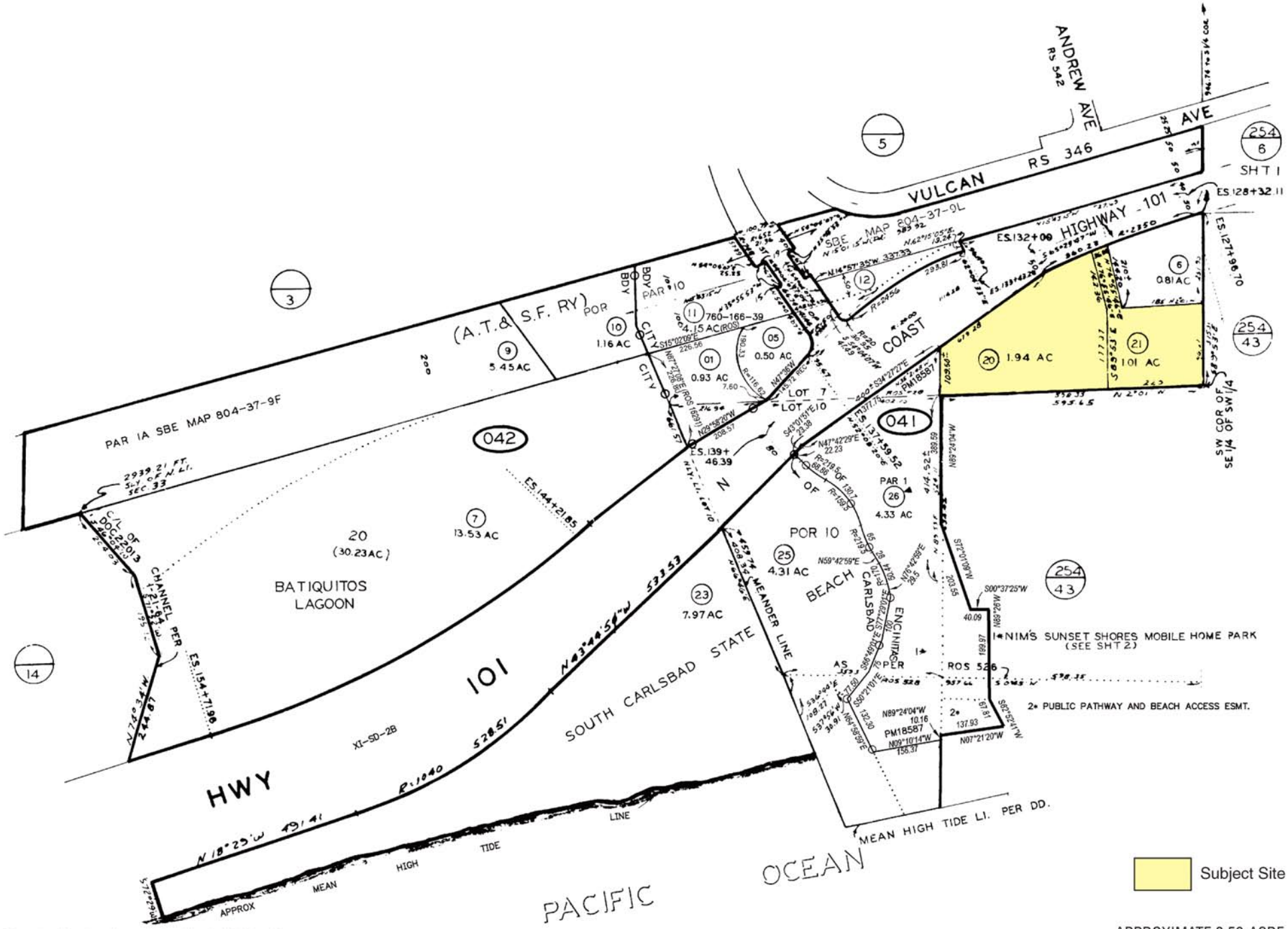
Site Vicinity

RBF CONSULTING

0 2500'
APPROXIMATE

4/11/07 JN 55-100374-13888

Exhibit 2



Source: San Diego County Assessor's Parcel Map, Book 216, Page 04.

RBF CONSULTING

not to scale

4/11/07 JN 55-100374-13888

APPROXIMATE 2.59-ACRE
CABO GRILL PROPERTY • PHASE I ESA

Subject Site

Exhibit 3

1.2 FINDINGS AND OPINIONS

Table 1, *Summary of Findings*, provides a summary of the findings of this ESA. A partial written summary of results of the ESA is as follows (refer to Sections 2.0 through 5.0 of this ESA for a complete discussion of our investigation and conclusions):

1.2.1 Site Inspection

Evidence of RECs within the boundary of the subject site was observed during the April 17, 2007 site inspection, which consisted of the following:

- Powerlines with transformers were noted on-site.
- One (1) metal pipe, painted white, was noted extending out of the ground within ornamental vegetation. The pipe had a removable metal cap and appeared to be filled with soil. Markings on the cap were indistinguishable.

1.2.2 Asbestos Containing Materials

Based upon the year (potentially constructed prior to 1978) the one (1) on-site structure was built, the potential for asbestos containing materials (ACMs) to be found on-site is considered likely.

1.2.3 Lead-Based Paints

Based upon the year (potentially constructed prior to 1978) the one (1) on-site structure was built, the potential for lead-based paints (LBPs) to be found on-site is considered likely.

1.2.4 Lead In Soil

Due to the age of Coast Highway 101 and the volumes of vehicles that have utilized this roadway, there is a potential that lead contamination exists within exposed soils within the vicinity of the City R/W (the eastern most portion of the subject site) and would potentially be released into the air during grading and construction activities.

1.2.5 Adjacent Properties

A rental equipment storage facility adjoins the subject site to the southeast. The facility appeared to store/maintain hazardous materials associated with construction equipment and other gasoline powered vehicles. All storage areas appeared to be located on asphalt. This property has not reported contamination to soil or groundwater at the time of this ESA. The presence of hazardous materials on the subject site that may have been generated from adjacent properties was not visible during the April 17, 2007 site inspection.

Table 1
Summary of Findings

ISSUE	Not noted	Noted	Historical	*De Minimis*	REC	HREC	Data Source	Opinion
Existing Structure(s)		X					Site Inspection	One (1) restaurant structures located on-site.
Evidence of Past Uses (Foundations/ Debris)	X							
Hazardous Substances Storage	X							
• Staining/Odors/Poor Housekeeping	X							
• Absent Secondary Containment	X							
• Unauthorized Disposal/Discharge	X							
Aboveground Storage Tank(s) (ASTs)	X							
Underground Storage Tanks(s) (USTs)/ Dispenser(s)	X							
Soil Staining/Pooled Liquid(s)	X							
Potential PCB-Containing Equipment	X							
Subsurface Hoist(s) or Hydraulic Equipment	X							
Floor Staining/Pavement Staining	X							
Floor Drain(s)	X							
Drainage ditches, ravines, gullies	X							
Pit(s), Pond(s), Basin(s), Lagoon(s), Surface Waters	X							
Stressed Vegetation	X							
Septic System(s)/Dry Well(s)	X							
Soil Pile(s)	X							
Miscellaneous Debris Pile(s)	X							
Storm-water Basin(s)	X							
Domestic Water Well(s)	X							
Agricultural Water Well(s)	X							
Groundwater Monitoring Well(s)	X							
Oil Well(s)/Suspected Drilling Mud Pits	X							
Sump(s)/Oil-water Separator(s)	X							
Undocumented Pipe(s)		X			X		Site Inspection	One (1) metal pipe, painted white, was visible extending out of the ground. The unidentified pipe had a metal cap. The pipe appeared to be filled with soil. Markings on the metal cap were indistinguishable during the April 17, 2007 site inspection.
Subsurface Pipeline(s)	X							
Adjacent or Vicinity Property Issue(s)	X							
Agricultural Chemicals Storage or Mixing	X							
Groundwater Issue(s)	X							
Railroad Tracks or Spur(s)	X							
Mine(s) or Mining Activities	X							
Sewer Lateral(s)/Pipeline(s)		X					Interview	The subject site is reportedly connected to sewer.
Vehicle/Equipment Servicing or Repairing	X							
Gasoline Station Usage History	X							
Dry Cleaner Usage History	X							
Industrial/Commercial Usage History	X							
Observed High-Voltage Power Lines		X					Site Inspection	Overhead power lines were visible traversing the the subject site.
• Transformers		X			X		Site Inspection	Transformers were visible on-site. No staining or leaking was visible.
Clean-up Lien(s)	X							
Data Gap	X							
• Data Failure		X			X			RBF was unable to interview current on-site operator(s), as they were unavailable at the time of this ESA. Additionally, RBF was unable to determine the exact age of the on-site structure.
• Other		X			X		Site Inspection	One (1) metal pipe was visible extending out of the ground; the exact use of this pipe is unknown at the time of this ESA.

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Landfill Sites

Dept. Defense Sites

Indian Reservations BIA

Oil & Gas pipelines

National Wetland Inventory

Areas of Concern

0 1/4 1/2 1 Miles

Source: EDR, Inc., 2007

RBF CONSULTING

4/11/07 JN 55-100374-13888

APPROXIMATE 2.59-ACRE
CABO GRILL PROPERTY • PHASE I ESA

Overview Map

Exhibit 4

1.2.6 Public Records

Available public records were reviewed. The lists that were reviewed identified no regulatory sites reported within the boundaries of the subject site. The lists identified five (5) regulatory sites located within a one-mile radius of the subject site. A potential REC on the subject site caused by these properties is considered to be low due to the groundwater flow direction from the subject site, proximity to the subject site, and/or the status of the identified sites. Refer to Exhibit 4, *Overview Map*, for an illustration of Environmental Data Resources' (EDR's) findings.

1.2.7 Historic Recognized Environmental Condition

A *"historic recognized environmental condition"* (HREC) is defined as a condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. HRECs are generally conditions which have in the past been remediated to the satisfaction of the responsible regulatory agency. Based on this definition, no HRECs have been noted within the boundaries of the subject site.

1.2.8 Historical Use(s) Information

Based upon the review of available historical aerial photographs, on-site agricultural uses appear to be present during the 1950s. Therefore, the potential exists that adverse environmental conditions were created by historic agricultural activities on-site. A combination of several commonly used pesticides (i.e., DDD, DDT, DDE) that are now banned may have been used throughout the subject site. It should be noted that the historical use of agricultural pesticides may have resulted in pesticide residues of certain persistence in soil at concentrations that are considered to be hazardous according to established federal regulatory levels. The primary concern with historical pesticide residues is human health risk from inadvertent ingestion of contaminated soil, particularly by children. The presence of moderately elevated pesticide residuals in soil present potential health and marketplace concerns.

Additionally, due to the age of North Coast Highway 101 and the volumes of vehicles that have utilized this Highway, there is a potential that lead contamination exists within exposed soils near roadway right-of-way on-site and would potentially be released into the air during grading and construction activities.

1.2.9 Data Gap

A data gap is a lack of or inability to obtain information required by the ASTM E1527-05 practice despite good faith efforts by the environmental professional to gather such information. Data Gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance and interviews. One (1) metal pipe was visible extending out of the ground; the exact use of this metal pipe is unknown at the time of this ESA. RBF was unable to interview current on-site operator(s), as they were unavailable at the time of this ESA. Additionally,

RBF was unable to determine the exact age of the on-site structure. However, based on available historical aerial photographs and topographic maps, the structure appears to have been constructed between the years 1975 and 1987, in which the potential exists for LBPs and ACMs to be present within the on-site structure.

1.3 RECOMMENDATIONS

Based on the records and other data reviewed during the preparation of this Phase I ESA, in general accordance with ASTM Standard Practice E 1527-05 and the scope of services, and subject to the limitations thereof, the following measures are recommended:

1.3.1 Pre-construction Activities

- The interior of on-site structure should be visually inspected prior to demolition or renovation activities. Should hazardous materials be encountered, the materials should be tested and properly disposed of in accordance with state and federal regulatory requirements. Any stained soils or surfaces underneath the removed materials should be sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required.
- Areas of exposed soils adjoining Coast Highway 101 R/W, which will be disturbed during excavation/grading activities, should be sampled and tested for lead, so that any special handling, treatment, or disposal provisions associated with aerially deposited lead may be included in construction documents (if aerially deposited lead is present).
- The terminus of the undocumented metal pipe should be defined. As historical agricultural uses existed on-site in the past, the unidentified pipe may be associated with a water well. If the pipe is found to be associated with a water well, the well should be properly closed and abandoned pursuant to state and federal guidelines (if not already done).
- The subject site has been historically utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling should occur throughout the subject site, as determined by a qualified Phase II//III specialist. The sampling will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.

1.3.2 Construction Activities

- Any transformers to be relocated during site construction/demolitions should be conducted under the purview of the local utility purveyor to identify proper handling procedures regarding potential PCBs.
- The exact age of the on-site structure should be determined. If the structure was constructed prior to 1978, pursuant to SCAQMD regulations, an asbestos survey must be conducted by

an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the levels of asbestos in structures should renovation or demolition occur. District Rule 1403 (Asbestos Emissions From Demolition/Renovation Activities) would be required for any demolition or renovation work involving asbestos containing material.

- The exact age of the on-site structure should be determined. If the structure was constructed prior to 1978, LBPs may be present and must be disposed of to an appropriate permitted disposal facility should renovation or demolition occur.
- If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contractor shall:
    - Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
    - Notify the Project Engineer of the implementing agency;
    - Secure the areas as directed by the Project Engineer; and
    - Notify the implementing agency's Hazardous Waste/Materials Coordinator.

1.4 SCOPE OF SERVICES AND METHODOLOGY USED

The scope of this ESA follows the general guidance provided in ASTM Standard Practice E 1527-05. The ASTM 1527-05 document outlines a procedure for completing ESAs that includes a search for recorded environmental cleanup liens; review of federal, tribal, state, and local government records; visual inspection of the property and of adjoining properties; and interviews with current owners, operators, and occupants. The ASTM document recommends the following regulatory database search distances from a property:

- National Priorities List (NPL) – 1.0 mile
- Federal Delisted NPL – 0.5 mile
- Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list – 0.5 mile
- CERCLIS/NFRAP site list – 0.5 mile
- Federal RCRA Corrective Action Report (CORRACTS) facilities list – 1.0 mile
- Federal RCRA non-CORRACTS Permitted Treatment, Storage, Disposal Facilities (TSD) facilities list – 0.5 mile
- Federal RCRA Registered Small or Large Generators of Hazardous Waste (GNRTR) – property and adjoining properties
- Federal institutional control/engineering control registries – property only
- Federal ERNS list – property only

- State and tribal lists of hazardous waste sites identified for investigation or remediation:
    - State- and tribal-equivalent NPL – 1.0 mile
    - State- and tribal-equivalent CERCLIS – 0.5 mile
- State and tribal landfill and/or solid waste disposal site lists – 0.5 mile
- State and tribal leaking storage tank (LUST) lists – 0.5 mile
- State and tribal registered storage tank lists – property and adjoining properties
- State and tribal institutional control/engineering control registries – property only
- State and tribal voluntary cleanup sites – 0.5 mile
- State and tribal Brownfield sites – 0.5

The objectives of the ESA contained herein are as follows:

- Evaluate the potential for hazardous materials on the subject site based upon readily discernible and/or documented present and historic uses of the property and uses immediately adjacent to the site; and
- Generally characterize the expected nature of hazardous materials that may be present as a result of such uses, within the limits imposed by the scope of this ESA.

This ESA is not intended to provide specific qualitative or quantitative information as to the actual presence of hazardous materials at the site, merely to identify the potential presence based on available information. To achieve the objectives of this ESA, RBF conducted a Phase I ESA of the subject site to provide preliminary conclusions relative to site conditions.

The ESA included the following components, which are designed to aid in the discovery and evaluation of recognized environmental conditions:

- RBF performed a site visit on April 17, 2007, consisting of a visual examination of the subject site for visual evidence of potential environmental concerns including existing or potential soil and groundwater contamination, as evidenced by soil or pavement staining or discoloration, stressed vegetation, indications of waste dumping or burial, pit, ponds, or lagoons; containers of hazardous substances or petroleum produces; electrical and hydraulic equipment that may contain PCBs, such as electrical transformers and hydraulic hoists; and underground and aboveground storage tanks. RBF observed the physical characteristics of the property (i.e., apparent runoff directions, location of paved areas, etc.). It should be noted that the site visit specifically excluded any subsurface investigation including, but not limited to, sampling and/or laboratory analysis.
- An investigation of historical use of the subject site by examining locally available aerial photographs (one source) and other readily available historical information, for evidence of potential environmental concerns associated with prior land use.

- A review of information available on general geology and topography of the subject property and local groundwater conditions.
- A review of environmental records available from the property owner or site contact including regulatory agency reports, permits, registrations, and consultant's reports for evidence of potential environmental concerns.
- A site property line visual assessment of adjacent properties for evidence of potential off-site environmental concerns that may affect the subject property.
- A review of a commercial database summary (provided by EDR), of federal, state, and local regulatory agency records pertinent to the subject property and off-site facilities located within ASTM-specified search distances for the subject property.
- Interviews with key site personnel, as available, regarding current and previous uses of the subject site, particularly activities involving hazardous substances and petroleum products.
- RBF compiled the data reviewed, discussed findings, formulated conclusions, opinions and recommendations, and prepared this written report presenting the findings of the ESA.
- The performance of the ESA was not limited by any extraordinary conditions (other than identified Data Gaps) or circumstances.

1.5 LIMITING CONDITIONS OF ASSESSMENT

The findings and professional opinions of RBF are based on the information made available to RBF (listed in Section 6.0, References) from public records, and should be understood to be preliminary only.

RBF makes no warranties, either expressed or implied, concerning the completeness of the data made available to us for this study and withholds certification of any type concerning the presence or absence of contamination of the subject site. RBF is not responsible for the quality or content of information from these sources. The report states our conclusion based on the limitations of our scope of services, in accordance with generally accepted standards for a Phase l ESA.

Subsurface exploration, geologic mapping, laboratory testing of soil or water samples, lead and asbestos sampling, and operations/inventory review of adjacent uses were not performed in connection with this ESA. This ESA represents our professional judgment, based on the level of effort described above, as to the present potential for hazardous materials at the site.

Subsurface exploration, sampling and laboratory testing should be performed if it is deemed necessary or required to quantify the actual absence or presence of hazardous materials and recommend possible remediation measures for such hazardous materials (a "Phase II" investigation).

This ESA does not satisfy continuing obligations under CERCLA liability protections provided for innocent landowners, bona fide prospective purchasers and contiguous property owners, which includes, but is not limited to, duties required after property acquisition (i.e., compliance with land use restrictions and institutional controls, undertake "reasonable steps" with respect to hazardous substances releases, compliance with other obligations such as reporting obligations and information requests, etc.).

This ESA addressed the likelihood of the presence of hazardous substances and/or petroleum products resulting from past and current known uses of the property and nearby properties. Certain conditions, such as those listed below, may not be revealed:

- Naturally occurring toxins in the subsurface soils (i.e., radon), rocks, or water, or toxicity of the on-site flora;
- Toxicity of substances common in current habitable environments, such as stored household products, building materials, and consumables;
- Biological pathogens;
- Subsurface contaminant plume from a remote source;
- Contaminants or contaminant concentrations that do not violate present regulatory standards but may violate such future standards; and
- Unknown site contamination, such as "midnight dumping" and/or accidental spillage, which could have occurred after RBF's site visit.

1.4.1 User Responsibilities

The purpose of this section is to describe tasks to be performed by the user that will help identify the possibility of recognized environmental conditions in connection with the subject site. These tasks do not require the technical expertise of an environmental professional and are generally not performed by environmental professionals performing a Phase I Environmental Site Assessment. The interview questionnaire utilized within this ESA is optional to the user and aids the environmental professional in gathering information from the user that may be material to identifying recognized environmental conditions. The following tasks are required, by the user of this ESA, to satisfy the requirements of conducting all appropriate inquires:

- *Review Title and Judicial Records for Environmental Liens or Activity and Use Limitations (AULs)* – Reasonably ascertainable recorded land title records and lien records that are filed under federal, tribal, state, or local law should be reviewed to identify environmental liens or activity and use limitations, if any, that are currently recorded against the property. Environmental liens and activity and use limitations that are imposed by judicial authorities may be recorded or filed in judicial records, and,

where applicable, such records should be reviewed. Any environmental liens or activity and use limitations so identified shall be reported to the environmental professional conducting a Phase I Environmental Site Assessment. Unless added by a change in the scope of work to be performed by the environmental professional, this practice does not impose on the environmental professional the responsibility to undertake a review of recorded land title records and judicial records for environmental liens or activity and use limitations. The user should either (1) engage a title company or title professional to undertake a review of reasonably ascertainable recorded land title records and lien records for environmental liens or activity and use limitations currently recorded against or relating to the property, or (2) negotiate such an engagement of a title company or title professional as an addition to the scope of work to be performed by the environmental professional.

- *Reasonably Ascertainable* – Except to the extent that applicable federal, state, local, or tribal statutes, or regulations specify any place other than recorded land title records for recording or filing environmental liens or activity and use limitations or specify records to be reviewed to identify the existence of such environmental liens or activity and use limitations, environmental liens or activity and use limitations that are recorded or filed any place other than recorded land title records are not considered to be reasonably ascertainable.
- *Specialized Knowledge or Experience of the User* – If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional. The user should do so before the environmental professional conducts the site reconnaissance.
- *Actual Knowledge of the User* – If the user has actual knowledge of any environmental lien or AULs encumbering the property or in connection with the property, it is the user's responsibility to communicate such information to the environmental professional. The user should do so before the environmental professional conducts the site reconnaissance.
- *Reason for Significantly Lower Purchase Price* – In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The user should try to identify an explanation for a lower price which does not reasonably reflect fair market value if the property were not contaminated, and make a written record of such explanation. Among the factors to consider will be the information that becomes known to the user pursuant to the Phase I Environmental Site Assessment. The ASTM E1527-05 standard does not require that a real estate appraisal be obtained in order to ascertain fair market value of the property.

- *Commonly Known or Reasonably Ascertainably Information* – If the user is aware of any commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate such information to the environmental professional. The user should do so before the environmental professional conducts the site reconnaissance.
- *Other* – Either the user shall make known to the environmental professional the reason why the user wants to have the Phase I Environmental Site Assessment performed or, if the user does not identify the purpose of the Phase I Environmental Site Assessment, the environmental professional shall assume the purpose is to qualify for an LLP to CERCLA liability and state this in the report. In addition to satisfying one of the requirements to qualify for an LLP to CERCLA liability, another reason for performing a Phase I Environmental Site Assessment might include the need to understand potential environmental conditions that could materially impact the operation of the business associated with the parcel of commercial real estate. The user and the environmental professional may also need to modify the scope of services performed under this practice for special circumstances, including, but not limited to , operating industrial facilities or large tracts of land (large areas or corridors).

The information and opinions rendered in this ESA are exclusively for use by **KSL La Costa Resort and Spa**. RBF will not distribute or publish this report without the consent of **KSL La Costa Resort and Spa**, except as required by law or court order. The information and opinions expressed in this ESA are given in response to RBF's scope of services and limitations indicated above and should be considered and implemented only in light of the scope of services and limitations. The services provided by RBF in completing this ESA were consistent with normal standards of the profession. No warranty, expressed or implied, is made.

Section 2 PHYSICAL SETTING

Physical setting sources typically provide information regarding geologic, hydrogeologic, hydrologic, or topographic characteristics of a property. The following information is primarily based on review of the United States Geological Survey (USGS) Encinitas, California Quadrangle, dated 1997 and a site inspection conducted by RBF on April 17, 2007. Other miscellaneous resources utilized within this section and throughout the ESA are referenced in Section 6.0, References.

2.1 SUBJECT SITE DESCRIPTION

2.1.1 Location

The subject site is located to the west of North Coast Highway 101 and to the south of the Batiquitos Lagoon, within the City of Encinitas, County of San Diego, State of California (T.12S, R.4W, Section 33, SBBM).

2.1.2 Current Use(s) of the Subject Site

Two (2) APNs (216-041-20-00 and -21-00) comprise the subject site with an approximate gross acreage of 2.95 acres. The subject site consists of one (1) structure and vacant land. The on-site structure (reported address 1950 North Coast Highway 101) is utilized for restaurant uses and is located within the northern portion of APN 216-041-20-00.

2.1.3 Description of On-Site Structures and Roads

The site consists of one (1) restaurant structure and associated parking lot, one (1) unimproved roadway, and one (1) improved roadway. The on-site structure appeared to be constructed of wood and stucco materials. The on-site parking lot had minor visible staining, typical of most commercial parking areas. Additionally, one (1) unimproved roadway connected the southern portion of the subject site, which consists of vacant land, to Coast Highway 101 (to the east).

2.1.4 Zoning/Land Use Records

Zoning/land use records generally consist of records maintained by the local government in which the subject site is located. They indicate the uses permitted by the local government for particular zones within its jurisdiction. The records may consist of maps and/or written records. According to the City of Encinitas, E-Zoning records, the subject site's land use designation is Visitor Service Commercial (N-VSC).

2.2 TOPOGRAPHY

The USGS maps show geological formations and their characteristics, describing the physical setting of an area through contour lines and major surface features including lakes, rivers, streams, buildings,

landmarks, and other factors that impact the spread of contamination. Additionally, the maps depict topography through color and contour lines and are helpful in determining elevations and site latitude and longitude.

Based on the USGS *Encinitas, California* Quadrangle, dated 1997, on-site topography is approximately 60 to 80 feet above msl and slopes to the east. The subject site appears to consist of developed land. Coast Highway 101 adjoins the subject site to the east. The Batiquitos Lagoon is visible to the north and Ponto State Beach is visible to the southeast of the subject site. Surrounding uses appear to consist of developed land. No on-site pits, ponds, or lagoons were noted on this topographical map.

2.3 CURRENT USES OF ADJOINING PROPERTIES

For the scope of this ESA, properties are defined and categorized based upon their physical proximity to the subject site. An adjoining property is considered any real property or properties the border of which is contiguous or partially contiguous with that of the subject site, or that would be contiguous or partially contiguous with that of the subject site but for a street, road, or other public thoroughfare separating them. An adjacent property is any real property located within 0.25 mile of the subject site's border. The following is a detailed description of each adjoining land use observed on April 17, 2007:

- North: Vacant land is located to the north of the subject site.
- East: Residential and commercial uses are located to the east of the subject site. Additionally, Coast Highway 101 is located to the east of the subject site, trending in a north/south direction.
- South: Residential land uses are located to the south of the subject site.
- West: Residential land uses and vacant land are located to the west of the subject site.

2.4 GEOLOGIC CONDITIONS

2.4.1 Geology

The USGS Geological Map Index was searched by EDR for available geological maps that cover the subject site and surrounding areas. These geological maps indicate geological formations that are overlaid on a topographic map. Some maps focus on specific issues (i.e., bedrock, sedimentary rocks, etc.) while others may identify artificial fills (including landfills). Geological maps can be effective in estimating permeability and other factors that influence the spread of contamination.

According to the EDR GeoCheck Report, the subject site is underlain by the Marina soil component. The land consists of a stratified sequence from the Cenozoic era. The depth to bedrock is greater than 60 inches.

2.4.2 Soils

The subject site is situated on the Marina-Chesterton association. The Marina-Chesterton association is somewhat excessively drained to moderately well-drained loamy coarse sands and fine sandy loams that have a subsoil of sandy clay over a hardpan; 2 to 15 percent slopes. The U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) Soil Survey Maps were searched for available soils within the subject site. One (1) soil series (with multiple phases) is located on the subject site and is described as follows:

> **Marina loamy coarse sand, 2 to 9 percent slopes (MIC):** This soil series consists of somewhat excessively drained, very deep loamy coarse sands derived from weakly consolidated to noncoherent ferruginous eolian sand. These soils are on old beach ridges. This particular soil is undulating to gently rolling soil on ridges. The slope is dominantly 4 percent. Included with this soil in mapping are small areas of Carlsbad soils, Chesterton soils, and Corralitos soils. Permeability is rapid. The available water holding capacity is 4 to 5 inches. Runoff is slow to medium, and the erosion hazard is slight to moderate.
>
> **Marina loamy coarse sand, 9 to 30 percent slopes (MIE):** This soil series consists of somewhat excessively drained, very deep loamy coarse sands derived from weakly consolidated to noncoherent ferruginous eolian sand. These soils are on old beach ridges. This particular soil is rolling to hilly. Runoff is medium to rapid, and the erosion hazard is moderate to high. In other features, this soil is similar to Marina loamy coarse sand, 2 to 9 percent slopes. Included in mapping are small areas of Carlsbad soils, Chesterton soils, and Corralitos soils.

2.4.3 Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. Radon is an invisible, odorless, inert gas that emits alpha particles, known to cause lung cancer. Radon levels are highest in basements (areas in close proximity to the soil) that are poorly ventilated. A radon survey was not included within the scope of this investigation. According to the "*U.S. EPA Map of Radon Zones*," the County of San Diego is located within Zone 3, which has a predicted average indoor screening level of <2.0 Picocuries per liter (pCi/L). EPA recommends remedial actions when radon levels are greater than 4.0 pCi/L.

2.5 BIOLOGICAL SETTING

The biotic community that exists within the vicinity of the subject site consists of that typical of developed coastal areas. The southern portion of the subject site consists of non-native and native species typical of vacant coastal land; the northern portion of the subject site consists mainly of non-native species typical of developed commercial areas.

2.6 DRAINAGE/HYDROLOGY

2.6.1 Drainage

Drainage of the subject site is accomplished by downward surface percolation and overland sheet flow, which is generally in a eastern direction across the subject site. The on-site drainage is anticipated to be sheet flow that follows the general topography of the area in a eastern direction.

2.6.2 Flood Hazards

Flood Prone Area Maps published by the USGS show areas prone to 100-year floods overlaid on a topographical map. These maps are not considered the official Federal Emergency Management Agency (FEMA) flood maps; therefore, in cases where a property is located immediately adjacent to or within the flood prone boundary, a FEMA map should be obtained. According to the EDR Database search, the subject site is not located within a 100-year flood zone (refer to the Appendix B, *EDR Search*).

2.7 GROUNDWATER AND WATER WELLS

No technical groundwater or water well data was readily available for the subject site during the preparation of this ESA. As a result, RBF assumes groundwater flow would follow the slope of the ground surface elevations towards the nearest open body of water or intermittent stream. The direction of this flow on-site is expected to be generally in an easterly direction. Note that groundwater flow direction within the boundaries of the subject site may vary, as the Pacific Ocean is located less than ½ west of the subject site and potential seawater intrusion may occur. According to the EDR Database search, no water wells are reported within a one-mile radius of the subject site.

Section 3 HISTORICAL & REGULATORY SEARCHES

The ASTM Phase I Standard (E1527-05) allows discretion in choosing from among eight standard sources, plus "other" non-specific sources (other non-specific sources can include newspaper archives and records in the files and/or personal knowledge of the property owner and/or occupants). The standard sources are aerial photographs, fire insurance maps, property tax files, recorded land title records (a chain-of-title), historical topographic maps, local street directories, building department records, and zoning/land use records. The focus is on usage rather than ownership, which is why a chain-of-title is not sufficient by itself.

3.1 METHODOLOGIES AND LIMITING CONDITIONS

Historical subject site use information was obtained from **1901** to the present. Per ASTM, historical uses "shall be identified from the present, back to the **property's obvious** first development use [including agricultural and fill activities], or back to 1940, whichever is **earlier**."

Data failure (a subset of a data gap) occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives of this ESA have not been met. Data failure is not uncommon in trying to identify the use of the property at five-year intervals back to the first use or 1940 (whichever is earlier). RBF was unable to interview current on-site operator(s), as they were unavailable at the time of this ESA. Additionally, RBF was unable to determine the exact age of the on-site structure. However, based on available historical aerial photographs and topographic maps, the structure appears to have been constructed between the years 1975 and 1987, in which the potential exists for LBPs and ACMs to be present within the on-site structure.

3.2 HISTORICAL SITE USAGE

The following historical information is based upon review of available historical maps and documents, available public information, interviews, and a review of a series of historical aerial photographs dating from 1939 to 2002.

3.2.1 Interviews

The objective of interviews is to obtain information indicating RECs in connection with the subject site. A reasonable attempt shall be made to interview a reasonable number of occupants of the property.

3.2.1.1 Current On-Site Owner (and/or Key Site Manager)

The current on-site owner was not available at the time of this ESA. RBF contacted Ms. Jennifer Tapa, the Key Site Manager identified by the Phase I ESA user (KSL La Costa Resort and Spa) for the subject site, on April 4, 2007. Ms. Tapa indicated that the subject site includes structures that are connected to a sewer line. Ms. Tapa stated that the purchase price is considered to be fair market value and she is not aware of any spills or other chemical releases that have taken place at the property. Ms. Tapa is not aware of any commonly known or reasonably ascertainable information about the property. Ms. Tapa stated that she has no knowledge or experience related to the property, which would show obvious indicators that point to the presence or likely presence of contamination (refer to Appendix C, *Documentation*).

3.2.1.2 Current On-Site Occupant

One (1) restaurant is present within the boundaries of the subject site. However, the occupant (tenant) of the restaurant (Cabo Grill) was unavailable for interview at the time of this ESA.

3.2.1.3 Current On-Site Operator

One (1) restaurant is present within the boundaries of the subject site. However, the operator of the restaurant (Cabo Grill) was unavailable for interview at the time of this ESA.

3.2.1.4 County of San Diego Assessor/Building Department

RBF contacted the County of San Diego Assessor/Building Department on April 17, 2007, if an effort to obtain available building records pertaining to the on-site address 1950 North Coast Highway 101, Encinitas. Staff stated that although building records associated with the on-site address are maintained at the County of San Diego, the maintained records are not available for public review.

3.2.1.5 Regional Water Quality Control Board

RBF contacted the Regional Water Quality Control Board (RWQCB) on March 30, 2007, requesting all available files associated with the on-site address 1950 North Coast Highway 101 (APNs 216-041-20-00, and -21-00). Staff member, Ms. Sylvia Wellnitz, stated that the RWQCB does not maintain files for the requested property. Ms. Wellnitz referred RBF to the County of San Diego Department of Environmental Health (DEH); refer to Section 3.2.2.9, *File Record Review*, for a detailed discussion of all records requested, and Appendix B, *Documentation*).

3.2.1.6 City of Encinitas Fire Department

RBF interviewed a staff member at the City of Encinitas Fire Department (CEFD) on March 29, 2007 to determine if the CEFD maintain files pertaining to hazardous materials associated with the subject site. Staff stated that no files are maintained by the CEFD for the reported address 1950 North Coast Highway 101 (APNs 216-041-20-00 and -21-00). However, staff stated that files might be maintained by the County of San Diego Department of Environmental Health (DEH) (refer to Section 3.2.2.9, *File Record Review*, for a detailed discussion of all records requested, and Appendix B, *Documentation*).

3.2.1.7 Other Interview Sources

No additional interviews were conducted during the course of this ESA.

3.2.2 Documentation

3.2.2.1 Building Department Records

Building Department Records are those records of the local government in which the subject site is located indicating permission of the local government to construct, alter, or demolish improvements on the property. The purpose for a records review is to obtain and review available building permit records, which would help to evaluate potentially recognizable environmental condition(s), which could be connected with the subject site. Generally, Building Department Records are based on a property's street address. RBF reviewed available building department records for 1950 North Coast Highway 101 at the City of San Diego on April 17, 2007. Although records were on file, the records consisted of minor tenant improvements (i.e., electrical, interior fire damage repair, deck improvements, and signage); no permits or additional information relevant to this ESA were noted (refer to Appendix C, *Documentation*).

3.2.2.2 Recorded Land Title Records

Recorded land titles are records usually maintained by the municipal clerk or county recorder of deeds which detail ownership fees, leases, land contracts, easements, liens, deficiencies, and activity and land use limitations (AUL) attached to or recorded against the subject site within the local jurisdiction having control for or reporting responsibility to the subject site. According to the EDR Environmental Lien Search Report, no environmental liens and/or other AULs were found in association with the on-site address 1950 North Coast Highway 101 (APNs 216-041-20-00 and -21-00).

3.2.2.3 Property Data

RBF searched property data for the subject site via *First American Real Estate Solutions* and the legal description for the subject site. This data typically provides current property ownership information and includes information regarding on-site improvements, zoning, land use, transfer of last sale, and other miscellaneous structural improvements. Property

information was available for the subject site via *First American, RealQuest Property Data*; a parcel map for the subject site was reviewed as part of Map 216-041, in which the subject site is included. The subject site consists of APNs 216-041-20-00 (approximately 1.94 acres) and -21-00 (approximately 1.01 acres), composing an approximate gross acreage of 2.95 acres. APN 216-041-20-00 (1950 North Coast Highway 101) has reported a Restaurant Building land use. APN 216-041-21-00 (1950 North Coast Highway 101) is utilized as vacant commercial uses.

3.2.2.4 City Directory Searches

City directories, published by private companies (or sometimes the government), provide a chronological sequence of past site ownership, occupancy, and/or uses for a property by reference of an address. This type of search is particularly effective to determine the past uses of developed properties. EDR provided a City Directory Search for the subject site on November 29, 2005. According to the City Directory Search, the subject site was listed as Michael's Restaurant (1980 and 1985) and Davina's Cabo Grill (2005). No other uses were listed on-site within the years searched (1980-2005). Adjoining properties were listed as office building uses within the years 1980 through 2005.

3.2.2.5 Sanborn Fire Insurance Maps

Sanborn maps contain detailed drawings, which indicate the location and use of structures on a given property during specific years. These maps were originally produced to show buildings in sufficient detail for insurance underwriters to evaluate fire risks and establish premiums, but now are utilized as a valuable source of historical and environmental risk information. No Sanborn maps were available for the subject site or immediate vicinity at the time of this ESA.

3.2.2.6 Historical Topographic Maps

RBF reviewed historical topographic maps dated 1901 through 1997 for the subject site and adjacent areas provided by EDR. Review of available historical topographic maps provided the following chronological sequence of site history. Copies of the historical topographic maps as well as the most recent topographic map are presented in Appendix C, *Documentation*.

1901-
1904: In the 1901 and 1904 USGS *Oceanside and Southern CA Sheet 2, California* Quadrangles, the subject site consists of vacant land. The 1901 and 1904 Quadrangles are 15 and 60 Minute (') Series topographic maps, respectively, which generally labels towns, rivers, peaks, and major land features; however, specific detail (structures and elevations, etc.) remains undefined. Elevation appears to be approximately 60 to 80 feet above mean sea level (msl). The Southern California Railroad (SCRR) is visible to the east of the subject site,

trending in a north/south direction. Multiple blue line streams are visible surrounding the subject site. These streams flow into the Batiquitos Lagoon (to the north of the subject site) and an unnamed canyon (to the south of the subject site). The developing area of Encinitas is visible to the south of the subject site. No on-site structures, pits, ponds, or lagoons were noted on the 1901 and 1904 topographic maps.

1947-1949: In the 1947 USGS *Oceanside and Encinitas, California* Quadrangles (15' and 7.5' Series, respectively), the subject site appears to consist of vacant land. The subject site is located within the developing area of Leucadia. North Coast Highway 101 is visible adjoining the subject site to the east and trending in a north/south direction. Adjoining uses appear to consist of sparse structures and infrastructure. No on-site structures, pits, ponds, or lagoons were noted on the 1947 topographic map.

1968-1975: In the 1968 and 1975 USGS *Encinitas, California* Quadrangles, the subject site continues to consist of vacant land. Four (4) structures are visible adjoining the subject site to the southeast. Unimproved roadways are visible to the west of the subject site. Development within Leucadia has increased significantly. No on-site structures, pits, ponds, or lagoons were noted on the 1968 and 1975 topographic maps.

1997: In the 1997 USGS *Encinitas, California* Quadrangle, the subject site appears to consist of developed land. Surrounding uses also appear to consist of developed land. Multiple large structures are visible to the east of the subject site. No on-site pits, ponds, or lagoons were noted on the 1997 topographic map.

Based on review of the above-referenced historical topographic maps, the subject site appears to have consisted of vacant land until an unknown year between 1975 and 1997, at which time the subject site was converted to developed land. North Coast Highway is visible adjoining the subject site in the 1947 through 1997 topographic maps.

3.2.2.7 Historical County Planning Maps

Beginning in the 1930s, historical county planning maps were used by highway departments to disburse federal funding based on each county's road system. Some states just mapped roads, but many added cultural features such as farms and factories. These features were usually shown everywhere except within city limits. These maps are especially useful in conjunction with historical topographic maps. The topographical map can indicate the size, shape, and location of structures, while the historical county planning map can identify their use. However, this ESA has relied upon other standard historical

information sources assumed to be either more accurate or informative than Historical County Planning Maps.

3.2.2.8 California Department of Oil, Gas, and Geothermal Resources

RBF reviewed a Wildcat Map provided by the California Department of Oil, Gas, and Geothermal Resources (DOGGR). These maps indicate existing and historical oil and gas wells within the immediate vicinity of the subject site. Current well status for any well indicated on the Wildcat Maps should be confirmed at the appropriate Division of Oil and Gas District Office. According to the Wildcat Map W1-7, San Diego and Riverside Counties, dated February 6, 1999, the subject site does not appear to be located in a sedimentary basin with oil, gas, or geothermal production (refer to Appendix C, *Documentation*).

3.2.2.9 File Record Review

RBF requested files from the CEFD, DEH, RWQCB, and Department of Toxics Substances Control Board (DTSC) for the reported on-site address 1950 North Coast Highway 101 (APNs 216-041-20-00 and -21-00); however, the CFD, DEH, RWQCB, and DTSC did not maintain files for the address/APNs requested.

3.2.3 Aerial Photographs

RBF reviewed available aerial photographs for the subject site and immediately adjacent areas to assist in the identification of development activities that have historically occurred on-site. Review of available historical aerial photographs dated 1939 through 2002 provided the following chronological sequence of site history. The aerial photographs were provided by EDR and are listed in Section 6.0, *References.* Copies of these historical aerial photographs are presented in Appendix C, *Documentation.*

1939: In the 1939 aerial photograph, the subject site appears to consist of agricultural land uses. Surrounding land uses appear to consist of agricultural uses to the east and southeast, vacant land to the west, and the Batiquitos Lagoon to the north. North Coast Highway 101 is visible to the east of the subject site and trends in a north/south direction.

1946-
1963: In the 1946 through 1963 aerial photographs, the subject site appears to consist of vacant land. Agricultural land uses are visible adjoining the subject site to the south and west. Four (4) structures are visible adjoining the subject site to the southeast. Development is visible to the northwest of the subject site. The general area appears to consist of sparse structures and agricultural uses.

1974: In the 1974 aerial photograph, the subject site appears to consist of vacant land. Residential development is visible to the west of the subject site. Surrounding development has increased and agricultural land uses within the area have decreased significantly. Multiple large structures are visible to the east of North Coast Highway 101.

1989-2002: In the 1989 through 2002 aerial photographs, the subject site appears to consist of approximately one (1) structure located within the northern portion of the subject site. The southern portion of the subject site consists of vacant land. Surrounding land uses appear similar to that viewed in the 1974 aerial photograph.

Based on review of the above-referenced historical aerial photographs, the subject site appears to have primarily consisted of approximately one (1) structure (constructed between 1974 and 1989) located within the northern portion of the subject site and past agricultural activities. Additionally, North Coast Highway 101 is visible adjoining the subject site to the east in the 1939 through 2002 aerial photographs.

3.2.4 Other Historical Sources

Other historical sources include miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the property owner and/or occupants. No other historical sources were reviewed during the course of this ESA.

3.3 REGULATORY SOURCES

The governmental sources have been searched by EDR (at the request of RBF) for sites within the subject site and within an approximate one-mile radius of the subject site boundaries. Upon completion of their search, EDR provided RBF with their findings dated March 29, 2007. RBF makes no claims as to the completeness or accuracy of the referenced sources. Our review of EDR's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites. To reduce the potential for omitting possible hazardous material sites on the subject site and within the surrounding area, sites may be listed in this report if there is any doubt as to the location because of discrepancies in map location, zip code, address, or other information. Refer to Appendix B, *EDR Search*, for a listing and description of the federal and state records searched.

3.3.1 Standard Environmental Record Searches

3.3.1.1 Subject Site

Available public records (provided by EDR) were reviewed by RBF on March 29, 2007. The lists that were reviewed, did not report a regulatory site within the boundaries of the

subject site. No known corrective action, restoration, or remediation has been planned, is currently taking place, or has been completed on the subject site. The subject site has not been under investigation for violation of any environmental laws, regulations, or standards, as identified in the databases reported by EDR.

3.3.1.2 All Regulatory Listed Sites Within a One-Mile Radius of the Subject Site

The lists identified five (5) listed regulatory properties located within a one-mile radius of the subject site (refer to Table 2, *Identified Sites Within One-Mile Radius of the Subject Site*, presented at the end of this Section). A potential REC on the subject site caused by these properties is considered to be low due to the groundwater flow direction, proximity of the properties to the subject site, and/or the status of the identified sites.

3.3.1.3 Orphan Summary

According to EDR's *ESA Report Desktop Reference*, dated 1996, some reported sites (Orphan Sites) are unmappable as exact locations remain undefined. Listings in publicly available records, which do not have adequate address information, are not generally considered practically reviewable. For the purposes of this ESA, practically reviewable is defined as information provided in a manner and in a form that yields information without the need for extraordinary analysis of irrelevant data. Although the location of these sites may be unknown, the site and detail information are often available through EDR.

RBF's review of Orphan Sites consisted of a verification that the subject site is not listed (i.e., referenced by name or street address) and a review to identify if any of the Orphan Sites cause a moderate to high potential to create an REC within the boundaries of the subject site. A potential REC on the subject site caused by one or more of the Orphan Sites is considered to be low due to the groundwater flow direction from the subject site, distance from subject site, and/or the status of the identified sites.

3.3.2 GeoTracker Search

In addition to the EDR search mentioned above, RBF searched the subject site vicinity on GeoTracker. GeoTracker was developed pursuant to a mandate by the California State Legislature to investigate the feasibility of establishing a statewide Geographic Information System (GIS) for leaking underground fuel tank (LUFT) sites and is maintained by the State Water Resources Control Board. RBF makes no claims as to the completeness or accuracy of GeoTracker; our review of GeoTracker's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites. RBF searched all sites within GeoTraker in the City of Encinitas, County of San Diego with the following search names: the business names "Cabo" and "Cabo Grill"; the street names "Highway 101", "Coast Highway 101", "North Coast Highway 101"; the address number "1950"; as well as the client name "La Costa". The following searches resulted in no properties listed within the boundaries of the subject site. Note that while searching GeoTracker

for the County of San Diego using the address number "1950", one (1) property was reported (address 1950 Oceanside Boulevard, Oceanside); however, this property is located greater than five (5) miles from the subject site. No RECs with respect to the subject site were noted via the GeoTracker search.

3.3.3 EnviroStor Database Search

In addition to the databases mentioned above, RBF searched the subject site vicinity on EnviroStor Database. EnviroStor Database was developed by the Department of Toxic Substances Control (DTSC) to allow the public to search for properties regulated by the DTSC's Site Mitigation and Brownfields Reuse Program where extensive investigation and/or cleanup actions are planned or have been completed. RBF makes no claims as to the completeness or accuracy of EnviroStor Database; our review of EnviroStor Database's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites. RBF searched all sites within EnviroStor Database in the City of Encinitas, County of San Diego. The following search resulted in no properties listed within the boundaries of the subject site. One (1) site was reported under the GeoTracker LUFT database. This site is located approximately 0.2 miles to the southeast (down-gradient) of the subject site. The site (ARCO; 1766 North Highway 101) is reported to be case closed on June 12, 2002 (refer to Appendix C, *Documentation*, for the reported closure letter). Due to the status and location of the reported site, the potential for contamination on the project site is considered to be low as a result of this property. No RECs with respect to the subject site were noted via the EnviroStor Database search.

3.3.4 Additional Environmental Record Searches

No additional environmental records searches were performed during the preparation of this ESA.

Table 2
IDENTIFIED SITES WITHIN A ONE-MILE RADIUS OF THE SUBJECT SITE

EDR Map ID#	Site Name/Address	Direction from Subject Site	Regulatory Database	Site Status	Potential for an REC on the Subject Site
1 2	Fast Gas ARCO 1766 N. Coast Highway 101	0.05-mile SE 59- elevation	HIST UST LUST	Reported four (4) historical UST containing product and waste oil. Reported LUST released substance to soil only on June 21, 2000. Preliminary site assessment work plan has been submitted (Administratively opened on database, however, no file physically exists).	Low (No reported contamination to groundwater; also, efer to Section 3.3.3, *EnviroStor Database Search*)
3	Codding Automotive Service 1805 Wilston Avenue	0.17-mile E 72- elevation	EDR Historical Auto Stations	Reported automotive repair type service station in 1956.	Low (No contamination reported)
A4	Hagen-Renaker 224 Andrew Avenue	0.22-mile E 74- elevation	LUST San Diego Co. HMMD	Reported LUST released substance to soil only. Case closed on September 6, 2006. Reported active facility; no reported carcinogen.	Low (Refer to site status)
A5	Barrett American 236 Andrew Avenue	0.23-mile E 77- elevation	LUST	Reported LUST released diesel to soil only. Case closed on May 4, 2006.	Low (Refer to site status)
6	First American Bank Property 1508 N. Highway 101	0.41-mile S 58- elevation	LUST	Reported LUST released substance to other ground water. Case closed on March 7, 1997. Note that the file is reported to be administratively opened on database, however, no file physically exists).	Low (Refer to site status)

Note: Map ID numbers match the site numbers indicated on the map of sites within one-mile radius contained within Appendix B, *EDR Search*.

POTENTIAL FOR ENVIRONMENTAL CONDITION KEY:

Low Potential=Potential to create environmental conditions on subject site is considered to be low for one or several factors including, but not limited to, the following:

> direction of groundwater flow is away from the subject site (down gradient); remedial action is underway or completed at off-site location; distance from subject site is considered great enough to not allow the creation of a potential environmental condition; only soil was affected by the occurrence; and/or reporting agency has determined no further action is necessary.

Moderate Potential=Potential to create environmental condition on subject site is considered to be moderate and further investigation may be necessary due to one or several factors including, but not limited to, the following:

> occurrence reported but remedial status unknown; unable to confirm remedial action completed; proximity to subject site; groundwater flow is towards the subject site (up gradient).

High Potential= Potential to create environmental condition on subject site is considered to be high and further investigation necessary due to one or several factors including the following:

> occurrence noted on-site and status if remedial action unknown; occurrence affected groundwater and is located up gradient from subject site.

Section 4 SITE RECONNAISSANCE

The following section documents the result of the visual site inspection conducted by RBF on April 17, 2007, and identifies potential areas in which an environmental condition could arise. Refer to both on- and off-site photographs taken on April 17, 2007, at the end of this section as a general visual reference. For information regarding results of the historical and governmental records searches, refer to Section 3.0, Historical and Regulatory Information Searches.

4.1 ON-SITE OBSERVATIONS

4.1.1 Methodology and Limiting Conditions

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying RECs, including hazardous substances and petroleum products in connection with the property (including soils, surface water, and groundwater). During the April 17, 2007 site inspection, RBF performed a visual observation of readily accessible areas of the subject site and immediately adjoining properties. RBF did not observe the interior of the on-site structures. Observations of bare soil on-site were limited due to the presence of thick vegetation throughout the southern portion of the subject site.

4.1.2 Description of On-Site Structures and/or Uses

The subject site consists of one (1) structure, associated parking lot, and vacant land. Structures appeared to consist of wood and stucco materials and appeared to be in good condition. RBF did not observe the interior of the on-site structure. No evidence of hazardous materials storage was observed on-site.

4.1.3 Geologic, Hydrogeologic, and Topographic Conditions

The majority of the subject site appeared to be moderately sloping to the east. The northern portion of the subject site was paved over with a parking lot associated with the restaurant use. Based on site conditions observed on April 17, 2007, the runoff associated with the subject site appeared to flow in an eastern direction toward Coast Highway 101. Water features were not visible on-site during the April 17, 2007 site inspection.

4.1.4 Asbestos Containing Material

Asbestos is a strong, incombustible, and corrosion resistant material, which was used in many commercial products since prior to the 1940s and up until the early 1970s. If inhaled, asbestos fibers can result in serious health problems. ACMs are building materials containing more than one percent (1%) asbestos (some state and regional regulators impose a one-tenth of one percent (0.1%) threshold). Based upon the year range that the on-site structure may have been built (between 1975 and 1987), the potential exists for asbestos containing materials (ACMs) to be found on-site.

4.1.5 Lead-Based Paints

Until 1978, when the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead, may homes were treated with paint containing some amount of lead. It is estimated that over 80 percent of all housing built prior to 1978 contains some LBP. The mere presence of lead in paint may not constitute a material to be considered hazardous. In fact, if in good condition (no flaking or pealing), most intact LBP is not considered to be a hazardous material. In poor condition LBPs can create a potential health hazard for building occupants, especially children. Based upon the year range that the on-site structure may have been built (between 1975 and 1987), the potential exists for LBPs to be found on-site.

4.1.6 Solid Waste Disposal

No indication of on-site solid waste disposal practices (i.e., landfills) was apparent during the April 17, 2007, site inspection.

4.1.7 Utilities

Utilities (overhead power lines with transformers) were noted within the boundaries of the subject site during the April 17, 2007, site inspection. No staining or leakage was noted with respect to on-site utilities.

4.1.8 Polychlorinated Biphenyls (PCBs)

Pole-mounted transformers were noted on-site during the April 17, 2007, site inspection. No evidence of di-electric fluid or staining was noted on-site during the April 17, 2007, field reconnaissance.

4.1.9 Chemical Storage Tanks (ASTs and USTs)

During the April 17, 2007, site inspection the subject site was inspected for fill pipes, vent pipes, areas of abnormal or heavy staining, manways, manholes, access covers, concrete pads not homogenous with surrounding surfaces, concrete build-up areas potentially indicating pump islands, abandoned pumping equipment, or fuel pumps. One (1) unidentified metal pipe was noted within the subject site, extending out of the ground. The on-site metal pipe was painted white and appeared to be filled with soil. A metal cap (removable) was visible; however, identification was not legible.

4.1.10 Spills

No visual or physical evidence of stained catch basins, drip pads, sumps, or stained soils was observed during the April 17, 2007, site inspection.

4.1.11 Wells

According to EDR, no water wells are reported within the boundaries of the subject site. However, one (1) unidentified metal pipe was noted within the subject site, extending out of the ground. Based on historical documentation, the subject site appeared to have consisted of agricultural uses, in which, the unidentified pipe may have been associated with a water well that served these uses. However, the exact use of the unidentified metal pipe is unknown at the time of this Assessment.

4.1.12 Pits, Ponds, Lagoons

No evidence of pits, ponds, or lagoons was observed within the subject site during the April 17, 2007, site inspection.

4.1.13 Septic Systems

Residential septic systems are possible receivers of household waste and can be the source for soil and groundwater contamination. Active and abandoned residential structures not connected to the city sewer are likely to have septic systems. One (1) restaurant structure is noted on-site. However, based on interviews conducted, the structure is connected to sewer. No visible evidence of septic tanks or cesspools was observed on-site during the April 17, 2007 site inspection. Therefore, the potential for septic tanks to be located on-site is considered to be unlikely.

4.2 OFF-SITE OBSERVATIONS

As previously stated in Section 2.0, Physical Setting, an adjoining property is considered any real property or properties that the border of which is contiguous or partially contiguous with that of the subject site, or that would be contiguous or partially contiguous with that of the subject site but for a street, road, or other public thoroughfare separating them. An adjacent property is any real property located within 0.25 miles of the subject site's border. Visual observations of the publicly accessible portions of adjoining properties were conducted on April 17, 2007, as part of this ESA and are described below.

4.2.1 Current/Past Uses

Off-site uses appeared to consist of vacant land to the north, Coast Highway 101 and commercial uses to the east, an equipment rental facility to the southeast, and residential uses to the south and west of the subject site, which were observed during the April 17, 2007 site inspection. No visible evidence to suggest past off-site uses was visible during the April 17, 2007 site inspection.

4.2.2 Utilities

Typical utilities (e.g., power lines with transformers) were noted within adjacent properties during the April 17, 2007, site inspection. No staining or leaking was observed with respect to utilities during the April 17, 2007, site inspection.

4.2.3 Chemical Storage Tanks

No adjacent off-site ASTs or USTs were noted during the April 17, 2007 site inspection.

4.2.4 Hazardous Materials

During a preliminary observation of accessible adjoining properties on April 17, 2007, one (1) equipment rental facility was visible adjoining the subject site to the southeast. Miscellaneous construction equipment, gasoline powered vehicles, as well as 55-gallon drums were visibly stored within this off-site property. However, the facility appeared to be located on asphalt and no visible or physical evidence was observed to suggest that a surface release of petroleum-based material has recently occurred. No unusual or suspicious materials handling or storage practices were observed with respect to adjacent properties.

Typical view of on-site transformer.

View of on-site unidentified metal pipe.

View of vacant land located within the southern portion of the subject site.

View of on-site structure (restaurant use) located within the northern portion of the subject site.

On-Site Photographs

Exhibit 5

View of vacant land located to the north of the subject site.

View of commercial uses and Coast Highway 101 located to the east of the subject site.

View of off-site rental facility adjoining the subject site to the southeast. Storage areas appear to be located on asphalt.

Typical view of residential uses located to the south and west of the subject site.

Off-Site Photographs

Exhibit 6

Section 5 FINDINGS, OPINIONS, AND RECOMMENDATIONS

RBF has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope of services and limitations of ASTM Standard Practice E 1527-05 within the Cabo Grill Property (APNs 216-041-20-00 & -21-00), City of Encinitas, County of San Diego, California; also known as the subject site within this ESA. Any exceptions to, or deletions from, this practice are described in Section 1.0, Introduction, of this report. This ESA has revealed the following in connection with the subject site.

5.1 FINDINGS AND OPINIONS

The following opinions are based upon review of reasonable ascertainable referenced material available to RBF during the preparation of this ESA, which included historical aerial photographs, historical topographic maps, regulatory databases, interviews, and a site inspection:

5.1.1 Site Conditions

Evidence of RECs within the boundary of the subject site was observed during the April 17, 2007, site inspection, which consisted of the following:

- Power lines with transformers were noted on-site.
- One (1) metal pipe, painted white, was noted extending out of the ground within ornamental vegetation. The pipe had a removable metal cap and appeared to be filled with soil. Markings on the cap were undistinguishable.

5.1.2 Public Records

Available public records were reviewed. The lists that were reviewed identified no regulatory sites reported within the boundaries of the subject site. The lists identified five (5) regulatory sites located within a one-mile radius of the subject site. A potential REC on the subject site caused by these properties is considered to be low due to the groundwater flow direction from the subject site, proximity to the subject site, and/or the status of the identified sites.

5.1.3 Historic Recognized Environmental Condition(s)

No HRECs have been noted within the boundaries of the subject site.

5.1.4 Historical Use(s) Information

Based upon the review of available historical aerial photographs, on-site agricultural uses appear to be present during the 1950s. Therefore, the potential exists that adverse environmental conditions were

created by historic agricultural activities on-site. A combination of several commonly used pesticides (i.e., DDD, DDT, DDE) that are now banned may have been used throughout the subject site. It should be noted that the historical use of agricultural pesticides may have resulted in pesticide residues of certain persistence in soil at concentrations that are considered to be hazardous according to established federal regulatory levels. The primary concern with historical pesticide residues is human health risk from inadvertent ingestion of contaminated soil, particularly by children. The presence of moderately elevated pesticide residuals in soil present potential health and marketplace concerns.

Additionally, due to the age of North Coast Highway 101 and the volumes of vehicles that have utilized this Highway, there is a potential that lead contamination exists within exposed soils near roadway right-of-way on-site and would potentially be released into the air during grading and construction activities.

5.1.5 Data Gaps

One (1) metal pipe was visible extending out of the ground; the exact use of this metal pipe is unknown at the time of this ESA. Additionally, RBF was unable to interview current on-site operator(s), as they were unavailable at the time of this ESA. RBF was unable to determine the exact age of the on-site structure. However, based on available historical aerial photographs and topographic maps, the structure appears to have been constructed between the years 1975 and 1987, in which the potential exists for LBPs and ACMs to be present within the on-site structure.

5.1.6 Other Potential Sources of Hazardous Material

The presence of hazardous materials on the subject site that may have been generated from adjacent properties was not visually or physically evident.

5.2 FORMAL RECOMMENDATIONS

Based on the records and other data reviewed during the preparation of this ESA, in general accordance with ASTM Standard Practice E 1527-05 and the scope of services, and subject to the limitations thereof, the following measures are recommended:

5.2.1 Prior to Construction

5.2.1.1 Structures

The interior of individual on-site structures within the subject site should be visually inspected prior to demolition or renovation activities. Should hazardous materials be encountered with any on-site structure, the materials should be tested and properly disposed of in accordance with state and federal regulatory requirements. Any stained soils or surfaces underneath the removed materials should be

sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required.

5.2.1.2 Unidentified Metal Pipe

The terminus of the undocumented metal pipe should be defined. As historical agricultural uses existed on-site in the past, the unidentified pipe may be associated with a water well. If the pipe is found to be associated with a water well, the well should be properly closed and abandoned pursuant to state and federal guidelines (if not already done).

The primary concern with pipes that extend into the ground surface is the potential for the pipe to act as a ventilation apparatus for an undocumented underground storage tank (UST). Should a UST be present, the UST should be removed and properly disposed of at an approved landfill facility. Once the UST is removed, a visual inspection of the areas beneath and around the removed UST should be performed. Any stained soils observed underneath the UST should be sampled. Results of sampling (if necessary) would indicate the level of remediation efforts that may be required.

5.2.1.3 Soil Sampling

Areas of exposed soils adjoining Coast Highway 101 R/W, which will be disturbed during excavation/grading activities, should be sampled and tested for lead prior to the issuance of Plans, Specifications, and Estimates (PS&E) for the project, so that any special handling, treatment, or disposal provisions associated with aerially deposited lead may be included in construction documents (if aerially deposited lead is present).

The subject site has been historically utilized for agricultural purposes for several decades and may contain pesticide residues in the soil. Soil sampling should occur throughout the subject site, as determined by a qualified Phase II//III specialist. The sampling will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that may be required.

5.2.2 Construction Activities

5.2.2.1 Structures

The interior of the on-site structure should be visually inspected prior to demolition or renovation activities. Should hazardous materials be encountered, the materials should be tested and properly disposed of in accordance with state and federal regulatory requirements. Any stained soils or surfaces underneath the removed materials should be sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required.

5.2.2.2 Lead-Based Paints

The exact age of the on-site structure should be determined. If the structure was constructed prior to 1978, LBPs may be present and if during demolition of the structures, paint is separated from the building material (e.g., chemically or physically), the paint waste should be evaluated independently from the building material to determine its proper management. According to the Department of Substances Control, if paint is not removed from the building material during demolition (and is not chipping or peeling), the material could be disposed of as construction debris (a non-hazardous waste). It is recommended that the landfill operator be contacted in advance to determine any specific requirements they may have regarding the disposal of lead-based paint materials.

5.2.2.3 Asbestos Containing Materials

The National Emission Standards for Hazardous Air Pollutants (NESHAP) mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. The exact age of the on-site structure should be determined. If the structure was constructed prior to 1978, pursuant to SCAQMD regulations, an asbestos survey must be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the levels of asbestos in structures should renovation or demolition occur. District Rule 1403 (Asbestos Emissions From Demolition/Renovation Activities) would be required for any demolition or renovation work involving asbestos containing material.

5.2.2.4 Pole-mounted Transformers

Any transformers to be relocated during site construction/demolitions should be conducted under the purview of the local utility purveyor to identify proper handling procedures regarding potential PCBs.

5.2.2.5 Construction

If unknown wastes or suspect materials are discovered during construction by the contractor, which he/she believes may involve hazardous waste/materials, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the Project Engineer of the implementing agency;
- Secure the areas as directed by the Project Engineer; and
- Notify the implementing agency's Hazardous Waste/Materials Coordinator.

Section 6 REFERENCES

Date	Approximate Scale	Source
1939	1”=555’	Fairchild
1946	1”=655’	Jack Ammann
1953	1”=555’	Park
1963	1”=555’	Cartwright
1974	1”=600’	AMI
1989	1”=666’	USGS
1994	1”=666‘	USGS
2002	1”=666’	USGS

Note: 1939-2002 Historical Aerial Photographs provided by Environmental Data Resources, Inc.

American Society for Testing and Materials International, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, Designation: E 1527 – 05

Building Department Records, City of Encinitas, reviewed on April 17, 2007

California Department of Oil, Gas, and Geothermal Resources (DOGGR), Wildcat Map #W1-7, San Diego and Riverside Counties, dated February 6, 1999

City Directory Search, prepared by EDR, dated April 2, 2007

City of Encinitas, E-Zoning, http://206.71.175.15/imf/sites/zoning/index.jsp, site accessed March 29, 2007

County of San Diego Department of Health Services, files requested on March 29, 2007

Database Search/GeoCheck, Environmental Data Resources, Inc., dated March 29, 2007

Department of Toxic Substance Control, files requested on March 29, 2007

Environmental Lien Search Report, Environmental Data Resources, Inc., dated April 3, 2007

EnviroStor Database, Department of Toxic Substances Control, accessed March 29, 2007

EPA Map of Radon Zones, U.S. EPA, 1993

Flood Insurance Rate Map, Federal Emergency Management Agency, Panel 1033 of 2375, map effective June 19, 1997

GeoTracker, State Water Resource Control Board, accessed March 29, 2007

Interview, Ms. Jennifer Tapa, Director of Forward Planning, KSL La Costa Resort, LLC., dated April 2, 2007

Interview, Staff Member, City of Encinitas Fire Department, conducted on March 29, 2007

Interview, Staff Member, County of San Diego Assessor/Building Department, conducted on March 29, 2007

RealQuest Property Data, *First American Real Estate Solutions*, accessed on March 29, 2007

Regional Water Quality Control Board, files requested on March 29, 2007

Sanborn Fire Insurance Maps, provided by EDR, via The Sanborn Library, LLC, searched on March 30, 2007

Site Inspection, conducted on April 17, 2007

Thomas Brothers Map, Riverside and San Diego Counties, 2007

USDA Soil Conservation Service, Soil Survey of San Diego Area, California, December 1973

USGS Historical Topographic Quadrangles, Oceanside, San Luis Rey, Southern California Sheet 2, and Encinitas, California Quadrangles, 1901 through 1997

USGS Topographic Quadrangle, Encinitas, California Quadrangle, dated 1997

padre
associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT OF THE COASTAL RESORT HOTEL PROPERTY 2100 NORTH U.S. HIGHWAY 101 ENCINITAS, SAN DIEGO COUNTY, CALIFORNIA

Prepared for:
ENCINITAS RESORT CORPORATION

April 2001

5450 Telegraph Road, Suite 101 ▪ Ventura, California 93003 ▪ 805-644-2220 ▪ FAX 805-644-2050

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT SUMMARY

Phase I Environmental Site Assessment
of the Coastal Resort Hotel Property,
2100 North U.S. Highway 101
Encinitas, San Diego County, California

Padre Project No.: 0101-0271 **Date of Report:** April 2, 2001

Assessment Component	Acceptable	Routine Solution	Phase II	Reference Section	Page
Historical Data	✓			5.0	7
Operational Activities	✓			6.1	10
Hazardous Materials/ Petroleum Products	✓			6.2	10
Waste Generation	✓			6.3	10
PCBs	✓			6.4	10
Asbestos-Containing Materials	✓			6.5	10
Lead-Based Paint	✓			6.6	10
Storage Tanks/Pipelines	✓			6.7	10
Surface Areas	✓			6.8	11
Regulatory Database Review	✓			7.0	11
Adjacent Properties	✓			8.0	13

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

The following personnel have prepared and/or reviewed this report for accuracy, content, and quality of presentation.

Written by:
Jerome K. Summerlin, C.E.G., R.E.A. II
Principal/Project Manager

Reviewed by:
Jeffrey T. Damron, P.E.
Principal

April 2, 2001

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

1.0 CERTIFICATION

Padre Associates, Inc. (Padre) has completed a Phase I environmental site assessment (ESA) of the approximately 4.3-acre coastal bluff-top Coastal Resort Hotel property (the "Project"), located at 2100 North U.S. Highway 101 in Encinitas, San Diego County, California 92704. The assessment was performed at the request of Petro-Analytical, Inc., on behalf of the Encinitas Resort Corporation utilizing methods and procedures consistent with good commercial or customary practice designed to conform to acceptable industry standards. This report is exclusively for the use and benefit of the Encinitas Resort Corporation, and is not for the use or benefit of, nor may it be relied upon by, any other person or entity without the advance written consent of Padre. The independent conclusions represent Padre's best professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by Petro-Analytical, Inc. and the Encinitas Resort Corporation or their representatives have been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed and the information available at the time of the assessment.

Researched by: Jerome K. Summerlin, C.E.G., C.Hg., R.E.A. II

Surveyed by: Jerome K. Summerlin, C.E.G., C.Hg., R.E.A. II and Ryan M. Zukor, R.E.A.

Written by: Jerome K. Summerlin, C.E.G., C.Hg., R.E.A. II

Reviewed by:

Jeffrey T. Damron, P.E.

2.0 SUMMARY

Padre performed a Phase I environmental site assessment (ESA), which included an on-site reconnaissance of the accessible areas of the Project, on March 6, 2001. The Project is located at 2100 North U.S. Highway 101, at Highway 101 and La Costa Avenue, Encinitas, San Diego County, California, and consists of approximately 4.3 acres of relatively undeveloped ocean-front, bluff-top property. Approximate geographic coordinates are 33.083240° North Latitude and 117.310220° West Longitude. Refer to Plate 1 - Site Location Map.

The Project currently exists as undeveloped land. Historically, the eastern portion of the Project existed as undeveloped land and the western portion of the Project as residential use. The previous residential use consisted of three homes and approximately seven mobile homes. Land use in the vicinity of the Project includes residential, parking, and recreational uses, as well as undeveloped land.

The following summarizes the independent conclusions representing Padre's best professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by Petro-Analytical, Inc. and the Encinitas Resort Corporation or their representative, have been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment.

2.1 FINDINGS/CONCLUSIONS

Historical Data

- The review of the historical data available for the Project and surrounding area revealed no evidence of any recognized adverse environmental conditions (Section 5). No additional action or assessment is recommended regarding the historical use of the Project.

Operational Activities

- Padre observed no recognized environmental conditions associated with the current activities at the Project (Section 6.1). No additional action or assessment is recommended regarding operational activities at the Project.

Hazardous Materials/Petroleum Products

- Although the Project appeared to be vacant at the time of our site visit, it is assumed that the Project was involved in the use of hazardous materials and petroleum products in the form of routine janitorial and maintenance supplies at the former residences (Section 6.2). These types of material normally do not pose a hazard to the Project, provided they are used as designed, are properly handled, and all

regulations regarding their use are followed. No additional action or assessment is recommended regarding the use of hazardous materials or petroleum products.

Wastes

- The Project does not appear to be involved in the generation, treatment, storage, or disposal of hazardous, medical, or regulated wastes (Section 6.3). In addition, the non-hazardous solid and liquid wastes generated at the Project appears to have been disposed of properly. No additional action or assessment is recommended regarding wastes at the Project.

Polychlorinated Biphenyls (PCBs)

- Padre did not observe either pad-mounted or pole-mounted transformers, or any additional equipment, that utilize dielectric fluid potentially containing elevated concentrations of polychlorinated (Section 6.4). No additional action or assessment is recommended regarding the presence of PCBs at the Project.

Asbestos-Containing Materials (ACM)

- Because the Project exists as undeveloped land Padre did not observe the presence of suspect asbestos-containing materials (ACM) (Section 6.5). No additional action or assessment is recommended regarding ACM at the Project.

Lead-Based Paint (LBP)

- Because the Project exists as undeveloped land Padre did not observe the presence of lead-based paint (LBP) (Section 6.6). No additional action or assessment is recommended regarding LBP at the Project.

Storage Tanks/Pipelines

- No evidence of existing storage tanks or pipelines (above or below ground) was identified (Section 6.7). No additional action or assessment is recommended with regard to tanks or pipelines at the Project.

Surface Areas

- No issues associated with surface areas were identified (Section 6.8). No additional action or assessment is recommended regarding surface areas at the Project.
- Visual observation of the storm water system did not identify any abnormal accumulation of petroleum run-off or foreign material from adjacent properties. No additional action or assessment is recommended regarding storm water systems at the Project.

Regulatory Review

- The review of the regulatory agency data available for the Project and the general area of the Project indicates that the Project is not located on any of the databases evaluated, and none of the sites listed are anticipated to have an impact on the Project (Section 7). In addition, the review does not suggest that the Project is involved in the generation, treatment, storage, or disposal of hazardous waste. No additional action or assessment is recommended regarding regulatory issues at the Project.

Adjacent Properties

- Padre identified no adjacent properties that are anticipated to have a negative impact on the environmental integrity of the Project (Section 8). No additional action or assessment is recommended regarding adjacent properties at the Project.

2.2 RECOMMENDATIONS

Based on our review of the available information, no further action or assessment is recommended for the Project at this time.

3.0 SURVEY APPROACH / PURPOSE

Padre conducted an on-site environmental site assessment of the Project, which consisted of a walk-through observation of the Project area and interviews with local agency representatives. On-site activities and interviews were conducted by Mr. Ryan M. Zukor, R.E.A.

Padre reviewed available federal, state, and local records in an effort to identify sites of known or suspected hazardous waste activity located at or near the Project, which could have an adverse impact on the Project. In an attempt to determine whether historical uses of the Project and surrounding area have had an environmental impact on the Project, Padre interviewed individuals knowledgeable about the Project and reviewed available pertinent records and documents. This assessment is based on the evaluation of the information gathered and accessibility of the Project at the time of the assessment.

The purpose of this report is to provide Petro-Analytical, Inc. and the Encinitas Resort Corporation with an assessment addressing environmental conditions (limited to those issues identified in the report) as they existed at the Project, identifying potential environmental liabilities associated with the Project. The assessment was conducted utilizing generally accepted Phase I ESA industry standards in accordance with ASTM Standard E 1527-00. The scope of work included an evaluation of:

- The Project history in an attempt to identify any possible ownership(s) and/or uses that would suggest an impact to the environmental integrity of the Project, as identified through the review of reasonably ascertainable standard historical sources.
- Physical characteristics of the Project, as identified through the review of reasonably ascertainable topographic, wetlands, flood plain, soils, geology, and ground water data.
- Current Project conditions (as applicable), including compliance with appropriate regulations as they pertain to the presence or absence of:
  - Facility storage tanks, drums, containers (above or below ground), etc.
  - Transformers and other electrical equipment that utilize fluid that may potentially contain PCBs.
  - The use of hazardous materials/chemicals and petroleum products, and/or the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes.
- A screening approach for the potential existence of asbestos, including the screening of suspect, friable materials in accessible areas. Friable materials are those, which can be easily crumbled or pulverized by hand pressure. This screening approach is not a comprehensive (i.e., AHERA-Style) asbestos survey, but is intended to identify the potential for an asbestos hazard in accessible areas.
- An evaluation of information contained in programs such as the NPL, CERCLIS, RCRIS, SWF, LUST, Cal-Sites, and other governmental information systems within specific search distances of the Project. This evaluation was performed to identify any sites that would have the potential to impact the environmental integrity of the Project.

  The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report is based on a radius search, which focuses on both the Project and neighboring sites, which may impact the Project. Neighboring sites listed in governmental environmental records are identified within a specific search distance. The search distance varies depending upon the particular government record being checked. The search is designed to meet the requirements of ASTM Standard E 1527-97. The information provided is assumed to be correct and complete.
- Visual observation of the adjacent properties to identify high-risk neighbors and the potential for contamination, if present or suspected, to migrate onto the Project.

4.0 PROJECT LOCATION / DESCRIPTION

The Project is located at 2100 North U.S. Highway 101 near the intersection of La Costa Avenue in Encinitas, San Diego County, California.

4.1 PROJECT DESCRIPTION

The Project lands consist of approximately 4.3-acres of bluff-top immediately south of Batiquitos Lagoon in the northwest corner of the City of Encinitas, which currently exists as undeveloped land. The western portion of the property was previously occupied by three houses and several mobile homes. Previous site grading activities have essentially lowered the bluff-top to its present elevation, resulting in an approximately 25 to 30 foot high cut slope along the southern portion of the Project. Photographs of the Project are included in Appendix A.

The Project is not currently serviced by public water and sanitary sewer systems, however Padre assumes that these services will be provided in the future by the City of Encinitas. According to information provided by the City of Encinitas, the utility meets the requirements as established by the U.S. EPA, state, county, and local authorities for water quality.

4.2 ENVIRONMENTAL SETTING

4.2.1 Topography

Review of Project topography on the Encinitas, California topographic Quadrangle, published by the U.S. Geological Survey (USGS) and dated 1968 (photorevised in 1975), indicated the following:

- The Project has an average elevation of approximately 65 feet above mean sea level. Slope in the general area of the Project is to the west.
- The Project area is illustrated to represent an area of partially developed land utilized for a trailer park.

Review of information compiled by the City of Encinitas Planning Department indicated that no wetland areas are indicated at the Project.

Review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated 1985, indicated that the Project is located in Zone X, defined as an area of minimal flooding, located outside the limit of known flooding areas.

4.2.2 Soils/Geology/Hydrogeology

Review of the Soil Survey of San Diego County, California, published by the U.S. Department of Agriculture Soil Conservation Service (USDA SCS) and dated 1978, indicated the following:

- The Project is located in an area comprised of Eocene-aged sandstone known as the Scripps Formation in the lower portion of the coastal bluffs, and marine terrace deposits in the upper part of the bluff.

- Within the Project area ground water within the coastal bluffs is typically encountered at the depth of the geologic contact between the marine terrace deposits and the Scripps Formation. Ground water measurement data collected at the Project by URS Greiner Woodward Clyde in October 1999 indicated the presence of ground water at a depth of approximately 20 feet.
- Shallow ground water flow is expected to follow the ground level slope of surface elevations towards the nearest open body of water or intermittent stream. The direction of this flow at the Project is anticipated to be toward the west.
- Estimated ground water levels may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations.

5.0 HISTORICAL REVIEW

Review of information available from the San Diego County, California Tax Assessment Office indicated that the Project is shown as Tax Map Book 254, Page 430, Parcels 2, 3, and 4, and as Tax Map Book 216, Page 41, Parcel 24. The San Diego County Assessor's Parcel Numbers for the Project are 254-430-02, 254-430-03, 254-430-04, and 216-041-24.

5.1 CHAIN-OF-TITLE

Padre's review of deed information did not include any recent transaction and ownership of the land comprised in the Project. Review of the available records indicates that the Project has been owned by Encinitas Resort Corporation since the early 1990s.

Review of available deed records did not identify any previous environmentally suspect ownership, easements, right of ways, or other environmental entries/restrictions associated with the Project.

5.2 LOCAL GOVERNMENT AGENCY RECORD REVIEW

Padre reviewed file information kept by the City of Encinitas Public Works Department (EPWD) for the Project address. Records dating back to the 1950s are maintained by this department. According to EPWD, no environmentally significant information was available for the Project address.

Padre requested information from the City of Encinitas Fire Department (EFD). According to information provided by EFD, no environmentally significant information was available for the Project address.

Padre has requested information regarding the Project from the County of San Diego Department of Environmental Health (SDDEH). No response from SDDEH had been received by the date of this report. Any significant information will be forwarded to Petro-Analytical, Inc. and Encinitas Resort Corporation when it is received.

Padre attempted to review building permits for the Project at the City of Encinitas Building Department (EBD). According to EBD, no environmentally significant information was available for the Project address.

Review of the available zoning records from the City of Encinitas Planning and Building Agency indicates that the Project is currently zoned L-VSC, Limited Visitor Serving Commercial. According to the records, no additional zoning changes were listed for the Project. Available zoning records do not indicate the potential presence of past manufacturing, military, or industrial usage in conjunction with the Project lands.

5.3 HISTORICAL MAPS AND CITY DIRECTORIES

Padre attempted to obtain historical maps of the Project and adjacent properties from EDR Sanborn, Inc. for review. However, Sanborn Map coverage was not available for the Project, indicating that the Project was historically not significantly developed. Additionally, Padre attempted to review historical city directories at the City of Encinitas Public Library. Historical listings for the Project address were not identified.

Review of the 1901 Encinitas Quadrangle topographic map, available from EDR Sanborn, Inc., indicated the following:

- The Project is generally shown as undeveloped land.

Review of the 1968 and 1975 Encinitas Quadrangle topographic maps, available from EDR Sanborn, Inc., indicated the following:

- The eastern portion of the Project is shown as undeveloped land, and the western portion of the Project is shown to be developed as a trailer park.

Copies of the historical quadrangle maps are included at the back of Appendix C.

5.4 AERIAL PHOTOGRAPHY

Review of the 1947 aerial photograph, available from EDR Sanborn, Inc., via the Jack Ammann Collection, indicated the following:

- The Project is shown to be relatively undeveloped. A house appears to exist at the western portion of the Project.
- The areas surrounding the Project are shown to generally exist as undeveloped land.

The 1953 aerial photograph, available from EDR Sanborn, Inc., via the Park Aerial Photograph Collection, indicated the following:

- The Project is shown to be developed for residential use at western portion of the Project consisting of three houses and several mobile homes.

- The areas surrounding the Project are shown to generally exist as undeveloped land, however a parking lot serving Carlsbad State Beach exists adjacent to the northern boundary of the Project.

The 1963 aerial photograph, available from EDR Sanborn, Inc., via the Cartwright Collection, does not significantly differ from the 1953 aerial photograph.

The 1975 aerial photograph, available from EDR Sanborn, Inc., via the Teledyne Collection, indicated the following:

- The Project is shown to be developed for residential use at western portion of the Project consisting of three houses and several mobile homes.
- The area bounding the southern portion of the Project is developed as a gated residential community.

The 1994 aerial photograph, available from EDR Sanborn, Inc., via Teledyne and the U.S.G.S., does not differ significantly from the 1975 aerial photograph.

Copies of the 1947, 1953, 1963, 1975, and 1994 aerial photographs are included as Appendix B as Plates B-1 through B-5.

5.5 PRIOR USE INTERVIEWS

Contact with Mr. Rick Ramsey of the La Costa Resort and Spa indicated that the Project was formerly utilized as a mobile home park and also contained three houses. Mr. Ramsey was unaware of any activities at the Project that would have resulted in potential environmental impairment at the Project.

5.6 PREVIOUS INVESTIGATIONS/ASSESSMENTS

Padre was not provided with any previously conducted environmental assessment reports pertaining to the Project.

5.7 PLANS AND SPECIFICATIONS

As-built/renovation-site plans, drawings, and specifications were not made available to Padre for review.

5.8 HISTORICAL SUMMARY

Based upon a review of chain-of-title information, city and county agency records, zoning records, historical topographic maps, and aerial photographs; the eastern portion of the Project has existed as undeveloped land, and the western portion was historically used for residential development that included three houses and several mobile homes.

6.0 PROJECT RECONNAISSANCE

6.1 OPERATIONAL ACTIVITIES

The Project was historically utilized as undeveloped land and for residential use. The Project currently exists as undeveloped land and the homes and mobile homes have been razed and removed, respectively.

Based on the operations assessed at the Project, no environmental permits are required.

6.2 HAZARDOUS MATERIALS/PETROLEUM PRODUCTS STORAGE AND HANDLING

Visual observation for the use and/or storage of hazardous materials and petroleum products was performed. Padre did not observe the presence of hazardous materials at the Project.

6.3 WASTE GENERATION, TREATMENT, STORAGE, AND DISPOSAL

Visual observation for the generation, treatment, storage, and disposal of wastes was performed. Padre did not observe the presence of generated waste at the project.

6.4 POLYCHLORINATED BIPHENYLS (PCBS)

The Project does not currently appear to be supplied with secondary electrical service from pad-mounted or pole-mounted exterior electrical transformers. No transformers were observed at the time of the assessment.

6.5 ASBESTOS-CONTAINING MATERIALS (ACM)

Suspect asbestos-containing materials (ACM) were not observed at the Project.

6.6 LEAD-BASED PAINT (LBP)

Lead-based paint was not observed at the Project.

6.7 FACILITY STORAGE TANKS AND PIPELINES (ABOVE OR BELOW GROUND)

Visual observations for manways, vent pipes, fill connections, concrete pads, and saw cuts in paved areas did not identify any surface connections or disturbances, which would indicate that the potential for an underground storage tank (UST) installation currently exists. Additionally, no evidence of underground pipelines was observed.

6.8 SURFACE AREAS

General surface features of the Project consist of a relatively flat unpaved parcel of land, which includes an asphalt-concrete access road along the northern boundary of the Project. Visual observation of the Project and adjacent properties did not identify any evidence of distress vegetation, staining, or surface migration of petroleum releases or hazardous materials onto or off of the Project.

No visible evidence of on-site surface impoundment facilities, pits, dry wells, or dumping of apparent hazardous substances was observed at the Project. No evidence of lagoons, ponds, or other bodies of water were observed at the Project.

7.0 REGULATORY DATABASE REVIEW

NPL, RCRA-TSD, RCRA-CA, Cal-Sites, CERCLIS, NFRAP, SWF, LUST, UST, RCRIS-Generators, and ERNS listings were reviewed. By cross-referencing the name, address, and zip code we conclude that the Project is not included as a listed site. Additionally, the area search of the Project and Project area for sites listed in these databases identified various sites individually outlined in the Regulatory Agency Data Report Findings included in Appendix C. Information concerning listed sites is included in each of the database sections that follow:

- **NPL Listing:** The National Priorities (Superfund) List is U.S. EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program.
  - ➢ No NPL sites were identified within 1.0 mile of the Project.
- **RCRA-TSD Facilities Listing:** The U.S. EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA-TSD database is a compilation by the USEPA of reporting facilities that transport, treat, store, or dispose of hazardous waste.
  - ➢ No RCRA-TSD sites were identified within 0.5 mile of the Project.
- **RCRA-CA Facilities Listing:** The U.S. EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Sites Listing contains information pertaining to hazardous waste treatment, storage, and disposal facilities (RCRA TSD) which have conducted, or are currently conducting, a corrective action(s) as regulated under RCRA.
  - ➢ No RCRA-CA sites were identified within 1.0 mile of the Project.

- **Cal-Sites Listing:** This database is a comprehensive listing of sites, which are considered to be a threat to the public health and welfare by the Department of Environment. Further, this is the ASTM equivalent of a State Hazardous Waste Sites List.

  - No Cal-Sites site were identified within 1.0 mile of the Project.

- **CERCLIS Listing:** This database is a compilation of sites, which the USEPA has investigated or is currently investigating for a release or threatened release of hazardous substances.

  - No CERCLIS sites were identified within 0.5 mile of the Project.

- **NFRAP Listing:** This database contains information regarding sites, which have been removed from the USEPA CERCLIS database.

  - No NFRAP sites were identified within 0.25 mile of the Project.

- **SWAT Listing:** This database is a comprehensive listing of all State Permitted Solid Waste Landfills.

  - No SWF sites were identified within 0.5 mile of the Project.

- **Leaking Underground Storage Tanks (LUST):**

  - One LUST site was identified within 0.5 mile of the Project. This site is discussed below.

    ARCO
    1766 North Highway 101
    Distance: 1/4- to 1/2- Mile
    Direction: Southeast

    The above site is located hydrogeologically cross-gradient to down-gradient of the Project. The available information indicates that soil is the only media affected, and that ground water has not been impacted. Based on distance from the Project, hydrogeologic gradient, and the fact that the site is a soil only impacted site, this site is not anticipated to impact the Project.

- **Underground Storage Tanks (UST):**

  - Neither the Project nor any adjoining properties were identified on the UST inventory as containing active USTs.

- **RCRIS-Generator Listing:** The U.S. EPA's Resource Conservation and Recovery Information System identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRIS-Generators database is a compilation by the USEPA of reporting facilities that generate hazardous waste.
  - Neither the Project nor any adjoining properties were identified on the RCRIS-Generator listing.
- **Emergency Response Notification System (ERNS):** The ERNS is a national database used to collect information on reported releases of oil or hazardous substances.
  - The Project was not identified on the ERNS database.

8.0 ADJACENT PROPERTIES

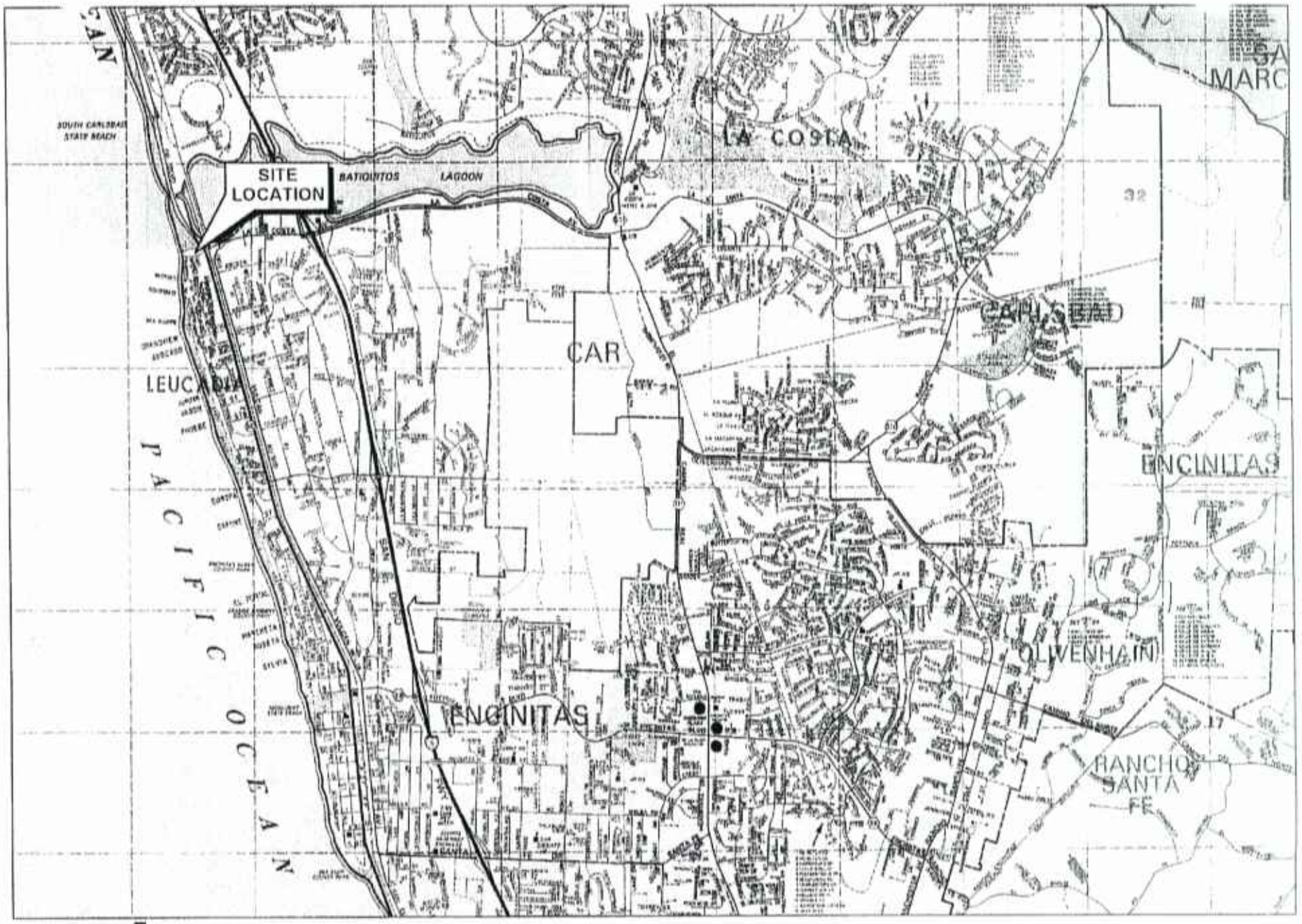
The general vicinity of the Project consists of residential and recreational land use. The following identifies specific adjacent property tenants and/or use:

- **North**. The day-use parking area for the Carlsbad Stare Beach is located north of the Project, beyond which exists Batiquitos Lagoon.
- **East**. Undeveloped land exists adjacent and east of the Project, beyond which exists U.S. Highway 101.
- **South**. Residential development exists adjacent and south of the Project, beyond which exists residential and commercial development.
- **West**. Carlsbad State Beach and the Pacific Ocean exist west of the Project.

The adjacent property use is not anticipated to impact the environmental integrity of the Project.

PLATES

April 2001
Proj . 0101-0271



padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS
Encinitas Resort Corp. Coastal Resort Hotel - Encinitas

SITE LOCATION MAP

PLATE 1

APPENDIX A

1. View of southwest portion of Project.

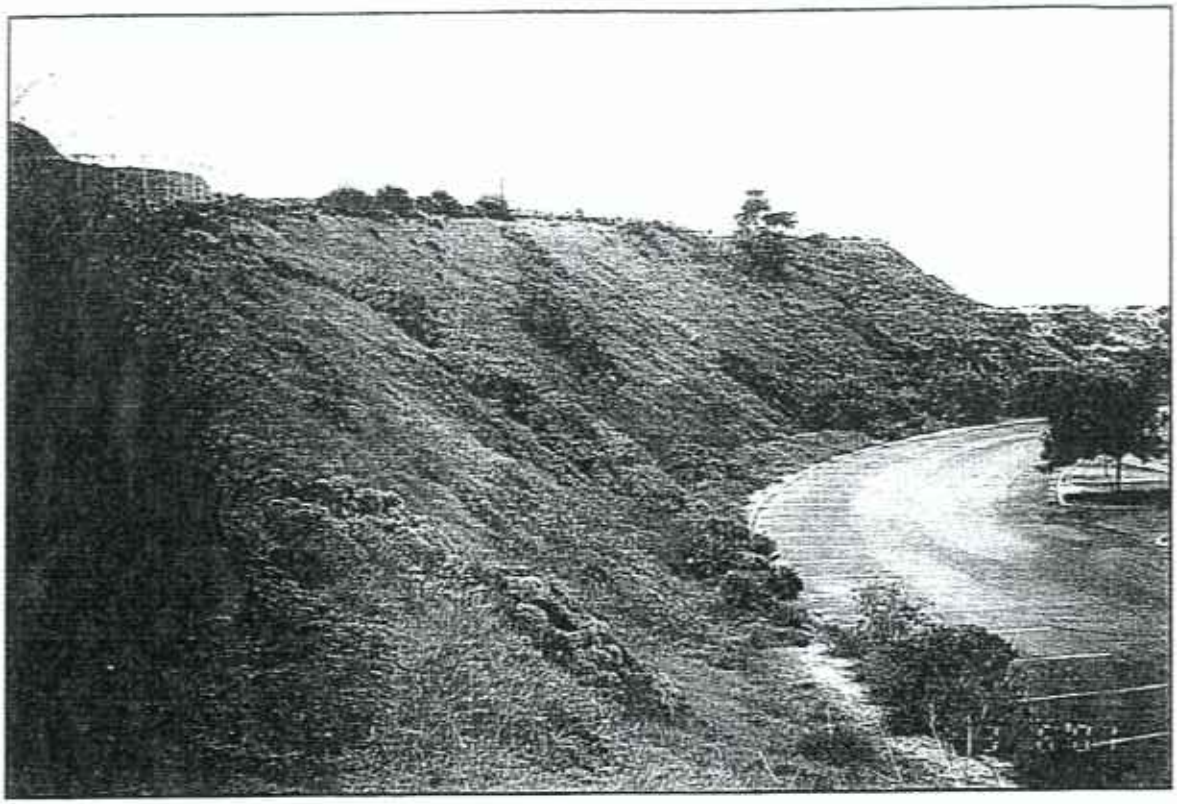
2. View of northwest portion of Project.

3. View of the western property boundary.

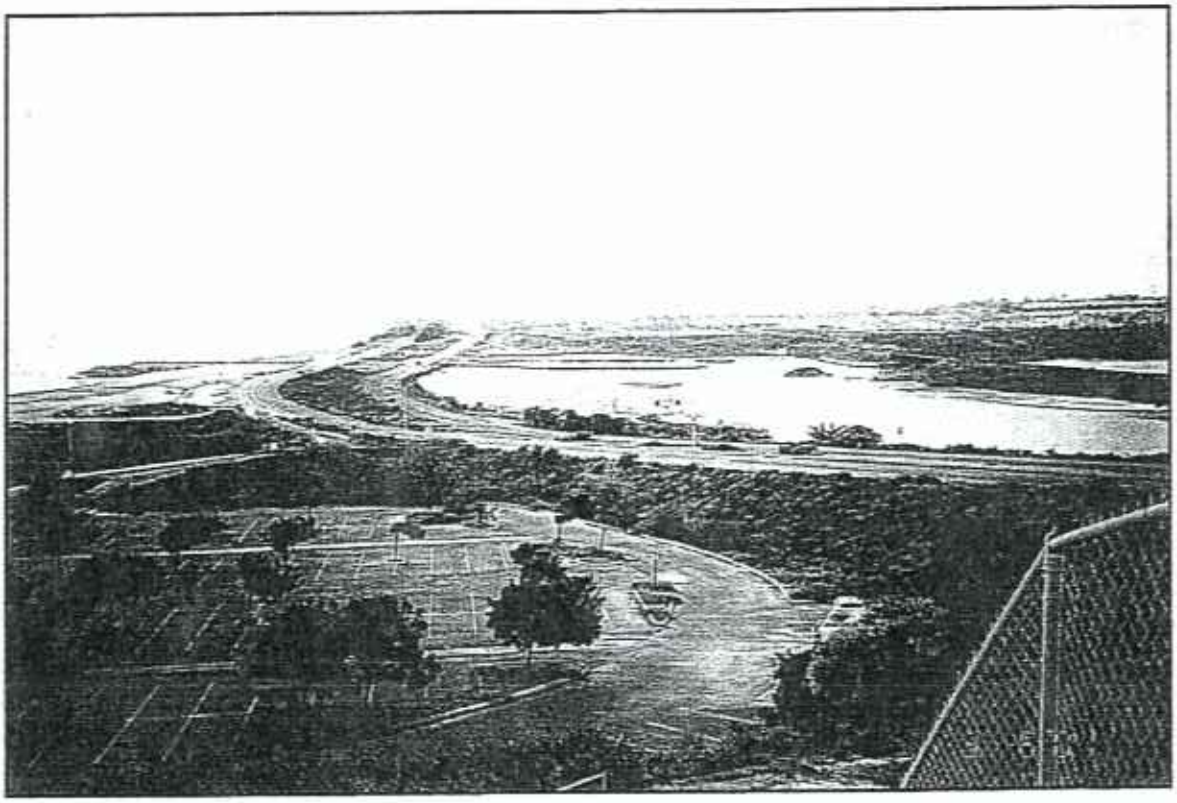
4. View of east portion of Project, and a portion of the intersections of Hwy. 101 and La Costa Ave.

5. View of Project and southerly adjacent properties.

6. View of asphalt-paved access road.



7. View of the northern property boundary.



8. View af adjacent State Beach parking lot and Batiquitos Lagoon.

APPENDIX B

April 2001
Project No. 0101-0271

SOURCE: USGS AERIAL PHOTO, 1994

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Encinitas Resort Corp. Coastal Resort Hotel - Encinitas

1994 AERIAL PHOTOGRAPH
PLATE B-1

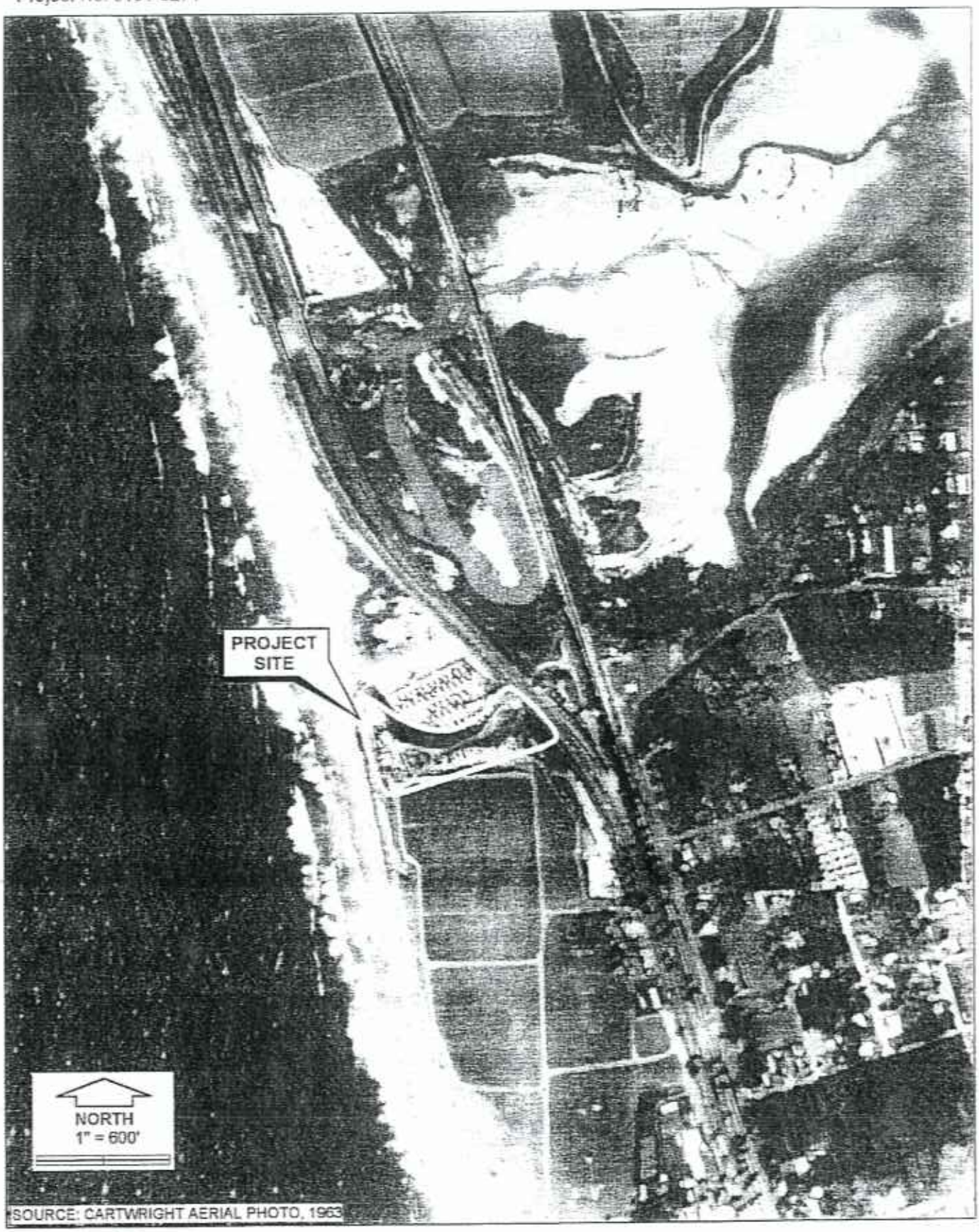
SOURCE: TELEDYNE AERIAL PHOTO, 1975

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Encinitas Resort Corp. Coastal Resort Hotel - Encinitas

1975 AERIAL PHOTOGRAPH
PLATE B-2

April 2001
Project No. 0101-0271



SOURCE: CARTWRIGHT AERIAL PHOTO, 1963

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Encinitas Resort Corp. Coastal Resort Hotel - Encinitas

1963 AERIAL PHOTOGRAPH
PLATE B-3

April 2001
Project No. 0101-0271

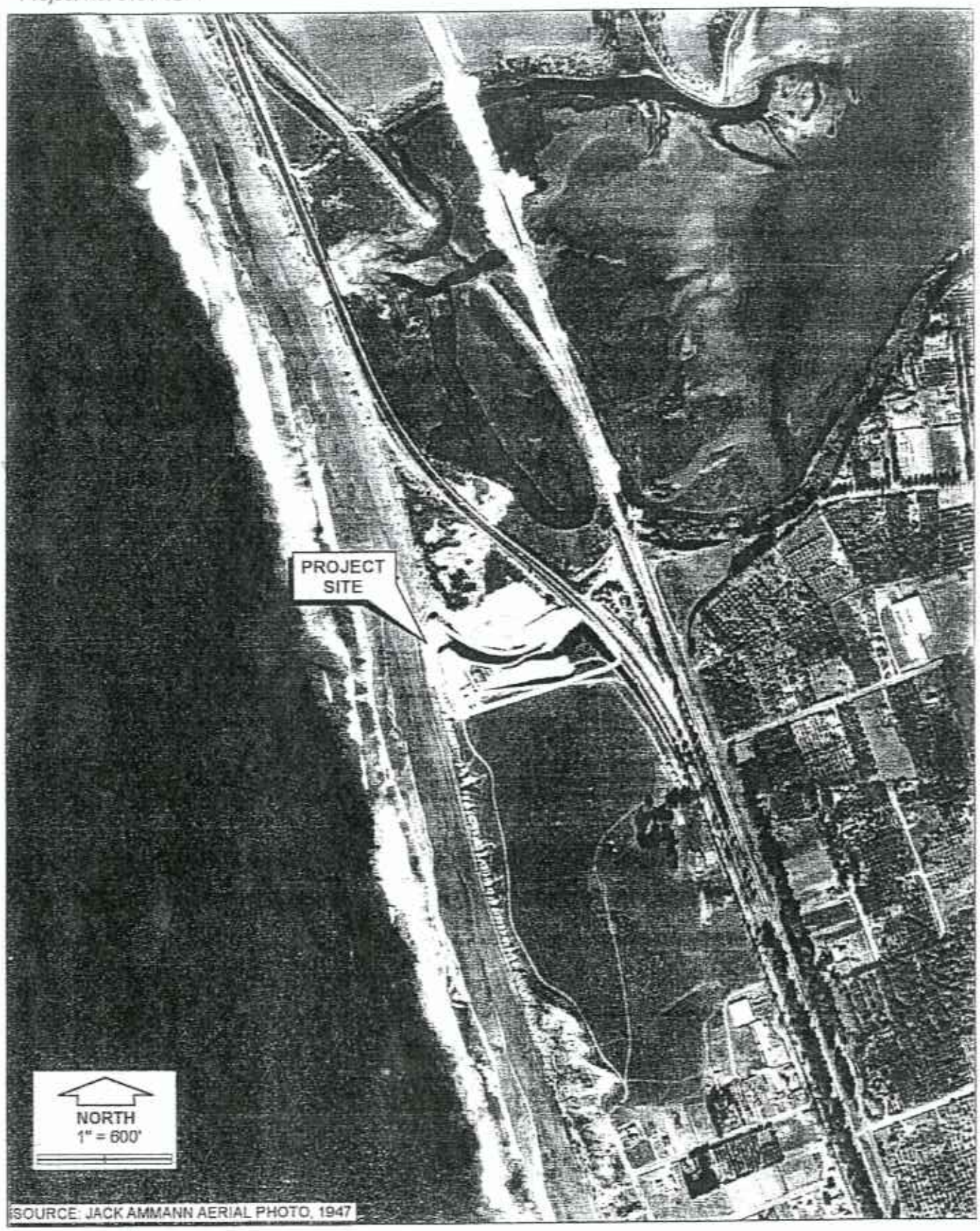
SOURCE: PARK AERIAL PHOTO, 1953

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Encinitas Resort Corp. Coastal Resort Hotel - Encinitas

1953 AERIAL PHOTOGRAPH
PLATE B-4

April 2001
Project No. 0101-0271



SOURCE: JACK AMMANN AERIAL PHOTO, 1947

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Encinitas Resort Corp. Coastal Resort Hotel - Encinitas

1947 AERIAL PHOTOGRAPH

PLATE B-5

APPENDIX C

The EDR Radius Map
with GeoCheck®

Costal Resort Hotel
2100 North US Hwy 101
Encinitas, CA 92024

Inquiry Number: 611424.3s

March 26, 2001

Environmental Data Resources, Inc.

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	6
Orphan Summary	13
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-10

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer
Copyright and Trademark Notice

This report contains information obtained from a variety of public and other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL EDR BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES.

Entire contents copyright 2001 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and the edr logos are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

2100 NORTH US HWY 101
ENCINITAS, CA 92024

COORDINATES

Latitude (North):	33.083240 - 33' 4' 59.7"
Longitude (West):	117.310220 - 117' 18' 36.8"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	471047.1
UTM Y (Meters):	3660366.2

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	2433117-A3 ENCINITAS, CA
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
CORRACTS..... Corrective Action Report
RCRIS-TSD..... Resource Conservation and Recovery Information System
RCRIS-LQG..... Resource Conservation and Recovery Information System
RCRIS-SQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

AWP..... Annual Workplan Sites
Cal-Sites..... Calsites Database
Notify 65..... Proposition 65 Records
Toxic Pits..... Toxic Pits Cleanup Act Sites

EXECUTIVE SUMMARY

SWF/LF..... Solid Waste Information System
WMUDS/SWAT..... Waste Management Unit Database
UST..... Hazardous Substance Storage Container Database
CA BOND EXP. PLAN..... Bond Expenditure Plan
CA FID UST..... Facility Inventory Database

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

AST..... Aboveground Petroleum Storage Tank Facilities
CA WDS..... Waste Discharge System
CA SLIC..... Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
HAZNET..... Hazardous Waste Information System
SAN DIEGO CO. HMMD..... Hazardous Materials Management Division Database

EDR PROPRIETARY DATABASES

Coal Gas..... Former Manufactured Gas (Coal Gas) Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STATE ASTM STANDARD

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/1994 has revealed that there are 2 CHMIRS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
Not reported	LA COSTA AVE/OLD HWY 10	1/2 - 1 E	4	11
Not reported	7204 PONTO DR	1/2 - 1 NNW	5	11

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there is 1 Cortese site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CHEVRON SERVICE STATION#9	***540 LA COSTA AVE***	***1/2 - 1 E***	***3***	***7***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/10/2001 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO	1766 HWY 101 N	1/4 - 1/2 SE	A1	6
ARCO	1766 HWY 101 N	1/4 - 1/2 SE	A2	6

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
1X SAN DIEGO CO/ENVIRON HEALTH	HAZNET
DOPET PUBLICATIONS, INC	HAZNET
GILBERTS AUTO SVC	HAZNET
SANESCO OIL CO	HAZNET
GIFFORD HANSEN PARTERSHIP	HAZNET
FINE LINE SCREENPRINTING	HAZNET
LEUCADIA AUTOBODY	HAZNET

OVERVIEW MAP - 611424.3s - Padre Associates, Inc

0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites (if requested)
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- Wetlands
- Areas of Concern

TARGET PROPERTY:	Costal Resort Hotel	CUSTOMER:	Padre Associates, Inc
ADDRESS:	2100 North US Hwy 101	CONTACT:	J. Summerlin, CEG
CITY/STATE/ZIP:	Encinitas CA 92024	INQUIRY #:	611424.3s
LAT/LONG:	33.0832 / 117.3102	DATE:	March 26, 2001 5:01 pm

DETAIL MAP - 611424.3s - Padre Associates, Inc

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites (if requested)
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- Wetlands
- Areas of Concern

TARGET PROPERTY:	Costal Resort Hotel	CUSTOMER:	Padre Associates, Inc
ADDRESS:	2100 North US Hwy 101	CONTACT:	J. Summerlin, CEG
CITY/STATE/ZIP:	Encinitas CA 92024	INQUIRY #:	611424.3s
LAT/LONG:	33.0832 / 117.3102	DATE:	March 26, 2001 5:01 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
STATE ASTM STANDARD								
AWP		1.000	0	0	0	0	NR	0
Cal-Sites		1.000	0	0	0	0	NR	0
CHMIRS		1.000	0	0	0	2	NR	2
Cortese		1.000	0	0	0	1	NR	1
Notify 65		1.000	0	0	0	0	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	2	NR	NR	2
UST		0.250	0	0	NR	NR	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
CA FID UST		0.250	0	0	NR	NR	NR	0
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
AST		TP	NR	NR	NR	NR	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
CA SLIC		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HAZNET		0.250	0	0	NR	NR	NR	0
San Diego Co. HMMD		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY DATABASES								
Coal Gas		1.000	0	0	0	0	NR	0
AQUIFLOW - see EDR Physical Setting Source Addendum								

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

A1 ARCO LUST **S104735655**
SE 1766 HWY 101 N **N/A**
1/4-1/2 ENCINITAS, CA 92024
1322
Higher Site 1 of 2 in cluster A

LUST Region 9:

Case Number:	9UT4078	Release Date:	06/21/2000
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	Not reported
Date Found:	06/21/2000	How Found:	Tank Closure
Date Stopped:	06/21/2000	How Stopped:	Close Tank
Source:	Tank	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Not reported		
Case Type:	Soil only		
Confirm Date:	/ /	Submit Workplan:	8/29/00
Prelim Assess:	/ /	Desc Pollution:	Not reported
Remed Plan:	/ /	Remed Action:	Not reported
Began Monitor:	Not reported	Closed Date:	Not reported
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H04837-001
Basin Number:	904.51	Gwater Depth:	Not reported

File Dispn: Administratively opened on database, however no file physically exists

Interim Remedial Actions:	Not reported
Beneficial Use:	NBN
Cleanup and Abatement order Number:	Not reported
Waste Discharge Requirement Number:	Not reported
NPDES Number:	Not reported

A2 ARCO LUST **S104793878**
SE 1766 HWY 101 N **N/A**
1/4-1/2 LEUCADIA, CA 92024
1322
Higher Site 2 of 2 in cluster A

State LUST:

Cross Street:	Not reported		
Qty Leaked:	0.00000		
Case Number	9UT4078		
Reg Board:	San Diego Region		
Chemical:	Not reported		
Lead Agency:	Local Agency		
Local Agency :	37000		
Case Type:	Soil only		
Status:	Preliminary site assessment workplan submitted		
County:	Not reported		
Review Date:	09/08/00	Confirm Leak:	Not reported
Workplan:	08/29/00	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported		
Release Date:	06/21/00		
Cleanup Fund Id :	Not reported		
Discover Date :	06/21/00		
Enforcement Dt :	/ /		

ARCO (Continued) **S104793878**

Enf Type:	Not reported
Enter Date :	09/08/00
Funding:	Responsible Party
Staff Initials:	DLM
How Discovered:	Tank Closure
How Stopped:	Close Tank
Interim :	Not reported
Lat/Lon :	Not reported
Leak Cause:	Unknown
Leak Source:	Tank
Local Case # :	H04837-001
Beneficial:	NBN
Staff :	SJP
MTBE Date :	/ /
MTBE Tested :	Not reported
Max MTBE GW :	0.00000
GW Qualifies :	Not reported
Max MTBE Soil :	0.00000
Soil Qualifies :	Not reported
Hydr Basin #:	904.51
Operator :	Not reported
Oversight Prgm :	LOP
Priority :	3
Review Date :	09/08/00
Stop Date :	06/21/00
Street Number :	1766
Work Suspended :	N
Responsible Party	NANAK PETROLEUM
Summary:	500 FT PIPING REMOVED.

---

3 East 1/2-1 2978 Higher — **CHEVRON SERVICE STATION#9**, **540 LA COSTA AVE**, **ENCINITAS, CA 92024** — **Cortese** **S100728616**, **HAZNET** **N/A**, **LUST**

State LUST:

Cross Street:	Not reported		
Qty Leaked:	0.00000		
Case Number	9UT2970		
Reg Board:	San Diego Region		
Chemical:	Not reported		
Lead Agency:	Local Agency		
Local Agency :	37000		
Case Type:	Other ground water affected		
Status:	Preliminary site assessment underway		
County:	Not reported		
Review Date:	02/06/95	Confirm Leak:	09/17/93
Workplan:	Not reported	Prelim Assess:	10/06/93
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	Not reported		
Release Date:	09/20/93		
Cleanup Fund Id :	Not reported		
Discover Date :	09/17/93		
Enforcement Dt :	10/05/93		
Enf Type:	SEL		
Enter Date :	02/06/95		
Funding:	Responsible Party		

CHEVRON SERVICE STATION#9 (Continued) **S100728616**

Staff Initials: SMW
How Discovered: Other Means
How Stopped: Repair Piping
Interim : Yes
Lat/Lon : Not reported
Leak Cause: Unknown
Leak Source: Piping
Local Case # : H12451-003
Beneficial: NBNOCB/E
Staff : SJP
MTBE Date : / /
MTBE Tested : Not reported
Max MTBE GW : 0.00000
GW Qualifies : Not reported
Max MTBE Soil : 0.00000
Soil Qualifies : Not reported
Hydr Basin #: 908.21
Operator : MIKE SABLAN
Oversight Prgm : LOP
Priority : 2B
Review Date : 02/06/95
Stop Date : 09/17/93
Street Number : 2959
Work Suspended : Not reported
Responsible Party Chevron U.S.A. Products Co.
Summary: Not reported

Cross Street: Not reported
Qty Leaked: 0.00000
Case Number 9UT3365
Reg Board: San Diego Region
Chemical: Not reported
Lead Agency: Local Agency
Local Agency : 37000
Case Type: Other ground water affected
Status: Preliminary site assessment underway
County: Not reported
Review Date: 03/18/97
Workplan: Not reported
Pollution Char: Not reported
Remed Action: Not reported
Close Date: Not reported
Release Date: 03/22/95
Cleanup Fund Id : Not reported
Discover Date : 03/02/95
Enforcement Dt : / /
Enf Type: Not reported
Enter Date : 03/18/97
Funding: Not reported
Staff Initials: SMW
How Discovered: Other Means
How Stopped: Not reported
Interim : Not reported
Lat/Lon : Not reported
Leak Cause: Unknown
Leak Source: Unknown
Local Case # : H12458-001

Confirm Leak: 03/07/95
Prelim Assess: 01/09/97
Remed Plan: Not reported
Monitoring: Not reported

CHEVRON SERVICE STATION#9 (Continued) **S100728616**

Beneficial: MUNB/E
Staff : SJP
MTBE Date : / /
MTBE Tested : Not reported
Max MTBE GW : 0.00000
GW Qualifies : Not reported
Max MTBE Soil : 0.00000
Soil Qualifies : Not reported
Hydr Basin #: 904.51
Operator : Not reported
Oversight Prgm : LOP
Priority : 2B
Review Date : 03/18/97
Stop Date : 03/02/95
Street Number : 540
Work Suspended :Not reported
Responsible PartyCHEVRON USA PRODUCTS COMPANY
Summary: THIS CASE WAS FOUND TO HAVE BEEN MISLABELED AT THE COUNTY ASA COMPLAINT

LUST Region 9:

Case Number:	9UT2970	Release Date:	09/20/1993
Local Agency:	37000		
Substance:	8006619	Qty Leaked:	0
Date Found:	09/17/1993	How Found:	Other Means
Date Stopped:	09/17/1993	How Stopped:	Repair Piping
Source:	Piping	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Not reported		
Case Type:	Other ground water affected		
Confirm Date:	09/17/1993	Submit Workplan:	Not reported
Prelim Assess:	10/06/1993	Desc Pollution:	Not reported
Remed Plan:	/ /	Remed Action:	Not reported
Began Monitor:	Not reported	Closed Date:	Not reported
Enforce Type:	SEL		
Enforce Date:	10/5/93		
Pilot Program:	LOP	Local Case:	H12451-003
Basin Number:	908.21	Gwater Depth:	8.5'
File Dispn:	File discarded, case closed		

Interim Remedial Actions: Yes
Beneficial Use: NBNOCB/E
Cleanup and Abatement order Number: Not reported
Waste Discharge Requirement Number: Not reported
NPDES Number: Not reported

CHEVRON SERVICE STATION#9 (Continued) S100728616

Case Number:	9UT3365	Release Date:	03/22/1995
Local Agency:	37000		
Substance:	12031	Qty Leaked:	Not reported
Date Found:	03/02/1995	How Found:	Other Means
Date Stopped:	03/02/1995	How Stopped:	Not reported
Source:	Unknown	Cause:	Unknown
Lead Agency:	Local Agency		
Status:	Not reported		
Case Type:	Other ground water affected		
Confirm Date:	03/07/1995	Submit Workplan:	Not reported
Prelim Assess:	01/09/1997	Desc Pollution:	Not reported
Remed Plan:	/ /	Remed Action:	Not reported
Began Monitor:	Not reported	Closed Date:	Not reported
Enforce Type:	Not reported		
Enforce Date:	Not reported		
Pilot Program:	LOP	Local Case:	H12458-001
Basin Number:	904.51	Gwater Depth:	Not reported
File Dispn:	Administratively opened on database, however no file physically exists		
Interim Remedial Actions:	Not reported		
Beneficial Use:	MUNB/E		
Cleanup and Abatement order Number:	Not reported		
Waste Discharge Requirement Number:	Not reported		
NPDES Number:	Not reported		

HAZNET:

Gepaid:	CAL000007354	Tepaid:	CAT080013352
Contact:	FRED HOJABRI	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.4586		
Category:	Unspecified aqueous solution		
Disposal Method:	Recycler		
Mailing Address:	540 LA COSTA AVE ENCINITAS, CA 92024		
County	Not reported		

Gepaid:	CAL000007354	Tepaid:	CAT080013352
Contact:	FRED HOJABRI	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.2293		
Category:	Aqueous solution with 10% or more total organic residues		
Disposal Method:	Recycler		
Mailing Address:	540 LA COSTA AVE ENCINITAS, CA 92024		
County	Not reported		

Gepaid:	CAL000007354	Tepaid:	CAT080013352
Contact:	FRED HOJABRI	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.2293		
Category:	Unspecified aqueous solution		
Disposal Method:	Recycler		
Mailing Address:	540 LA COSTA AVE ENCINITAS, CA 92024		
County	Not reported		

CHEVRON SERVICE STATION#9 (Continued) **S100728616**

Gepaid:	CAL000007354	Tepaid:	CAT080010101
Contact:	FRED HOJABRI	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	San Diego
Tons:	0		
Category:			
Disposal Method:	Transfer Station		
Mailing Address:	540 LA COSTA AVE ENCINITAS, CA 92024		
County	Not reported		

Gepaid:	CAL000007354	Tepaid:	CAT080010101
Contact:	FRED HOJABRI	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	San Diego
Tons:	0.2085		
Category:	Aqueous solution with 10% or more total organic residues		
Disposal Method:	Not reported		
Mailing Address:	540 LA COSTA AVE ENCINITAS, CA 92024		
County	Not reported		

The CA HAZNET database contains 4 additional records for this site.
Please contact your EDR Account Executive for more information.

CORTESE:

Reg By:	LTNKA
Reg Id:	9UT3365
Region:	CORTESE

Reg By:	LTNKA
Reg Id:	9UT2970
Region:	CORTESE

4
East
1/2-1
3183
Higher

LA COSTA AVE/OLD HWY 101
ENCINITAS, CA 92024

CHMIRS **S100274794**
N/A

CHMIRS:

OES Control Number:	8904656	DOT ID:	Not reported
DOT Hazard Class:	Not Reported		
Chemical Name:	PHOSPHORUS, RED		
Extent of Release:	Not reported		
CAS Number:	Not reported	Quantity Released:	Not reported
Environmental Contamination:	None Reported	Property Use:	Lake/Pond/River
Incident Date:	30-JAN-89	Date Completed:	30-JAN-89

5
NNW
1/2-1
5111
Same

7204 PONTO DR
CARLSBAD, CA 92009

CHMIRS **S100278888**
N/A

(Continued) **S100278888**

CHMIRS:

OES Control Number:	8802043	DOT ID:	1414
DOT Hazard Class:	Flammable solids, spontaneously combustible materials and materials that are dangerous when wet		
Chemical Name:	LITHIUM HYDRIDE		
Extent of Release:	Not reported		
CAS Number:	7580-67-8	Quantity Released:	5
Environmental Contamination:	Ground	Property Use:	Vacant Lot
Incident Date:	29-JUN-88	Date Completed:	29-JUN-88

(.4 SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
ENCINITAS	S102808930	1X SAN DIEGO CO/ENVIRON HEALTH	COUNTY PUBLIC WORKS STATION	00000	HAZNET	CAH777000167
ENCINITAS	S104577330	DOPET PUBLICATIONS, INC	449 FIRST ST	92024	HAZNET	CAL000078149
ENCINITAS	S104577188	GILBERTS AUTO SVC	1057 FIRST ST	92024	HAZNET	CAL000072454
ENCINITAS	S104575433	SANESCO OIL CO	710 FIRST ST	92024	HAZNET	CAL000009895
ENCINITAS	S104565573	GIFFORD HANSEN PARTERSHIP	1131 FIRST ST	92023	HAZNET	CAC001169872
ENCINITAS	S104583622	FINE LINE SCREENPRINTING	560 N HWY 101 3B	92024	HAZNET	CAL921533522
ENCINITAS	S103974798	LEUCADIA AUTOBODY	1508 N HWY 101, #B	92024	HAZNET	CAL000138713

Site	Database(s)	EDR ID Number EPA ID Number
1X SAN DIEGO CO/ENVIRON HEALTH COUNTY PUBLIC WORKS STATION ENCINITAS, CA 00000	HAZNET	S102808930 N/A

HAZNET:

Gepaid:	CAH777000167	Tepaid:	AZD049318009
Contact:	CO SAN DIEGO/ENVIRON HEALTH	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	99
Tons:	0.215		
Category:	Unspecified oil-containing waste		
Disposal Method:	Not reported		
Mailing Address:	1225 INPERIAL AVENUE SAN DIEGO, CA 92186		
County	Not reported		

Gepaid:	CAH777000167	Tepaid:	AZD049318009
Contact:	CO SAN DIEGO/ENVIRON HEALTH	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	99
Tons:	0.025		
Category:	Empty containers less than 30 gallons		
Disposal Method:	Not reported		
Mailing Address:	1225 INPERIAL AVENUE SAN DIEGO, CA 92186		
County	Not reported		

DOPET PUBLICATIONS, INC 449 FIRST ST ENCINITAS, CA 92024	HAZNET	S104577330 N/A

HAZNET:

Gepaid:	CAL000078149	Tepaid:	CAD003963592
Contact:	Not reported	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Santa Clara
Tons:	0.1334		
Category:	Photochemicals/photoprocessing waste		
Disposal Method:	Recycler		
Mailing Address:	449 FIRST ST ENCINITAS, CA 92024		
County	Not reported		

GILBERTS AUTO SVC 1057 FIRST ST ENCINITAS, CA 92024	HAZNET	S104577188 N/A

HAZNET:

Gepaid:	CAL000072454	Tepaid:	CAT080025711
Contact:	ACEVES GILBERT	Telephone:	(619) 942-0529
Gen County:	San Diego	Tsd County:	San Bernardino
Tons:	0.2293		
Category:	Aqueous solution with less than 10% total organic residues		
Disposal Method:	Recycler		
Mailing Address:	1057 1ST ST ENCINITAS, CA 92024 - 5056		
County	Not reported		

Site	Database(s)	EDR ID Number EPA ID Number

GILBERTS AUTO SVC (Continued) — S104577188

Gepaid:	CAL000072454	Tepaid:	CAT080025711
Contact:	ACEVES GILBERT	Telephone:	(619) 942-0529
Gen County:	San Diego	Tsd County:	San Bernardino
Tons:	0		
Category:	Waste oil and mixed oil		
Disposal Method:	Recycler		
Mailing Address:	1057 1ST ST ENCINITAS, CA 92024 - 5056		
County	Not reported		

Gepaid:	CAL000072454	Tepaid:	CAT080013352
Contact:	ACEVES GILBERT	Telephone:	(619) 942-0529
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.271		
Category:	Unspecified aqueous solution		
Disposal Method:	Recycler		
Mailing Address:	1057 1ST ST ENCINITAS, CA 92024 - 5056		
County	Not reported		

SANESCO OIL CO — HAZNET — S104575433
710 FIRST ST — N/A
ENCINITAS, CA 92024

HAZNET:

Gepaid:	CAL000009895	Tepaid:	CAT080013352
Contact:	SANESCO OIL CO	Telephone:	(619) 745-4562
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	2.085		
Category:	Aqueous solution with less than 10% total organic residues		
Disposal Method:	Recycler		
Mailing Address:	770 METCALF ST ESCONDIDO, CA 92025 - 1667		
County	Not reported		

Gepaid:	CAL000009895	Tepaid:	CAT080013352
Contact:	SANESCO OIL CO	Telephone:	(619) 745-4562
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	4.17		
Category:	Tank bottom waste		
Disposal Method:	Recycler		
Mailing Address:	770 METCALF ST ESCONDIDO, CA 92025 - 1667		
County	Not reported		

GIFFORD HANSEN PARTERSHIP — HAZNET — S104565573
1131 FIRST ST — N/A
ENCINITAS, CA 92023

HAZNET:

Gepaid:	CAC001169872	Tepaid:	CAT080013352
Contact:	BROOKS GIFFORD & DON HANSEN	Telephone:	(760) 753-6595
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	2.1892		
Category:	Unspecified oil-containing waste		
Disposal Method:	Recycler		
Mailing Address:	PO BOX 230216 ENCINITAS, CA 92023		
County	Not reported		

Site	Database(s)	EDR ID Number EPA ID Number
FINE LINE SCREENPRINTING **560 N HWY 101 3B** **ENCINITAS, CA 92024**	**HAZNET**	**S104583622** **N/A**

HAZNET:

Gepaid:	CAL921533522	Tepaid:	CAT000613893
Contact:	TODD HAKANSON	Telephone:	(619) 943-1701
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.2635		
Category:	Aqueous solution with less than 10% total organic residues		
Disposal Method:	Transfer Station		
Mailing Address:	560 N HIGHWAY 101 STE 3B ENCINITAS, CA 92024 - 2039		
County	Not reported		

LEUCADIA AUTOBODY **1508 N HWY 101, #B** **ENCINITAS, CA 92024**	**HAZNET**	**S103974798** **N/A**

HAZNET:

Gepaid:	CAL000138713	Tepaid:	CAD008302903
Contact:	THOMAS DISALVO	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.1459		
Category:	Paint sludge		
Disposal Method:	Not reported		
Mailing Address:	1508 N HIGHWAY 101 # B ENCINITAS, CA 92024		
County	Not reported		

Gepaid:	CAL000138713	Tepaid:	CAD008302903
Contact:	THOMAS DISALVO	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.1668		
Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)		
Disposal Method:	Recycler		
Mailing Address:	1508 N HIGHWAY 101 # B ENCINITAS, CA 92024		
County	Not reported		

Gepaid:	CAL000138713	Tepaid:	CAD008252405
Contact:	THOMAS DISALVO	Telephone:	(000) 000-0000
Gen County:	San Diego	Tsd County:	Los Angeles
Tons:	0.1459		
Category:	Unspecified solvent mixture Waste		
Disposal Method:	Recycler		
Mailing Address:	1508 N HIGHWAY 101 # B ENCINITAS, CA 92024		
County	Not reported		

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 01/23/01
Date Made Active at EDR: 02/16/01
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 02/05/01
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/05/01

Proposed NPL: Proposed National Priority List Sites
Source: EPA
Telephone: N/A

Date of Government Version: 01/23/01
Date Made Active at EDR: 02/16/01
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 02/05/01
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/05/01

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/16/00
Date Made Active at EDR: 08/16/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 06/05/00
Elapsed ASTM days: 72
Date of Last EDR Contact: 12/29/00

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 04/16/00
Date Made Active at EDR: 08/16/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 06/05/00
Elapsed ASTM days: 72
Date of Last EDR Contact: 12/29/00

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 04/20/00
Date Made Active at EDR: 08/01/00
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 06/12/00
Elapsed ASTM days: 50
Date of Last EDR Contact: 03/14/01

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 06/21/00
Date Made Active at EDR: 07/31/00
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 07/10/00
Elapsed ASTM days: 21
Date of Last EDR Contact: 01/30/01

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 08/08/00
Date Made Active at EDR: 09/06/00
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 08/11/00
Elapsed ASTM days: 26
Date of Last EDR Contact: 02/02/01

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/97
Database Release Frequency: Biennially

Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/30/99
Database Release Frequency: Annually

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/23/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/05/01
Date of Next Scheduled EDR Contact: 05/07/01

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/07/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 05/31/00
Database Release Frequency: Annually

Date of Last EDR Contact: 01/23/01
Date of Next Scheduled EDR Contact: 04/23/01

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/23/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 08/01/98
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/01
Date of Next Scheduled EDR Contact: 04/02/01

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 02/20/01
Date of Next Scheduled EDR Contact: 05/21/01

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/01/00
Database Release Frequency: Annually

Date of Last EDR Contact: 02/12/01
Date of Next Scheduled EDR Contact: 05/14/01

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 12/27/00
Date of Next Scheduled EDR Contact: 03/26/01

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 03/30/01
Date of Next Scheduled EDR Contact: 06/12/01

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-260-7864
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/30/01
Date of Next Scheduled EDR Contact: 03/26/01

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 08/10/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 12/28/00
Date of Next Scheduled EDR Contact: 03/26/01

STATE OF CALIFORNIA ASTM STANDARD RECORDS

CAL-SITES (AWP): Annual Workplan Sites
Source: California Environmental Protection Agency
Telephone: 916-323-3400
Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 03/10/00
Date Made Active at EDR: 05/10/00
Database Release Frequency: Annually
Date of Data Arrival at EDR: 04/10/00
Elapsed ASTM days: 30
Date of Last EDR Contact: 01/30/01

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CAL-SITES (ASPIS): Calsites Database
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 10/01/00
Date Made Active at EDR: 11/22/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 10/30/00
Elapsed ASTM days: 23
Date of Last EDR Contact: 01/09/01

CHMIRS: California Hazardous Material Incident Report System
Source: Office of Emergency Services
Telephone: 916-464-3283
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/94
Date Made Active at EDR: 04/24/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 03/13/95
Elapsed ASTM days: 42
Date of Last EDR Contact: 02/26/01

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Source: CAL EPA/Office of Emergency Information
Telephone: 916-327-1848
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/98
Date Made Active at EDR: 09/23/98
Database Release Frequency: Varies
Date of Data Arrival at EDR: 08/26/98
Elapsed ASTM days: 28
Date of Last EDR Contact: 01/30/01

NOTIFY 65: Proposition 65 Records
Source: State Water Resources Control Board
Telephone: 916-657-0696
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Made Active at EDR: 11/19/93
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 11/01/93
Elapsed ASTM days: 18
Date of Last EDR Contact: 01/26/01

TOXIC PITS: Toxic Pits Cleanup Act Sites
Source: State Water Resources Control Board
Telephone: 916-227-4364
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95
Date Made Active at EDR: 09/26/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 08/30/95
Elapsed ASTM days: 27
Date of Last EDR Contact: 02/06/01

SWF/LF (SWIS): Solid Waste Information System
Source: Integrated Waste Management Board
Telephone: 916-341-6320
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/20/00
Date Made Active at EDR: 01/26/01
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 12/20/00
Elapsed ASTM days: 37
Date of Last EDR Contact: 03/19/01

WMUDS/SWAT: Waste Management Unit Database
Source: State Water Resources Control Board
Telephone: 916-227-4448
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/00
Date Made Active at EDR: 05/10/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 04/10/00
Elapsed ASTM days: 30
Date of Last EDR Contact: 03/16/01

LUST: Leaking Underground Storage Tank Information System
Source: State Water Resources Control Board
Telephone: 916-445-6532
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/10/01
Date Made Active at EDR: 02/12/01
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 01/11/01
Elapsed ASTM days: 32
Date of Last EDR Contact: 01/11/01

CA UST:

UST: Hazardous Substance Storage Container Database
Source: State Water Resources Control Board
Telephone: 916-227-4408
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90
Date Made Active at EDR: 02/12/91
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 01/25/91
Elapsed ASTM days: 18
Date of Last EDR Contact: 01/16/01

CA BOND EXP. PLAN: Bond Expenditure Plan
Source: Department of Health Services
Telephone: 916-255-2118
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89
Date Made Active at EDR: 08/02/94
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 07/27/94
Elapsed ASTM days: 6
Date of Last EDR Contact: 05/31/94

CA FID UST: Facility Inventory Database
Source: California Environmental Protection Agency
Telephone: 916-445-6532
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Made Active at EDR: 09/29/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 09/05/95
Elapsed ASTM days: 24
Date of Last EDR Contact: 12/28/98

STATE OF CALIFORNIA ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Petroleum Storage Tank Facilities
Source: State Water Resources Control Board
Telephone: 916-227-4382
Registered Aboveground Storage Tanks.

Date of Government Version: 10/28/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/05/01
Date of Next Scheduled EDR Contact: 05/07/01

CA WDS: Waste Discharge System
Source: State Water Resources Control Board
Telephone: 916-657-1571
Sites which have been issued waste discharge requirements.

Date of Government Version: 08/21/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/28/00
Date of Next Scheduled EDR Contact: 03/26/01

HAZNET: Hazardous Waste Information System
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/99
Database Release Frequency: Annually

Date of Last EDR Contact: 02/14/01
Date of Next Scheduled EDR Contact: 05/14/01

LOCAL RECORDS

ALAMEDA COUNTY:

Local Oversight Program Listing of UGT Cleanup Sites
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 08/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/30/01
Date of Next Scheduled EDR Contact: 04/30/01

Underground Tanks
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 12/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/30/00
Date of Next Scheduled EDR Contact: 04/30/01

CONTRA COSTA COUNTY:

Site List
Source: Contra Costa Health Services Department
Telephone: 925-646-2286
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/05/01
Date of Next Scheduled EDR Contact: 06/04/01

KERN COUNTY:

Underground Storage Tank Sites & Tanks Listing
Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Kern County Sites and Tanks Listing.

Date of Government Version: 01/23/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/05/01
Date of Next Scheduled EDR Contact: 06/04/01

LOS ANGELES COUNTY:

List of Solid Waste Facilities
Source: La County Department of Public Works
Telephone: 818-458-5185

Date of Government Version: 09/16/98
Database Release Frequency: Varies

Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

City of El Segundo Underground Storage Tank
Source: City of El Segundo Fire Department
Telephone: 310-607-2239

Date of Government Version: 02/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

City of Long Beach Underground Storage Tank
Source: City of Long Beach Fire Department
Telephone: 562-570-2543

Date of Government Version: 10/01/99
Database Release Frequency: Annually

Date of Last EDR Contact: 02/27/01
Date of Next Scheduled EDR Contact: 05/28/01

City of Torrance Underground Storage Tank
Source: City of Torrance Fire Department
Telephone: 310-618-2973

Date of Government Version: 02/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

City of Los Angeles Landfills
Source: Engineering & Construction Division
Telephone: 213-473-7869

Date of Government Version: 08/31/99
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

Street Number List
Source: Department of Public Works
Telephone: 626-458-3517
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/30/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

Site Mitigation List
Source: Community Health Services
Telephone: 323-890-7806
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 06/02/00
Database Release Frequency: Annually

Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

San Gabriel Valley Areas of Concern
Source: EPA Region 9
Telephone: 415-744-2407
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98
Database Release Frequency: N/A

Date of Last EDR Contact: 06/29/99
Date of Next Scheduled EDR Contact: N/A

MARIN COUNTY:

Underground Storage Tank Sites
Source: Public Works Department Waste Management
Telephone: 415-499-6647
Currently permitted USTs in Marin County.

Date of Government Version: 08/08/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/05/01
Date of Next Scheduled EDR Contact: 05/07/01

NAPA COUNTY:

Sites With Reported Contamination
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 10/23/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/01
Date of Next Scheduled EDR Contact: 04/02/01

Closed and Operating Underground Storage Tank Sites
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 08/30/00
Database Release Frequency: Annually

Date of Last EDR Contact: 01/02/01
Date of Next Scheduled EDR Contact: 04/02/01

ORANGE COUNTY:

List of Underground Storage Tank Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/29/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

List of Underground Storage Tank Facilities
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/29/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

List of Industrial Site Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Petroleum and non-petroleum spills.

Date of Government Version: 06/23/00
Database Release Frequency: Annually

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PLACER COUNTY:

Master List of Facilities
Source: Placer County Health and Human Services
Telephone: 530-889-7335
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 10/10/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/28/00
Date of Next Scheduled EDR Contact: 03/26/01

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Source: Department of Public Health
Telephone: 909-358-5055
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 12/05/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/23/01
Date of Next Scheduled EDR Contact: 04/23/01

Underground Storage Tank Tank List
Source: Health Services Agency
Telephone: 909-358-5055

Date of Government Version: 12/05/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/23/01
Date of Next Scheduled EDR Contact: 04/23/01

SACRAMENTO COUNTY:

Toxisite List
Source: Sacramento County Environmental Management
Telephone: 916-875-8450

Date of Government Version: 11/29/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/06/01
Date of Next Scheduled EDR Contact: 05/07/01

Regulatory Compliance Master List
Source: Sacramento County Environmental Management
Telephone: 916-875-8450
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/29/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/06/01
Date of Next Scheduled EDR Contact: 05/07/01

SAN BERNARDINO COUNTY:

Hazardous Material Permits
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 10/02/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

SAN DIEGO COUNTY:

Solid Waste Facilities
Source: Department of Health Services
Telephone: 619-338-2209
San Diego County Solid Waste Facilities.

Date of Government Version: 07/01/98
Database Release Frequency: Annually

Date of Last EDR Contact: 02/27/01
Date of Next Scheduled EDR Contact: 05/28/01

Hazardous Materials Management Division Database
Source: Hazardous Materials Management Division
Telephone: 619-338-2258
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 01/07/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/08/01
Date of Next Scheduled EDR Contact: 04/09/01

SAN FRANCISCO COUNTY:

Local Oversite Facilities
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

Date of Government Version: 01/02/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

Underground Storage Tank Information
Source: Department of Public Health
Telephone: 415-252-3920

Date of Government Version: 12/01/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

SAN MATEO COUNTY:

Fuel Leak List
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

Date of Government Version: 10/05/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/30/01
Date of Next Scheduled EDR Contact: 04/30/01

Business Inventory
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/24/99
Database Release Frequency: Annually

Date of Last EDR Contact: 01/16/01
Date of Next Scheduled EDR Contact: 04/16/01

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SANTA CLARA COUNTY:

Fuel Leak Site Activity Report
Source: Santa Clara Valley Water District
Telephone: 408-927-0710

Date of Government Version: 12/31/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/29/01
Date of Next Scheduled EDR Contact: 04/02/01

Hazaroud Material Facilities
Source: City of San Jose Fire Department
Telephone: 408-277-4659

Date of Government Version: 03/20/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

SOLANO COUNTY:

Leaking Undergroung Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 09/01/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

Underground Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 09/01/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
Source: Department of Health Services
Telephone: 707-525-6565

Date of Government Version: 12/01/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/30/01
Date of Next Scheduled EDR Contact: 04/30/01

SUTTER COUNTY:

Underground Storage Tanks
Source: Sutter County Department of Agriculture
Telephone: 530-822-7500

Date of Government Version: 01/02/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

VENTURA COUNTY:

Inventory of Illegal Abandoned and Inactive Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 06/01/99
Database Release Frequency: Annually
Date of Last EDR Contact: 03/01/01
Date of Next Scheduled EDR Contact: 05/28/01

Listing of Underground Tank Cleanup Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/26/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

Underground Tank Closed Sites List
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/21/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/16/01
Date of Next Scheduled EDR Contact: 04/16/01

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 11/22/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Source: Yolo County Department of Health
Telephone: 530-666-8646

Date of Government Version: 07/07/00
Database Release Frequency: Annually
Date of Last EDR Contact: 01/23/01
Date of Next Scheduled EDR Contact: 04/23/01

California Regional Water Quality Control Board (RWQCB) LUST Records

LUST REG 1: Active Toxic Site Investigation
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220

Date of Government Version: 08/01/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 02/28/01
Date of Next Scheduled EDR Contact: 05/28/01

LUST REG 2: Fuel Leak List
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

Date of Government Version: 12/01/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/15/01
Date of Next Scheduled EDR Contact: 04/16/01

LUST REG 3: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147

Date of Government Version: 11/01/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

LUST REG 4: Underground Storage Tank Leak List
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-6600

Date of Government Version: 11/01/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/02/01
Date of Next Scheduled EDR Contact: 04/02/01

LUST REG 5: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-255-3125

Date of Government Version: 10/01/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

LUST REG 6L: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424

Date of Government Version: 01/02/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491

Date of Government Version: 01/02/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

LUST REG 7: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491

Date of Government Version: 10/23/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/01
Date of Next Scheduled EDR Contact: 04/02/01

LUST REG 8: Leaking Underground Storage Tanks
Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4498

Date of Government Version: 11/22/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/15/01
Date of Next Scheduled EDR Contact: 05/14/01

LUST REG 9: Leaking Underground Storage Tank Report
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 619-467-2952

Date of Government Version: 12/05/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/22/01
Date of Next Scheduled EDR Contact: 04/23/01

California Regional Water Quality Control Board (RWQCB) SLIC Records

SLIC REG 1: Active Toxic Site Investigations
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

Date of Government Version: 08/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/28/01
Date of Next Scheduled EDR Contact: 05/28/01

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 12/01/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/15/01
Date of Next Scheduled EDR Contact: 04/16/01

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/01/00
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 02/01/01
Database Release Frequency: Quarterly
Date of Last EDR Contact: 01/30/01
Date of Next Scheduled EDR Contact: 04/30/01

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-855-3075
Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 12/30/00
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 01/08/01
Date of Next Scheduled EDR Contact: 04/09/01

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583

Date of Government Version: 10/01/00
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-3298

Date of Government Version: 06/01/00
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 01/11/01
Date of Next Scheduled EDR Contact: 04/09/01

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980

Date of Government Version: 06/01/00
Database Release Frequency: Annually
Date of Last EDR Contact: 03/05/01
Date of Next Scheduled EDR Contact: 06/04/01

EDR PROPRIETARY DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HISTORICAL AND OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

COSTAL RESORT HOTEL
2100 NORTH US HWY 101
ENCINITAS, CA 92024

TARGET PROPERTY COORDINATES

Latitude (North):	33.083241 - 33' 4' 59.7"
Longitude (West):	117.310219 - 117' 18' 36.8"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	471047.1
UTM Y (Meters):	3660366.2

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2433117-A3 ENCINITAS, CA
Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property: General SW

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Q3 Flood Data Electronic Coverage
SAN DIEGO, CA	NO

Flood Plain Panel at Target Property:	Not Reported
Additional Panels in search area:	Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Coverage
ENCINITAS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Site-Specific Hydrogeological Data*:

Search Radius:	2.0 miles
Status:	Not found

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1 - 2 Miles North	E

For additional site information, refer to Physical Setting Source Map Findings.

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

GEOLOGIC AGE IDENTIFICATION

Geologic Code:	Te
Era:	Cenozoic
System:	Tertiary
Series:	Eocene

ROCK STRATIGRAPHIC UNIT

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Component Name: MARINA

Soil Surface Texture: loamy coarse sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessive. Soils have high hydraulic conductivity and low water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

Soil Layer Information

	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	27 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 7.30 Min: 5.10
2	27 inches	50 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10
3	50 inches	88 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 7.30 Min: 5.10

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:	fine sandy loam gravelly - loamy sand loam gravelly - coarse sand clay loamy fine sand loamy sand
Surficial Soil Types:	fine sandy loam gravelly - loamy sand loam gravelly - coarse sand clay loamy fine sand loamy sand
Shallow Soil Types:	loamy fine sand
Deeper Soil Types:	indurated unweathered bedrock stratified gravelly - coarse sand weathered bedrock

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 611424.3s

0 1/2 1 2 Miles

- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Water Wells
- Public Water Supply Wells
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Cluster of Multiple Icons
- Earthquake epicenter, Richter 5 or greater
- Closest Hydrogeological Data
- Oil, gas or related wells

TARGET PROPERTY:	Costal Resort Hotel	CUSTOMER:	Padre Associates, Inc
ADDRESS:	2100 North US Hwy 101	CONTACT:	J. Summerlin, CEG
CITY/STATE/ZIP:	Encinitas CA 92024	INQUIRY #:	611424.3s
LAT/LONG:	33.0832 / 117.3102	DATE:	March 26, 2001 5:02 pm

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **North** **1 - 2 Miles** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported E 30 50 Not Reported 08/31/1990	**AQUIFLOW**	**33943**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for SAN DIEGO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Zip Code: 92024

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations for District 2 and 6
Source: Department of Conservation
Telephone: 916-323-1779

RADON

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

GULF OF SANTA C
CARLSBAD STATE BEACH
Ponto
32
29
28
33
BATIQUITOS
Roadside Rest
Trailer Park
Water Tank
Leucadia
PONTO STATE BEACH
Encinitas Beach County Park
Seaside Gardens County Park
Encinitas Union Sch
Trailer Park

1968

Carlsbad
AGUA HEDIONDA
SOUTHERN
CALIFORNIA
Canyon de las Encinas
Lagoon
Encinitas
ENCINITAS
SURF LINE
OCEAN

1901

GULF OF SANTA
CARLSBAD
TOPEKA
AND
SANTA FE
FREEWAY
STATE
BEACH
Trailer Park
Ponto
32
33
BATIQUITOS
LA COSTA
Roadside Rest
Trailer Park
Water Tank
Leucadia
PONTO STATE BEACH
Leucadia Park
Trailer Park
Encinitas Beach County Park
Seaside Gardens County Park
St John's Sch

1975

Fenway - Encinitas
1950 N. Coast Highway 101
Encinitas, CA 92024

Inquiry Number: 5095677.7
November 03, 2017

EDR Environmental Lien and AUL Search

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

1950 N. Coast Highway 101
Fenway - Encinitas
Encinitas, CA 92024

RESEARCH SOURCE

Source 1:

San Diego county recorder
San Diego, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	Deed
Title is vested in:	W2007 Encinitas I LLC
Title received from:	David Aguirre
Deed Dated	8/25/2008
Deed Recorded:	9/9/2008
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	see exhibit
Miscellaneous Comments:	na
Legal Description:	see exhibit
Legal Current Owner:	W2007 Encinitas I LLC
Parcel # / Property Identifier:	216-041-20-000
Comments:	see exhibit

Deed 2:

Type of Deed:	Deed
Title is vested in:	W2007 Encinitas I LLC
Title received from:	Estate of Donald L. Woodley
Deed Dated	8/10/2007
Deed Recorded:	8/14/2007
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	

	see exhibit
Miscellaneous Comments:	na
Legal Description:	see exhibit
Legal Current Owner:	W2007 Encinitas I LLC
Parcel # / Property Identifier:	216-041-21-00
Comments:	see exhibit

Deed 3:

Type of Deed:	Deed
Title is vested in:	KSL Encinitas Resort Corporation
Title received from:	Encinitas Resort Corporation
Deed Dated	11/16/2001
Deed Recorded:	11/16/2001
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	see exhibit
Miscellaneous Comments:	na
Legal Description:	see exhibit
Legal Current Owner:	KSL Encinitas Resort Corporation
Parcel # / Property Identifier:	216-041-26-000
Comments:	see exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

Deed Exhibit 1

Recording Requested By:
Chicago Title

Escrow No. 207833-DO
Title Order No. 830010110-U16

When Recorded Mail Document and Tax Statement To:
W2007 ENCINITAS I, LLC
50-905 Avenida Bermudas
La Quinta, CA 92253

566

DOC # 2008-0479387

SEP 09, 2008 8:00 AM
OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 22.00
OC: OC

PAGES: 2

APN: 216-041-20

SPACE ABOVE THIS LINE FOR RECORDER'S USE

QUITCLAIM DEED

The undersigned grantor(s) declare(s)
Documentary transfer tax is $ Ø City Tax is $ No Consideration
[ ] computed on full value of property conveyed, or
[ ] computed on full value less value of liens or encumbrances remaining at time of sale,
[ ] Unincorporated Area [X] CITY OF ENCINITAS

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
DAVID AGUIRRE, AN UNMARRIED MAN

hereby remises, releases and quitclaims to
W2007 ENCINITAS I, LLC, a Delaware limited liability company

the following described real property in the City of **ENCINITAS**,
County of **SAN DIEGO**, State of **CALIFORNIA**:
LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF IDENTIFIED AS EXHIBIT "A".

DATED: August 25, 2008

State of California)
County of San Diego)

On August 26, 2008 before me, Alana M. Hardy, Notary Public (here insert name and title of the officer), personally appeared David Aguirre, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Alana M. Hardy (Seal)

David Aguirre
DAVID AGUIRRE

OFFICIAL SEAL
ALANA M. HARDY
NOTARY PUBLIC-CALIFORNIA
COMM. NO. 1801417
SAN DIEGO COUNTY
MY COMM. EXP. JUNE. 13, 2012

MAIL TAX STATEMENTS AS DIRECTED ABOVE

exhibit "A"

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

ALL THAT REAL PROPERTY IN THE INCORPORATED AREA OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1: THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 12 SOUTH, RANGE 4 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO UNITED STATES GOVERNMENT SURVEY, APPROVED OCTOBER 25, 1875, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERLY OF LOT 10 OF SAID SECTION 33, DISTANT THEREON NORTH 2°01'00" WEST 220.00 FEET FROM THE SOUTHEAST CORNER THEREOF, BEING KNOWN AS POINT "X"; THENCE SOUTHERLY ALONG SAID EASTERLY LINE SOUTH 2°01'00" EAST A DISTANCE OF 220.00 FEET TO SAID SOUTHEAST CORNER; THENCE EASTERLY ALONG THE SOUTHERLY LINE OF SAID SECTION 33, NORTH 89°53'00" EAST A DISTANCE OF 187.02 FEET (RECORD DEED NORTH 89°53'00" EAST 186.07 FEE) TO THE SOUTHWEST CORNER OF LAND DESCRIBED IN DEED TO LATHAM E. MOORE, ET UX, RECORDED JULY 15, 1957 IN BOOK 6663, PAGE 293 OF OFFICIAL RECORDS; THENCE NORTHERLY ALONG THE WESTERLY LINE OF SAID MOORE'S LAND, PARALLEL WITH SAID EASTERLY LINE OF LOT 10, NORTH 2°01'00" WEST A DISTANCE OF 184.91 FEET (RECORD DEED NORTH 2°01'00" WEST 135.00 FEET) TO THE NORTHWESTERLY CORNER THEREOF; THENCE NORTH 76°55'48" EAST A DISTANCE OF 144.20 FEET TO AN INTERSECTION WITH THE SOUTHWESTERLY RIGHT OF WAY LINE OF THE CALIFORNIA STATE HIGHWAY XI-SD-2-B, SAID POINT OF INTERSECTION BEING IN THE ARC OF A 2,350.00 FOOT RADIUS CURVE CONCAVE SOUTHWESTERLY, A RADIAL THROUGH SAID POINT BEARS NORTH 70°20'54" EAST BEING THE TRUE POINT OF BEGINNING; THENCE CONTINUING NORTH 76°55'46" EAST TO AN INTERSECTION WITH THE CENTER LINE OF THE CALIFORNIA STATE HIGHWAY AS SHOWN ON DEPARTMENT OF PUBLIC WORKS SURVEY FROM ENCINITAS TO OCEANSIDE, ROAD XI-SD-2-B, SAID INTERSECTION BEING A POINT ON THE ARC OF A CURVE THEREIN, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2400.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE AND SAID CENTER LINE TO AN INTERSECTION WITH THE EASTERLY PROLONGATION OF THE SOUTH LINE OF THE NORTH 7 ACRES OF LOT 10 OF SAID SECTION 33, AS SAID SOUTH LINE IS SHOWN ON SAID RECORD OF SURVEY MAP NO. 528; THENCE ALONG SAID EASTERLY PROLONGATION SOUTH, 89°53' WEST, TO AN INTERSECTION WITH THE SOUTHWESTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY; THENCE CONTINUING ALONG SAID EASTERLY PROLONGATION, SOUTH 89°53' WEST TO THE EAST LINE OF SAID LOT 10; THENCE SOUTH ALONG THE EAST LINE OF LOT 10 TO A POINT "X" REFERRED TO ABOVE; THENCE NORTH 89°53' EAST A DISTANCE OF 177.37 FEET; THENCE NORTH 76°55'46" EAST A DISTANCE OF 142.36 FEET TO THE SOUTHWEST LINE OF THE CALIFORNIA STATE HIGHWAY XI-SD-2-B; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID HIGHWAY 36.88 FEET TO THE TRUE POINT OF BEGINNING.

(APN 216-041-20)

Deed Exhibit 2

Please complete this information.

RECORDING REQUESTED BY:
CHICAGO TITLE
AND WHEN RECORDED MAIL TO:
W2007 ENCINITAS I LLC
Attn: Whitehall
55 Broad St.
New York NY 10004

F6
4P
ND
TT

DOC # 2007-0540481

AUG 14, 2007 8:00 AM
OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 16.00
OC: OC
PAGES: 4 TAX: N.D.

2007-0540481

Space above this line reserved for Recorder's Use Only
Govt. Code 27361.6

1399

ADMINISTRATOR'S DEED TO REAL PROPERTY

(Please fill in document title(s) on this line)
Govt. Code 27324

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION
Govt. Code 27361.6
(Additional recording fee applies)

RECORDING REQUESTED BY:

CHICAGO TITLE COMPANY

1400

WHEN RECORDED, MAIL TO:
W2007 Encinitas I, LLC (M. Amboss)
50-905 Avenida Bermudas
La Quinta, CA 92253

MAIL TAX STATEMENTS TO:
W2007 Encinitas I, LLC
Attn: Whitehall
55 Broad Street
New York, NY 10004

ADMINISTRATOR'S DEED TO REAL PROPERTY

Escrow No. Title Order No. 603040982-U50

The undersigned transferor declares:

Documentary Transfer Tax is Non-Disclosure
_ unincorporated area x City of Encinitas
_ computed on the full value of the interest or property conveyed, or is
_ computed on the full value less the value of liens or encumbrances remaining at the time of sale.
Assessors Parcel Number: 216-041-21

This deed is made by Claudia Powell as Administrator of the Estate of Donald L. Woodley deceased, hereinafter called "Transferor", pursuant to authority having been granted said Administrator by the Superior Court of the State of California for San Diego County as evidenced by Letters of Administration dated, August 7, 2007, Case No. P 185035, which Letters include authorization to administer pursuant to the Independent Administration of Estates Act (Probate Code §10400 et seq.)

The Transferor hereby conveys to W2007 Encinitas I, LLC, a Delaware Limited Liability Company, without any representation, warranty or covenant of any kind, express or implied, all right, title and interest of the decedent at the time of her death and all right, title and interest that the estate may have subsequently acquired in the real property situated in the County of San Diego, California, commonly known as vacant land at 1950 North Coast Highway 101 in Encinitas, California and more particularly described as follows:

Full Legal description is attached hereto and incorporated by this reference.
APN 216-041-21

SUBJECT TO all conditions, restrictions, and reservations of record; this conveyance being made without any representation, warranty, covenant or other assurance of any kind, expressed or implied, the Transferor further disclaiming all personal or individual liability or responsibility therein, her responsibility being only in her capacity as, and as such, only to the extent of the assets of said estate in her possession as said Administrator.

Dated: August 10, 2007

Claudia Powell Administrator

CLAUDIA POWELL, as Administrator of
the Estate of Donald L. Woodley

STATE OF CALIFORNIA)
)
COUNTY OF SAN DIEGO)

1401

On August 10, 2007, before me, ERICA ROSA, Notary Public, personally appeared CLAUDIA POWELL, personally known to me (or proved to me on the basis of satisfactory evidence), to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____ (Seal)

ERICA ROSA
Commission # 1687191
Notary Public - California
San Diego County
My Comm. Expires Aug 20, 2010

EXHIBIT "A"

THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 12 SOUTH, RANGE 4 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO UNITED STATES GOVERNMENT SURVEY, APPROVED OCTOBER 25, 1875, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERLY OF LOT 10 OF SAID SECTION 33, DISTANT THEREON NORTH 2°01'00" WEST 220.00 FEET FROM THE SOUTHEAST CORNER THEREOF; THENCE SOUTHERLY ALONG SAID EASTERLY LINE SOUTH 2°01'00" EAST A DISTANCE OF 220.00 FEET TO SAID SOUTHEAST CORNER; THENCE EASTERLY ALONG THE SOUTHERLY LINE OF SAID SECTION 23, NORTH 89°53'00" EAST A DISTANCE OF 187.02 FEET (RECORD DEED NORTH 89°53'00" EAST 186.07 FEET) TO THE SOUTHWEST CORNER OF LAND DESCRIBED IN DEED TO LATHAN E. MOORE, ET UX, RECORDED JULY 15, 1957 IN BOOK 6663, PAGE 293, OF OFFICIAL RECORDS; THENCE NORTHERLY ALONG THE WESTERLY LINE OF SAID MOORE'S LAND, PARALLEL WITH SAID EASTERLY LINE OF LOT 10, NORTH 2°01'00" WEST A DISTANCE OF 184.91 FEET (RECORD DEED NORTH 2°01'00" WEST 135.00 FEET) TO THE NORTHWESTERLY CORNER THEREOF; THENCE NORTH 76°55'48" EAST A DISTANCE OF 144.20 FEET TO AN INTERSECTION WITH THE SOUTHWESTERLY RIGHT OF WAY LINE OF THE CALIFORNIA STATE HIGHWAY XI-SD-2-B, SAID POINT OF INTERSECTION BEING IN THE ARC OF 2,350.00 FOOT RADIUS CURVE CONCAVE SOUTHWESTERLY, A RADIAL THROUGH SAID POINT BEARS NORTH 70°20'54" EAST; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 0°53'57" A DISTANCE OF 36.88 FEET; THENCE SOUTH 76°55'46" WEST A DISTANCE OF 142.36 FEET TO A POINT WHICH BEARS NORTH 89°53'00" EAST A DISTANCE OF 177.37 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 89°53'00" WEST A DISTANCE OF 177.37 FEET TO THE POINT OF BEGINNING.

END OF LEGAL DESCRIPTION

Deed Exhibit 3

RECORDED AT THE REQUEST OF
CHICAGO TITLE CO.

5318

DOC # 2001-0836298

NOV 16, 2001 9:37 AM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER
FEES: 17.00
OC: OC

TAX: N.D.

2001-0836298

RECORDING REQUESTED BY

AND WHEN RECORDED RETURN TO:

Heather D. Poisson, Esq.
Long Aldridge & Norman LLP
303 Peachtree Street, Suite 5300
Atlanta, Georgia 30308

MAIL TAX STATEMENTS TO:

KSL Encinitas Resort Corporation
50-905 Avenida Bermuda
La Quinta, California 92253

13048686.416
216-041-26

(Space Above for Recorder's Use)

GRANT DEED

The undersigned grantor declares:
Documentary transfer tax is shown on the
accompanying statement and is not for public record.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, ENCINITAS RESORT CORPORATION, a California corporation ("Grantor"), hereby GRANTS to KSL ENCINITAS RESORT CORPORATION, a Delaware corporation ("Grantee"), the real property located in the City of Encinitas, County of San Diego, State of California, described in Schedule "1" attached hereto and incorporated herein by reference.

SUBJECT TO:

1. General and Special Real Property Taxes for the current fiscal year.

2. The covenants, conditions, restrictions, easements, reservations, rights and rights-of-way of record.

(The remainder of this page has intentionally been left blank)

IN WITNESS WHEREOF, the undersigned has caused this Grant Deed to be executed as of the date set forth above.

ENCINITAS RESORT CORPORATION, a California corporation

By: _____
Toshio Kinoshita
President

STATE OF CALIFORNIA)

) ss.

COUNTY OF San Diego)

On November 15th, 2001, before me, Jane Donovan, a Notary Public in and for said state, personally appeared TOSHIO KINOSHITA, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Jane Donovan
Notary Public in and for said State

JANE DONOVAN
Commission # 1281146
Notary Public - California
Orange County
My Comm. Expires Oct 20, 2004

Schedule "1"
to
Grant Deed

Legal Description of Property

All that certain real property situated in the City of Encinitas, County of San Diego, State of California, more particularly described as follows:

PARCEL 1 OF PARCEL MAP NO. 18587, IN THE CITY OF ENCINITAS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, NOVEMBER 21, 2000.

APPENDIX G

CERTIFICATION AND STATEMENT OF LIMITING CONDITIONS

HOVEY ENVIRONMENTAL
www.hoveyenvironmental.com ◊ info@hoveyenvironmental.com
2929 Chatsworth Blvd ◊ San Diego California 92106
Phone 619.203.9774 ◊ Fax 619.923.3055

CERTIFICATION AND STATEMENT OF LIMITING CONDITIONS FOR PHASE I ENVIRONMENTAL SITE ASSESSMENT

SUBJECT PROPERTY:	1950, 2100 N Coast Highway	Encinitas	CA	92024
	STREET ADDRESS	CITY	STATE	ZIP

ASSESSORS PARCEL NUMBERS: 216-041-20-000; 216-041-21-000; 216-041-26-000

CLIENT NAME: Fenway Capital Advisors, Attn: Bryan Smith PROJECT #: 17013-01

READ THE AGREEMENT CAREFULLY – IT IS A LEGALLY BINDING CONTRACT

Certification: Hovey Environmental LLC certifies to the Principal Parties; and Hovey Environmental LLC and the Principal Parties agree that:

1. Hovey Environmental LLC has no present or contemplated future (a) partnership with Principal Parties nor (b) any interest in the property inspected which could adversely affect the Hovey Environmental LLC's ability to perform an objective inspection; and neither the employment of Hovey Environmental LLC to conduct the inspection, nor the compensation for it, is contingent on the results of the inspection.
2. Hovey Environmental LLC has no personal interest in or bias with respect to the subject matter of the inspection report or any parties who may be part of a financial transaction involving the property. The conclusions and recommendations of the report are not based in whole or in part upon the race, color, creed, sex, or national origin of any of the Principal Parties.
3. Hovey Environmental LLC will personally inspect the property, both inside and out and will make visual inspection of adjacent properties, to the extent possible by readily available access. The inspection does not include the removal of any soil, water or air samples, the moving of furniture or fixtures, or any type of inspection that would require extraordinary effort to access.
4. All contingent and limiting conditions are contained herein (imposed by the terms of the inspection assignment or by the undersigned affecting the conclusions and recommendations contained in the report.)
5. The Inspection and Inspection report will be performed in accordance with ASTM 1527-13, Code of Federal Regulations Part 312 *Standard Practices for All Appropriate Inquiries*, and made in conformity with and is subject to the requirements of the Code of Professional Ethics of the Environmental Assessment Association.

Client Signature

6. All opinions, conclusions, and recommendations concerning the inspected property that are set forth in the inspection report will be prepared by Hovey Environmental LLC. No change of any item in the report shall be made by anyone other than Hovey Environmental LLC, and Hovey Environmental LLC shall have no responsibility for any such unauthorized change.

Contingent and Limiting Conditions: The certification of Hovey Environmental LLC appearing in the environmental inspection report is subject to the following conditions and to such other specific and limiting conditions as are set forth by Hovey Environmental LLC in the report.

1. Hovey Environmental LLC assumes no responsibility for matters of a legal nature affecting the property inspected or the title thereto. The property is inspected assuming responsible ownership.
2. Any sketch appearing in or attached to the inspection report, or any statement of dimensions, capacities, quantities or distances, are approximate and are included to assist the reader in visualizing the property and the use is limited to this purpose. Hovey Environmental LLC will make no survey of the property.
3. Hovey Environmental LLC is not required to give testimony or appear in court because of having made the inspection with reference to the property in question, unless arrangements have been previously made thereof. If Hovey Environmental LLC is called to give testimony as a result of the Environmental Inspection, additional fees will be charged at Hovey Environmental LLC's then current fee rates for any time spent including but not limited to research, consultation, additional inspection time, preparation of reports, travel, time waiting to testify and court appearances or depositions or sworn statements.
4. This report is not intended to have any direct effect on the value of the property inspected but simply to provide a visual Environmental Assessment solely for the benefit of the Principal Parties.
5. Hovey Environmental LLC assumes that there are no hidden, unapparent, or latent conditions or defects in or of the property, subsoil, or structures, other than those noted on the inspection report or any addendum to the report which the Inspector will include. Hovey Environmental LLC assumes no responsibility for such conditions or for the inspection, engineering, or repair which might be required to discover or correct such factors. The Phase I ESA is an inspection only. Hovey Environmental LLC will not take samples from the property or perform any tests on the property as part of this agreement.
6. Information, estimates and opinions furnished to Hovey Environmental LLC, and contained in the report, were obtained from sources considered reliable and believed to be true and correct on the date they were obtained. However, Hovey Environmental LLC has made no independent investigation as to such matters and undertakes no responsibility for the accuracy of such items, including but not limited to federal, state, and local government databases, historical archives, maps, tax files, title records, and land use records.
7. The Inspection and Inspection Report are made by Hovey Environmental LLC solely for the benefit and personal use of the Principal Parties. Disclosure of the contents of the Inspection Report is governed by the Bylaws and Regulations of the Environmental Assessment Association. No disclosure may be made of the Inspection Report without the prior written consent of Hovey Environmental LLC and Hovey Environmental LLC undertakes no responsibility for harm or damages to any party other than the Principal Parties arising from or in any way connected to the report.
8. Neither the Inspection Report, any part thereof, nor any copy of the same (including conclusions or recommendations, the identity of the Inspector, professional designation, reference to any professional organization, or the firm with which the inspector is connected), shall be used for any purposes by anyone but the Principal Parties. The report shall not be conveyed by anyone to the public through advertising, public relations, news, sales, or other media, without the prior written consent and approval of Hovey Environmental LLC.

Client Signature

9. This Agreement and the documents referred to herein constitute the entire Agreement between the parties hereto and supercede any and all prior representations, discussions or agreements whether written or oral. No amendment, change or variance from this Agreement shall be binding on either party unless mutually agreed to in writing and signed by the parties hereto. If any provision of this agreement is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable and binding on the parties.
10. THE INSPECTION AND INSPECTION REPORT DO NOT CONSITUTE A WARRANTY, GUARANTEE OR INSURANCE POLICY OF ANY KIND. There are no warranties, guarantees or insurance available or provided by Hovey Environmental LLC.

Having read and fully understanding this Agreement, I hereby authorize the inspection of the subject property.

$3,750
Environmental Assessment Fee

November 2, 2017
Agreement Date

Client's Signature

FCA ENCINITAS, LLC
Client's Name and Company (if applicable)

10525 VISTA SORRENTO PKWY #310 SAN DIEGO, CA 92121
Street Address City State Zip

bsmith@fenway ca.com
Email

(858) 436 3616
Daytime Phone

858) 444-5709
Mobile Phone

(858) 436-3636
Fax

Caroline Hovey, CMC, CES, REA-08115
Principal Environmental Specialist
Hovey Environmental LLC

APPENDIX H
QUALIFICATIONS OF ENVIRONMENTAL ASSESSOR

CAROLINE HOVEY, ***CMC, CES, REA-08115***
Principal Environmental Specialist
Hovey Environmental LLC

EXPERIENCE

2002 - present

PRINCIPAL ENVIRONMENTAL SPECIALIST: Hovey Environmental LLC

- Moisture and microbial evaluations and testing
- Microbial remediation protocols and post-remediation verification
- Environmental site assessments (Phase I ESA)
- Consultation and expert witness services
- Air, water, soil quality evaluations and testing

1994 – 2001

ENVIRONMENTAL RESEARCH ASSOCIATE: Granberry & Assoc., Chemical, Safety, and Environmental Consultants; Winter Park, FL

- Indoor air quality assessments / sick building syndrome analyses
- Environmental site assessments
- Research of legal cases dealing with hazards in the chemical industry
- Assist safety audits of manufacturing plants
- Audit industrial compliance with government regulations, including OSHA, NFPA, etc.

1998 – 2000

ENVIRONMENTAL SCIENTIST: South Florida Water Management District; Kissimmee Department; West Palm Bch, FL

- Primary Investigator, River Channel Vegetation study: data collection, trend analysis, and reporting
- Interagency coordination of exotic plant management
- Field collection, data processing of the River Channel Geomorphology study
- Construction and maintenance of vegetation database for Kissimmee River and associated floodplain
- Maintenance of Kissimmee River / Everglades herbarium
- Weekly Hydrologic Monitoring Reports

1996 - 1998

ENVIRONMENTAL ASSISSTANT: St. John's River Water Management District, Land Management Division; Melbourne, FL

- Assistance with burn planning / mapping and participation in prescribed burns
- Wildlife inventories, including bird counts
- Preparation of St. Sebastian River Buffer Preserve for public use (trail marking, fence construction and destruction, etc.)

1994 – present

WETLANDS RESEARCH VOLUNTEER: Various organizations

- Compiled and summarized 20+ years of ornithological data of an isolated wetland area
- Assistance with exotic weed management programs
- Collection of environmental data, hydrophone recording
- Beach profiling data collection
- Collection of sea water samples

EDUCATION & TRAINING

FLORIDA INSTITUTE OF TECHNOLOGY; Melbourne, FL
BS Environmental Science
Cum Laude Graduate

Environmental Solutions Association
Series 200 Mold Inspection Course

Certified Mold Inspectors & Contractors Institute
Mold Assessment and Remediation Training

Continuing Education through Environmental Data Resources
Due Diligence at Dawn Seminars

Continuing Education through IAQA and AIHA
Local Chapter Meetings and Seminars
National Conventions

PUBLICATIONS, PROFESSIONAL AFFILIATIONS, & CERTIFICATIONS

Council-Certified Microbial Consultant; American Indoor Air Quality Council
#0704045

Indoor Air Quality Association, San Diego Chapter Advisory Board Member
Member #17519

Environmental Solutions Association
Certified Mold Inspector, Certification #0373

American Industrial Hygienists Association
Member #173057

Registered Environmental Assessor, State of California
Member #08115 prior to program dissolution by the state

Environmental Assessment Association
Certified Environmental Specialist, Certification # 73923
Certified Environmental Inspector, Certification # 73923

California Real Estate Inspection Association
Affiliate Member

Certified Mold Inspectors & Contractors Institute
Certified Toxic Mold Investigator
Certified Mold Remediator

PUBLICATION: "Macrophyte communities within the channelized Kissimmee River: expectations for restoration."
Aquaphyte Newsletter. 20 (1): 1 – 5.

APPENDIX K
NOISE AND GROUNDBORNE VIBRATION TECHNICAL MEMORANDUM

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

Technical Memorandum:
NOISE AND GROUNDBORNE VIBRATION

Marea Village Mixed Use Development Project

MBAKERINTL.COM

Technical Memorandum

TO:	City of Encinitas	**DATE:**	April 2021
FROM:	Michael Baker International	**SUBJECT:**	Noise and Groundborne Vibration for the Marea Village Mixed Use Development Project

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential short- and long-term noise and ground-borne vibration impacts as a result of the project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site is via North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The proposed project would demolish the existing buildings on the property and construct 94 apartments, 30 hotel rooms, and 18,262 square feet of retail uses. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area. Vehicular access to the site would be provided via a right turn in from the southbound lane of North Coast Highway 101 and a new left turn lane from the northbound North Coast Highway 101. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. It is anticipated there would also be pedestrian access to the site from the property

to the north of the project which is the site of a hotel that is currently under construction. The hotel is anticipated to be operational prior to the project.

Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone overlay. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Limited Visitor-Serving Commercial (N-LVSC) with a Coastal Zone and Residential-30 (R-30) Zone overlay. As part of the City of Encinitas Housing Element Update, Site 1 of the project site was allocated a minimum of 33 residential units if the site is developed at a mixed-use ratio.

Project construction would occur over approximately 15 months. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating.

METHODOLOGY

To assess potential noise impacts, a field investigation was conducted to identify land uses and sensitive receptors that could be subject to construction and operational noise impacts from the project, and ambient noise measurements were collected to establish the existing noise environment.

Noise levels of specific construction equipment were determined and resultant noise levels at those sensitive receptors (at measured distances from the source) were then calculated. Potential long-term (i.e., operational) mobile and stationary source noise were assessed based on site reconnaissance information and documented noise levels.

Traffic noise levels were predicted using the using Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108). The RD-77-108 model calculates the average noise level at specific locations based on traffic volumes from the *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis* (Traffic Impact Analysis) prepared by LOS Engineering, Inc. (dated November 12, 2020), average speeds represented by the posted speed limit, roadway geometry, and site environmental conditions. As a conservative analysis, shielding features, including topography and intervening buildings, were not considered in the model.

Stationary noise levels were predicted using typical reference noise levels from publications and distances between noise sources and nearest sensitive receptors.

Predicted noise levels were then compared with applicable significance thresholds and City standards for determination of significance.

In addition, an on-site noise level assessment was performed to evaluate whether the project's design is consistent with the City's Noise and Land Use Compatibility Guidelines and Municipal Code.

EXISTING SITE CONDITIONS

The project site is currently occupied by an operating restaurant, a small commercial center, and a vacant structure formerly operated as a restaurant, along with various supporting surface parking areas and a small area of previously undeveloped land.

The topography of the project site varies. Developed areas in the southern portion of the site are generally flat; however, approximately 14 percent of the overall site has a slope greater than 25 percent, with some on-site slopes exceeding 40 percent.

The existing Seabluffe residential community of 255-gated townhomes is located directly adjacent to the south and west. Moorgate Road and approximately 18 parking stalls run along the southern boundary of

the site. The Pacific Ocean lies further west, approximately 0.14-mile from the site. A new hotel (currently under construction) is located adjacent to the north of the project site. The intersection of La Costa Avenue and North Coast Highway 101 lies approximately 215 feet to the northeast. North Coast Highway 101, a four-lane divided highway with two lanes and a dedicated bike lane in both directions, forms the eastern boundary of the project site. Sidewalks are only available along southbound Highway 101 on the north half of the project site. The North County Transit District (NCTD) railroad runs north-south and parallels Highway 101 on the east, approximately 135 feet to the east of the project site at its nearest point. The closest airport is the McClellan-Palomar Airport, located approximately 3.5 miles to the northeast of the project site.

FUNDAMENTALS OF SOUND AND ENVIRONMENTAL NOISE

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is perceived to be twice as loud and 20 dBA higher is perceived to be four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. This A-weighted dB scale has been chosen by most authorities for regulation of environmental noise. Table 1, Typical Indoor/Outdoor Noise Levels and Common Environmental Noise Sources, lists typical indoor and outdoor noise levels.

Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. The presence of a barrier between the source and the receptor may attenuate noise levels. The actual amount of attenuation depends on the barrier size and the frequency of the noise. A noise barrier may be any natural or human-made feature, such as a hill, tree, building, wall, or berm. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

Table 1
Typical Indoor/Outdoor Noise Levels and Common Environmental Noise Sources

Common Outdoor Activities Noise Level	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet fly-over at 1,000 feet		
	100	
Gas lawn mower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

There are several metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA. Similarly, Community Noise Equivalent Level (CNEL) is a measure of 24-hour noise levels that incorporates a 5-dBA penalty for sounds occurring between 7:00 p.m. and 10:00 p.m. and a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

FUNDAMENTALS OF ENVIRONMENTAL GROUNDBORNE VIBRATION

Sources of earth-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction

equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 2, *Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels*, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Table 2
Human Reaction and Damage to Buildings
for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effect on Buildings
0.006–0.019	64–74	Range of threshold of perception.	Vibrations unlikely to cause damage of any type.
0.08	87	Vibrations readily perceptible.	Recommended upper level to which ruins and ancient monuments should be subjected.
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities.	Virtually no risk of architectural damage to normal buildings.
0.2	94	Vibrations may begin to annoy people in buildings.	Threshold at which there is a risk of architectural damage to normal dwellings.
0.4–0.6	98–104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Architectural damage and possibly minor structural damage.

Source: California Department of Transportation, *Transportation Related Earthborne Vibrations*, 2002.

Ground vibration can be a concern in instances where buildings shake and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per section (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

EXISTING SETTING

Noise Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The nearest sensitive receptors to the project site are multi-family residences (Seabluffe Village) located immediately adjacent to the west and south.

Existing Mobile and Stationary Noise Levels

The majority of the existing noise in the project area is from mobile sources generated from traffic along surrounding roadways including North Coast Highway 101 and trains along the North County Transit District railroad. The primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment and parking areas). Noise associated with the stationary sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

Ambient Noise Measurements

In order to quantify existing ambient noise levels in the project area, Michael Baker International conducted noise measurements on October 27, 2020; refer to Exhibit 1, *Noise Measurement Locations*, and Table 3, *Noise Measurements*. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site. The 10-minute short-term measurements were taken at each site between 10:00 a.m. and 12:00 p.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day. The noise measurements were taken during "off-peak" (9:00 a.m. through 3:00 p.m.) traffic noise hours as this provides a more conservative baseline. During rush hour traffic, vehicle speeds and heavy truck volumes are often low. Free-flowing traffic conditions just before or after rush hour often yield higher noise levels.[1]

Meteorological conditions were clear skies, warm temperatures, with light wind speeds (approximately 0 to 5 miles per hour), and low humidity. Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for Type I (precision) sound level meters. As shown in Table 3, the ambient recorded noise level in the project vicinity ranged from 50.4 dBA to 65.3 dBA. Refer to Appendix A, *Noise Data*, for the results of the field measurement.

[1] California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

Table 3
Noise Measurements

Measurement Location Number	Location	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	Peak (dBA)	Time
1	On southern side of the project site near existing driveway and Highway 101	65.3	79.4	44.2	99.1	10:27 a.m.
2	Inside Seabluffe Village, the grass area adjacent to Moorgate Road and apartments along Haymarket Road	50.4	66.4	41.2	84.1	10:50 a.m.
3	Inside Seabluffe Village, at the corner of Milbank Road and Moorgate Road	53.6	75.9	44.5	100.7	11:03 a.m.

Note: L_{eq} = equivalent sound level; L_{max} = maximum sound level, the highest individual sound level occurring over a given time period; L_{min} = minimum sound level, the lowest individual sound level occurring over a given time period; Peak = peak sound level, the peak level of the sound pressure wave with no time constant applied.

Source: Michael Baker International, October 27, 2020.

REGULATORY SETTING

Federal

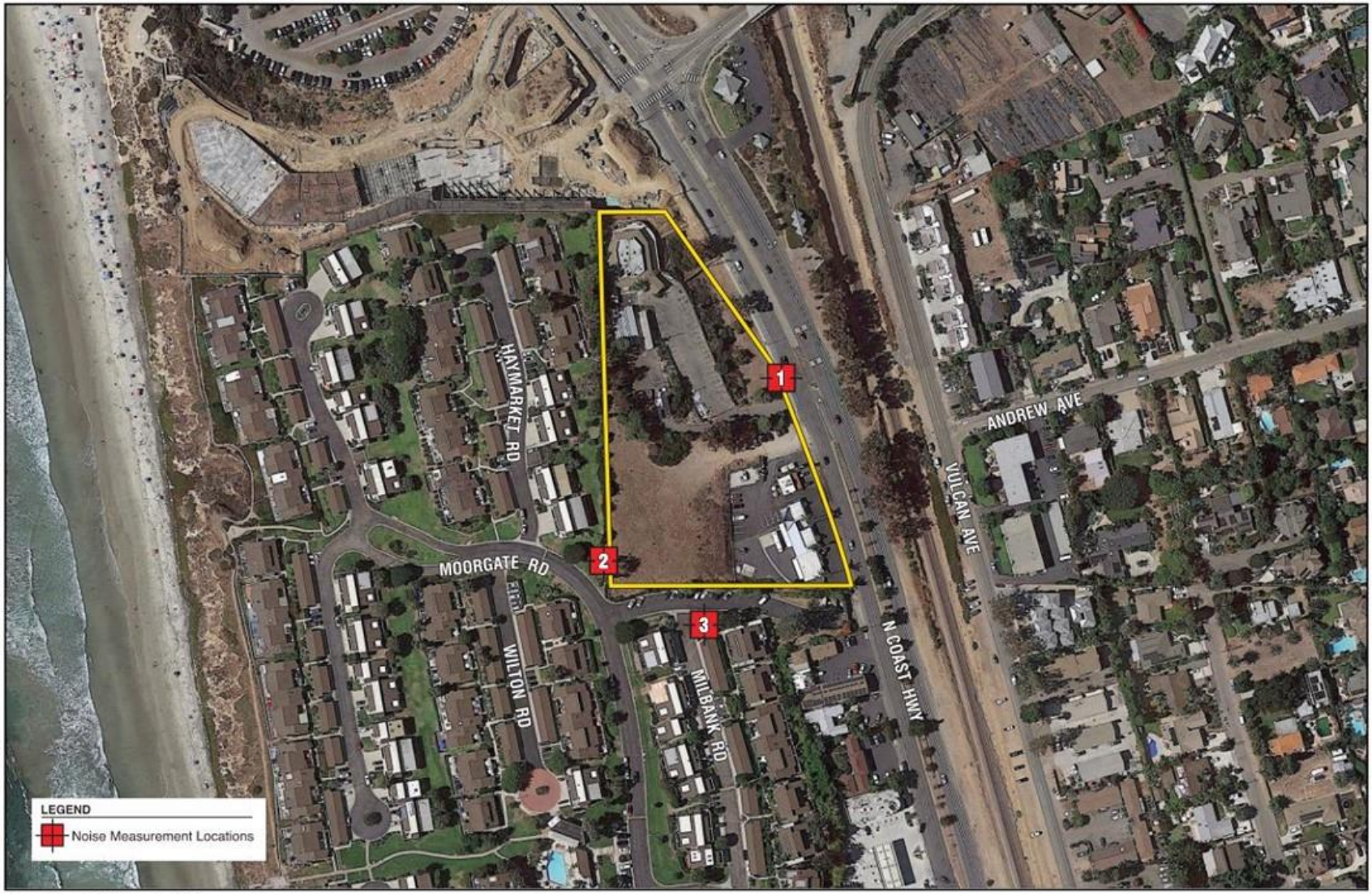
U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) offers guidelines for community noise exposure in the publication Noise Effects Handbook – A Desk Reference to Health and Welfare Effects of Noise. These guidelines consider occupational noise exposure as well as noise exposure in homes. The EPA recognizes an exterior noise level of 55 decibels day-night level (dB L_{dn}) as a general goal to protect the public from hearing loss, activity interference, sleep disturbance, and annoyance. The EPA and other Federal agencies have adopted suggested land use compatibility guidelines that indicate that residential noise exposures of 55 to 65 dB L_{dn} are acceptable. However, the EPA notes that these levels are not regulatory goals, but are levels defined by a negotiated scientific consensus, without concern for economic and technological feasibility or the needs and desires of any particular community.

State of California

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act, find that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The act also finds that there is a continuous and increasing bombardment of noise in urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians that is free from noise that jeopardizes their health or welfare.



Source: Google Earth, December 2020

NOT TO SCALE

Michael Baker INTERNATIONAL

12/2020 JN 180068

MAREA VILLAGE MIXED USE DEVELOPMENT PROJECT
NOISE AND GROUNDBORNE VIBRATION TECHNICAL MEMORANDUM

Noise Measurement Locations

Exhibit 1

Office of Planning and Research

The State Office of Planning and Research's *Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *Noise Element Guidelines* contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

City of Encinitas

City of Encinitas General Plan

The *City of Encinitas General Plan* (General Plan) is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life in the City. Table 4, *Land Use Compatibility for Community Noise Environments*, presents guidelines from the General Plan Noise Element for determining acceptable and unacceptable community noise exposure limits for various land use categories.

Table 4
Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential - Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging - Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial and Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

Notes: NA: Not Applicable; L_{dn}: average day/night sound level; CNEL: Community Noise Equivalent Level, dBA: A-weighted Decibel
Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable - New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable – New construction or development should generally not be undertaken.

Source: City of Encinitas, *General Plan Noise Element*, adopted March 29, 1989.

The General Plan Noise Element also includes goals and policies emphasizing noise reduction through standards, site planning, and in the construction of new development that focus on noise mitigation. The relevant goals and policies for the project include:

- **Goal 2**: Require that new development be designed to provide acceptable indoor and outdoor noise environments.
    - **Policy 2.1**: The Noise and Land Use Compatibility Guidelines and the accompanying discussion set forth the criteria for siting new development in the City of Encinitas. Any project which would be located in a normally unacceptable noise exposure area, based on the Land Use Compatibility Guidelines, shall require an acoustical analysis. Noise mitigation in the future shall be incorporated in the project as needed. As a condition of approval of a project, the City may require post-construction noise monitoring and sign off by an acoustician to ensure that City requirements have been met.
- **Goal 3**: Ensure that residents are protected from harmful and irritating noise sources to the greatest extent possible.
    - **Policy 3.1**: The City will adopt and enforce a quantitative noise ordinance to resolve neighborhood conflicts and to control unnecessary noise in the City of Encinitas. Examples of the types of noise sources that can be controlled through the use of a quantitative noise ordinance are barking dogs, noisy mechanical equipment such as swimming pool and hot tub pumps, amplified music in commercial establishments, etc.
- **Goal 4**: Provide for measures to reduce noise impacts from stationary noise sources.
    - **Policy 4.1**: Ensure inclusion of noise mitigation measures in the design and operation of new and existing development.

City of Encinitas Municipal Code

The City of Encinitas Municipal Code (Municipal Code) establishes noise criteria to prevent noise and vibration that may jeopardize the health or welfare of the City's citizens or degrade their quality of life. Chapter 9.32, Noise Abatement and Control, and Chapter 30.40, Performance Standards, establish property line noise level limits. These limits apply to existing uses but will also apply to future uses and are used for evaluating potential impacts of future on-site generated noise levels.

Section 9.32.410 states that it shall be unlawful for any person, including the City, to operate construction equipment at any construction site on Sundays, and days appointed by the President, Governor or the City Council for a public fast, thanksgiving, or holiday. No such equipment, or combination of equipment regardless of age or date of acquisition, shall be operated so as to cause noise at a level in excess of 75 decibels for more than eight hours during any 24-hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes.

The property line noise limits are summarized in Table 5, City of Encinitas Exterior Noise Limits. In reference to noise levels depicted in Table 5, Municipal Code Section 30.40.10 states, "Every use shall be so operated that the noise generated does not exceed the following levels at or beyond the lot line and does not exceed the limits of any adjacent zone."

Table 5
City of Encinitas Exterior Noise Limits

Adjacent Zone	Noise Level [dB(A)]	
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Rural Residential (RR), Rural Residential-1 (RR-1), Rural Residential-2 (RR-2), Residential-3 (R-3), Residential-5 (R-5), Residential-8 (R-8)	50	45
Residential-11 (R-11), Residential Single Family-11 (RS-11), Residential-15 (R-15), Residential-20 (R-20), Residential-25 (R-25), Mobile Home Park (MHP)	55	50
Office Professional (OP), Limited Local Commercial (LLC), Local Commercial (LC), General Commercial (GC), Limited Visitor Serving Commercial (L-VSC), Visitor Serving Commercial (VSC)	60	55
Light Industrial (L-I), Business Park (BP)	60	55
Source: City of Encinitas Municipal Code 30.40.010(A).		

In reference to interior noise standards, Municipal Code Section 30.40.010 states, "The interior noise level as required by the State of California Noise Insulation Standards must not exceed an L_{DN} of 45 dB in multifamily dwellings. This interior standard shall also be applied to single-family dwellings and offices in the City of Encinitas."

Encinitas North 101 Corridor Specific Plan

The project is located within the Encinitas North 101 Corridor Specific Plan (Specific Plan). Chapter 9.7, Noise, of the Specific Plan establishes goals and policies related to noise control in the Specific Plan area. The relevant goals and policies for the project include:

- **Goal 1:** Provide an acceptable noise environment for existing and future residents of the City of Encinitas.
    - **Policy 1.1**: Review actions or projects that may have noise generation potential to determine what impact they may have on existing land uses. If a project would cause an increase in traffic noise levels, the policy of the City of Encinitas is to accept an increase up to an L_{dn} of 55 dB in outdoor residential use areas without mitigation. If a project would increase the traffic noise level by more than 5 dB and the resulting L_{dn} would be over 55 dB, then mitigation measures must be evaluated. If the project, or action, would increase traffic noise levels by 3 dB or more and the resulting L_{dn} would exceed 60 dB in outdoor use areas in residential development, noise mitigation must be similarly evaluated. The impact of non transportation projects must generally be evaluated on a case-by-case basis. The following recommendations will aid in evaluating the impacts of commercial and industrial projects.

        a) Performance Standards Adjacent to Residential Areas. New commercial construction adjacent to residential areas should not increase noise levels in a residential area by more than 3 dB (L_{dn}) or create noise impacts which would increase noise levels to more than an L_{dn} of 60 dB at the boundary of the nearest residential area, whichever is more restrictive.

        b) Performance Standards Adjacent to Commercial and Industrial Areas. New commercial projects should not increase noise levels in a commercial area by more than 5 dB (L_{dn}) or increase noise levels to an L_{dn} in excess of 70 dB (office buildings, business and professional) or an L_{dn} of 75 dB (industrial) at the property line of an adjacent commercial/industrial use, whichever is more restrictive.

These criteria may be waived if, as determined by a noise analysis, there are mitigating circumstances (such as higher existing noise levels) and/or no uses would be adversely affected. Where conditions are unusual or where backgrounds are unusually low and the characteristics of a new noise source are not adequately described by using the L_{dn} noise descriptor, additional acoustical analysis is encouraged and the conclusions of such analysis will be considered by the City.

- **Policy 1.2**: An L_{dn} of 60 dB is the maximum acceptable outdoor noise level in residential outdoor use areas. The City recognizes that there are residential areas in which existing noise levels exceed an acceptable level. The City will adopt a Noise Wall/Barrier Installation Policy for determining which areas should receive soundwalls along the major street system and to evaluate possible cost participation programs for constructing these soundwalls.

- **Goal 2**: Require that new development be designed to provide acceptable indoor and outdoor noise environments.
- **Goal 3**: Ensure that residents are protected from harmful and irritating noise sources to the greatest extent possible.
- **Goal 4**: Provide for measures to reduce noise impacts from stationary noise sources.
  - **Policy 4.1**: Ensure inclusion of noise mitigation measures in the design and operation of new and existing development.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) THRESHOLDS

Based on Appendix G of the State CEQA Guidelines and the City of Encinitas' applicable noise standards, the project may have a significant adverse impact related to noise and vibration if it would result in any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. More specifically:
  - operational traffic source noise levels that would result in an increase of 3 dBA and greater than 60 dB at noise-sensitive land uses, or an increase of 5 dBA and greater than 55 dB at noise-sensitive land uses;
  - operational stationary and/or area source (non-transportation) noise levels that would exceed the applicable standard or result in a noticeable increase of 3 dBA or greater at the property line of residential uses or by 5 dBA at the property line of commercial uses;
- Generation of excessive groundborne vibration or groundborne noise levels; and/or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

IMPACT ANALYSIS

NOI-1 Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, and some passive recreation areas would each be considered noise-sensitive. The nearest sensitive receptors to the project site are the predominantly residential neighborhoods located immediately adjacent to the west and south of the proposed project site.

Project Construction

Construction of the proposed project would involve construction activities such as building demolition, grading, building construction, paving, and architectural coating. The temporary construction noise associated with on-site equipment could potentially expose sensitive receptors to noise levels in excess of the applicable noise standard and/or result in a noticeable increase in ambient noise levels, and/or an exceedance of daytime hour noise standards.

Typical noise levels generated by construction equipment used by the project are shown in Table 6, Noise Levels Generated by Construction Equipment. It should be noted that the noise levels in maximum sound levels (L_{max}) identified in Table 6 are the highest individual sound occurring at an individual time period. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). The L_{max} levels were converted to L_{eq} levels based on the acoustical use factor of each equipment, and L_{eq} levels are more representative of the noise levels averaged over time.

Table 6
Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	L_{max} at Property Line (dBA)[2]	L_{eq} at Property Line (dBA)[2]	L_{max} at 50 Feet (dBA)	L_{eq} at 120 Feet (dBA)	L_{eq} at 220 Feet (dBA)
Backhoe	40	**112**	108	78	66	61
Concrete Saw	20	**124**	117	90	75	70
Crane	16	**113**	105	79	63	58
Dozer	40	**116**	112	82	70	65
Dump Truck	40	**110**	106	76	64	59
Excavator	40	**115**	111	81	69	64
Forklift	40	**112**	105	78	63	58
Grader	40	**119**	115	85	73	68
Loader	40	**113**	109	79	67	62
Paver	50	**111**	108	77	66	61
Vibratory Pile Driver	20	**129**	122	95	80	75
Roller	20	**114**	107	80	65	60
Scraper	40	**119**	115	85	73	68
Soil Mix Drill Rig	50	**114**	111	80	69	64
Tractor	40	**118**	114	84	72	67
Water Truck	40	**114**	110	80	68	63
General Industrial Equipment	50	**119**	116	85	74	69

Note:
1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.
2. 2: It is mathematically infeasible to calculate noise levels at zero-foot from the source. Therefore, noise levels are calculated at one foot from the source as an approximate to represent noise levels at the property line.

Source: Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054)*, January 2006.

The potential for construction-related noise to affect nearby sensitive receptors would depend on the location and proximity of construction activities to these receptors. The closest sensitive receptors are the multi-family residences located adjacent to the west and south of the project site.

According to the Municipal Code Section 9.32.410 (A), construction activities are only allowed between the hours of 7:00 a.m. to 7:00 p.m. on Mondays through Saturdays except for holidays and construction equipment, or combination of equipment shall be operated so as to cause noise at a level in excess of 75 decibels for more than eight hours during any 24-hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes.

As shown in Table 6, construction noise would potentially range from 105 dBA L_{eq} to 122 dBA L_{eq} at the property line and 77 dBA L_{eq} to 95 dBA L_{eq} at 50 feet from the property line, in exceedance of the 75 dBA threshold. At a distance of 120 feet from the property lines, estimated noise levels from all equipment types with the exception of pile drivers would be reduced to below the 75 L_{eq} thresholds. At a distance of 220 feet from the property line, vibratory pile drivers would be reduced to below the 75 dBA L_{eq} threshold.

Although construction noise may exceed the 75 dBA L_{eq} threshold at any given time, the fraction of use for the types of construction equipment shown in Table 6 would ranges from 16% to 50% over the course of a construction day and in different areas on the property at varying distances from the property boundary; therefore, the rate and duration of individual or cumulative equipment noise in exceedance of the 75 dBA threshold would be variable and intermittent in duration throughout the day and it is unlikely

that construction activities would continuously sustain or exceed the 75 dBA over the course of an 8 hour period.

The applicant for the proposed project would be required to prepare a Construction Noise Control Plan and comply with City's noise ordinance requirements as a condition of project approval. Because the project would be required to prepare a Construction Noise Control Plan to demonstrate compliance with the City's noise ordinance, including the requirements that construction equipment, or combination of equipment would not sustain or exceed the City's 75 dBA significance threshold continuously over the course of an 8 hour period, the impact of temporary construction noise would be **less than significant**.

Project Operations

Off-Site Mobile Noise

The proposed project would result in additional traffic on adjacent roadways from daily activities, thereby increasing vehicular noise in the vicinity of existing and proposed land uses. Based on the City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis (Traffic Impact Analysis) prepared by LOS Engineering, Inc. (dated November 12, 2020), the project would generate a net increase of 1,122 average daily trips, including 60 trips during the a.m. peak hour and 102 trips during the p.m. peak hour. The noise levels under "Existing Without Project" and "Existing With Project" scenarios are modeled using Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108) and compared in Table 7, Existing Traffic Noise Levels. Noise modeling assumptions and results are included in Appendix A. As depicted in Table 7, under the "Existing Without Project" scenario, noise levels at 100 feet from roadway centerline would range from approximately 59.5 dBA to 65.0 dBA, with the highest noise levels occurring along Carlsbad Boulevard from Avenida Encinas to La Costa Avenue. The "Existing With Project" scenario noise levels at 100 feet from roadway centerline would range from approximately 59.7 dBA to 65.1 dBA, with the highest noise levels also occurring along Carlsbad Boulevard from Avenida Encinas to La Costa Avenue.

Table 7
Existing and Predicted Traffic Noise Levels

Roadway Segment	Existing Without Project					Existing With Project					Difference In dBA @ 100 Feet from Roadway
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	
Carlsbad Boulevard											
Avenida Encinas to La Costa Avenue	16,525	65.0	-	100	216	16,749	65.1	-	101	218	0.1
North Coast Highway 101											
La Costa Avenue to 600-foot South of La Costa Avenue	17,801	60.6	-	51	109	18,474	60.7	-	52	112	0.2
600-foot South of La Costa Avenue to Bishops Gate Road	17,801	60.5	-	50	108	18,923	60.8	-	52	113	0.3
Bishops Gate Road to Grandview Street	17,427	60.4	-	49	107	18,538	60.7	-	52	111	0.3
Grandview Street to Jupiter Street	15,918	60.0	-	-	100	16,344	60.1	-	47	102	0.1
Jupiter Street to Leucadia Boulevard	15,873	60.0	-	-	100	16,288	60.1	-	47	102	0.1
La Costa Avenue											
North Coast Highway 101 to North Vulcan Avenue	11,686	59.5	-	43	93	12,135	59.7	-	44	95	0.2
North Vulcan Avenue to Sheridan Road	13,499	60.2	-	48	102	13,925	60.3	-	49	105	0.1
Sheridan Road to Interstate 5	14,728	60.5	-	50	109	15,121	60.7	-	51	111	0.1

Notes: ADT = average daily traffic; dBA = A-weighted decibels; CNEL = community noise equivalent level; "-" = contour is located within the roadway right-of-way.

Source: Noise modeling is based on traffic data within the *City of Encinitas Marea Village Mixed-Use Development (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, prepared by LOS Engineering, Inc., dated November 12, 2020.

Table 7 also shows the difference between the "Existing Without Project" scenario and the "Existing With Project" scenario. As depicted in Table 7, traffic associated with the proposed project would result in a maximum increase of 0.3 dBA along North Coast Highway 101 from 600-foot South of La Costa Avenue to Grandview Street. A significant impact would result only if both of the following occur: an exceedance of the normally acceptable noise standards for residential uses (i.e., 60 dBA CNEL; refer to Table 4) and a perceptible increase in traffic noise levels (i.e., noise increase would be greater than 3.0 dBA).

As shown in Table 7, although traffic noise levels would exceed 60 dBA CNEL along almost all roadway segments under both "Existing Without Project" and "Existing With Project" scenarios in the project area, project-generated average daily trips would not cause a perceptible increase in traffic noise levels (i.e., noise increase would be greater than 3.0 dBA) along any of the surrounding roads. As the project would not cause a perceptible increase in traffic noise levels, the proposed project would not significantly increase noise levels along the roadway segments analyzed. Therefore, a less than significant impact would occur in this regard.

Stationary Noise

Mechanical Equipment Noise

Anticipated mechanical equipment noise that would be generate by the proposed project would include Heating Ventilation and Air Conditioning (HVAC) units and swimming pool pumps. The HVAC units would be installed on the rooftops of the proposed buildings and the swimming pool pumps would be located

to the east of Building 11. Typically, mechanical equipment noise is 55 dBA at 50 feet from the source. Because the swimming pool pumps would be located further from the nearest off-site sensitive receptors than the HVAC units, the following discussion focuses on noise generated from the HVAC units. Based upon the Inverse Square Law, sound levels decrease by 6 dBA for each doubling of distance from the source. The closest proposed building to the property line of the multi-family residences to the west would be Building 11, located on northwest of the project site. The HVAC units would be installed on the central-west portion of Building 11's rooftop, approximately 50 feet from the multi-family residences property line. At this distance, noise levels from the HVAC units would be approximately 55 dBA. In addition, the HVAC units would be shielded by a screening wall, which would reduce noise levels by 5 dBA.[2] Therefore, noise levels from HVAC units would be approximately 50 dBA at the nearest residential property line and would not exceed the City's R-11 Zone exterior noise level standards of 55 dBA CNEL for daytime and 50 dBA CNEL for nighttime. The project would be consistent with General Plan Noise Element Policy 3.1 and Policy 4.1 in this regard. In addition, noise levels from HVAC units would be below the ambient noise levels (i.e. 50.4 dBA to 53.6 dBA; refer to Table 3), which would be consistent with the Specific Plan requirements that noise levels shall be 3 dBA or less over ambient noise levels and below 60 dBA. Thus, a less than significant impact would occur.

Parking Lots

The project proposes a combination of on-site garage parking and limited surface parking as well as off-street parking. The on-site surface parking spaces would be located on the west and south portion of the project site.

Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. Estimates of the maximum noise levels associated with some parking lot activities are presented in Table 8, *Typical Noise Levels Generated by Parking Lots*.

Table 8
Typical Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source (dBA L_{eq})
Car door slamming	61
Car starting	60
Car idling	53

Notes: dBA = A-weighted Decibels; L_{eq} = Equivalent Sound Level
Source: Kariel, H. G., *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.

As shown in Table 8, parking lot activities can result in noise levels of up to 61 dBA at a distance of 50 feet. It is noted that parking lot noise are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower than what is identified in Table 8. The nearest parking spaces would be located approximately 40 feet from the property line of the multi-family residences to the west. At this distance, parking lot noise would range from 55 to 63 dBA. It should be noted that parking lot noise levels would be much lower in the CNEL noise scale (i.e., the noise metric used by the Land Use Compatibility Guidelines to evaluate mobile noise impacts) which represents a time-weighted 24-hour average noise

[2] Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, January 2016.

level based on A-weighted decibels. While parking lot noise may be as loud as 63 dBA, these noise levels would be short-term and intermittent. In addition, there is an existing surface parking lot located on the west side of the project site that is also close to the multi-family residences. Therefore, project-generated parking lot noise levels would not introduce a new source of noise when compared to existing conditions. Thus, the project would be consistent with General Plan Noise Element Policy 3.1 and Policy 4.1, and impacts would be less than significant.

Outdoor Area

The project proposes an outdoor patio area located on the west side of proposed Building 11, which would be a hotel. The proposed outdoor patio area has the potential to be accessed by groups of people intermittently. In addition, the project would play light background music throughout the outdoor area of the project site. Noise generated by groups of people is dependent on several factors including vocal effort, impulsiveness, and the random orientation of the group members. This type of noise is estimated at 60 dBA at one meter (3.28 feet) away for raised normal speaking.[3] This noise level would have a +5 dBA adjustment for the impulsiveness of the noise source, and a -3 dBA adjustment for the random orientation of the group members.[4] Therefore, group noise levels would be approximately 62 dBA at one meter (3.28 feet) from the source. The light background music is assumed to generate similar level of noise as the group. The patio area would be located approximately 30 feet from the property line of the multi-family residences to the west. At this distance, noise level would be reduced to approximately 43 dBA, which would not exceed the City's R-11 Zone exterior noise level standards of 55 dBA CNEL for daytime and 50 dBA CNEL for nighttime. The project would be consistent with General Plan Noise Element Policy 3.1 and Policy 4.1 in this regard. In addition, noise levels from the outdoor patio area would be below the ambient noise levels (i.e. 50.4 dBA to 53.6 dBA; refer to Table 3), which would be consistent with the Specific Plan requirements that noise levels shall be 3 dBA or less over ambient noise levels and below 60 dBA. As such, impacts would be less than significant.

NOI-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Vibration-sensitive land uses are locations where people reside or where there is a potential for damage to structures like buildings and sidewalks. The nearest structures are multi-family residential buildings located approximately 20 feet west of the of the project boundary.

Construction

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and construction equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

Construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic (e.g., plaster cracks) or structural. The distance at which damage from vibration could be experienced can vary substantially depending on the

[3] M.J. Hayne, et al, *Prediction of Crowd Noise, Acoustics*, November 2006.
[4] Ibid.

age and composition of the building structure, soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, buildings that are constructed with typical timber frames and masonry show that a vibration level of up to 0.2 in/sec PPV is considered safe and would not result in any construction vibration damage.[5] This evaluation uses the Federal Transit Administration (FTA) architectural damage criterion for continuous vibrations at non-engineered timber and masonry buildings of 0.2 in/sec PPV. The FTA has published standard vibration velocities for construction equipment operations. Typical vibration produced by construction equipment is detailed in Table 9, Typical Vibration Levels for Construction Equipment.

Groundborne vibration decreases rapidly with distance. The nearest structures are multi-family residential buildings located approximately 20 feet west of the of the project boundary. As indicated in Table 9, vibration velocities from typical heavy construction equipment used during project construction would range from 0.0042 (a small bulldozer) to 0.2935 (vibratory roller) in/sec PPV at 20 feet from the source of activity, which would potentially exceed the FTA's 0.2 in/sec PPV threshold of architectural damage. Therefore, Mitigation Measure MM NOI-2 would be required to reduce vibration levels below the threshold. Mitigation Measure MM NOI-2 would ensure the vibration level at the nearest structures would be closely monitored during construction and by adjusting the vibration frequency settings of the construction equipment, the vibration level would be below the 0.2 in/sec threshold at the nearest structures. With the implementation of Mitigation Measure MM NOI-2, the proposed construction activities associated with the project would not expose sensitive receptors to excessive groundborne vibration levels. Vibration impacts associated with construction would be less than significant with mitigation incorporated.

Table 9
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second)[1]	Approximate peak particle velocity at 20 feet (inches/second)[1]
Large bulldozer	0.089	0.1244
Loaded trucks	0.076	0.1062
Small bulldozer	0.003	0.0042
Jackhammer	0.035	0.0489
Pile Drivers (Low Vibration)	0.170	0.2376
Vibratory Rollers	0.210	0.2935

Notes:
1. Calculated using the following formula:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance

PPV (ref) = the reference vibration level in in/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Manual.*

D = the distance from the equipment to the receiver

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, Table 7-4 *Vibration Source Levels for Construction Equipment* September 2018.

[5] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

Operation

The project proposes a mixed-use development including residential use, office, retail, restaurant, and hotel. The operation of the project would involve occasional truck deliveries and trash pick-up, which would potentially generate groundborne vibration. However, the truck operations would not be substantial, and the groundborne vibration levels would not be perceptible or felt at surrounding uses. Therefore, the impact would be less than significant.

MM NOI-1: Implement Vibration Control Measures During Construction

The project applicant shall incorporate the following measures on all grading and building plans and specifications subject to approval of the City of Encinitas prior to issuance of a demolition or grading permit (whichever occurs first):

- The Applicant shall utilize a construction vibration monitoring system with the potential to measure low levels of vibration. The Applicant shall adjust the vibration frequency settings of the equipment to ensure vibration levels do not exceed the 0.2 inch-per-second PPV threshold at the residential buildings located to the west of the project site.
- The Applicant shall conduct sensitivity training to inform construction personnel about the existing sensitive receptors surrounding the project and about methods to reduce noise and vibration.

Timing/Implementation: Before and during all construction activities.

Enforcement/Monitoring: City of Encinitas and the general contractor.

NOI-3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The closest airport is the McClellan-Palomar Airport, located approximately 3.5 miles to the northeast of the project site. The site is not within the McClellan-Palomar Airport influence area where aircraft noise levels are a concern.[6] Thus, the proposed project would not expose people residing or working in the area to excessive noise levels. Therefore, no impacts would occur.

Mitigation Measures: No mitigation is required.

CUMULATIVE IMPACTS

When determining whether the overall noise (and vibration) impacts from cumulative projects would be cumulatively significant and whether the proposed project's incremental contribution to any significant cumulative impacts would be cumulatively considerable, it is important to note that noise and vibration are localized occurrences; as such, they decrease rapidly in magnitude as the distance from the source to the receptor increases.

Short-Term Construction Noise Impacts

Construction activities associated with the proposed project and cumulative projects may overlap, resulting in construction noise in the area. However, as analyzed above, construction noise impacts primarily affect the areas immediately adjacent to the project site. As a condition of project approval, the project would be required to prepare a Construction Noise Control Plan to demonstrate that all construction activity is in compliance with all appliable City noise standards and submit it to the City's Planning and Building Department for review and approval, which would to reduce construction noise impacts to less than significant levels.. All other housing projects covered under the 2019 HEU would be subject to the same requirements. The construction activities associated with other cumulative development projects would also be required to comply with the City's Municipal Code and would incorporate mitigation measures on a project-by-project basis, as applicable, to reduce construction noise pursuant to CEQA provisions. Therefore, with implementation of a City-approved Construction Noise Control Plan, the project's contribution to cumulative short-term construction impacts would be less than cumulatively considerable.

Long-Term (Mobile) Noise Impacts

Long-term cumulative noise impacts from mobile sources would occur primarily as a result of increased traffic on area roadways due to buildout of the proposed project and other projects in the vicinity. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions (FTA 2006). An increase of 3 dB is widely accepted as "barely perceptible." With regard to traffic noise, traffic volumes would need to roughly double to result in a perceptible change in ambient noise levels.

To determine if cumulative traffic noise levels would increase to a level of significance with the development of the proposed project and other planned projects, traffic data from the Local

[6] County of San Diego, *McClellan-Palomar Airport Far Part 150 Study Update Noise Exposure Maps*, April 26, 2005, https://www.sandiegocounty.gov/content/dam/sdc/dpw/AIRPORTS/palomar/documents/Part150/NoiseExposureMaps.pdf , accessed December 3, 2020.

Transportation Analysis, prepared by LOS Engineering, Inc., dated November 12, 2020 was analyzed for the following traffic scenarios:

- Existing: Current day noise conditions without construction of the project.
- Existing Plus Cumulative Projects without Project : Current day noise conditions plus the completion of the project and the completion of other permitted, planned projects or approved ambient growth factors.
- Existing Plus Cumulative Projects with Project: Comparison of the existing noise levels and the related noise level increases from the combination of the project and all other planned or permitted projects in the vicinity of the site.

As shown in Table 10, Cumulative Traffic Noise, combined effect for roadway segment noise levels would increase between 0.4 dBA and 1.2 dBA with development of the proposed project and other cumulative projects. As the noise increase would not exceed the 3 dBA threshold, the proposed project would not contribute to a significant cumulative noise impact to any existing or future noise sensitive land use. Therefore, mobile source noise impacts would be less than cumulatively considerable.

Table 10
Cumulative Traffic Noise

Roadway Segment	dBA @ 100 Feet from Roadway Centerline			Combined Effects	Incremental Effects	Cumulatively Significant Impact?[1]
	Existing	Cumulative without Project	Cumulative with Project	Difference in dBA Between Cumulative With Project and Existing	Difference in dBA Between Cumulative With Project and Cumulative Without Project	
Carlsbad Boulevard						
Avenida Encinas to La Costa Avenue	65.0	65.7	65.7	0.7	0.1	No
North Coast Highway 101						
La Costa Avenue to 600-foot South of La Costa Avenue	60.6	60.8	61.0	0.4	0.2	No
600-foot South of La Costa Avenue to Bishops Gate Road	60.5	60.8	61.0	0.5	0.3	No
Bishops Gate Road to Grandview Street	60.4	60.7	60.8	0.4	0.1	No
Grandview Street to Jupiter Street	60.0	60.3	60.4	0.4	0.1	No
Jupiter Street to Leucadia Boulevard	60.0	60.3	60.4	0.4	0.1	No
La Costa Avenue						
North Coast Highway 101 to North Vulcan Avenue	59.5	60.6	60.7	1.2	0.1	No
North Vulcan Avenue to Sheridan Road	60.2	61.1	61.2	1.1	0.1	No
Sheridan Road to Interstate 5	60.5	61.5	61.6	1.1	0.1	No

Notes:
1. A cumulative impact would occur if the "Combined Effects" and "Incremental Effects" criterion are exceeded, and the modeled noise level exceeds the normally acceptable noise standard shown in Table 3.

Source: Noise modeling is based on traffic data within *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, prepared by LOS Engineering, Inc., dated November 12, 2020.

Mitigation Measures: No mitigation is required.

Long-Term (Stationary) Noise Impacts

Although related cumulative projects have been identified within the project study area, the noise generated by stationary equipment on-site cannot be quantified due to the speculative nature of each development. However, each cumulative project would require separate discretionary approval and CEQA assessment, which would address potential noise impacts and identify necessary attenuation measures, where appropriate. Additionally, as noise dissipates as it travels away from its source, noise impacts from stationary sources would be limited to each of the respective sites and their vicinities. As noted above, the proposed project would not result in significant stationary noise impacts. Therefore, the proposed project would not result in stationary long-term equipment that would significantly affect surrounding sensitive receptors. Thus, the proposed project and identified cumulative projects are not anticipated to result in a significant cumulative impact.

Mitigation Measures: No mitigation is required.

Vibration Impacts

As discussed above, project construction activities would not generate groundborne vibration off-site above the significance criteria (i.e. 0.2 in/sec PPV threshold for construction as established by the FTA) with implementation of Mitigation Measure MM NOI-1, and project operation activities would not generate perceptible groundborne vibration. Although construction activities associated with the proposed project and off-site cumulative projects may overlap, off-site projects within the City would also be subject to the 0.2 in/sec PPV threshold. Further, the cumulative development projects would be required to implement any required mitigation measures on a project-by-project basis, as applicable, pursuant to CEQA provisions. Therefore, with implementation of Mitigation Measure MM NOI-1, the project's contribution to cumulative vibration impacts would be less than cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure MM NOI-1.

ON-SITE NOISE LEVEL ASSESSMENT

CEQA review focuses on potential impacts to off-site sensitive receptors as a result of project implementation; however, as a condition of design review permit approval, the City also requires that new development be designed to provide acceptable on-site indoor and outdoor noise environments. An on-site noise level assessment was also performed to evaluate whether the proposed project's design is consistent with the City's Noise and Land Use Compatibility Guidelines and other applicable policies. No outdoor entertainment is proposed for the project. The main sources of on-site noise from the implementation of the proposed project would be from traffic and noise generated by groups of people in outdoor gathering spaces. Each of these sources are discussed further below.

Traffic Noise

The proposed on-site residences would be exposed to the traffic noise from North Coast Highway 101. The closest on-site residences to North Coast Highway 101 would be within Building 2 and Building 6 on the east side of the project site, located approximately 50 feet from the roadway centerline. FHWA RD-77-108 program was used to model traffic noise levels at the proposed on-site residences under "Existing Plus Cumulative Plus Project" condition as a conservative analysis and the modeled results are shown in Table 11, Noise Levels at Proposed On-Site Residence. Noise modeling assumptions and results are included in Appendix A. As shown in Table 11, noise levels at on-site residences would be within the City's conditionally acceptable noise and land use compatibility standards, refer to Table 4, which is consistent

with General Plan Noise Element Policy 2.1. According to the U.S. Environmental Protection Agency (EPA) Protective Noise Levels[7], typical buildings in warm climates could provide a 24 dBA exterior to interior noise level reduction with windows closed. Therefore, as shown in Table 11, interior noise levels at the proposed on-site residences would not exceed the City's interior noise standard of 45 dBA L_{dn}. As such, the proposed project would be consistent with the City's design and policies with respect to on-site noise.

Table 11
Noise Levels at Proposed On-Site Residence

Roadway Segment	Existing Plus Cumulative Plus Project ADT[1]	L_{dn} at 100 Feet from Centerline of Roadway (dBA)[2]	Exterior L_{dn} at Proposed On-Site Residences (dBA)[1]	Interior L_{dn} at Proposed On-Site Residences (dBA)[1, 2]
North Coast Highway 101				
La Costa Avenue to 600-foot South of La Costa Avenue	19,538	60.5	65.7	41.7
600-foot South of La Costa Avenue to Bishops Gate Road	19,987	60.5	65.5	41.5

ADT = average daily trips; L_{dn} = day-night sound level

Notes:
1. Traffic noise levels were calculated using the FHWA roadway noise prediction model. Refer to Appendix A, *Noise Data* for noise modeling assumptions and results.
2. According to the EPA *Protective Noise Levels*, typical buildings in warm climate could provide 24 dBA exterior to interior noise reduction with windows closed.

Source: City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis prepared by LOS Engineering, Inc., dated November 12, 2020.

Stationary Noise

The proposed on-site residences would be exposed to stationary noise generated by groups of people in outdoor gathering spaces.

Outdoor Area. The project proposes an outdoor pool area located on the east side of proposed Building 11, which would be a hotel. The proposed outdoor pool area has the potential to be accessed by groups of people intermittently. As discussed above, noise generated by groups of people would be approximately 62 dBA at one meter (3.28 feet) from the source. The pool area would be located approximately 40 feet from the nearest residences on-site within Building 6. At this distance, noise level would be reduced to approximately 40 dBA. With 24 dBA exterior to interior noise reduction with windows closed, interior noise level would be approximately 16 dBA, which would not exceed the City's interior noise standard of 45 dBA L_{dn}. As such, the design and operation of the proposed project would be consistent with the City's design and policies with respect to on-site noise.

Background Music. The project would play light background music throughout the outdoor area of the project site. The residences on-site would be potentially exposed to excess noise level. To ensure consistency with the City's interior noise standard of 45 dBA L_{dn}, the project would need to implement Control Measure NOI-2, which requires that when measured on balconies and patios of on-site residential units, noise level from the background music shall not exceed 69 dBA. With 24 dBA exterior to interior noise reduction with windows closed, implementation of Control Measure NOI-2 would ensure the interior noise level would not exceed 45 dBA. Therefore, with implementation of Control Measure NOI-

[7] U.S. Environmental Protection Agency, *Protective Noise Levels*, November 1978.

1, the design and operation of the proposed project would be consistent with the City's design and policies with respect to on-site noise.

Control Measure

NOI-2 The project applicant shall ensure that during project operation, noise level from background music played on-site shall not exceed 69 dBA when measured on balconies and patios of on-site residential units.

REFERENCES

Documents

1. California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.
2. California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, Table 20, April 2020.
3. City of Encinitas, *General Plan Noise Element*, adopted March 29, 1989.
4. City of Encinitas, *Municipal Code*, http://www.qcode.us/codes/encinitas/, accessed December 4, 2020.
5. City of Encinitas, *Zoning Map*, https://ezoning.encinitasca.gov/index.html, accessed December 4, 2020.
6. County of San Diego, *McClellan-Palomar Airport Far Part 150 Study Update Noise Exposure Maps*, April 26, 2005, https://www.sandiegocounty.gov/content/dam/sdc/dpw/AIRPORTS/palomar/documents/Part150/NoiseExposureMaps.pdf, accessed December 3, 2020.
7. Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 6, 2010.
8. Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, January 2006.
9. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.
10. Harris, Cyril, *Handbook of Noise Control*, 1979.
11. Kariel, H. G., *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), March 10, 1991.
12. LOS Engineering, Inc., *City of Encinitas Fenway Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, November 12, 2020.
13. National Institute on Deafness and Other Communication Disorders, *Noise-Induced Hearing Loss*, https://www.nidcd.nih.gov/sites/default/files/Documents/health/hearing/NoiseInducedHearingLoss.pdf, accessed August 12, 2019.
14. State Office of Planning and Research, *State of California General Plan Guidelines*, October 2017.
15. U.S. Department of Transportation, *Highway Traffic Noise Analysis and Abatement Policy and Guidance*, https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed April 15, 2020.

16. U.S. Environmental Protection Agency, *Noise Effects Handbook – A Desk Reference to Health and Welfare Effects of Noise*, October 1979 (revised July 1981).

Websites / Programs

1. Google Earth, 2020.

Michael Baker
INTERNATIONAL

Appendix A:
Noise Data

Site Number: Marea Village EIR On-Site #1			
Recorded By: Pierre Glaize & Zhe Chen			
Job Number: 180066			
Date: 10/27/2020			
Time: 10:27 a.m.			
Location: On-site of the Project, adjacent to existing driveway.			
Source of Peak Noise: Traffic along North Coast Highway 101.			
Noise Data			
Leq (dB)	**Lmax(dB)**	**Lmin (dB)**	**Peak (dB)**
65.3	79.4	44.2	99.1

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**3011133**	**04/08/2019**	
	Microphone	**Brüel & Kjær**	**4189**	**3086765**	**04/08/2019**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**25380**	**04/08/2019**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**04/08/2019**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** Sunny
	Note: dBA Offset = 0.00		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (inches)**
	3	66°	30.07

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 4.7.4
Start Time:		10/27/2020 10:27:41
End Time:		10/27/2020 10:37:41
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.16

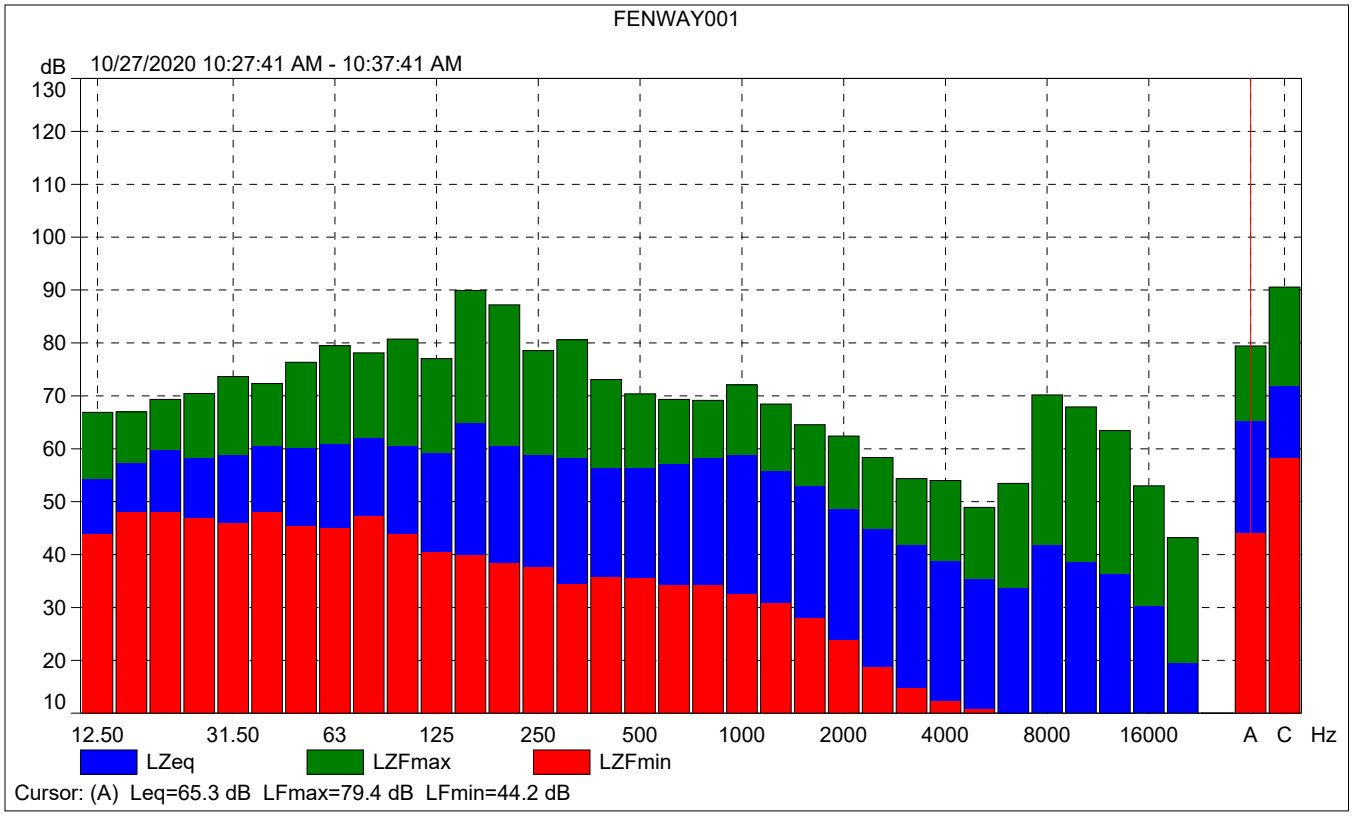
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

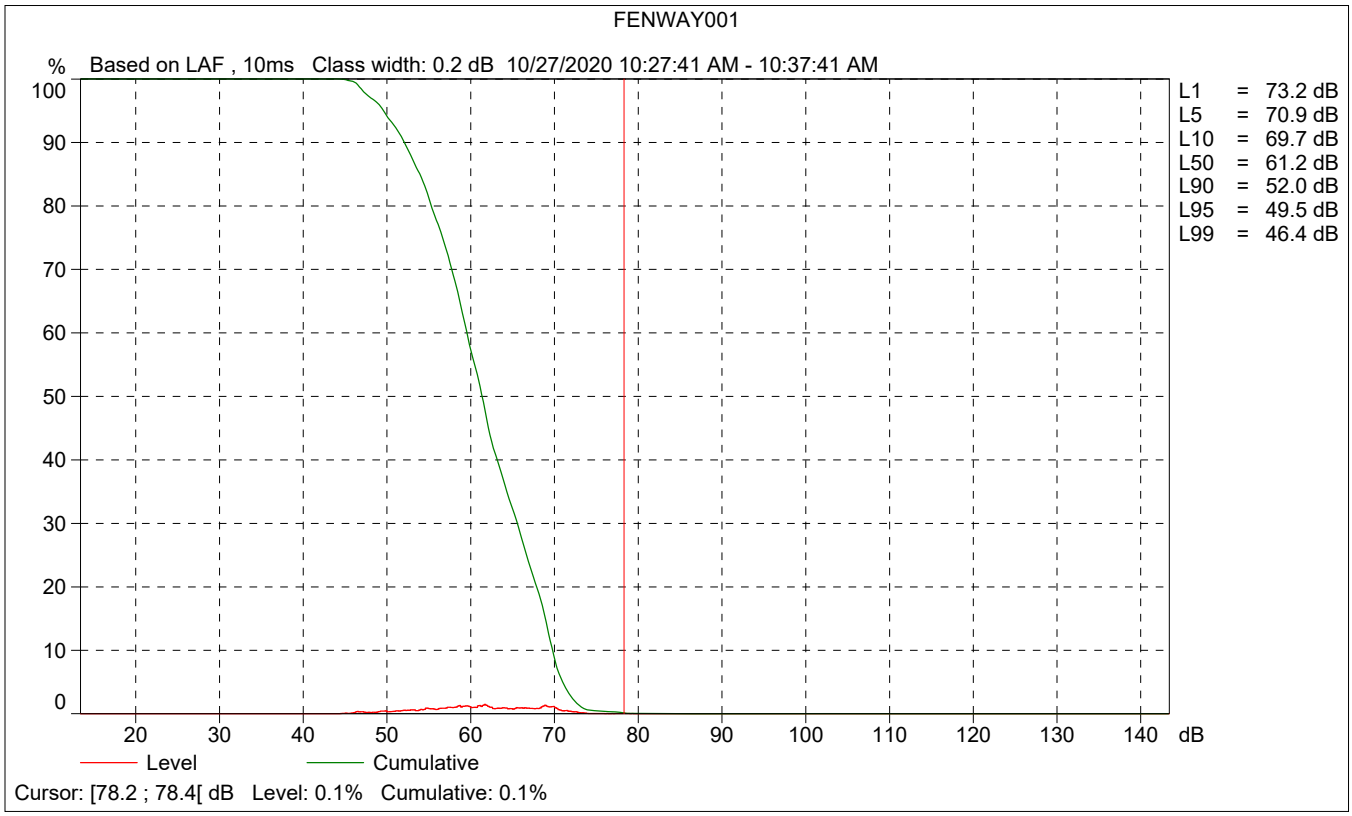
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

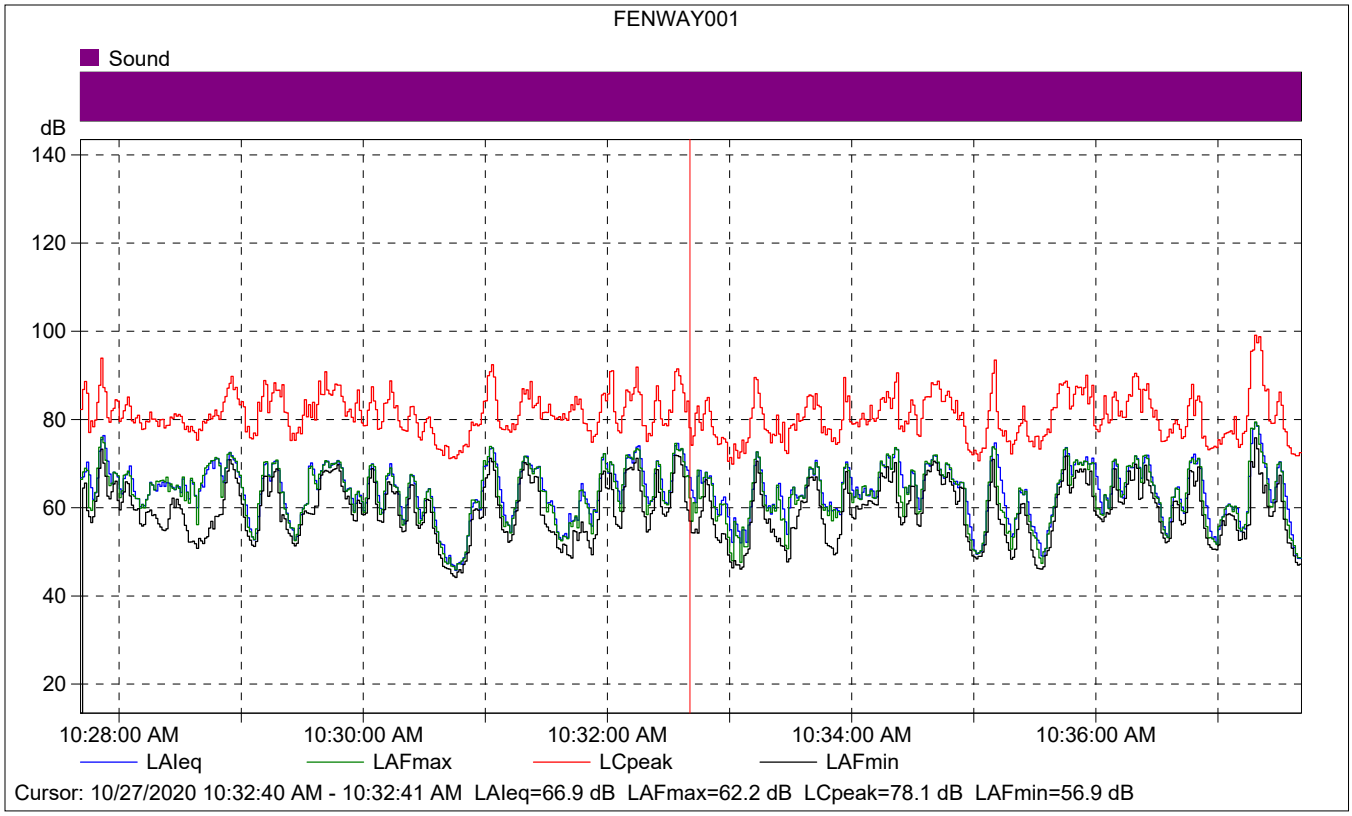
Calibration Time:		10/27/2020 07:17:01
Calibration Type:		External reference
Sensitivity:		43.4200167655945 mV/Pa

FENWAY001

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	65.3	79.4	44.2
Time	10:27:41 AM	10:37:41 AM	0:10:00				
Date	10/27/2020	10/27/2020					

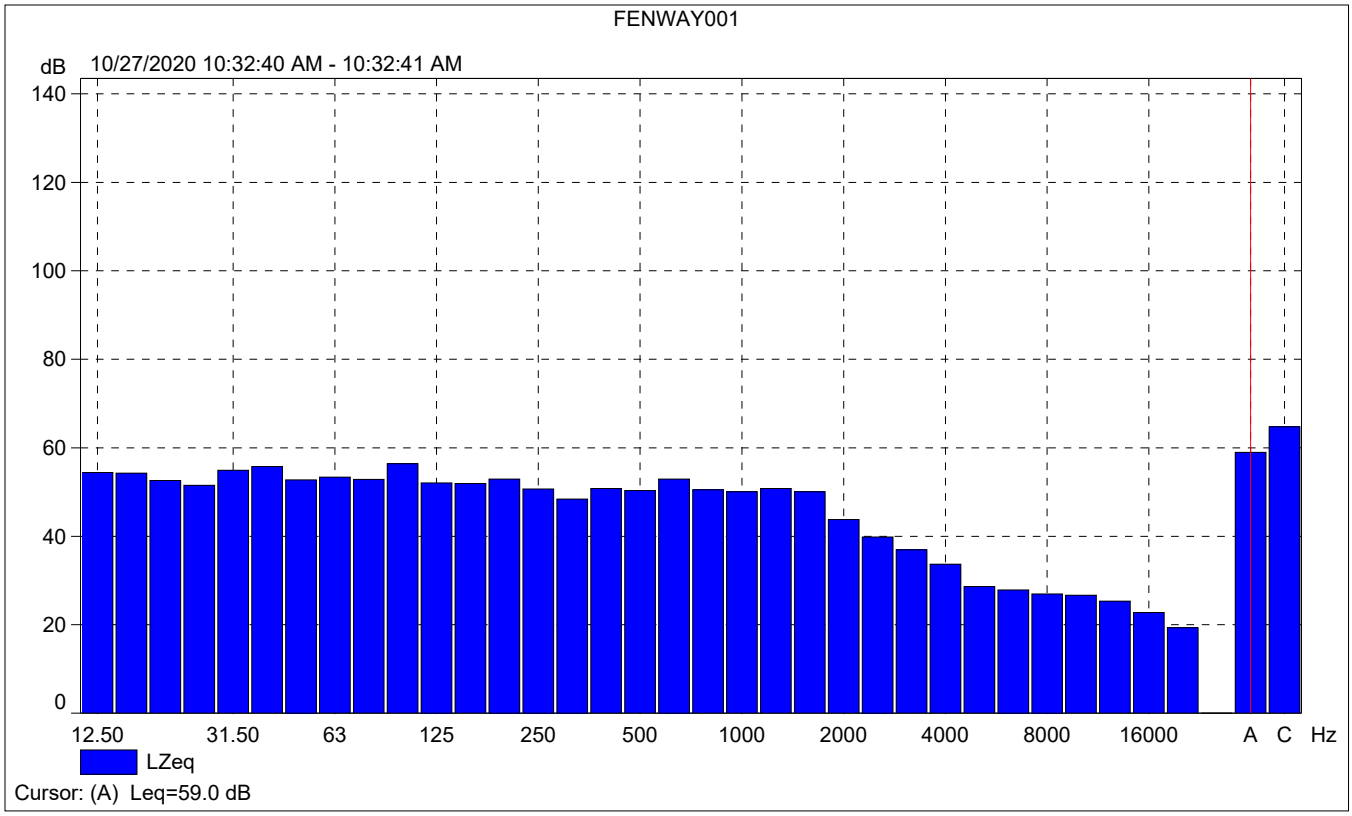

FENWAY001
dB
10/27/2020 10:27:41 AM - 10:37:41 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=65.3 dB LFmax=79.4 dB LFmin=44.2 dB

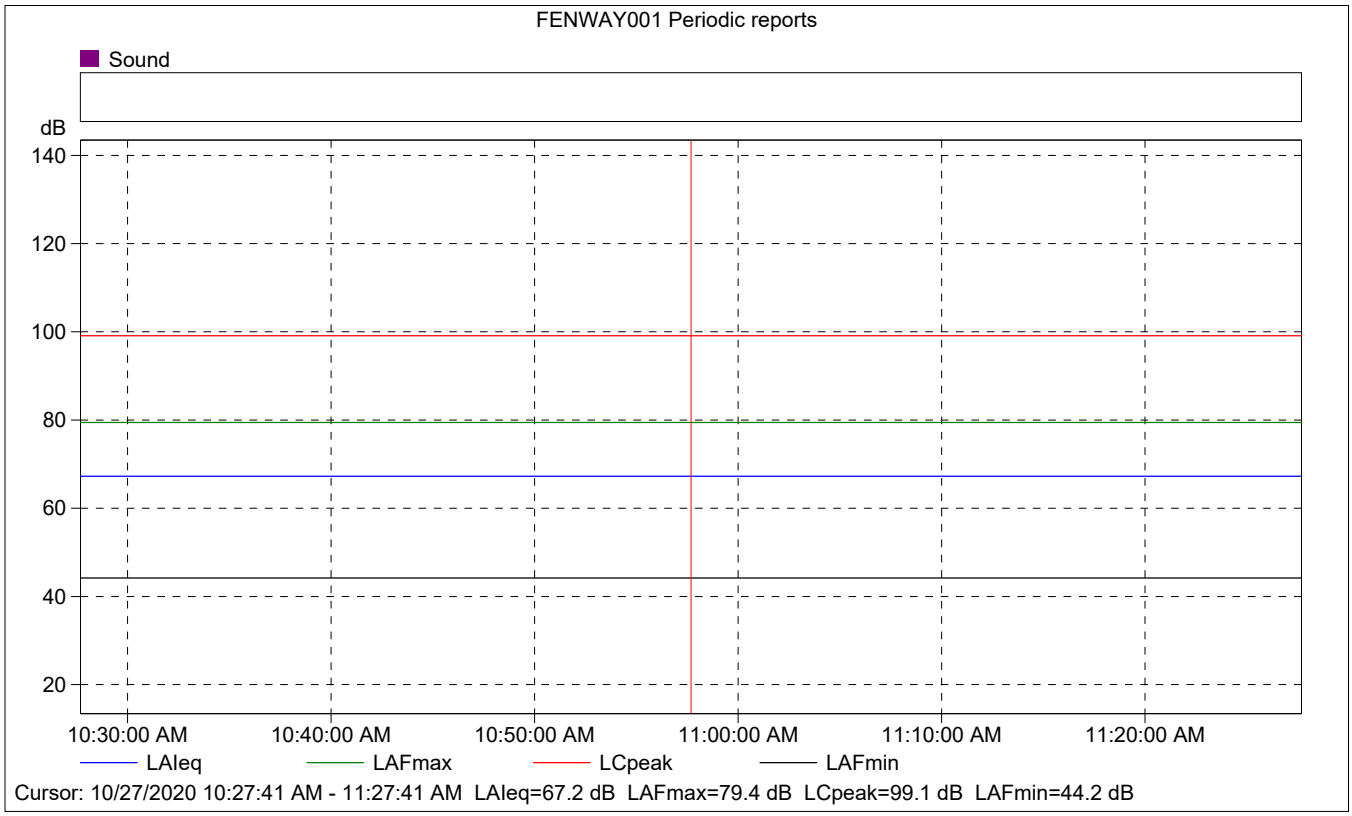

FENWAY001
%
Based on LAF , 10ms Class width: 0.2 dB 10/27/2020 10:27:41 AM - 10:37:41 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 73.2 dB
L5 = 70.9 dB
L10 = 69.7 dB
L50 = 61.2 dB
L90 = 52.0 dB
L95 = 49.5 dB
L99 = 46.4 dB
Level
Cumulative
Cursor: [78.2 ; 78.4[dB Level: 0.1% Cumulative: 0.1%



FENWAY001

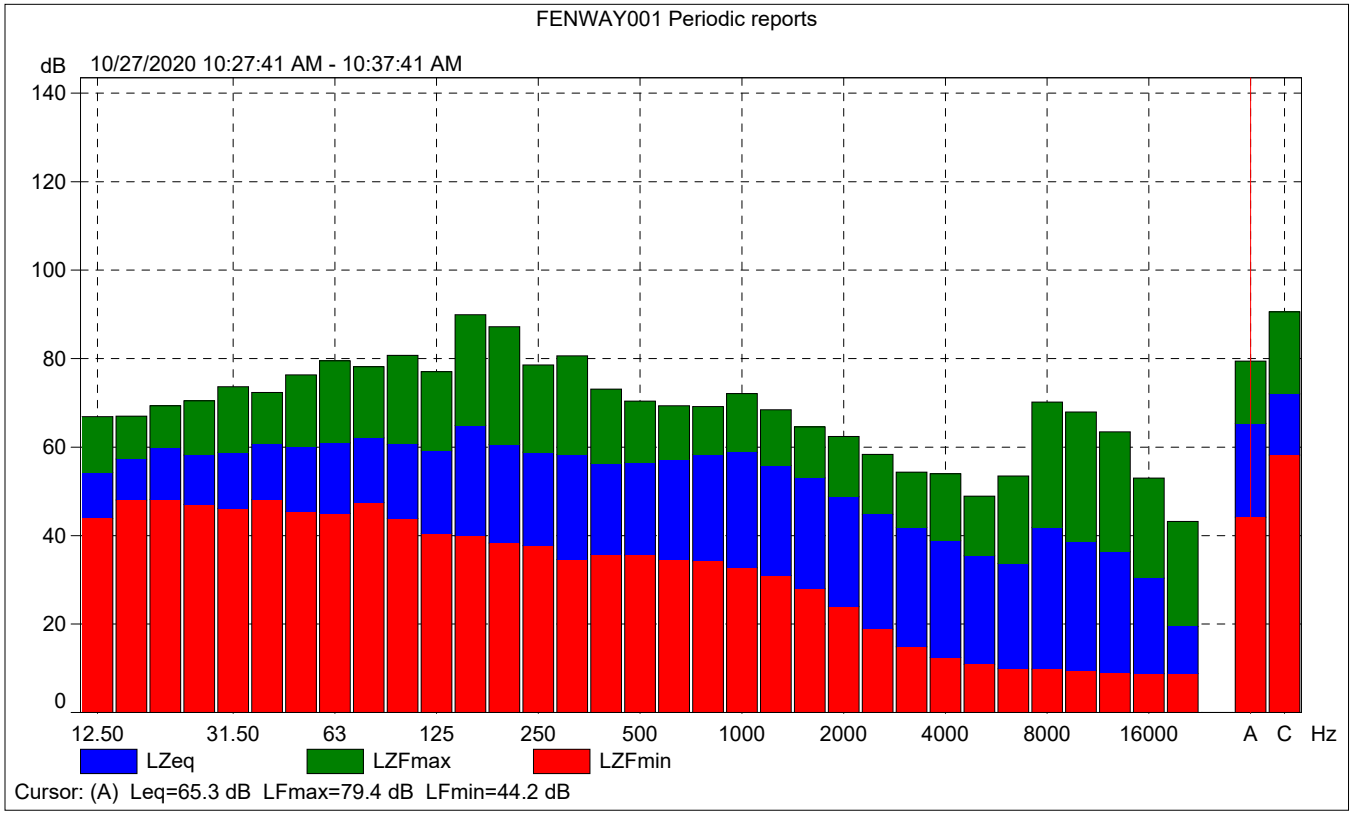
	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			66.9	62.2	56.9
Time	10:32:40 AM	0:00:01			
Date	10/27/2020				

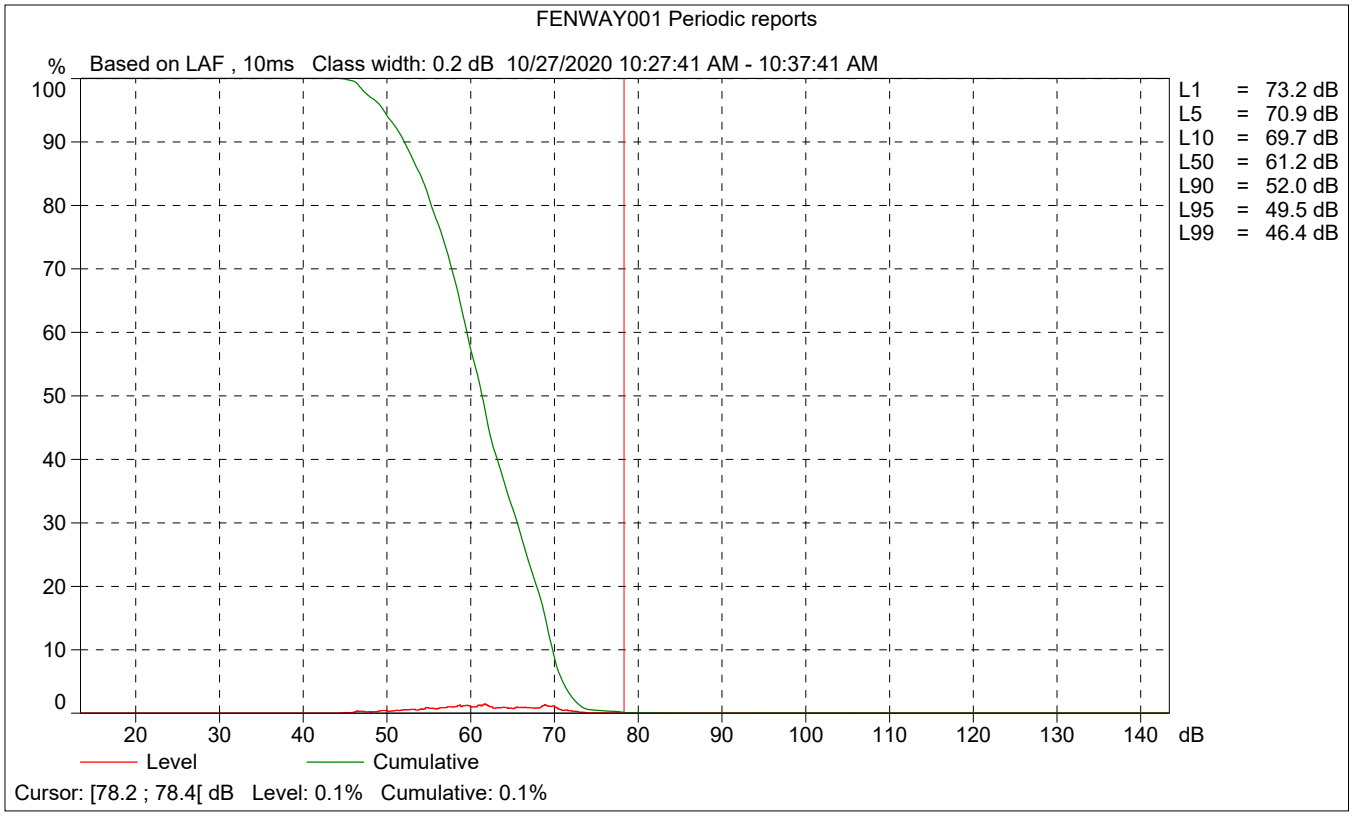

FENWAY001
dB
10/27/2020 10:32:40 AM - 10:32:41 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=59.0 dB


FENWAY001 Periodic reports
Sound
dB
140
120
100
80
60
40
20
10:30:00 AM
10:40:00 AM
10:50:00 AM
11:00:00 AM
11:10:00 AM
11:20:00 AM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/27/2020 10:27:41 AM - 11:27:41 AM LAIeq=67.2 dB LAFmax=79.4 dB LCpeak=99.1 dB LAFmin=44.2 dB

FENWAY001 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	67.2	79.4	44.2
Time	10:27:41 AM	0:10:00				
Date	10/27/2020					



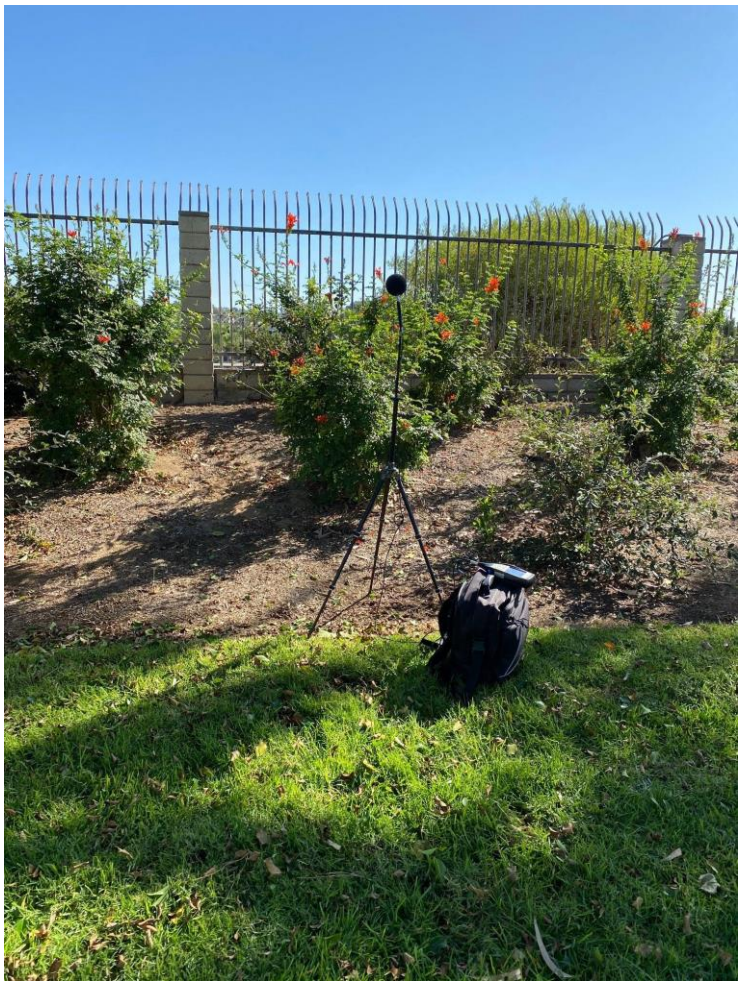

FENWAY001 Periodic reports
% Based on LAF , 10ms Class width: 0.2 dB 10/27/2020 10:27:41 AM - 10:37:41 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 73.2 dB
L5 = 70.9 dB
L10 = 69.7 dB
L50 = 61.2 dB
L90 = 52.0 dB
L95 = 49.5 dB
L99 = 46.4 dB
Level
Cumulative
Cursor: [78.2 ; 78.4[dB Level: 0.1% Cumulative: 0.1%

Site Number: Marea Village EIR Site #2			
Recorded By: Pierre Glaize and Zhe Chen			
Job Number: 180066			
Date: 10/27/2020			
Time: 10:50 a.m.			
Location: Grass area adjacent to Moorgate road and residential buildings along Haymarket road.			
Source of Peak Noise: Fedex and water delivery truck.			
Noise Data			
Leq (dB)	**Lmax(dB)**	**Lmin (dB)**	**Peak (dB)**
50.4	66.4	41.2	84.1

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**3011133**	**04/08/2019**	
	Microphone	**Brüel & Kjær**	**4189**	**3086765**	**04/08/2019**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**25380**	**04/08/2019**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**04/08/2019**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** Sunny
	Note: dBA Offset = 0.00		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (inches)**
	4	68°	30.07

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.4
Start Time:		10/27/2020 10:50:58
End Time:		10/27/2020 11:00:58
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.16

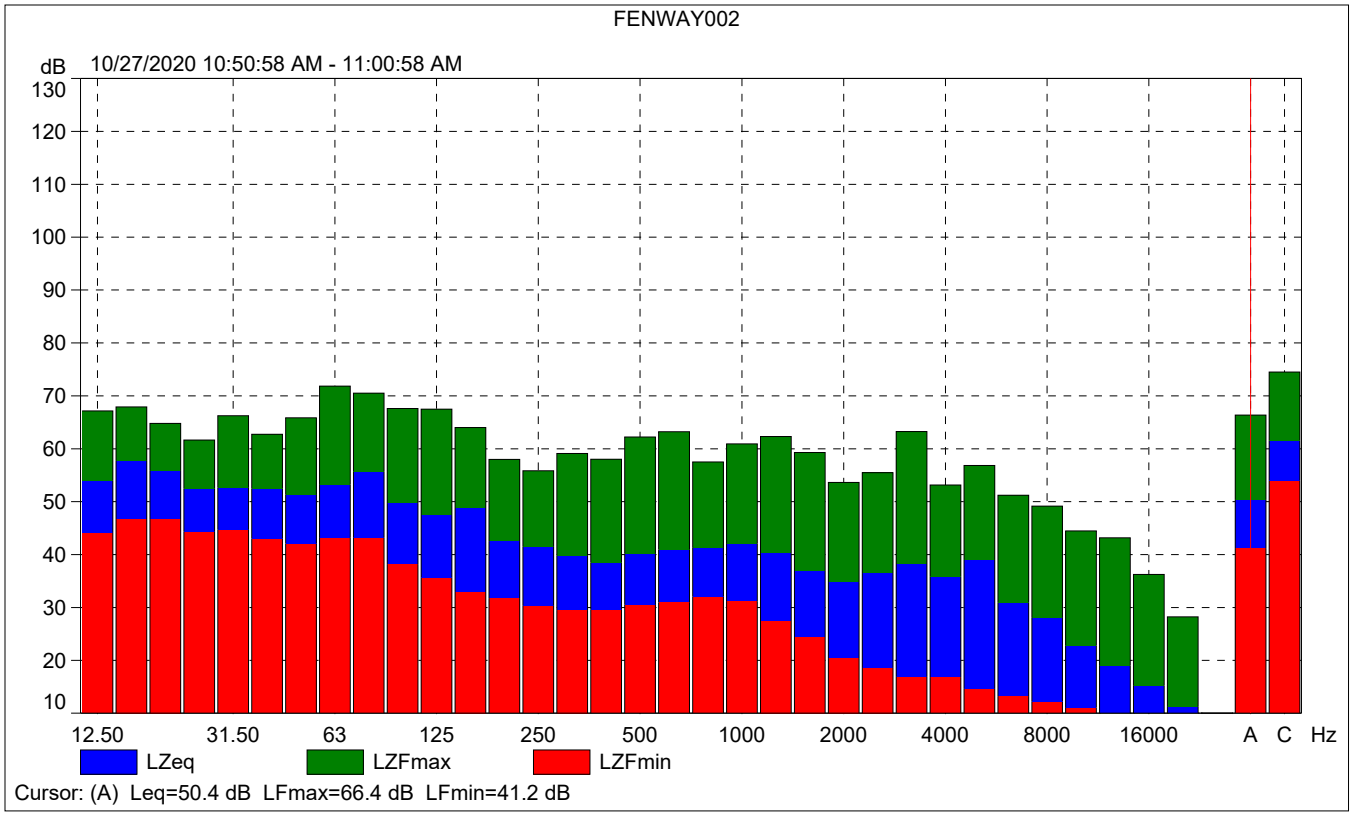
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

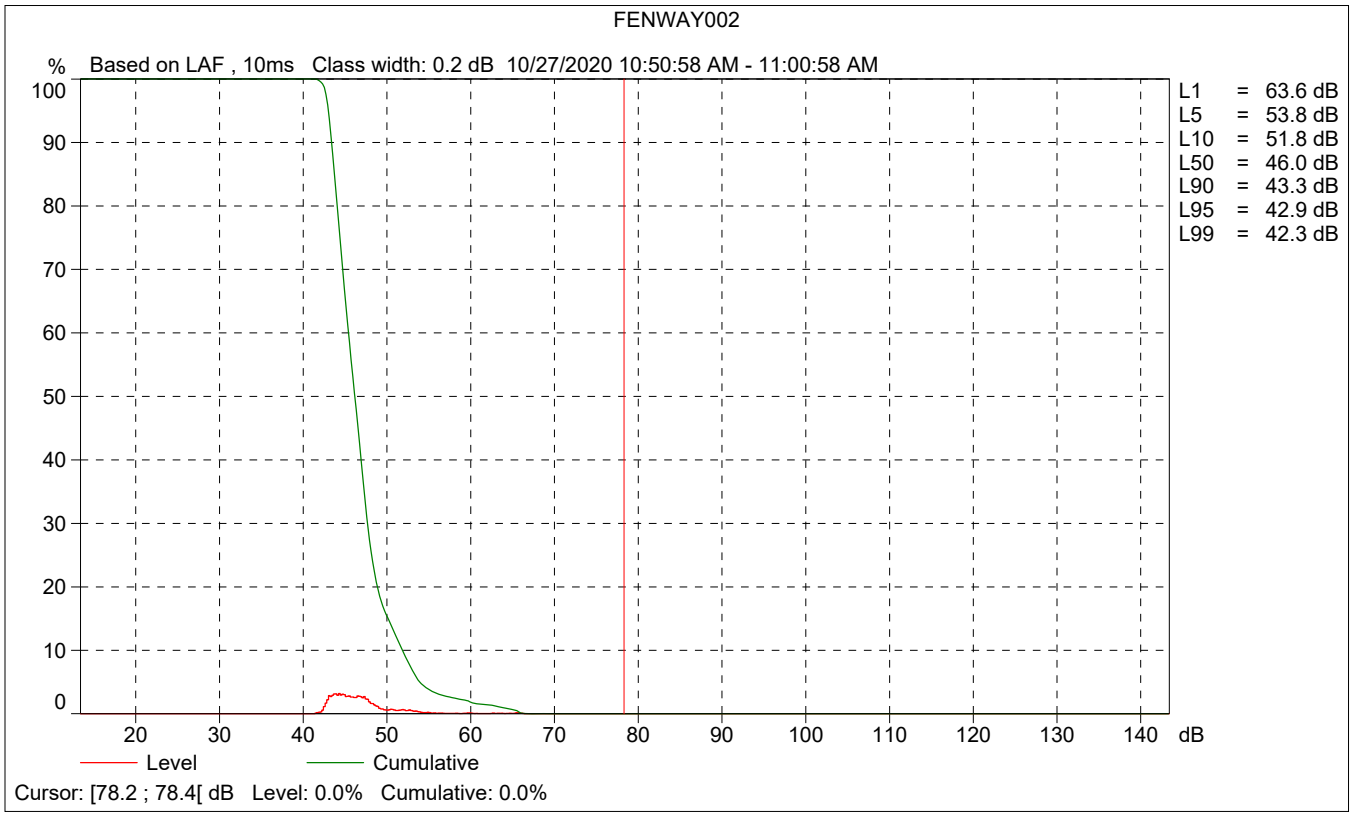
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

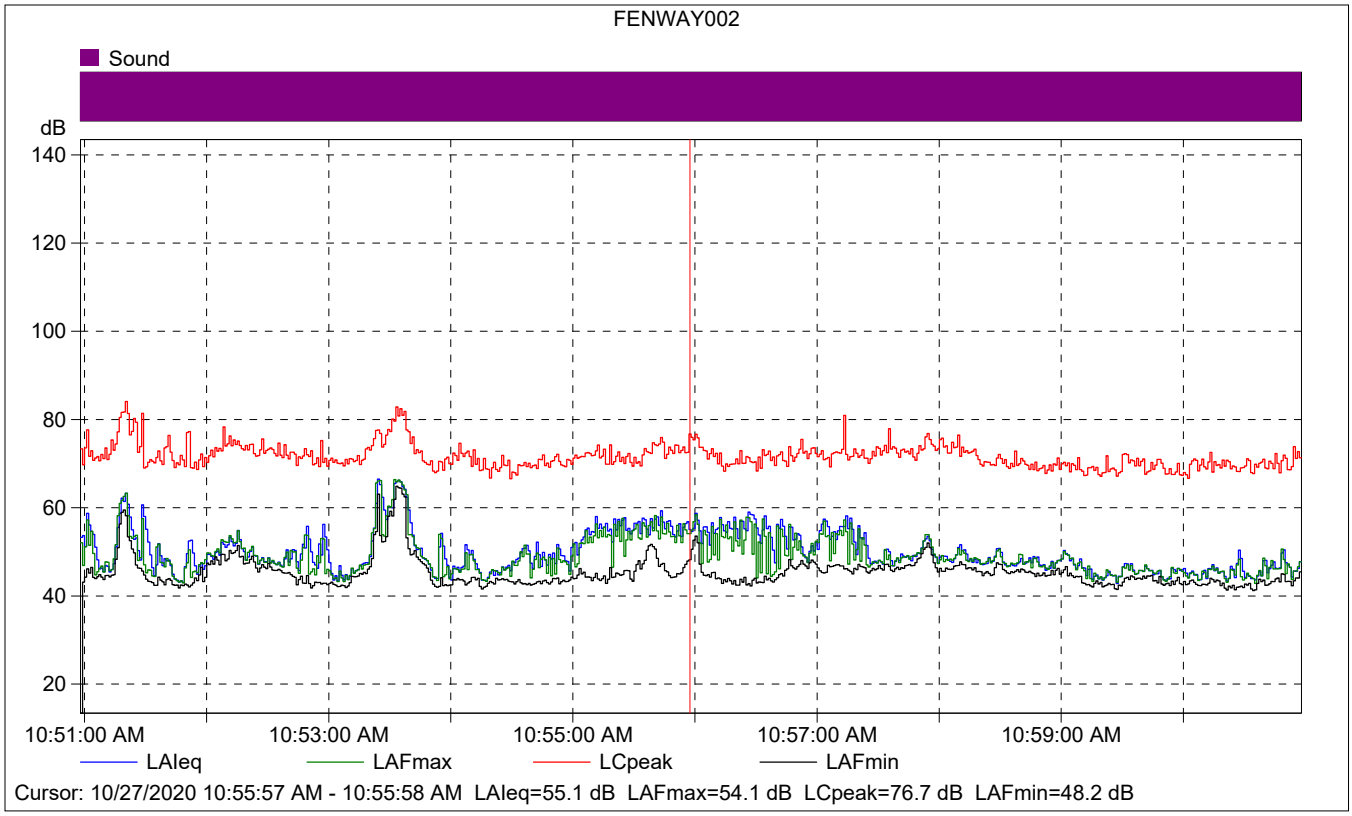
Calibration Time:		10/27/2020 07:17:01
Calibration Type:		External reference
Sensitivity:		43.4200167655945 mV/Pa

FENWAY002

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	50.4	66.4	41.2
Time	10:50:58 AM	11:00:58 AM	0:10:00				
Date	10/27/2020	10/27/2020					

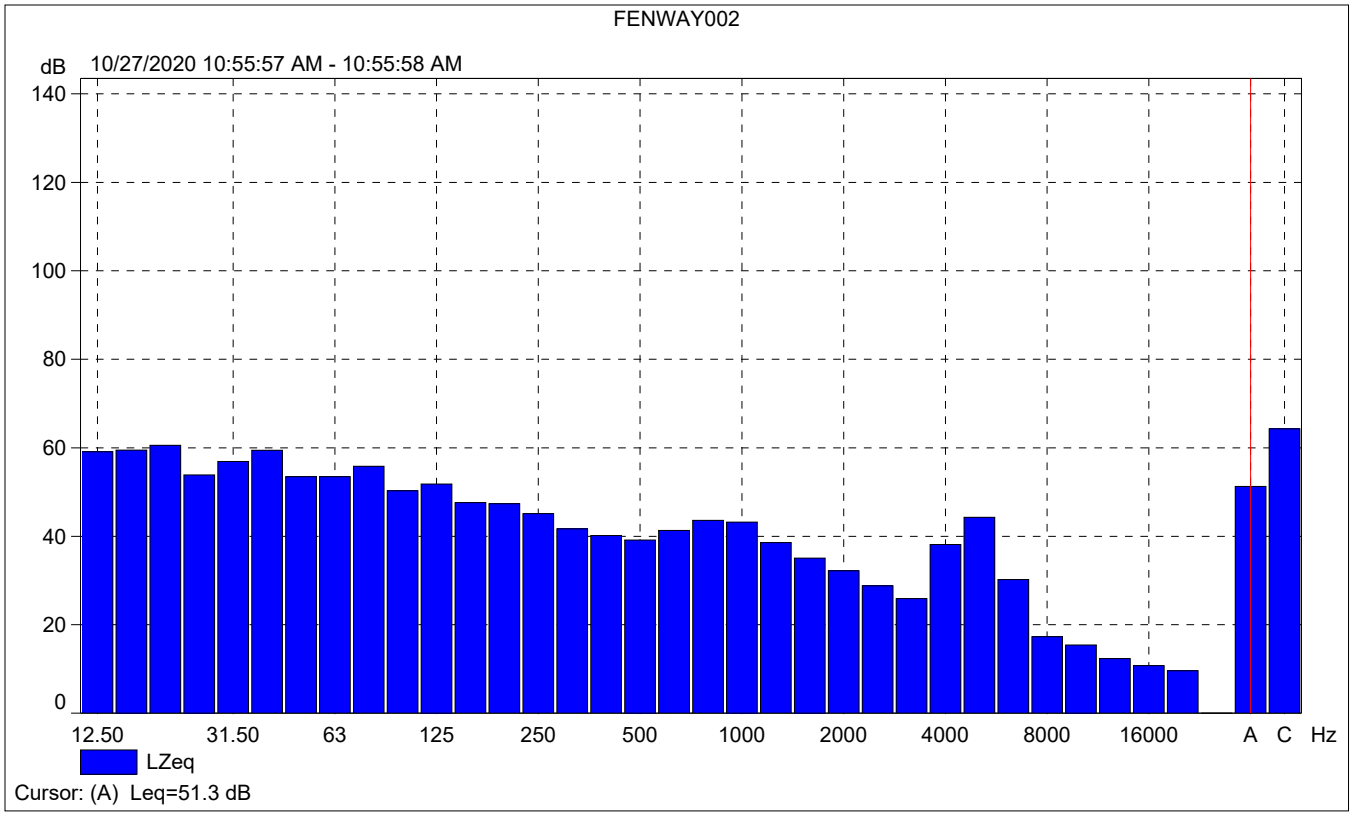

FENWAY002
dB
10/27/2020 10:50:58 AM - 11:00:58 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=50.4 dB LFmax=66.4 dB LFmin=41.2 dB

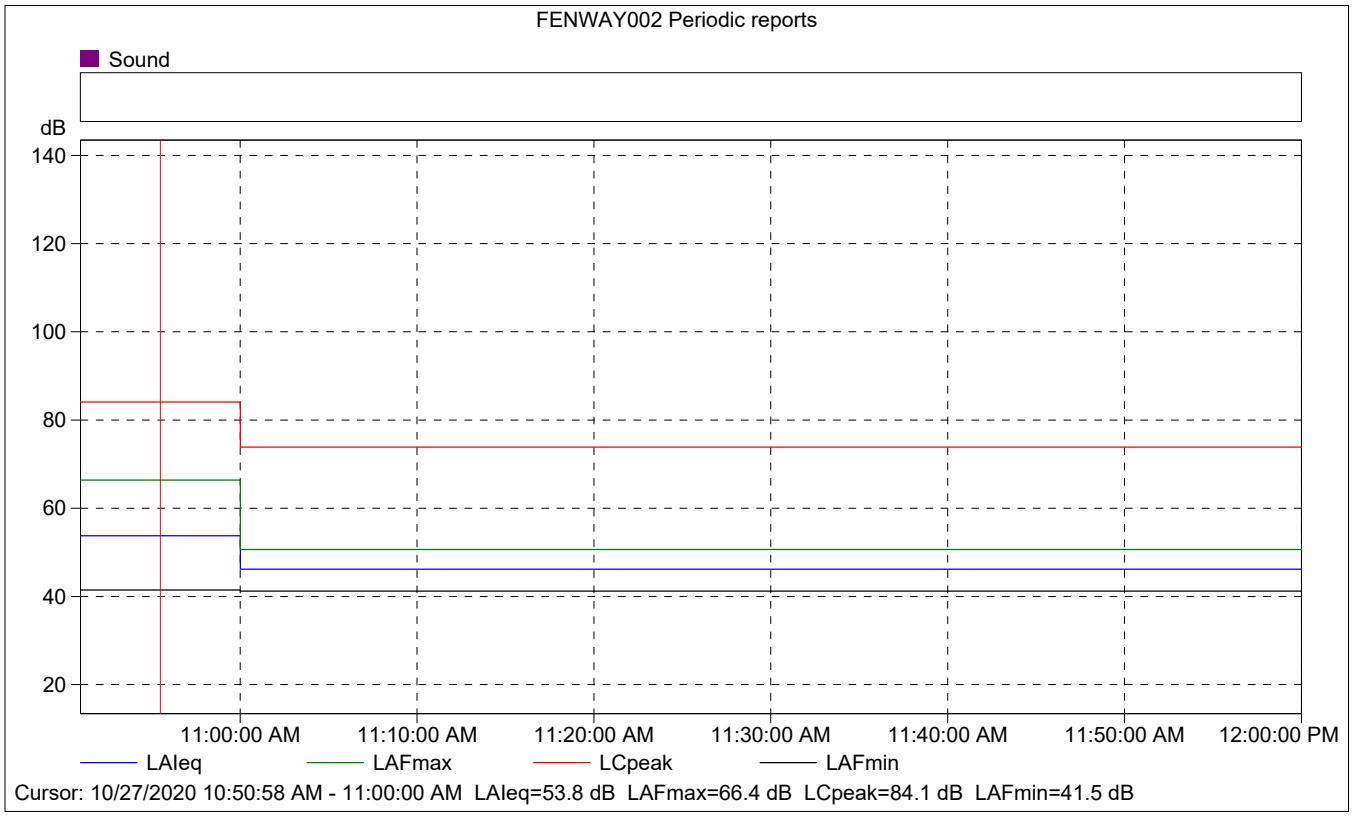

FENWAY002
%
Based on LAF , 10ms Class width: 0.2 dB 10/27/2020 10:50:58 AM - 11:00:58 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 63.6 dB
L5 = 53.8 dB
L10 = 51.8 dB
L50 = 46.0 dB
L90 = 43.3 dB
L95 = 42.9 dB
L99 = 42.3 dB
Level
Cumulative
Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.0%



FENWAY002

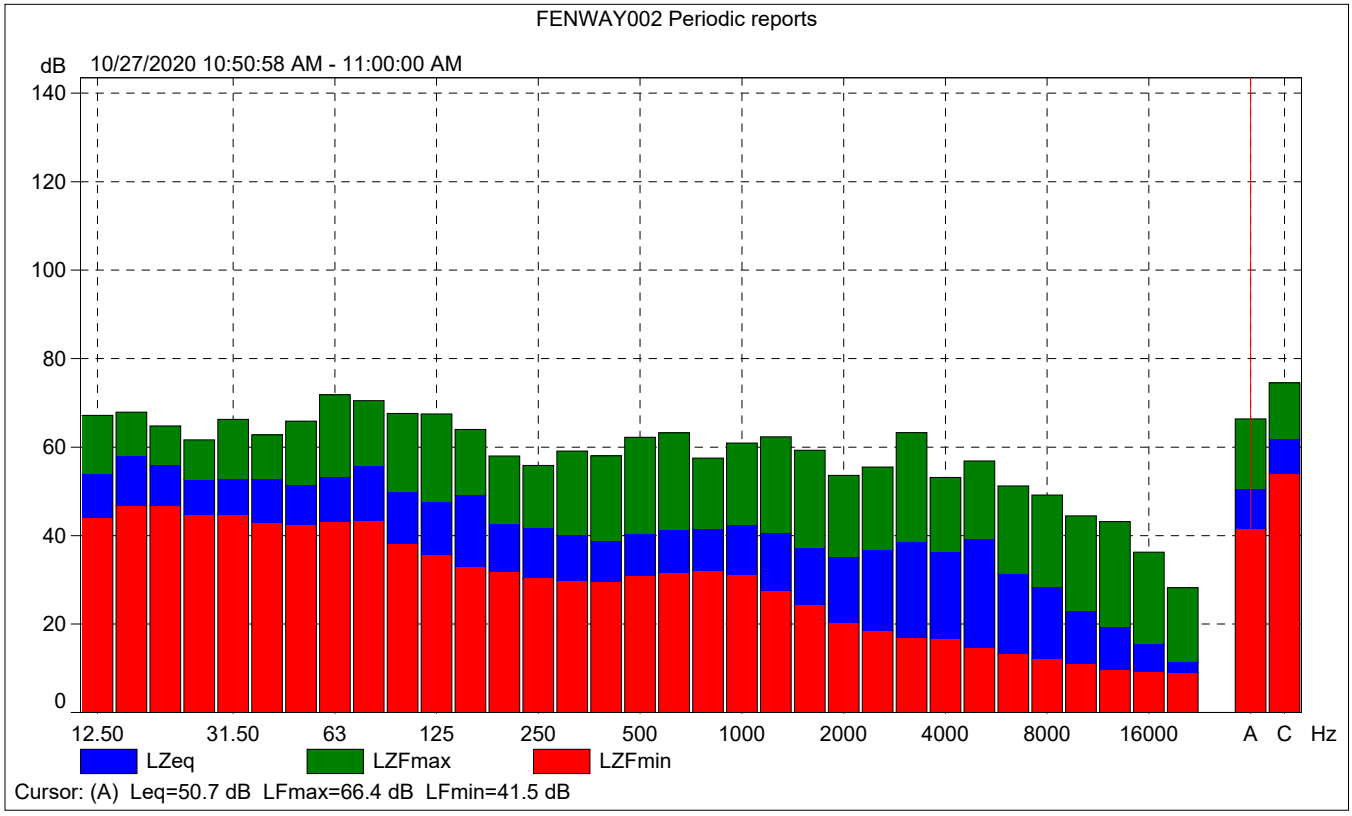
	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			55.1	54.1	48.2
Time	10:55:57 AM	0:00:01			
Date	10/27/2020				


FENWAY002
dB
10/27/2020 10:55:57 AM - 10:55:58 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=51.3 dB

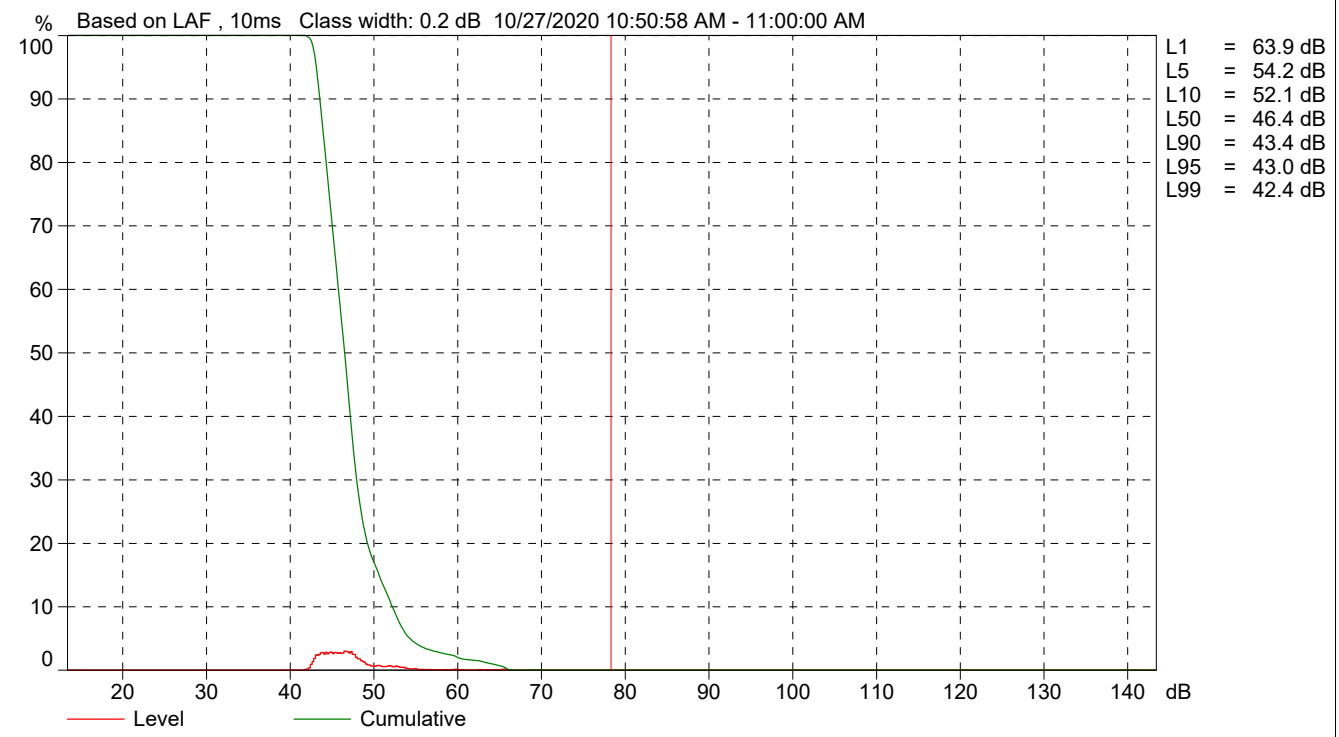

FENWAY002 Periodic reports
Sound
dB
140
120
100
80
60
40
20
11:00:00 AM
11:10:00 AM
11:20:00 AM
11:30:00 AM
11:40:00 AM
11:50:00 AM
12:00:00 PM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/27/2020 10:50:58 AM - 11:00:00 AM LAIeq=53.8 dB LAFmax=66.4 dB LCpeak=84.1 dB LAFmin=41.5 dB

FENWAY002 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	53.8	66.4	41.5
Time	10:50:58 AM	0:09:02				
Date	10/27/2020					



FENWAY002 Periodic reports



Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.0%

Site Number: Marea Village EIR Site #3			
Recorded By: Pierre Glaize and Zhe Chen			
Job Number: 180066			
Date: 10/27/2020			
Time: 11:03 a.m.			
Location: Corner of Milbank road and Moorgate road.			
Source of Peak Noise: Highway 101 traffic and people loudly talking on the phone.			
Noise Data			
Leq (dB)	**Lmax(dB)**	**Lmin (dB)**	**Peak (dB)**
53.6	75.9	44.5	100.7

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**3011133**	**04/08/2019**	
	Microphone	**Brüel & Kjær**	**4189**	**3086765**	**04/08/2019**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**25380**	**04/08/2019**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**04/08/2019**	

Weather Data			
Est.	**Duration:** 10 minutes	**Sky:** Sunny	
	Note: dBA Offset = 0.00	**Sensor Height (ft):** 5 ft	
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (inches)**
	4	68°	30.07

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 4.7.4
Start Time:		10/27/2020 11:03:28
End Time:		10/27/2020 11:13:28
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.16

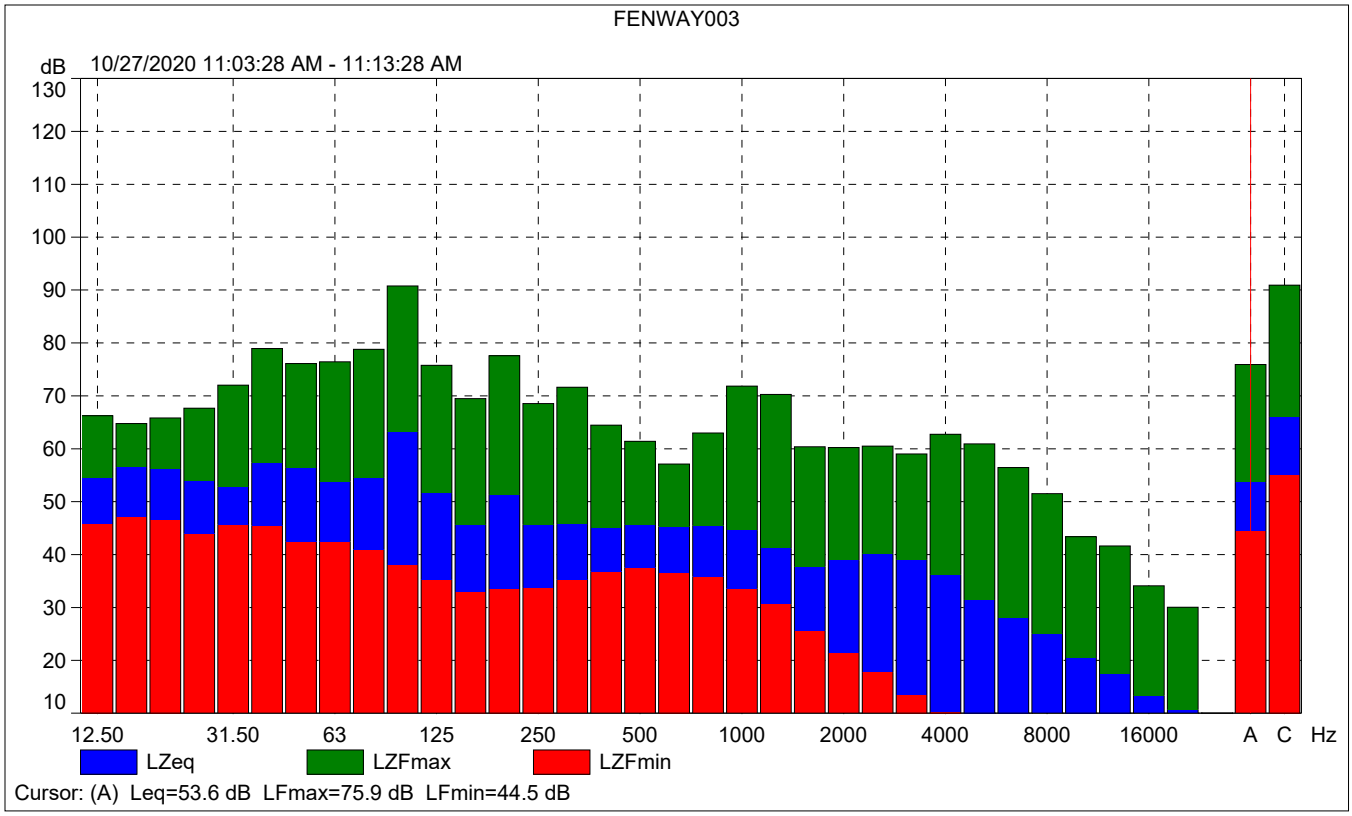
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

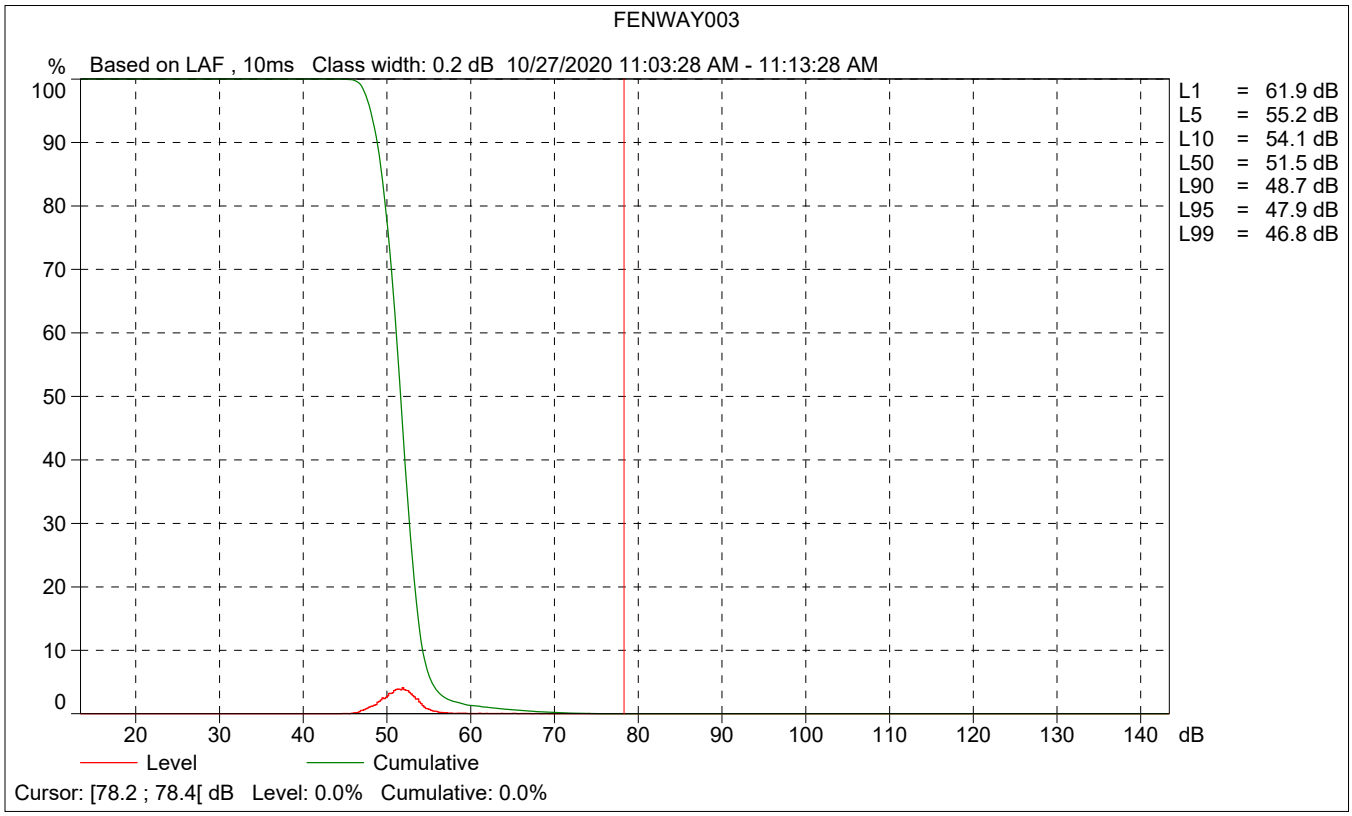
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

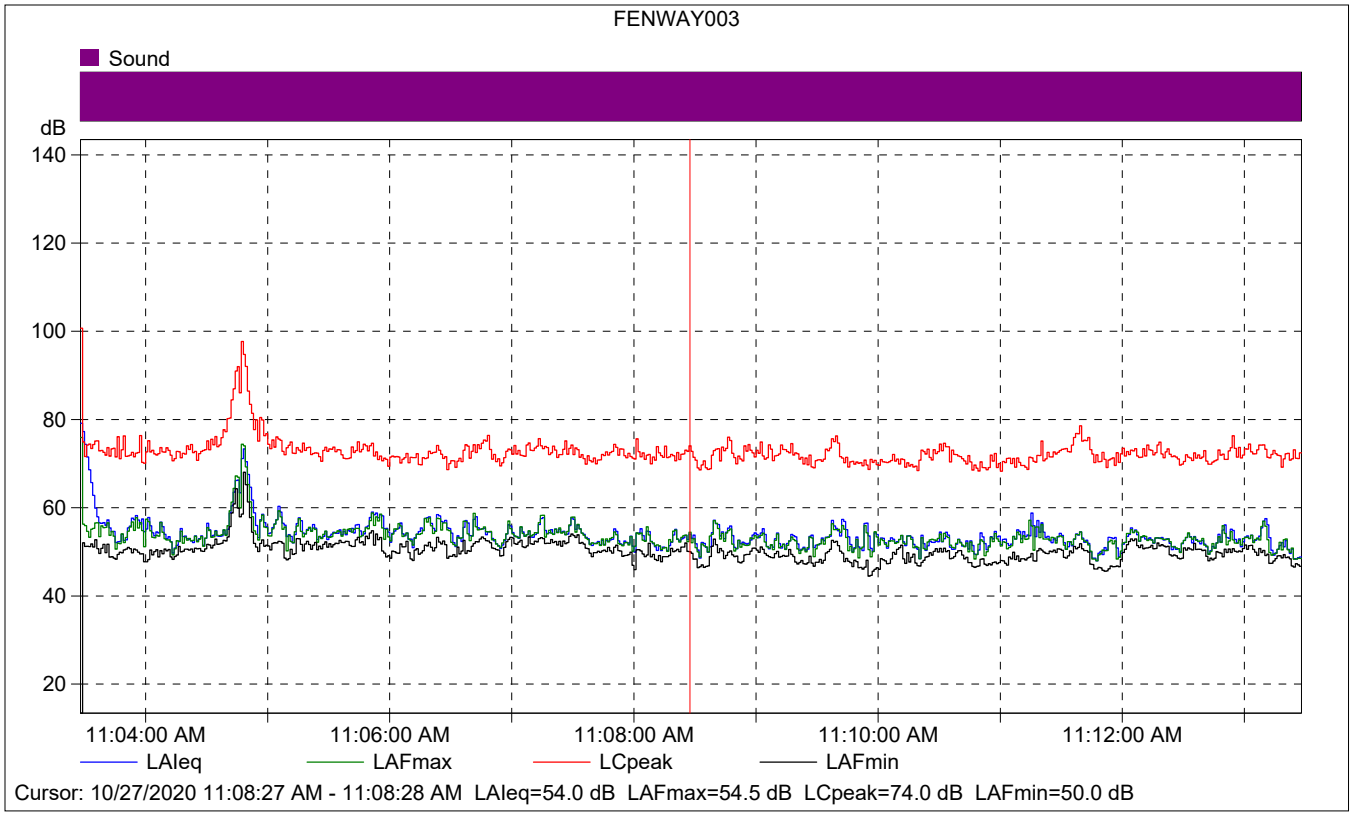
Calibration Time:		10/27/2020 07:17:01
Calibration Type:		External reference
Sensitivity:		43.4200167655945 mV/Pa

FENWAY003

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	53.6	75.9	44.5
Time	11:03:28 AM	11:13:28 AM	0:10:00				
Date	10/27/2020	10/27/2020					

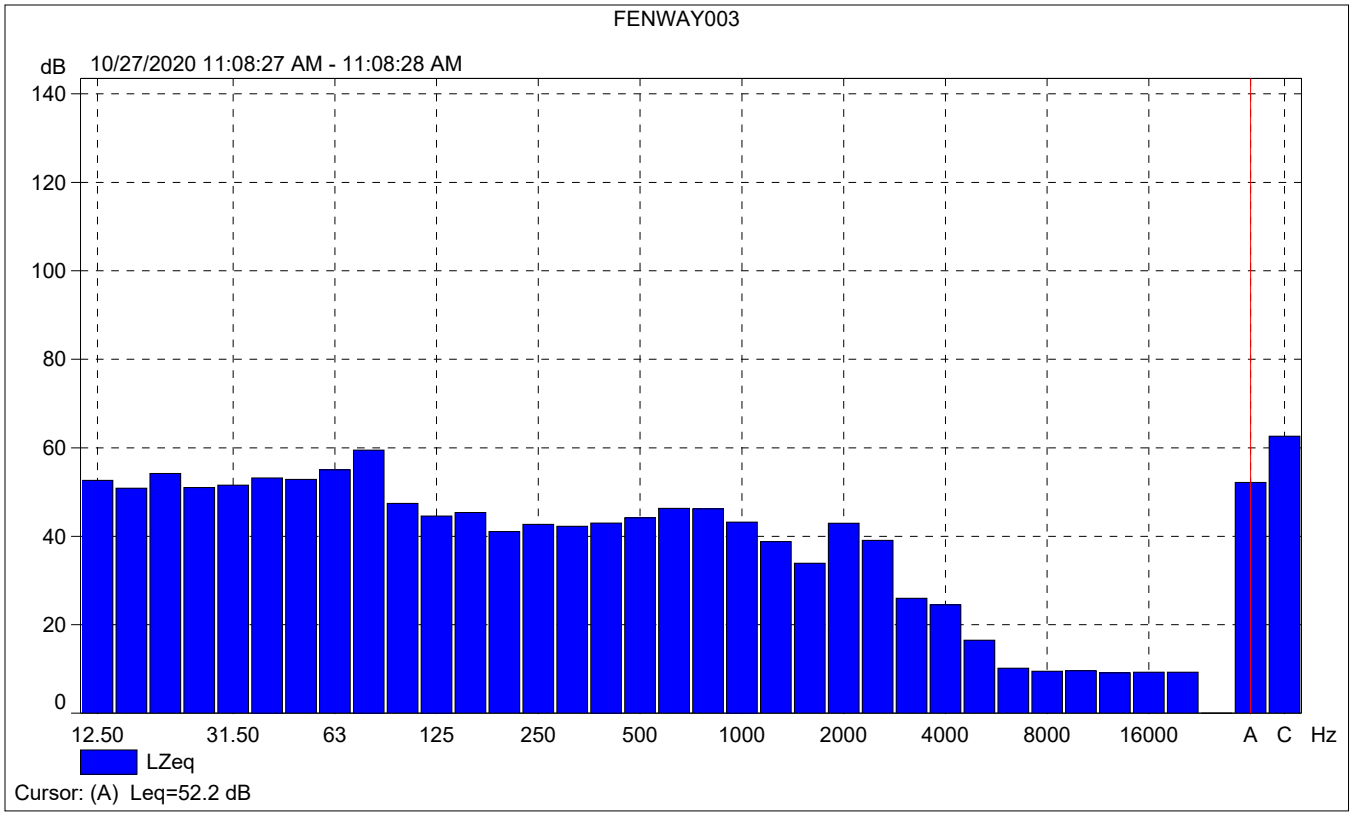

FENWAY003
dB
10/27/2020 11:03:28 AM - 11:13:28 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=53.6 dB LFmax=75.9 dB LFmin=44.5 dB

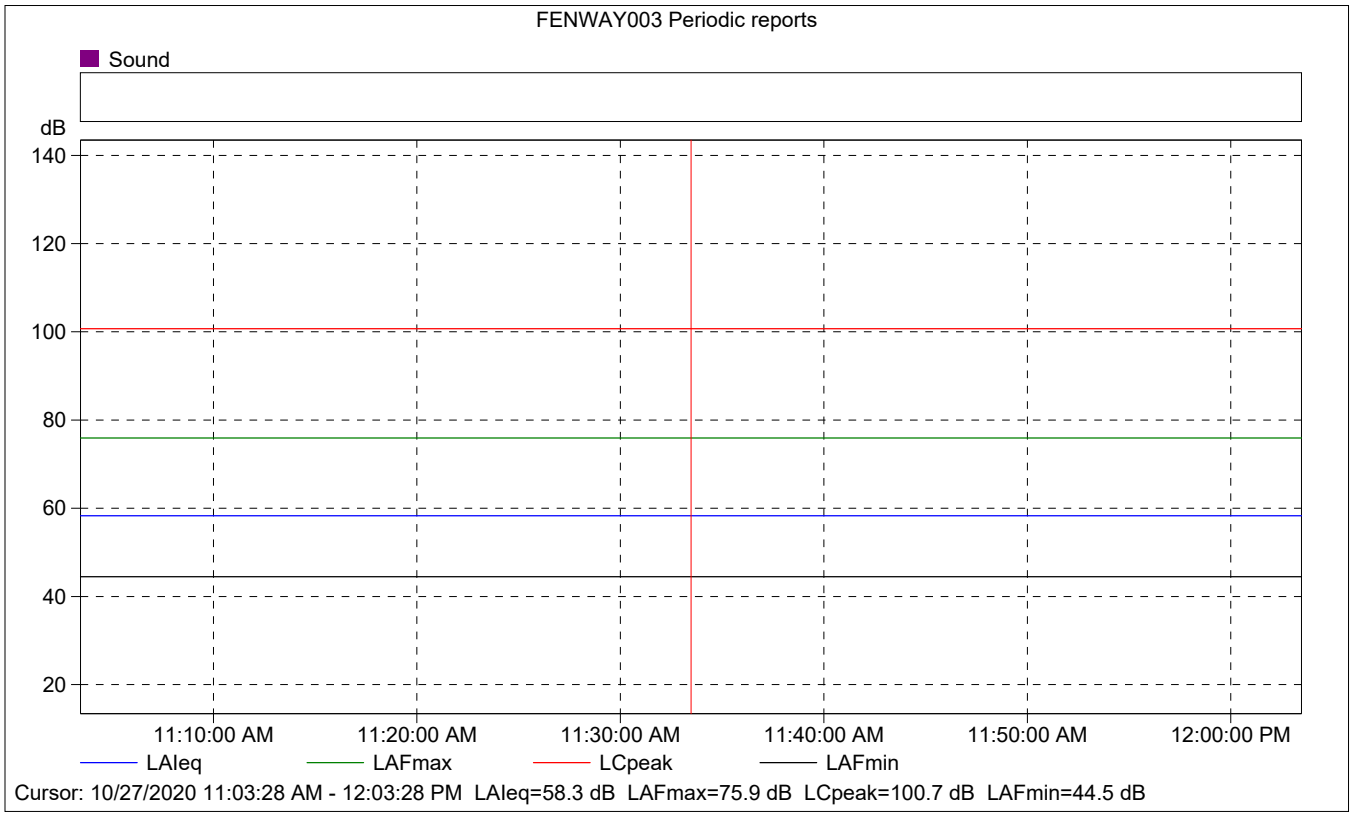

FENWAY003
%
Based on LAF , 10ms Class width: 0.2 dB 10/27/2020 11:03:28 AM - 11:13:28 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 61.9 dB
L5 = 55.2 dB
L10 = 54.1 dB
L50 = 51.5 dB
L90 = 48.7 dB
L95 = 47.9 dB
L99 = 46.8 dB
Level
Cumulative
Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.0%



FENWAY003

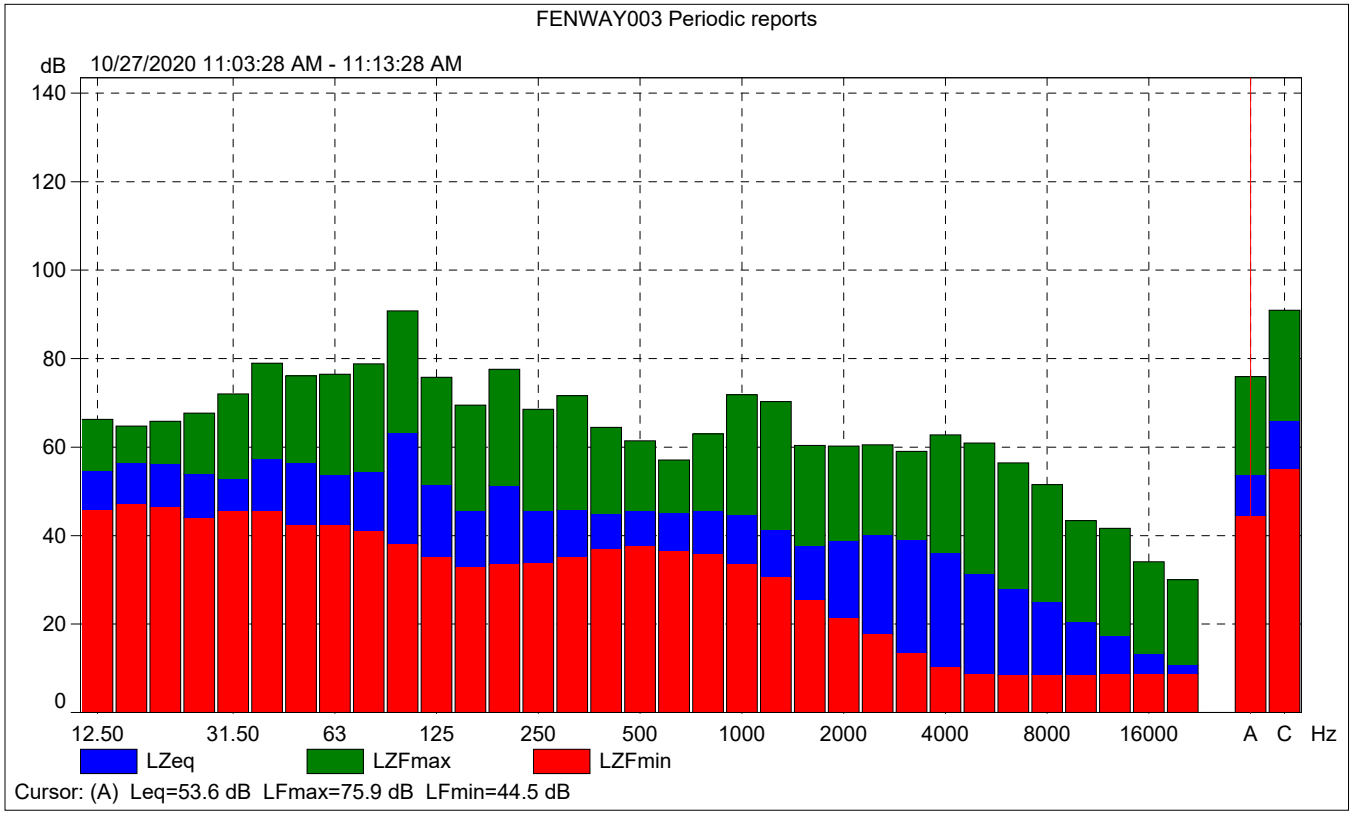
	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			54.0	54.5	50.0
Time	11:08:27 AM	0:00:01			
Date	10/27/2020				


FENWAY003
dB
10/27/2020 11:08:27 AM - 11:08:28 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=52.2 dB

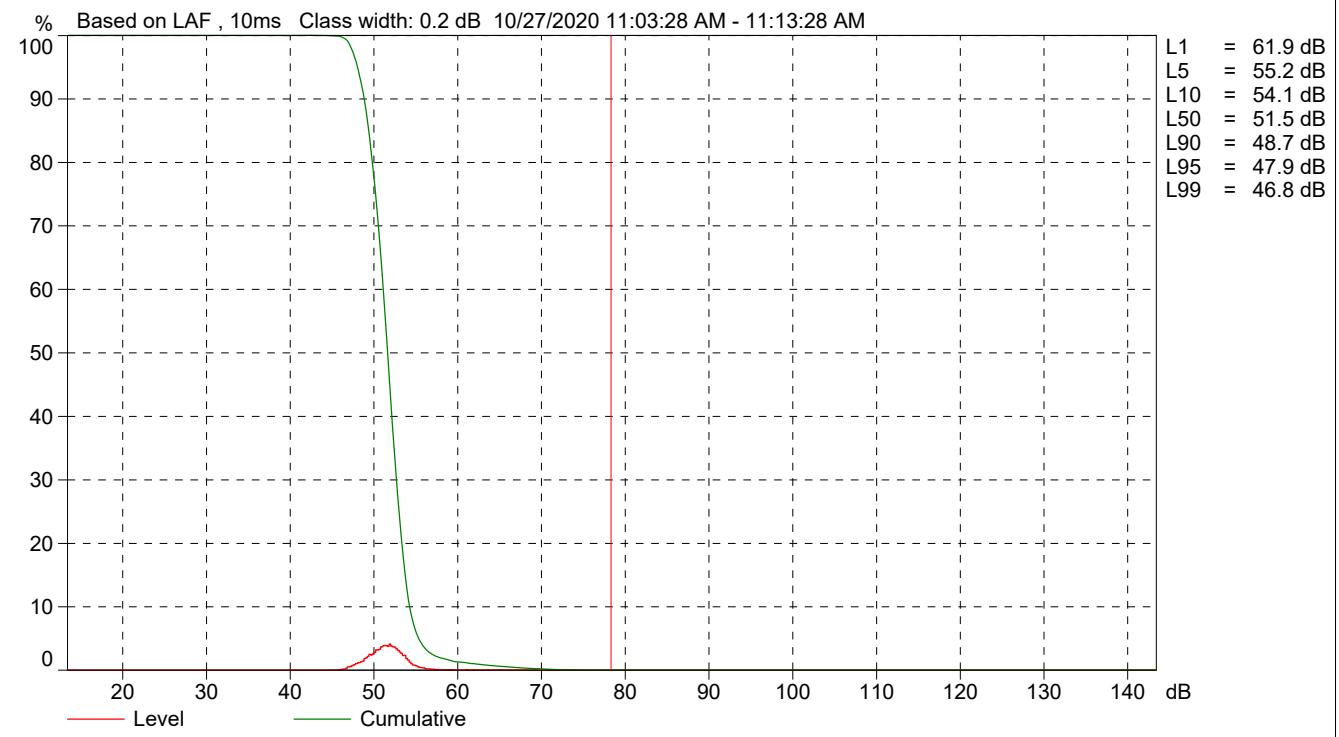

FENWAY003 Periodic reports
Sound
dB
140
120
100
80
60
40
20
11:10:00 AM
11:20:00 AM
11:30:00 AM
11:40:00 AM
11:50:00 AM
12:00:00 PM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/27/2020 11:03:28 AM - 12:03:28 PM LAIeq=58.3 dB LAFmax=75.9 dB LCpeak=100.7 dB LAFmin=44.5 dB

FENWAY003 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	58.3	75.9	44.5
Time	11:03:28 AM	0:10:00				
Date	10/27/2020					



FENWAY003 Periodic reports



Cursor: [78.2 ; 78.4[dB Level: 0.0% Cumulative: 0.0%

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 180066
Project Name: Marea Village Mixed Use Development Project
Scenario: Existing

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Traffic Impact Analysis
Community Noise Descriptor: L_{dn}: _____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.50%	12.90%	9.60%
Medium-Duty Trucks	84.80%	4.90%	10.30%
Heavy-Duty Trucks	86.50%	2.70%	10.80%

Analysis Condition				Design		Vehicle Mix		Distance from Centerline of Roadway					
		Median	ADT	Speed	Alpha	Medium	Heavy	CNEL at	Distance to Contour				Calc
Roadway, Segment	Lanes	Width	Volume	(mph)	Factor	Trucks	Trucks	100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL	Dist
Carlsbad Boulevard													
Avenida Encinas to La Costa Avenue	4	30	16,525	50	0.5	1.8%	0.7%	65.0	-	100	216	466	100
North Coast Highway 101													
La Costa Avenue to 600-foot South of La Costa Avenue	4	12	17,801	30	0.5	1.8%	0.7%	60.6	-	51	109	235	100
600-foot South of La Costa Avenue to Bishops Gate Road	3	17	17,801	30	0.5	1.8%	0.7%	60.5	-	50	108	233	100
Bishops Gate Road to Grandview Street	3	18	17,427	30	0.5	1.8%	0.7%	60.4	-	49	107	230	100
Grandview Street to Jupiter Street	3	18	15,918	30	0.5	1.8%	0.7%	60.0	-	-	100	216	100
Jupiter Street to Leucadia Boulevard	3	17	15,873	30	0.5	1.8%	0.7%	60.0	-	-	100	216	100
La Costa Avenue													
North Coast Highway 101 to North Vulcan Avenue	2	0	11,686	35	0.5	1.8%	0.7%	59.5	-	43	93	201	100
North Vulcan Avenue to Sheridan Road	2	0	13,499	35	0.5	1.8%	0.7%	60.2	-	48	102	221	100
Sheridan Road to Interstate 5	2	0	14,728	35	0.5	1.8%	0.7%	60.5	-	50	109	234	100

"-" = contour is located within the roadway right-of-way.

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 180066
Project Name: Marea Village Mixed Use Development Project
Scenario: Existing+Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Traffic Impact Analysis
Community Noise Descriptor: L_{dn}: _____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.50%	12.90%	9.60%
Medium-Duty Trucks	84.80%	4.90%	10.30%
Heavy-Duty Trucks	86.50%	2.70%	10.80%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix Medium Trucks	 Heavy Trucks	Distance from Centerline of Roadway CNEL at 100 Feet	Distance to Contour 70 CNEL	65 CNEL	60 CNEL	55 CNEL	Calc Dist
Carlsbad Boulevard													
Avenida Encinas to La Costa Avenue	4	30	16,749	50	0.5	1.8%	0.7%	65.1	-	101	218	470	100
North Coast Highway 101													
La Costa Avenue to 600-foot South of La Costa Avenue	4	12	18,474	30	0.5	1.8%	0.7%	60.7	-	52	112	240	100
600-foot South of La Costa Avenue to Bishops Gate Road	3	17	18,923	30	0.5	1.8%	0.7%	60.8	-	52	113	242	100
Bishops Gate Road to Grandview Street	3	18	18,538	30	0.5	1.8%	0.7%	60.7	-	52	111	239	100
Grandview Street to Jupiter Street	3	18	16,344	30	0.5	1.8%	0.7%	60.1	-	47	102	220	100
Jupiter Street to Leucadia Boulevard	3	17	16,288	30	0.5	1.8%	0.7%	60.1	-	47	102	219	100
La Costa Avenue													
North Coast Highway 101 to North Vulcan Avenue	2	0	12,135	35	0.5	1.8%	0.7%	59.7	-	44	95	206	100
North Vulcan Avenue to Sheridan Road	2	0	13,925	35	0.5	1.8%	0.7%	60.3	-	49	105	225	100
Sheridan Road to Interstate 5	2	0	15,121	35	0.5	1.8%	0.7%	60.7	-	51	111	238	100

"-" = contour is located within the roadway right-of-way.

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 180066
Project Name: Marea Village Mixed Use Development Project
Scenario: Existing+Cumulative

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Traffic Impact Analysis
Community Noise Descriptor: L_{dn}: _____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.50%	12.90%	9.60%
Medium-Duty Trucks	84.80%	4.90%	10.30%
Heavy-Duty Trucks	86.50%	2.70%	10.80%

Analysis Condition				Design		Vehicle Mix		Distance from Centerline of Roadway					
		Median	ADT	Speed	Alpha	Medium	Heavy	CNEL at	Distance to Contour				Calc
Roadway, Segment	Lanes	Width	Volume	(mph)	Factor	Trucks	Trucks	100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL	Dist
Carlsbad Boulevard													
Avenida Encinas to La Costa Avenue	4	30	19,316	50	0.5	1.8%	0.7%	65.7	-	111	240	517	100
North Coast Highway 101													
La Costa Avenue to 600-foot South of La Costa Avenue	4	12	18,865	30	0.5	1.8%	0.7%	60.8	-	53	113	244	100
600-foot South of La Costa Avenue to Bishops Gate Road	3	17	18,865	30	0.5	1.8%	0.7%	60.8	-	52	112	242	100
Bishops Gate Road to Grandview Street	3	18	18,489	30	0.5	1.8%	0.7%	60.7	-	51	111	239	100
Grandview Street to Jupiter Street	3	18	16,980	30	0.5	1.8%	0.7%	60.3	-	49	105	226	100
Jupiter Street to Leucadia Boulevard	3	17	16,934	30	0.5	1.8%	0.7%	60.3	-	48	104	225	100
La Costa Avenue													
North Coast Highway 101 to North Vulcan Avenue	2	0	14,927	35	0.5	1.8%	0.7%	60.6	-	51	110	236	100
North Vulcan Avenue to Sheridan Road	2	0	16,917	35	0.5	1.8%	0.7%	61.1	-	55	119	257	100
Sheridan Road to Interstate 5	2	0	18,507	35	0.5	1.8%	0.7%	61.5	-	59	126	273	100

"-" = contour is located within the roadway right-of-way.

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 180066
Project Name: Marea Village Mixed Use Development Project
Scenario: Existing+Cumulative+Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Traffic Impact Analysis
Community Noise Descriptor: L_{dn}: _____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.50%	12.90%	9.60%
Medium-Duty Trucks	84.80%	4.90%	10.30%
Heavy-Duty Trucks	86.50%	2.70%	10.80%

Analysis Condition				Design		Vehicle Mix		Distance from Centerline of Roadway					
		Median	ADT	Speed	Alpha	Medium	Heavy	CNEL at	Distance to Contour				Calc
Roadway, Segment	Lanes	Width	Volume	(mph)	Factor	Trucks	Trucks	100 Feet	70 CNEL	65 CNEL	60 CNEL	55 CNEL	Dist
Carlsbad Boulevard													
Avenida Encinas to La Costa Avenue	4	30	19,540	50	0.5	1.8%	0.7%	65.7	-	112	242	521	100
North Coast Highway 101													
La Costa Avenue to 600-foot South of La Costa Avenue	4	12	19,538	30	0.5	1.8%	0.7%	61.0	-	54	116	250	100
600-foot South of La Costa Avenue to Bishops Gate Road	3	17	19,987	30	0.5	1.8%	0.7%	61.0	-	54	117	251	100
Bishops Gate Road to Grandview Street	3	18	18,927	30	0.5	1.8%	0.7%	60.8	-	52	113	243	100
Grandview Street to Jupiter Street	3	18	17,406	30	0.5	1.8%	0.7%	60.4	-	49	107	229	100
Jupiter Street to Leucadia Boulevard	3	17	17,349	30	0.5	1.8%	0.7%	60.4	-	49	106	229	100
La Costa Avenue													
North Coast Highway 101 to North Vulcan Avenue	2	0	15,376	35	0.5	1.8%	0.7%	60.7	-	52	112	241	100
North Vulcan Avenue to Sheridan Road	2	0	17,343	35	0.5	1.8%	0.7%	61.2	-	56	121	261	100
Sheridan Road to Interstate 5	2	0	18,900	35	0.5	1.8%	0.7%	61.6	-	60	128	276	100

"-" = contour is located within the roadway right-of-way.

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 180066
Project Name: Marea Village Mixed Use Development Project
Scenario: Existing+Cumulative+Project (100 feet Ldn)

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Traffic Impact Analysis
Community Noise Descriptor: L_{dn}: X CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.50%	12.90%	9.60%
Medium-Duty Trucks	84.80%	4.90%	10.30%
Heavy-Duty Trucks	86.50%	2.70%	10.80%

Analysis Condition				Design		Vehicle Mix		Distance from Centerline of Roadway					
		Median	ADT	Speed	Alpha	Medium	Heavy	Ldn at	Distance to Contour				Calc
Roadway, Segment	Lanes	Width	Volume	(mph)	Factor	Trucks	Trucks	100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn	Dist
North Coast Highway 101													
La Costa Avenue to 600-foot South of La Costa Avenue	4	12	19,538	30	0.5	1.8%	0.7%	60.5	-	50	108	233	100
600-foot South of La Costa Avenue to Bishops Gate Road	3	17	19,987	30	0.5	1.8%	0.7%	60.5	-	50	109	234	100

"-" = contour is located within the roadway right-of-way.

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 180066
Project Name: Marea Village Mixed Use Development Project
Scenario: Existing+Cumulative+Project (50 feet Ldn)

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Traffic Impact Analysis
Community Noise Descriptor: L_{dn}: X CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.50%	12.90%	9.60%
Medium-Duty Trucks	84.80%	4.90%	10.30%
Heavy-Duty Trucks	86.50%	2.70%	10.80%

Analysis Condition				Design		Vehicle Mix		Distance from Centerline of Roadway					
		Median	ADT	Speed	Alpha	Medium	Heavy	Ldn at	Distance to Contour				Calc
Roadway, Segment	Lanes	Width	Volume	(mph)	Factor	Trucks	Trucks	50 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn	Dist
North Coast Highway 101													
La Costa Avenue to 600-foot South of La Costa Avenue	4	12	19,538	30	0.5	1.8%	0.7%	65.7	-	55	120	257	50
600-foot South of La Costa Avenue to Bishops Gate Road	3	17	19,987	30	0.5	1.8%	0.7%	65.5	-	54	117	251	50

"-" = contour is located within the roadway right-of-way.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX L-1
VEHICLE MILES TRAVELED STUDY

THIS PAGE INTENTIONALLY LEFT BLANK

CITY OF ENCINITAS
Marea Village Mixed-Use
(Hotel, Residential, Commercial)
1900 N. Coast Highway 101
December 22, 2020

Draft Vehicle Miles Traveled Analysis

Prepared by:

LOS Engineering, Inc.
11622 El Camino Real, Suite 100, San Diego, CA 92130
Phone 619-890-1253

Job #1924

Table of Contents

1.0 Introduction 1
2.0 Vehicle Miles Traveled Methodology 4
2.1 San Diego ITE VMT Guidelines and Significance Criteria 4
2.2 Analysis Metrics 4
2.3 CEQA Analysis Methodology 5
3.0 Project Description and Setting 6
3.1 Project Trip Generation 6
3.2 Project Setting 7
3.2.1 Transit 7
3.2.2 Pedestrian 7
3.2.3 Bike 7
3.2.4 Vehicle 7
4.0 VMT Analysis 8
4.1 Project Analysis 8
4.2 Cumulative Analysis 13
5.0 VMT Mitigation Measures 14
5.1 Transportation Demand Management Strategies 14
5.2 SANDAG Mobility Management VMT Reduction Calculations 15
6.0 Conclusion 16

List of Figures

Figure 1: Project Location 2
Figure 2: Site Plan 3
Figure 3: SANDAG VMT per Capita by Census Tract 9
Figure 4: SANDAG VMT per Capita by City/CPA 10
Figure 5: SANDAG VMT per Employee by Census Tract 11
Figure 6: SANDAG VMT per Employee by City/CPA 12

List of Tables

Table 1: Project Traffic Generation 6
Table 2: Project VMT Percentage of Regional Mean and IMpact Summary 8

Appendices

Appendix A ..... OPR Technical Advisory
Appendix B ..... ITE Guidelines
Appendix C ..... SANDAG Mobility Management VMT Reduction Calculator Tool Output
Appendix D ..... Excerpts from CAPCOA

1.0 Introduction

A Vehicle Miles Traveled (VMT) analysis is required to satisfy the California Environmental Quality Act (CEQA) guidelines that utilize VMT as the measure of mobility effectiveness for determining transportation impacts.

The proposed mixed-use project includes a 30-room resort hotel, 94 multi-family units, and 18,261 square feet of commercial/retail space. The project is located on the westside of North Coast Highway 101 approximately 500 feet south of La Costa Avenue, in the City of Encinitas, California. The project will replace an existing commercial/retail center of approximately 7,582 square feet. The regional location of the project is shown in **Figure 1**. A site plan is shown in **Figure 2.**

This report describes the VMT analysis methodology, significant criteria, and potential mitigation measures. The format of this study includes the following chapters:

1.0 Introduction
2.0 Vehicle Miles Traveled Methodology
3.0 Project Description and Setting
4.0 VMT Analysis
5.0 VMT Mitigation Measures
6.0 Conclusions

Figure 1: Project Location

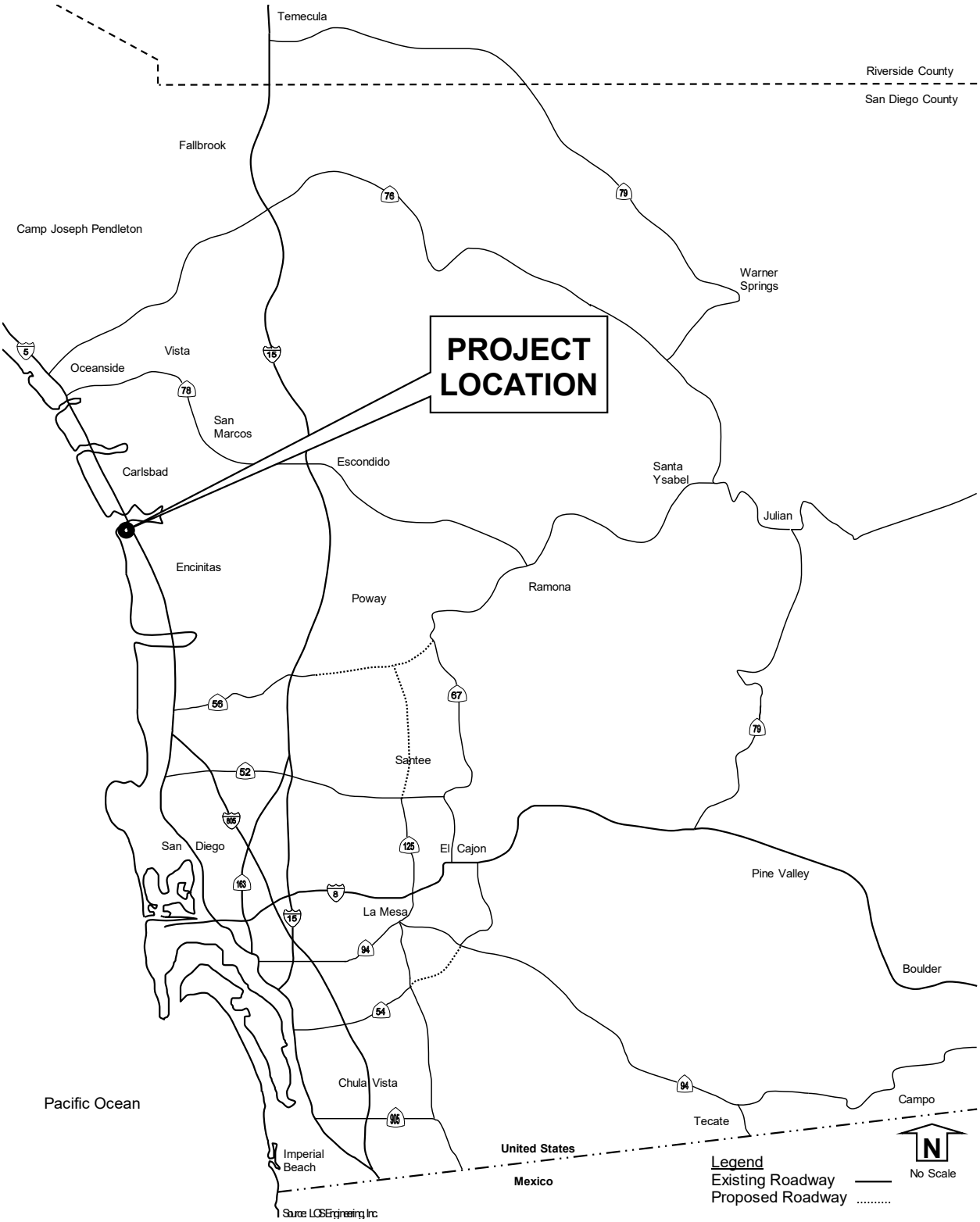
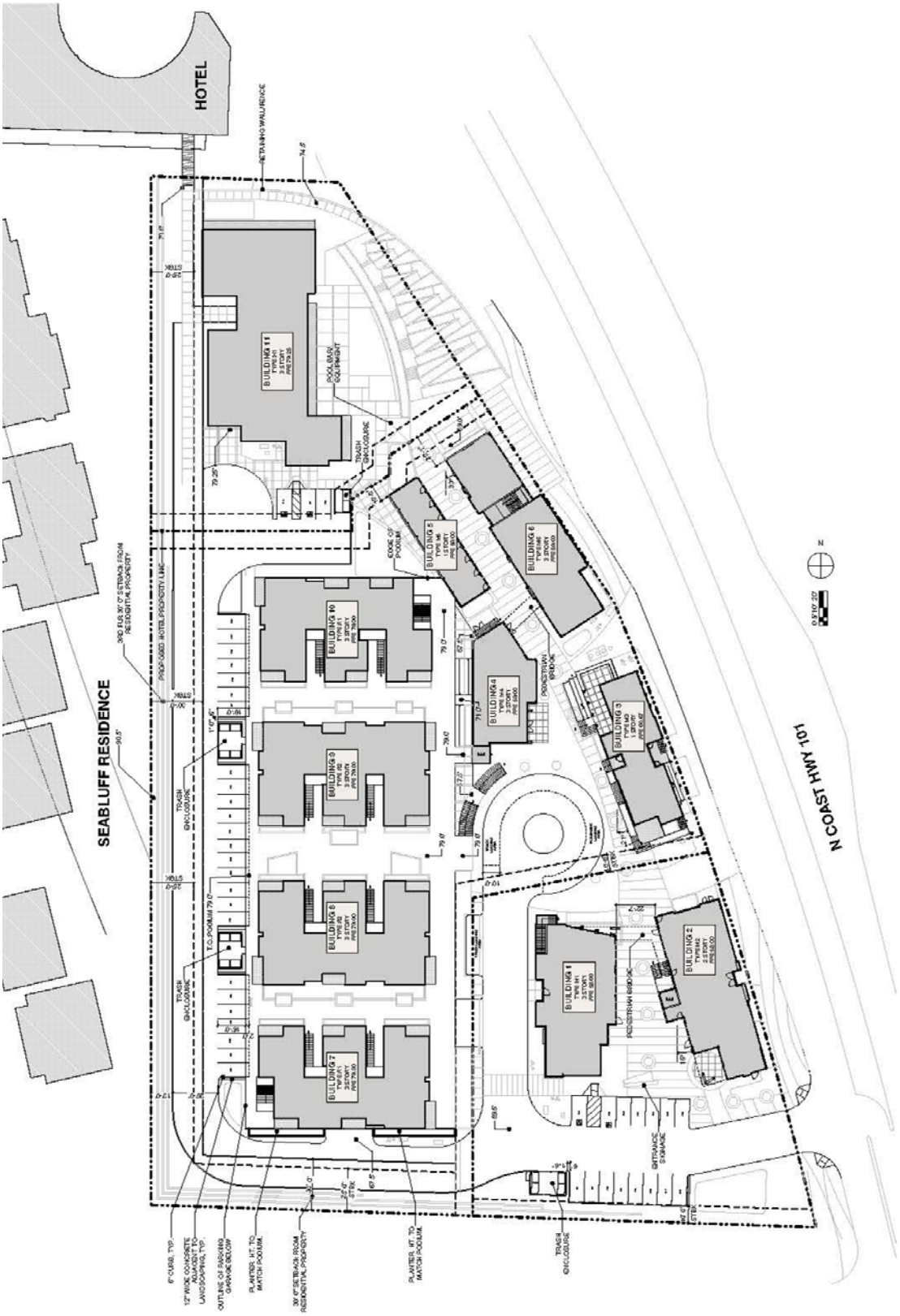


Figure 2: Site Plan



Source: Stephen Dalton Architects

2.0 Vehicle Miles Traveled Methodology

The California Governor's Office of Planning and Research (OPR) Technical Advisory developed guidance on implementing Senate Bill 743 (SB 743) to determine if a project may result in a transportation impact.

The OPR *Transportation Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018 states on page 8 "As noted above, lead agencies have the discretion to set or apply their own thresholds of significance". The OPR Technical Advisory is included in **Appendix A**.

City of Encinitas Engineering Staff have requested the VMT analysis to be based on the local San Diego Institute of Transportation Engineers (ITE) *Guidelines for Traffic Impact Studies in the San Diego Region*, May 2019. The ITE Guidelines are included in **Appendix B**.

2.1 San Diego ITE VMT Guidelines and Significance Criteria

The San Diego ITE Guidelines use VMT per capita and VMT per employee to define a significant transportation impact when a project exceeds a level of 85% of the regional mean. The ITE Guidelines state on page 4-4:

> "It is recommended that if the project average is lower than either 85% of the regional average or 85% of the average for the city or community in which the project is located, the VMT impacts of the project can be presumed to be less than significant."

2.2 Analysis Metrics

The San Diego ITE Guidelines recommend that VMT thresholds for SB 743 analysis use VMT/capita (for residential projects) and/or VMT/employee (for employment projects) to determine transportation related impact. The following definitions are from the San Diego Association of Governments (SANDAG):

1) VMT/Capita represents the average amount of personal, non-commercial, vehicle travel made on an average weekday by each resident who lives within a geographic boundary.

2) VMT/Employee represents the average amount of personal, non-commercial, vehicle travel made on an average weekday by each resident employee whose employment/work location is within a geographic boundary and it includes all travel made by the employee, not just community to work, and includes those individuals who telecommute to their work location.

2.3 CEQA Analysis Methodology

The San Diego ITE Guidelines outline screening criteria and thresholds for determining the required level of VMT analysis.

1) Projects inconsistent with the General Plan or Community Plan that generate up to 500 Average Daily Trips (ADT) are not required to prepare a VMT Analysis and the VMT impacts are presumed to be less than significant.

2) Projects consistent with the General Plan or Community Plan that generate up to 1,000 ADT are not required to prepare a VMT Analysis and the VMT Impacts are presumed to be less than significant.

3) Projects that generate between 1,000 ADT and 2,400 ADT are required to prepare a VMT analysis using the San Diego Association of Governments (SANDAG) San Diego Region SB743 maps.

4) Projects that generate greater than 2,400 ADT are required to prepare a VMT analysis using the SANDAG Regional Model.

3.0 Project Description and Setting

The proposed mixed-use project includes a 30-room resort hotel, 94 multi-family units, and 18,261 square feet of commercial/retail space. The project will replace an existing commercial/retail center of approximately 7,582 square feet.

3.1 Project Trip Generation

Project traffic generation was calculated using the San Diego Association of Governments (SANDAG) trip rates from the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. The project site has active uses creating traffic; therefore, a traffic credit was applied because the existing uses will be replaced by the project. Additionally, the existing and proposed project have pass-by trips already on the study roadways. The project is calculated to generate a net increase of 1,122 ADT as shown in **Table 1**.

TABLE 1: PROJECT TRAFFIC GENERATION

Land Uses	Rate		Size & Units		ADT
Proposed project					
Resort Hotel	10	/Room	30	Rooms	300
Multi-Family (>20 du/acre)	6	/DU	94	DU	564
Specialty Retail/Strip Commercial	40	/KSF	8,584	SF	343
Restaurant (sit down high turnover)	160	/KSF	3,905	SF	625
Restaurant (quality)	100	/KSF	2,134	SF	213
Office	20	/KSF	3,638	SF	73
			Project Driveway Trips:		**2,118**
Pass-By Trips per SANDAG rates (Existing trips already on Coast Hwy)					
			Specialty Retail (Pass-By=15%):		-52
			Restaurant High Turnover (Pass-By=12%):		-75
			Restaurant Quality (Pass-By=12%):		-26
			Office (Pass-By=4%):		-3
			Project Primary & Diverted Trips:		*1,963*
Existing use to be removed					
Restaurant (sit down high turnover)	160	/KSF	5,333	SF	853
Specialty Retail/Strip Commercial	40	/KSF	2,249	SF	90
			Credit For Existing Use Driveway Trips:		*943*
Pass-By Trips per SANDAG rates (Existing trips already on Coast Hwy)					
			Restaurant (Pass-By=12%):		-102
			Credit For Existing Use Primary & Diverted Trips:		*841*
			Net Change in Primary & Diverted Trips (for anlaysis):		***1,122***

Source: SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region,* April 2002. SF - Square Feet. DU:Dwelling Unit. ADT: Average Daily Trip. Spreadsheet rounding may result in ±1 to the above numbers.

3.2 Project Setting

The project will be served by adjacent bus stops, pedestrian points of access, adjacent bike lane/route, and one driveway on N. Coast Highway 101.

3.2.1 Transit

The North County Transit District has bus stops adjacent to the project for Bus Route 101 that runs from the Oceanside Transit Center down to the University Town Center in San Diego. The project is located approximately 2.5 miles from NCTD's Encinitas coaster station that can be reached using Route 101 service. The SANDAG May 2016 Smart Growth Concept Map identifies a year 2050 rapid transit service line on Coast Highway adjacent to the project.

3.2.2 Pedestrian

As part of the project, a sidewalk will be constructed/re-constructed along the project frontage that will provide multiple pedestrian access points for the project. Additionally, an on-site pedestrian connection will be included between the project and the hotel located immediately north of the site.

3.2.3 Bike

Adjacent to the project, there is currently a northbound Class II bike lane and southbound intermittent bike "Sharrow" markings. The City's Streetscape improvement project along N. Coast Hwy 101 will provide bikes lanes in both direction along the project frontage.

3.2.4 Vehicle

Project traffic will utilize the surrounding roadways, which include:

Carlsbad Boulevard from Avenida Encinas to La Costa Ave is mostly constructed as a four (4) lane divided roadway with two travel lanes in each direction. There are no sidewalks on this segment. The posted speed limit is 50 Miles Per Hour (MPH).

La Costa Avenue from North Coast Highway 101 to I-5 is currently constructed as a two (2) lane roadway with one travel lane in each direction. Bike lanes are provided on both sides of the roadway. There are no sidewalks on this segment. The posted speed limit is 40 MPH.

North Coast Highway 101 from the City of Carlsbad limits to La Costa Avenue is constructed as a four (4) lane divided roadway. North Coast Highway 101 from La Costa Avenue to approximately 600 feet south of La Costa Avenue is generally built as a four (4) lane divided roadway with bike lanes in each direction. North Coast Highway 101 from approximately 600 feet south of La Costa Avenue to Leucadia Blvd is generally built as a three (3) lane divided roadway with 1 northbound and 2 southbound lanes. Parking is generally permitted. The posted speed limit is 35 MPH.

4.0 VMT Analysis

According to the San Diego ITE Guidelines, the project with a net change in trip generation of 1,122 ADT is required to prepare a VMT analysis using the San Diego Association of Governments (SANDAG) San Diego Region SB743 maps.

The project includes both residential and employment uses; therefore, an analysis of VMT/Capita and VMT/Employee is required.

4.1 Project Analysis

The project is located within Census Tract 177.01. The project is considered to have a significant transportation VMT impact because the VMT/Capita and VMT/Employee of the project land use exceed 85% of the regional mean as shown in **Table 2**.

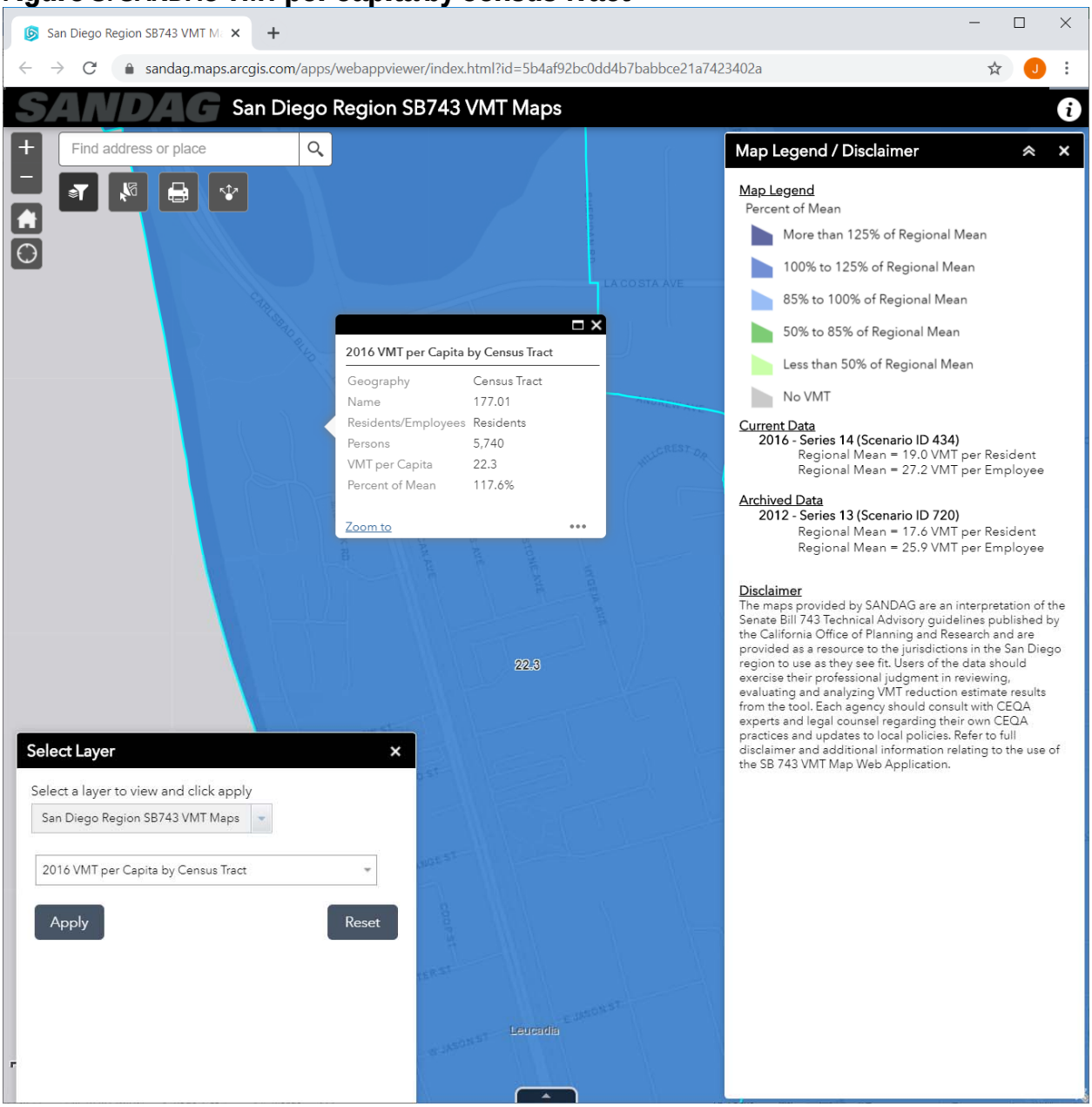
TABLE 2: PROJECT VMT PERCENTAGE OF REGIONAL MEAN AND IMPACT SUMMARY

VMT Analysis	Percent of Regional Mean	Percent Above/ Below 85%	Significant Impact?
VMV/Capita by Census Tract 177.01	117.6%	32.6%	Yes
VMV/Capita by City/CPA	115.1%	30.1%	Yes
VMV/Employee by Census Tract 177.01	105.0%	20.0%	Yes
VMV/Employee by City/CPA	111.3%	26.3%	Yes

The individual SANDAG San Diego Region SB743 VMT Maps by VMT/Capita and by Employee are included below.

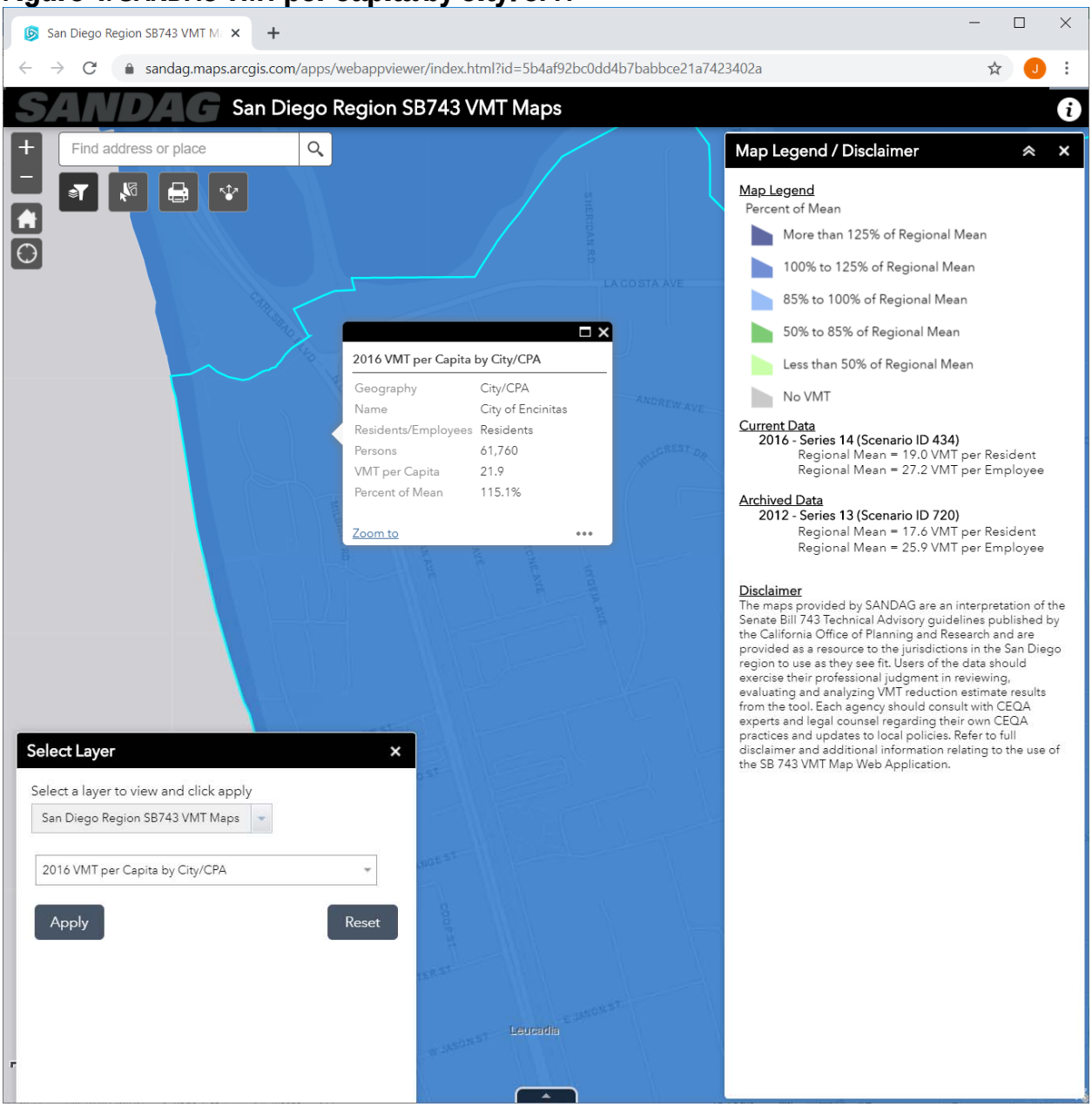
The project location for residential VMT per Capita by Census Tract is at 117.6% of the regional mean; therefore, the project exceeds 85% of the regional mean and is considered to have a significant transportation VMT impact as shown in **Figure 3**.

Figure 3: SANDAG VMT per Capita by Census Tract



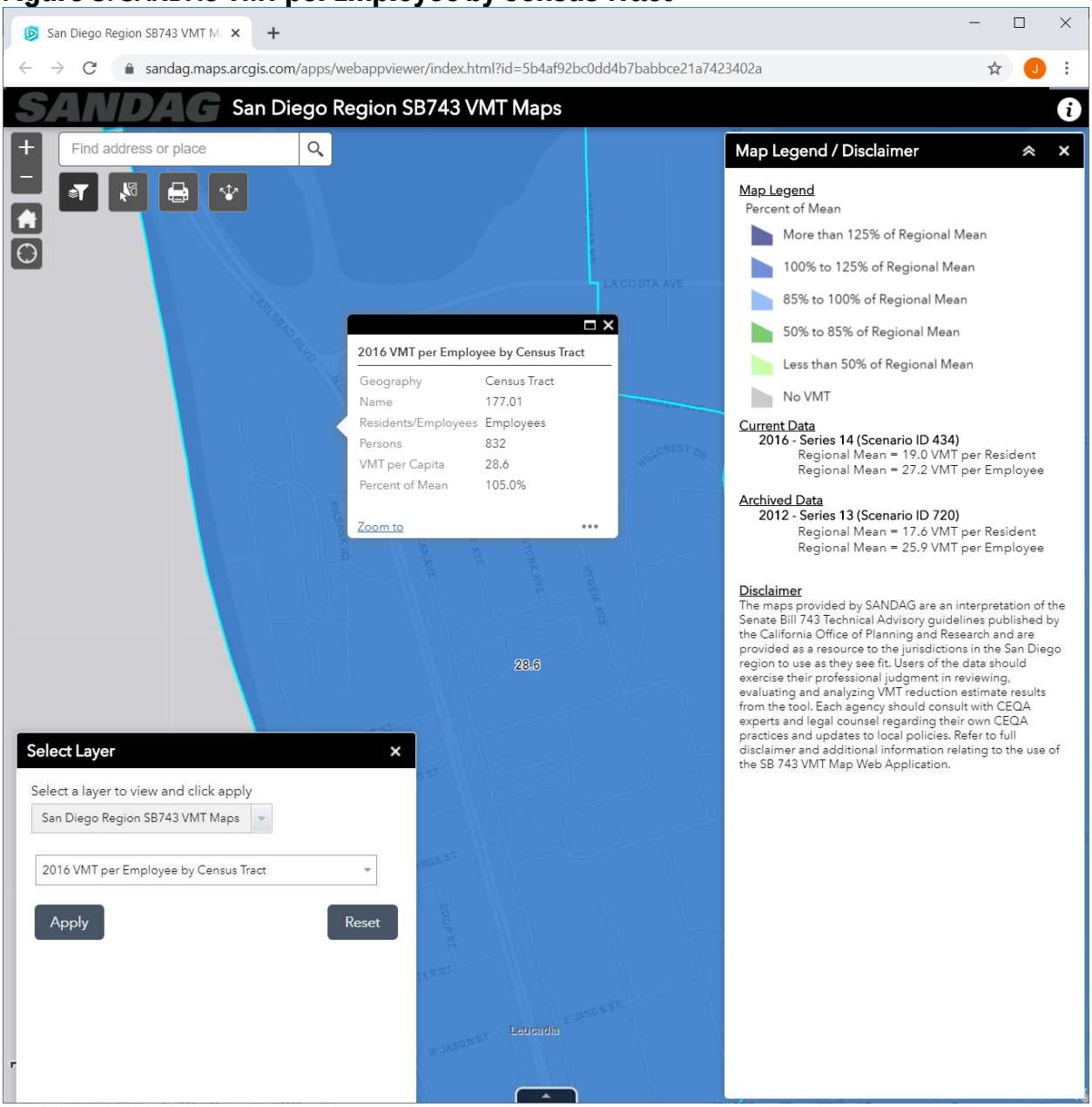
The project location for residential VMT per Capita by City/CPA is at 115.1% of the regional mean; therefore, the project exceeds 85% of the regional mean and is considered to have a significant transportation VMT impact as shown in **Figure 4**.

Figure 4: SANDAG VMT per Capita by City/CPA



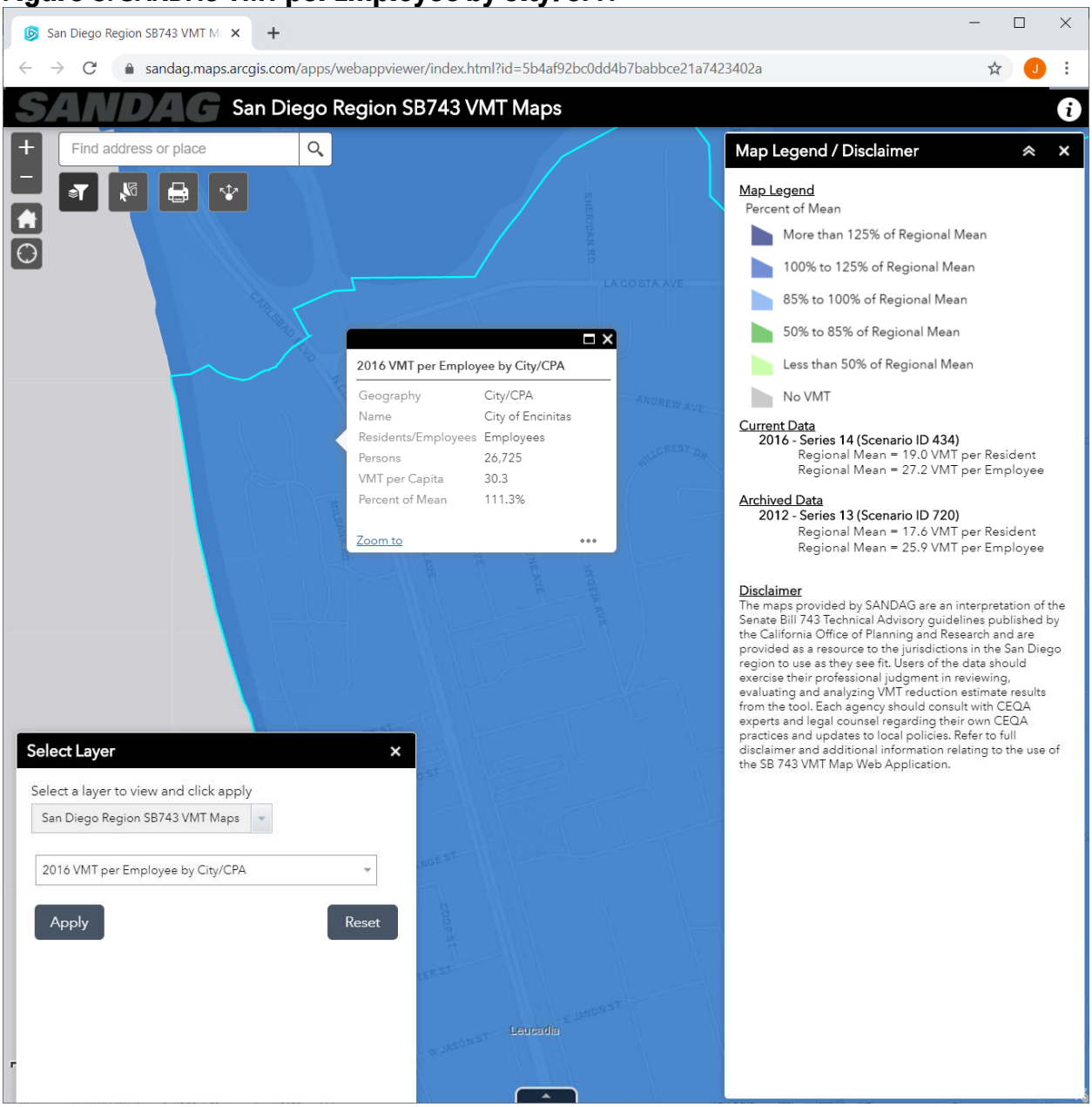
The project location for VMT per Employee by Census Tract is at 105.0% of the regional mean; therefore, the project exceeds 85% of the regional mean and is considered to have a significant transportation VMT impact as shown in **Figure 5**.

Figure 5: SANDAG VMT per Employee by Census Tract



The project location for VMT per Employee by City/CPA is at 111.3% of the regional mean; therefore, the project exceeds 85% of the regional mean and is considered to have a significant transportation VMT impact as shown in **Figure 6**.

Figure 6: SANDAG VMT per Employee by City/CPA



4.2 Cumulative Analysis

The OPR *Transportation Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018 states on page 6:

> A project's cumulative impacts are based on an assessment of whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (Pub. Resources Code, § 21083, subd. (b)(2); see CEQA Guidelines, § 15064, subd. (h)(1).) When using an absolute VMT metric, i.e., total VMT (as recommended below for retail and transportation projects), analyzing the combined impacts for a cumulative impacts analysis may be appropriate. However, metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance. (See *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 219, 223; CEQA Guidelines, § 15064, subd. (h)(3).)

As outlined above, OPR states that cumulative impacts are not distinct from the project impacts; therefore, a cumulative analysis is not provided.

5.0 VMT Mitigation Measures

The project is considered to have a significant transportation VMT impact based on the SANDAG's San Diego Region SB743 maps. According to the *California Air Pollution Control Officers Association (CAPCOA)* "Quantifying Greenhouse Gas Mitigation Measures" August 2010, there are five potential categories of transportation mitigation measures. The categories include:

1) Land Use / Location
2) Neighborhood / Site Enhancement
3) Parking Policy / Pricing
4) Transit System Improvements
5) Commute Trip Reduction

Transportation mitigation measures can be implemented through Transportation Demand Management (TDM) strategies.

5.1 Transportation Demand Management Strategies

The project applicant proposes to implement TDM strategies as potential mitigation. The following TDM elements are proposed:

1) Voluntary employer commute program. Employers to provide information about the SANDAG's iCommute program (www.icommutesd.com) and encourage carpooling.

2) Develop and/or promote bicycle usage through a bikeshare program to help reduce vehicle usage and demand for parking by providing users with on-demand access to bikes for short-term rental, contribute to electric bicycle charging stations, contribute to bicycle infrastructure improvements, and disseminate a bicycle riders guide to make it easier for people to bike and walk to work.

3) Provide pedestrian improvements such as a connection to the hotel to the north.

4) Provide information about maps, routes, and schedules for public transit.

TDM strategies for VMT reductions can be calculated using the SANDAG mobility management calculator. Therefore, a SANDAG mobility management VMT analysis was conducted to determine if the project could mitigate the VMT impact.

5.2 SANDAG Mobility Management VMT Reduction Calculations

SANDAG's Mobility Management VMT Reduction Calculator Tool provides the means to estimate VMT reductions based on a project's design and planned programs. However, the SANDAG calculator tool does not provide measures for all of the proposed TMD strategies. The following TDM and project elements were entered into the SANDAG reduction calculator tool to determine the VMT reduction:

1) Voluntary employer commute program. The SANDAG model calculates a 6.2% VMT reduction with the implementation of a Voluntary employer commute program.

2) Mixed-Use project. The SANDAG model calculates a 0.2% VMT reduction from pedestrian interaction between the mixed land uses.

The SANDAG Draft Mobility Management VMT Reduction Calculator Tool computed a sum of 6.4% VMT reduction based on the project's voluntary employer commute program and the project's mixed land uses. Output from the SANDAG Reduction Calculator Tool is included in **Appendix C**.

CAPCOA states that the maximum combined allowable VMT reduction is 15% for land development projects located within suburban areas (**Appendix D**); therefore, this project with a range of VMT from 20% to 32.6% above 85% of the regional mean could not reach the required VMT reduction to fully mitigate the VMT impact. While the proposed TDM strategies do not reduce the VMT impact to below a level of significance, they do provide some level of VMT reduction. <u>The VMT impact remains significant, unmitigated, and requires overrides</u>.

6.0 Conclusion

A VMT analysis was prepared to determine if the project would create a potential CEQA transportation impact. The San Diego ITE VMT Guidelines use VMT/capita and VMT/employee to define a significant transportation impact when a project exceeds a level of 85% of the regional mean. The project is considered to have a significant transportation VMT impact because the individual elements of the project exceed 85% of the regional mean as follows:

1) VMT per Capita (resident) by Census Tract is at 117.6% of the regional mean
2) VMT per Capita (resident) by City/CPA is at 115.1% of the regional mean
3) VMT per Employee by Census Tract is at 105.0% of the regional mean
4) VMT per Employee by City/CPA is at 111.3% of the regional mean

The project applicant proposes to implement the following TDM strategies:

1) Voluntary employer commute program. Employers to provide information about the SANDAG's iCommute program (www.icommutesd.com) and encourage carpooling.
2) Develop and/or promote bicycle usage through a bikeshare program to help reduce vehicle usage and demand for parking by providing users with on-demand access to bikes for short-term rental, contribute to electric bicycle charging stations, contribute to bicycle infrastructure improvements, and disseminate a bicycle riders guide to make it easier for people to bike and walk to work.
3) Provide pedestrian improvements such as a connection to the hotel to the north.
4) Provide information about maps, routes, and schedules for public transit.

SANDAG's Mobility Management VMT Reduction Calculator Tool provides the means to estimate VMT reductions based on a project's design and planned programs. The following project elements were entered into the SANDAG reduction calculator tool to determine the VMT reduction:

1) Voluntary employer commute program. The SANDAG model calculates a 6.2% VMT reduction with the implementation of a Voluntary employer commute program.
2) Mixed-Use project. The SANDAG model calculates a 0.2% VMT reduction from pedestrian interaction between the mixed land uses.

The SANDAG Draft Mobility Management VMT Reduction Calculator Tool computed a sum of 6.4% VMT reduction based on the project's voluntary employer commute program and the project's mixed land uses. CAPCOA states that the maximum combined allowable VMT reduction is 15% for land development projects located within suburban areas; therefore, this project with a range of VMT from 20% to 32.6% above 85% of the regional mean could not reach the required VMT reduction to fully mitigate the VMT impact. While the proposed TDM strategies do not reduce the VMT impact to below a level of significance, they do provide some level of VMT reduction. The VMT impact remains significant, unmitigated, and requires overrides.

Appendix A

OPR Technical Advisory

TECHNICAL ADVISORY

ON EVALUATING TRANSPORTATION IMPACTS IN CEQA

December 2018

Contents

A. Introduction 1
B. Background 2
C. Technical Considerations in Assessing Vehicle Miles Traveled 4
1. Recommendations Regarding Methodology 4
D. General Principles to Guide Consideration of VMT 7
E. Recommendations Regarding Significance Thresholds 8
1. Screening Thresholds for Land Use Projects 12
2. Recommended Numeric Thresholds for Residential, Office, and Retail Projects 15
3. Recommendations Regarding Land Use Plans 18
4. Other Considerations 19
F. Considering the Effects of Transportation Projects on Vehicle Travel 19
1. Recommended Significance Threshold for Transportation Projects 22
2. Estimating VMT Impacts from Transportation Projects 23
G. Analyzing Other Impacts Related to Transportation 25
H. VMT Mitigation and Alternatives 26

Appendix 1. Considerations About Which VMT to Count 29
Appendix 2. Induced Travel: Mechanisms, Research, and Additional Assessment Approaches 32

A. Introduction

This technical advisory is one in a series of advisories provided by the Governor's Office of Planning and Research (OPR) as a service to professional planners, land use officials, and CEQA practitioners. OPR issues technical assistance on issues that broadly affect the practice of land use planning and the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). (Gov. Code, § 65040, subds. (g), (l), (m).) The purpose of this document is to provide advice and recommendations, which agencies and other entities may use at their discretion. This document does not alter lead agency discretion in preparing environmental documents subject to CEQA. This document should not be construed as legal advice.

Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. As one appellate court recently explained: "During the last 10 years, the Legislature has charted a course of long-term sustainability based on denser infill development, reduced reliance on individual vehicles and improved mass transit, all with the goal of reducing greenhouse gas emissions. Section 21099 is part of that strategy . . . ." (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 729.) Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (*Id.*, subd. (b)(1); see generally, adopted CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria, OPR has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)

This advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. Again, OPR provides this Technical Advisory as a resource for the public to use at their discretion. OPR is not enforcing or attempting to enforce any part of the recommendations contained herein. (Gov. Code, § 65035 ["It is not the intent of the Legislature to vest in the Office of Planning and Research any direct operating or regulatory powers over land use, public works, or other state, regional, or local projects or programs."].)

This December 2018 technical advisory is an update to the advisory it published in April 2018. OPR will continue to monitor implementation of these new provisions and may update or supplement this advisory in response to new information and advancements in modeling and methods.

B. Background

VMT and Greenhouse Gas Emissions Reduction. Senate Bill 32 (Pavley, 2016) requires California to reduce greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2030, and Executive Order B-16-12 provides a target of 80 percent below 1990 emissions levels for the transportation sector by 2050. The transportation sector has three major means of reducing GHG emissions: increasing vehicle efficiency, reducing fuel carbon content, and reducing the amount of vehicle travel. The California Air Resources Board (CARB) has provided a path forward for achieving these emissions reductions from the transportation sector in its 2016 Mobile Source Strategy. CARB determined that it will not be possible to achieve the State's 2030 and post-2030 emissions goals without reducing VMT growth. Further, in its 2018 Progress Report on California's Sustainable Communities and Climate Protection Act, CARB found that despite the State meeting its 2020 climate goals, "emissions from statewide passenger vehicle travel per capita [have been] increasing and going in the wrong direction," and "California cannot meet its [long-term] climate goals without curbing growth in single-occupancy vehicle activity."[1] CARB also found that "[w]ith emissions from the transportation sector continuing to rise despite increases in fuel efficiency and decreases in the carbon content of fuel, California will not achieve the necessary greenhouse gas emissions reductions to meet mandates for 2030 and beyond without significant changes to how communities and transportation systems are planned, funded, and built."[2]

Thus, to achieve the State's long-term climate goals, California needs to reduce per capita VMT. This can occur under CEQA through VMT mitigation. Half of California's GHG emissions come from the transportation sector[3], therefore, reducing VMT is an effective climate strategy, which can also result in co-benefits.[4] Furthermore, without early VMT mitigation, the state may follow a path that meets GHG targets in the early years, but finds itself poorly positioned to meet more stringent targets later. For example, in absence of VMT analysis and mitigation in CEQA, lead agencies might rely upon verifiable offsets for GHG mitigation, ignoring the longer-term climate change impacts resulting from land use development and infrastructure investment decisions. As stated in CARB's 2017 Scoping Plan:

> "California's future climate strategy will require increased focus on integrated land use planning to support livable, transit-connected communities, and conservation of agricultural and other lands. Accommodating population and economic growth through travel- and energy-efficient land use provides GHG-efficient growth, reducing GHGs from both transportation and building energy use. GHGs can be further reduced at the project level through implementing energy-efficient construction and travel demand management approaches."[5] (*Id.* at p. 102.)

---

[1] California Air Resources Board (Nov. 2018) *2018 Progress Report on California's Sustainable Communities and Climate Protection Act*, pp. 4, 5, available at https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf.
[2] *Id.*, p. 28.
[3] See https://ca50million.ca.gov/transportation/
[4] Fang et al. (2017) *Cutting Greenhouse Gas Emissions Is Only the Beginning: A Literature Review of the Co-Benefits of Reducing Vehicle Miles Traveled*.
[5] California Air Resources Board (Nov. 2017) *California's 2017 Climate Change Scoping Plan*, p. 102, available at https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

In light of this, the 2017 Scoping Plan describes and quantifies VMT reductions needed to achieve our long-term GHG emissions reduction goals, and specifically points to the need for statewide deployment of the VMT metric in CEQA:

> "Employing VMT as the metric of transportation impact statewide will help to ensure GHG reductions planned under SB 375 will be achieved through on-the-ground development, and will also play an important role in creating the additional GHG reductions needed beyond SB 375 across the State. Implementation of this change will rely, in part, on local land use decisions to reduce GHG emissions associated with the transportation sector, both at the project level, and in long-term plans (including general plans, climate action plans, specific plans, and transportation plans) and supporting sustainable community strategies developed under SB 375."[6]

VMT and Other Impacts to Health and Environment. VMT mitigation also creates substantial benefits (sometimes characterized as "co-benefits" to GHG reduction) in both in the near-term and the long-term. Beyond GHG emissions, increases in VMT also impact human health and the natural environment. Human health is impacted as increases in vehicle travel lead to more vehicle crashes, poorer air quality, increases in chronic diseases associated with reduced physical activity, and worse mental health. Increases in vehicle travel also negatively affect other road users, including pedestrians, cyclists, other motorists, and many transit users. The natural environment is impacted as higher VMT leads to more collisions with wildlife and fragments habitat. Additionally, development that leads to more vehicle travel also tends to consume more energy, water, and open space (including farmland and sensitive habitat). This increase in impermeable surfaces raises the flood risk and pollutant transport into waterways.[7]

VMT and Economic Growth. While it was previously believed that VMT growth was a necessary component of economic growth, data from the past two decades shows that economic growth is possible without a concomitant increase in VMT. (Figure 1.) Recent research shows that requiring development projects to mitigate LOS may actually reduce accessibility to destinations and impede economic growth.[8,9]

---

[6] *Id.* at p. 76.

[7] Fang et al. (2017) *Cutting Greenhouse Gas Emissions Is Only the Beginning: A Literature Review of the Co-Benefits of Reducing Vehicle Miles Traveled*, available at https://ncst.ucdavis.edu/wp-content/uploads/2017/03/NCST-VMT-Co-Benefits-White-Paper_Fang_March-2017.pdf.

[8] Haynes et al. (Sept. 2015) *Congested Development: A Study of Traffic Delays, Access, and Economic Activity in Metropolitan Los Angeles*, available at http://www.its.ucla.edu/wp-content/uploads/sites/6/2015/11/Haynes_Congested-Development_1-Oct-2015_final.pdf.

[9] Osman et al. (Mar. 2016) *Not So Fast: A Study of Traffic Delays, Access, and Economic Activity in the San Francisco Bay Area*, available at http://www.its.ucla.edu/wp-content/uploads/sites/6/2016/08/Taylor-Not-so-Fast-04-01-2016_final.pdf.

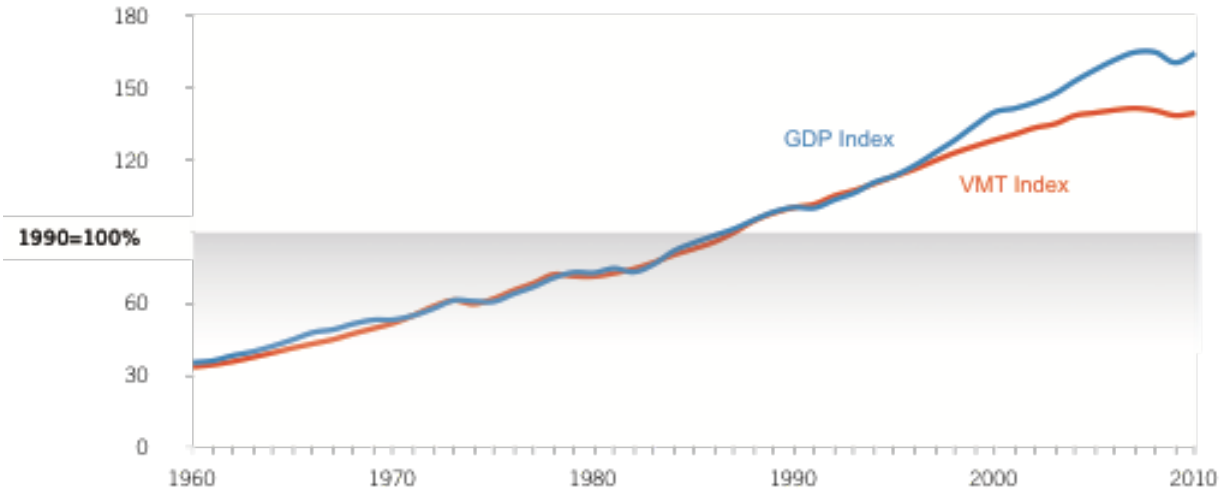


Figure 1. Kooshian and Winkelman (2011) *VMT and Gross Domestic Product (GDP), 1960-2010*.

C. Technical Considerations in Assessing Vehicle Miles Traveled

Many practitioners are familiar with accounting for VMT in connection with long-range planning, or as part of the CEQA analysis of a project's greenhouse gas emissions or energy impacts. This document provides technical information on how to assess VMT as part of a transportation impacts analysis under CEQA. Appendix 1 provides a description of which VMT to count and options on how to count it. Appendix 2 provides information on induced travel resulting from roadway capacity projects, including the mechanisms giving rise to induced travel, the research quantifying it, and information on additional approaches for assessing it.

1. Recommendations Regarding Methodology

Proposed Section 15064.3 explains that a "lead agency may use models to estimate a project's vehicle miles traveled . . . ." CEQA generally defers to lead agencies on the choice of methodology to analyze impacts. (*Santa Monica Baykeeper v. City of Malibu* (2011) 193 Cal.App.4th 1538, 1546; see *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 409 ["the issue is not whether the studies are irrefutable or whether they could have been better" … rather, the "relevant issue is only whether the studies are sufficiently credible to be considered" as part of the lead agency's overall evaluation].) This section provides suggestions to lead agencies regarding methodologies to analyze VMT associated with a project.

Vehicle Types. Proposed Section 15064.3, subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT). For an apples-to-apples

comparison, vehicle types considered should be consistent across project assessment, significance thresholds, and mitigation.

Residential and Office Projects. Tour- and trip-based approaches[10] offer the best methods for assessing VMT from residential/office projects and for comparing those assessments to VMT thresholds. These approaches also offer the most straightforward methods for assessing VMT reductions from mitigation measures for residential/office projects. When available, tour-based assessment is ideal because it captures travel behavior more comprehensively. But where tour-based tools or data are not available for all components of an analysis, a trip-based assessment of VMT serves as a reasonable proxy.

Models and methodologies used to calculate thresholds, estimate project VMT, and estimate VMT reduction due to mitigation should be comparable. For example:

- A tour-based assessment of project VMT should be compared to a tour-based threshold, or a trip-based assessment to a trip-based VMT threshold.
- Where a travel demand model is used to determine thresholds, the same model should also be used to provide trip lengths as part of assessing project VMT.
- Where only trip-based estimates of VMT reduction from mitigation are available, a trip-based threshold should be used, and project VMT should be assessed in a trip-based manner.

When a trip-based method is used to analyze a residential project, the focus can be on home-based trips. Similarly, when a trip-based method is used to analyze an office project, the focus can be on home-based work trips.

When tour-based models are used to analyze an office project, either employee work tour VMT or VMT from all employee tours may be attributed to the project. This is because workplace location influences overall travel. For consistency, the significance threshold should be based on the same metric: either employee work tour VMT or VMT from all employee tours.

For office projects that feature a customer component, such as a government office that serves the public, a lead agency can analyze the customer VMT component of the project using the methodology for retail development (see below).

Retail Projects. Generally, lead agencies should analyze the effects of a retail project by assessing the change in total VMT[11] because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns.

[10] See Appendix 1, *Considerations About Which VMT to Count,* for a description of these approaches.
[11] See Appendix 1, *Considerations About Which VMT to Count, "*Assessing Change in Total VMT" section, for a description of this approach.

Considerations for All Projects. Lead agencies should not truncate any VMT analysis because of jurisdictional or other boundaries, for example, by failing to count the portion of a trip that falls outside the jurisdiction or by discounting the VMT from a trip that crosses a jurisdictional boundary. CEQA requires environmental analyses to reflect a "good faith effort at full disclosure." (CEQA Guidelines, § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Where those VMT effects will grow over time, analyses should consider both a project's short-term and long-term effects on VMT.

Combining land uses for VMT analysis is not recommended. Different land uses generate different amounts of VMT, so the outcome of such an analysis could depend more on the mix of uses than on their travel efficiency. As a result, it could be difficult or impossible for a lead agency to connect a significance threshold with an environmental policy objective (such as a target set by law), inhibiting the CEQA imperative of identifying a project's significant impacts and providing mitigation where feasible. Combining land uses for a VMT analysis could streamline certain mixes of uses in a manner disconnected from policy objectives or environmental outcomes. Instead, OPR recommends analyzing each use separately, or simply focusing analysis on the dominant use, and comparing each result to the appropriate threshold. Recommendations for methods of analysis and thresholds are provided below. In the analysis of each use, a mixed-use project should take credit for internal capture.

Any project that includes in its geographic bounds a portion of an existing or planned Transit Priority Area (i.e., the project is within a ½ mile of an existing or planned major transit stop or an existing stop along a high quality transit corridor) may employ VMT as its primary metric of transportation impact for the entire project. (See Pub. Resources Code, § 21099, subds. (a)(7), (b)(1).)

Cumulative Impacts. A project's cumulative impacts are based on an assessment of whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (Pub. Resources Code, § 21083, subd. (b)(2); see CEQA Guidelines, § 15064, subd. (h)(1).) When using an absolute VMT metric, i.e., total VMT (as recommended below for retail and transportation projects), analyzing the combined impacts for a cumulative impacts analysis may be appropriate. However, metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance. (See *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 219, 223; CEQA Guidelines, § 15064, subd. (h)(3).)

D. General Principles to Guide Consideration of VMT

SB 743 directs OPR to establish specific "criteria for determining the significance of transportation impacts of projects[.]" (Pub. Resources Code, § 21099, subd. (b)(1).) In establishing this criterion, OPR was guided by the general principles contained within CEQA, the CEQA Guidelines, and applicable case law.

To assist in the determination of significance, many lead agencies rely on "thresholds of significance." The CEQA Guidelines define a "threshold of significance" to mean "an identifiable **quantitative, qualitative**[12] **or performance level** of a particular environmental effect, non-compliance with which means the effect will ***normally*** be determined to be significant by the agency and compliance with which means the effect ***normally*** will be determined to be less than significant." (CEQA Guidelines, § 15064.7, subd. (a) (emphasis added).) Lead agencies have discretion to develop and adopt their own, or rely on thresholds recommended by other agencies, "provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." (*Id*. at subd. (c); *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Substantial evidence means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (*Id*. at § 15384 (emphasis added); *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1108-1109.)

Additionally, the analysis leading to the determination of significance need not be perfect. The CEQA Guidelines describe the standard for adequacy of environmental analyses:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to **make a decision which intelligently takes account of environmental consequences**. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is **reasonably feasible**. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The **courts have looked not for perfection** but for **adequacy**, **completeness**, and a **good faith effort** at full disclosure.

(CEQA Guidelines, § 15151 (emphasis added).)

These general principles guide OPR's recommendations regarding thresholds of significance for VMT set forth below.

[12] Generally, qualitative analyses should only be conducted when methods do not exist for undertaking a quantitative analysis.

E. Recommendations Regarding Significance Thresholds

As noted above, lead agencies have the discretion to set or apply their own thresholds of significance. (*Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 218-223 [lead agency had discretion to use compliance with AB 32's emissions goals as a significance threshold]; *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th at p. 1068.) However, Section 21099 of the Public Resources Code states that the criteria for determining the significance of transportation impacts must promote: (1) reduction of greenhouse gas emissions; (2) development of multimodal transportation networks; and (3) a diversity of land uses. It further directed OPR to prepare and develop criteria for determining significance. (Pub. Resources Code, § 21099, subd. (b)(1).) This section provides OPR's suggested thresholds, as well as considerations for lead agencies that choose to adopt their own

The VMT metric can support the three statutory goals: "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, *and* a diversity of land uses." (Pub. Resources Code, § 21099, subd. (b)(1), emphasis added.) However, in order for it to promote and support all three, lead agencies should select a significance threshold that aligns with state law on all three. State law concerning the development of multimodal transportation networks and diversity of land uses requires planning for and prioritizing increases in complete streets and infill development, but does not mandate a particular depth of implementation that could translate into a particular threshold of significance. Meanwhile, the State has clear quantitative targets for GHG emissions reduction set forth in law and based on scientific consensus, and the depth of VMT reduction needed to achieve those targets has been quantified. Tying VMT thresholds to GHG reduction also supports the two other statutory goals. Therefore, to ensure adequate analysis of transportation impacts, OPR recommends using quantitative VMT thresholds linked to GHG reduction targets when methods exist to do so.

Various legislative mandates and state policies establish quantitative greenhouse gas emissions reduction targets. For example:

- Assembly Bill 32 (2006) requires statewide GHG emissions reductions to 1990 levels by 2020 and continued reductions beyond 2020.

- Senate Bill 32 (2016) requires at least a 40 percent reduction in GHG emissions from 1990 levels by 2030.

- Pursuant to Senate Bill 375 (2008), the California Air Resources Board GHG emissions reduction targets for metropolitan planning organizations (MPOs) to achieve based on land use patterns and transportation systems specified in Regional Transportation Plans and Sustainable Community Strategies (RTP/SCS). Current targets for the State's largest MPOs call for a 19 percent reduction in GHG emissions from cars and light trucks from 2005 emissions levels by 2035.

- Executive Order B-30-15 (2015) sets a GHG emissions reduction target of 40 percent below 1990 levels by 2030.

- Executive Order S-3-05 (2005) sets a GHG emissions reduction target of 80 percent below 1990 levels by 2050.

- Executive Order B-16-12 (2012) specifies a GHG emissions reduction target of 80 percent below 1990 levels by 2050 specifically for transportation.

- Executive Order B-55-18 (2018) established an additional statewide goal of achieving carbon neutrality as soon as possible, but no later than 2045, and maintaining net negative emissions thereafter. It states, "The California Air Resources Board shall work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal."

- Senate Bill 391 requires the California Transportation Plan to support 80 percent reduction in GHGs below 1990 levels by 2050.

- The *California Air Resources Board Mobile Source Strategy* (2016) describes California's strategy for containing air pollutant emissions from vehicles, and quantifies VMT growth compatible with achieving state targets.

- The California Air Resources Board's *2017 Climate Change Scoping Plan Update: The Strategy for Achieving California's 2030 Greenhouse Gas Target* describes California's strategy for containing GHG emissions from vehicles, and quantifies VMT growth compatible with achieving state targets.

Considering these various targets, the California Supreme Court observed:

> Meeting our statewide reduction goals does not preclude all new development. Rather, the Scoping Plan … assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians.

(*Center for Biological Diversity v. California Dept. of Fish & Wildlife*, *supra*, 62 Cal.4th at p. 220.) Indeed, the Court noted that when a lead agency uses consistency with climate goals as a way to determine significance, particularly for long-term projects, the lead agency must consider the project's effect on meeting long-term reduction goals. (*Ibid*.) And more recently, the Supreme Court stated that "CEQA requires public agencies . . . to ensure that such analysis stay in step with evolving scientific knowledge and state regulatory schemes." (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 504.)

Meeting the targets described above will require substantial reductions in existing VMT per capita to curb GHG emissions and other pollutants. But targets for overall GHG emissions reduction do not translate directly into VMT thresholds for individual projects for many reasons, including:

- Some, but not all, of the emissions reductions needed to achieve those targets could be accomplished by other measures, including increased vehicle efficiency and decreased fuel carbon content. The CARB's *First Update to the Climate Change Scoping Plan* explains:

"Achieving California's long-term criteria pollutant and GHG emissions goals will require four strategies to be employed: (1) improve vehicle efficiency and develop zero emission technologies, (2) reduce the carbon content of fuels and provide market support to get these lower-carbon fuels into the marketplace, (3) **plan and build communities to reduce vehicular GHG emissions and provide more transportation options, and (4) improve the efficiency and throughput of existing transportation systems.**"[13] CARB's *2018 Progress Report on California's Sustainable Communities and Climate Protection Act* states on page 28 that "California cannot meet its climate goals without curbing growth in single-occupancy vehicle activity." In other words, vehicle efficiency and better fuels are necessary, but insufficient, to address the GHG emissions from the transportation system. Land use patterns and transportation options also will need to change to support reductions in vehicle travel/VMT.

- New land use projects alone will not sufficiently reduce per-capita VMT to achieve those targets, nor are they expected to be the sole source of VMT reduction.

- Interactions between land use projects, and also between land use and transportation projects, existing and future, together affect VMT.

- Because location within the region is the most important determinant of VMT, in some cases, streamlining CEQA review of projects in travel efficient locations may be the most effective means of reducing VMT.

- When assessing climate impacts of some types of land use projects, use of an efficiency metric (e.g., per capita, per employee) may provide a better measure of impact than an absolute numeric threshold. (*Center for Biological Diversity*, *supra*.)

Public Resources Code section 21099 directs OPR to propose criteria for determining the significance of transportation impacts. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in selecting a significance threshold that may be appropriate for their particular projects. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance . . . recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence." (CEQA Guidelines, § 15064.7, subd. (c).) Based on OPR's extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State's long-term climate goals, **OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold**.

Fifteen percent reductions in VMT are achievable at the project level in a variety of place types.[14]

Moreover, a fifteen percent reduction is consistent with SB 743's direction to OPR to select a threshold that will help the State achieve its climate goals. As described above, section 21099 states that the

[13] California Air Resources Board (May 2014) *First Update to the Climate Change Scoping Plan*, p. 46 (emphasis added).
[14] CAPCOA (2010) *Quantifying Greenhouse Gas Mitigation Measures*, p. 55, available at http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

criteria for determining significance must "promote the reduction in greenhouse gas emissions." In its document *California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*[15], CARB assesses VMT reduction per capita consistent with its evidence-based modeling scenario that would achieve State climate goals of 40 percent GHG emissions reduction from 1990 levels by 2030 and 80 percent GHG emissions reduction levels from 1990 by 2050. Applying California Department of Finance population forecasts, CARB finds per-capita light-duty vehicle travel would need to be approximately 16.8 percent lower than existing, and overall per-capita vehicle travel would need to be approximately 14.3 percent lower than existing levels under that scenario. Below these levels, a project could be considered low VMT and would, on that metric, be consistent with 2017 Scoping Plan Update assumptions that achieve climate state climate goals.

CARB finds per capita vehicle travel would need to be kept below what today's policies and plans would achieve.

CARB's assessment is based on data in the 2017 Scoping Plan Update and 2016 Mobile Source Strategy. In those documents, CARB previously examined the relationship between VMT and the state's GHG emissions reduction targets. The Scoping Plan finds:

> "While the State can do more to accelerate and incentivize these local decisions, local actions that reduce VMT are also necessary to meet transportation sector-specific goals and achieve the 2030 target under SB 32. Through developing the Scoping Plan, CARB staff is more convinced than ever that, in addition to achieving GHG reductions from cleaner fuels and vehicles, California must also reduce VMT. Stronger SB 375 GHG reduction targets will enable the State to make significant progress toward needed reductions, but alone will not provide the VMT growth reductions needed; there is a gap between what SB 375 can provide and what is needed to meet the State's 2030 and 2050 goals."[16]

Note that, at present, consistency with RTP/SCSs does not necessarily lead to a less-than-significant VMT impact.[17] As the Final 2017 Scoping Plan Update states,

> VMT reductions are necessary to achieve the 2030 target and must be part of any strategy evaluated in this Plan. Stronger SB 375 GHG reduction targets will enable the State to make significant progress toward this goal, but alone will not provide all of the VMT growth reductions that will be needed. There is a gap between what SB 375 can provide and what is needed to meet the State's 2030 and 2050 goals."[18]

---

[15] California Air Resources Board (Jan. 2019) *California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*, available at https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate.

[16] California Air Resources Board (Nov. 2017) *California's 2017 Climate Change Scoping Plan*, p. 101.

[17] California Air Resources Board (Feb. 2018) *Updated Final Staff Report: Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets*, Figure 3, p. 35, available at https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf.

[18] California Air Resources Board (Nov. 2017) *California's 2017 Climate Change Scoping Plan*, p. 75.

Also, in order to capture the full effects of induced travel resulting from roadway capacity projects, an RTP/SCS would need to include an assessment of land use effects of those projects, and the effects of those land uses on VMT. (See section titled "*Estimating VMT Impacts from Transportation Projects"* below.) RTP/SCSs typically model VMT using a collaboratively-developed land use "vision" for the region's land use, rather than studying the effects on land use of the proposed transportation investments.

In summary, achieving 15 percent lower per capita (residential) or per employee (office) VMT than existing development is both generally achievable and is supported by evidence that connects this level of reduction to the State's emissions goals.

1. Screening Thresholds for Land Use Projects

Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. (See e.g., CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G.) As explained below, this technical advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing.

Screening Threshold for Small Projects

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day[19] generally may be assumed to cause a less-than-significant transportation impact.

Map-Based Screening for Residential and Office Projects

Residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are

[19] CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

currently below threshold VMT (see recommendations below). Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.

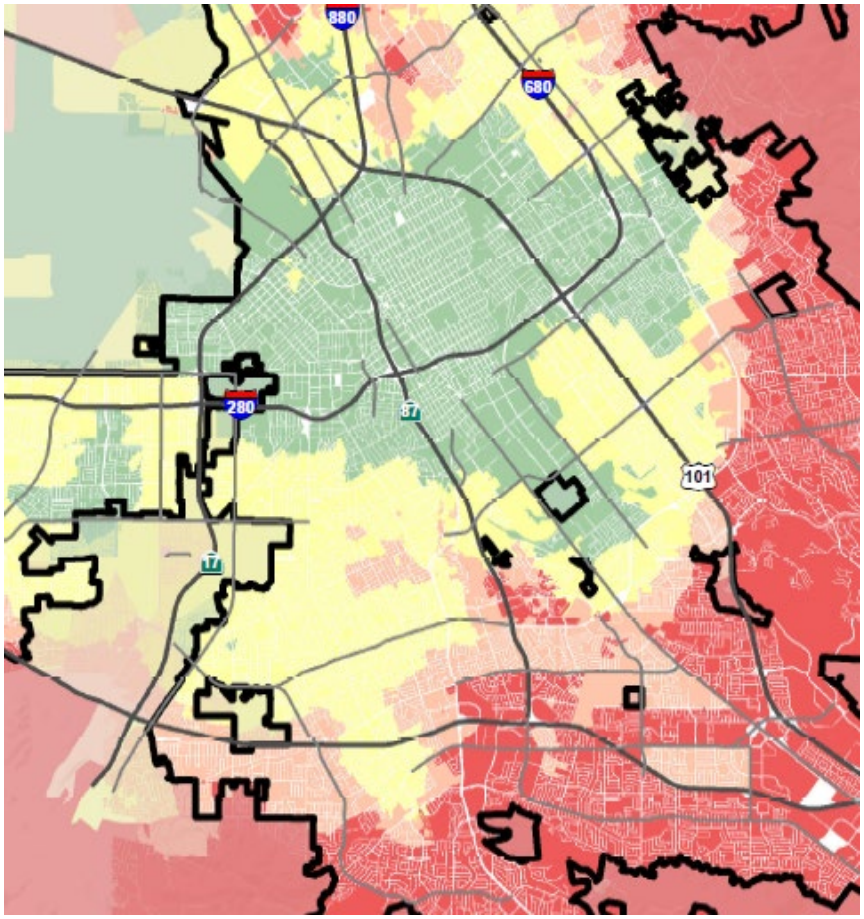


Figure 2. Example map of household VMT that could be used to delineate areas eligible to receive streamlining for VMT analysis. (Source: City of San José, Department of Transportation, draft output of City Transportation Model.)

Presumption of Less Than Significant Impact Near Transit Stations

Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop[20] or an existing stop

[20] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

along a high quality transit corridor[21] will have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT. For example, the presumption might not be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

A project or plan near transit which replaces affordable residential units[22] with a smaller number of moderate- or high-income residential units may increase overall VMT because the increase in VMT of displaced residents could overwhelm the improvements in travel efficiency enjoyed by new residents.[23]

If any of these exceptions to the presumption might apply, the lead agency should conduct a detailed VMT analysis to determine whether the project would exceed VMT thresholds (see below).

Presumption of Less Than Significant Impact for Affordable Residential Development

Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT.[24,25] Further, "… low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available."[26] In areas where existing jobs-housing match is closer to optimal, low income housing nevertheless generates less VMT than market-

[21] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").
[22] Including naturally-occurring affordable residential units.
[23] Chapple et al. (2017) *Developing a New Methodology for Analyzing Potential Displacement,* Chapter 4, pp. 159-160, available at https://www.arb.ca.gov/research/apr/past/13-310.pdf.
[24] Karner and Benner (2016) *The convergence of social equity and environmental sustainability: Jobs-housing fit and commute distance* ("[P]olicies that advance a more equitable distribution of jobs and housing by linking the affordability of locally available housing with local wage levels are likely to be associated with reduced commuting distances").
[25] Karner and Benner (2015) *Low-wage jobs-housing fit: identifying locations of affordable housing shortages.*
[26] Karner and Benner (2015) *Low-wage jobs-housing fit: identifying locations of affordable housing shortages.*

rate housing.[27,28] Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations. Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed use projects) containing a particular amount of affordable housing, based on local circumstances and evidence. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units.

2. Recommended Numeric Thresholds for Residential, Office, and Retail Projects

Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS for that city, and should be consistent with the SCS.

Residential development that would generate vehicle travel that is 15 or more percent below the existing residential VMT per capita, measured against the region or city, may indicate a less-than-significant transportation impact. In MPO areas, development measured against city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the population or number of units specified in the SCS for that city because greater-than-planned amounts of development in areas above the region-based threshold would undermine the VMT containment needed to achieve regional targets under SB 375.

For residential projects in unincorporated county areas, the local agency can compare a residential project's VMT to (1) the region's VMT per capita, or (2) the aggregate population-weighted VMT per capita of all cities in the region. In MPO areas, development in unincorporated areas measured against aggregate city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the population or number of units specified in the SCS for that city because greater-than-planned amounts of development in areas above the regional threshold would undermine achievement of regional targets under SB 375.

---

[27] Chapple et al. (2017) *Developing a New Methodology for Analyzing Potential Displacement*, available at https://www.arb.ca.gov/research/apr/past/13-310.pdf.
[28] CAPCOA (2010) *Quantifying Greenhouse Gas Mitigation Measures*, pp. 176-178, available at http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

These thresholds can be applied to either household (i.e., tour-based) VMT or home-based (i.e., trip-based) VMT assessments.[29] It is critical, however, that the agency be consistent in its VMT measurement approach throughout the analysis to maintain an "apples-to-apples" comparison. For example, if the agency uses a home-based VMT for the threshold, it should also be use home-based VMT for calculating project VMT and VMT reduction due to mitigation measures.

Recommended threshold for office projects: A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

Office projects that would generate vehicle travel exceeding 15 percent below existing VMT per employee for the region may indicate a significant transportation impact. In cases where the region is substantially larger than the geography over which most workers would be expected to live, it might be appropriate to refer to a smaller geography, such as the county, that includes the area over which nearly all workers would be expected to live.

Office VMT screening maps can be developed using tour-based data, considering either total employee VMT or employee work tour VMT. Similarly, tour-based analysis of office project VMT could consider either total employee VMT or employee work tour VMT. Where tour-based information is unavailable for threshold determination, project assessment, or assessment of mitigation, home-based work trip VMT should be used throughout all steps of the analysis to maintain an "apples-to-apples" comparison.

Recommended threshold for retail projects: A net increase in total VMT may indicate a significant transportation impact.

Because new retail development typically redistributes shopping trips rather than creating new trips,[30] estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts.

By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact. Regional-serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, may tend to have a significant impact. Where such development decreases VMT, lead agencies should consider the impact to be less-than-significant.

Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available, but should also consider any project-

[29] See Appendix 1 for a description of these approaches.
[30] Lovejoy, et al. (2013) *Measuring the impacts of local land-use policies on vehicle miles of travel: The case of the first big-box store in Davis, California, The Journal of Transport and Land Use*.

specific information, such as market studies or economic impacts analyses that might bear on customers' travel behavior. Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving. Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT.

Mixed-Use Projects

Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project's dominant use. In the analysis of each use, a project should take credit for internal capture. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment.

Other Project Types

Of land use projects, residential, office, and retail projects tend to have the greatest influence on VMT. For that reason, OPR recommends the quantified thresholds described above for purposes of analysis and mitigation. Lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types. In developing thresholds for other project types, or thresholds different from those recommended here, lead agencies should consider the purposes described in section 21099 of the Public Resources Code and regulations in the CEQA Guidelines on the development of thresholds of significance (e.g., CEQA Guidelines, § 15064.7).

Strategies and projects that decrease local VMT but increase total VMT should be avoided. Agencies should consider whether their actions encourage development in a less travel-efficient location by limiting development in travel-efficient locations.

Redevelopment Projects

Where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.

As described above, a project or plan near transit which replaces affordable[31] residential units with a smaller number of moderate- or high-income residential units may increase overall VMT, because

[31] Including naturally-occurring affordable residential units.

displaced residents' VMT may increase.[32] A lead agency should analyze VMT for such a project even if it otherwise would have been presumed less than significant. The assessment should incorporate an estimate of the aggregate VMT increase experienced by displaced residents. That additional VMT should be included in the numerator of the VMT per capita assessed for the project.

If a residential or office project leads to a net increase in VMT, then the project's VMT per capita (residential) or per employee (office) should be compared to thresholds recommended above. Per capita and per employee VMT are efficiency metrics, and, as such, apply only to the existing project without regard to the VMT generated by the previously existing land use.

If the project leads to a net increase in provision of locally-serving retail, transportation impacts from the retail portion of the development should be presumed to be less than significant. If the project consists of regionally-serving retail, and increases overall VMT compared to with existing uses, then the project would lead to a significant transportation impact.

RTP/SCS Consistency (All Land Use Projects)

Section 15125, subdivision (d), of the CEQA Guidelines provides that lead agencies should analyze impacts resulting from inconsistencies with regional plans, including regional transportation plans. For this reason, if a project is inconsistent with the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), the lead agency should evaluate whether that inconsistency indicates a significant impact on transportation. For example, a development may be inconsistent with an RTP/SCS if the development is outside the footprint of development or within an area specified as open space as shown in the SCS.

3. Recommendations Regarding Land Use Plans

As with projects, agencies should analyze VMT outcomes of land use plans across the full area over which the plan may substantively affect travel patterns, including beyond the boundary of the plan or jurisdiction's geography. And as with projects, VMT should be counted in full rather than split between origin and destination. (Emissions inventories have sometimes spit cross-boundary trips in order to sum to a regional total, but CEQA requires accounting for the full impact without truncation or discounting). Analysis of specific plans may employ the same thresholds described above for projects. A general plan, area plan, or community plan may have a significant impact on transportation if proposed new residential, office, or retail land uses would in aggregate exceed the respective thresholds recommended above. Where the lead agency tiers from a general plan EIR pursuant to CEQA Guidelines sections 15152 and 15166, the lead agency generally focuses on the environmental impacts that are specific to the later project and were not analyzed as significant impacts in the prior EIR. (Pub. Resources Code, § 21068.5; Guidelines, § 15152, subd. (a).) Thus, in analyzing the later project, the lead agency

[32] Chapple et al. (2017) *Developing a New Methodology for Analyzing Potential Displacement,* Chapter 4, pp. 159-160, available at https://www.arb.ca.gov/research/apr/past/13-310.pdf.

would focus on the VMT impacts that were not adequately addressed in the prior EIR. In the tiered document, the lead agency should continue to apply the thresholds recommended above.

Thresholds for plans in non-MPO areas may be determined on a case-by-case basis.

4. Other Considerations

Rural Projects Outside of MPOs

In rural areas of non-MPO counties (i.e., areas not near established or incorporated cities or towns), fewer options may be available for reducing VMT, and significance thresholds may be best determined on a case-by-case basis. Note, however, that clustered small towns and small town main streets may have substantial VMT benefits compared to isolated rural development, similar to the transit oriented development described above.

Impacts to Transit

Because criteria for determining the significance of transportation impacts must promote "the development of multimodal transportation networks" pursuant to Public Resources Code section 21099, subd. (b)(1), lead agencies should consider project impacts to transit systems and bicycle and pedestrian networks. For example, a project that blocks access to a transit stop or blocks a transit route itself may interfere with transit functions. Lead agencies should consult with transit agencies as early as possible in the development process, particularly for projects that are located within one half mile of transit stops.

When evaluating impacts to multimodal transportation networks, lead agencies generally should not treat the addition of new transit users as an adverse impact. An infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving proximity and accessibility. Such development also improves regional vehicle flow by adding less vehicle travel onto the regional network.

Increased demand throughout a region may, however, cause a cumulative impact by requiring new or additional transit infrastructure. Such impacts may be adequately addressed through a fee program that fairly allocates the cost of improvements not just to projects that happen to locate near transit, but rather across a region to all projects that impose burdens on the entire transportation system, since transit can broadly improve the function of the transportation system.

F. Considering the Effects of Transportation Projects on Vehicle Travel

Many transportation projects change travel patterns. A transportation project which leads to additional vehicle travel on the roadway network, commonly referred to as "induced vehicle travel," would need to quantify the amount of additional vehicle travel in order to assess air quality impacts, greenhouse gas emissions impacts, energy impacts, and noise impacts. Transportation projects also are required to

examine induced growth impacts under CEQA. (See generally, Pub. Resources Code, §§ 21065 [defining "project" under CEQA as an activity as causing either a direct or reasonably foreseeable indirect physical change], 21065.3 [defining "project-specific effect" to mean all direct or indirect environmental effects], 21100, subd. (b) [required contents of an EIR].) For any project that increases vehicle travel, explicit assessment and quantitative reporting of the amount of additional vehicle travel should not be omitted from the document; such information may be useful and necessary for a full understanding of a project's environmental impacts. (See Pub. Resources Code, §§ 21000, 21001, 21001.1, 21002, 21002.1 [discussing the policies of CEQA].) A lead agency that uses the VMT metric to assess the transportation impacts of a transportation project may simply report that change in VMT as the impact. When the lead agency uses another metric to analyze the transportation impacts of a roadway project, changes in amount of vehicle travel added to the roadway network should still be analyzed and reported.[33]

While CEQA does not require perfection, it is important to make a reasonably accurate estimate of transportation projects' effects on vehicle travel in order to make reasonably accurate estimates of GHG emissions, air quality emissions, energy impacts, and noise impacts. (See, e.g., *California Clean Energy Com. v. City of Woodland* (2014) 225 Cal.App.4th 173, 210 [EIR failed to consider project's transportation energy impacts]; *Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 266.) Appendix 2 describes in detail the causes of induced vehicle travel, the robust empirical evidence of induced vehicle travel, and how models and research can be used in conjunction to quantitatively assess induced vehicle travel with reasonable accuracy.

If a project would likely lead to a measurable and substantial increase in vehicle travel, the lead agency should conduct an analysis assessing the amount of vehicle travel the project will induce. Project types that would likely lead to a measurable and substantial increase in vehicle travel generally include:

- Addition of through lanes on existing or new highways, including general purpose lanes, HOV lanes, peak period lanes, auxiliary lanes, or lanes through grade-separated interchanges

Projects that would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require an induced travel analysis, include:

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity
- Roadside safety devices or hardware installation such as median barriers and guardrails

[33] See, e.g., California Department of Transportation (2006) *Guidance for Preparers of Growth-related, Indirect Impact Analyses*, available at http://www.dot.ca.gov/ser/Growth-related_IndirectImpactAnalysis/GRI_guidance06May_files/gri_guidance.pdf.

- Roadway shoulder enhancements to provide “breakdown space,” dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Conversion of existing general purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Reduction in number of through lanes
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Installation of traffic metering systems, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Adoption of or increase in tolls
- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase
- Initiation of new transit service
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes
- Removal or relocation of off-street or on-street parking spaces
- Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs)
- Addition of traffic wayfinding signage
- Rehabilitation and maintenance projects that do not add motor vehicle capacity
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel
- Installation of publicly available alternative fuel/charging infrastructure
- Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor

1. Recommended Significance Threshold for Transportation Projects

As noted in Section 15064.3 of the CEQA Guidelines, lead agencies for roadway capacity projects have discretion, consistent with CEQA and planning requirements, to choose which metric to use to evaluate transportation impacts. This section recommends considerations for evaluating impacts using vehicle miles traveled. Lead agencies have discretion to choose a threshold of significance for transportation projects as they do for other types of projects. As explained above, Public Resources Code section 21099, subdivision (b)(1), provides that criteria for determining the significance of transportation impacts must promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. (*Id.;* see generally, adopted CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) With those goals in mind, OPR prepared and the Agency adopted an appropriate transportation metric.

Whether adopting a threshold of significance, or evaluating transportation impacts on a case-by-case basis, a lead agency should ensure that the analysis addresses:

- Direct, indirect and cumulative effects of the transportation project (CEQA Guidelines, § 15064, subds. (d), (h))
- Near-term and long-term effects of the transportation project (CEQA Guidelines, §§ 15063, subd. (a)(1), 15126.2, subd. (a))
- The transportation project's consistency with state greenhouse gas reduction goals (Pub. Resources Code, § 21099)[34]
- The impact of the transportation project on the development of multimodal transportation networks (Pub. Resources Code, § 21099)
- The impact of the transportation project on the development of a diversity of land uses (Pub. Resources Code, § 21099)

The CARB Scoping Plan and the CARB Mobile Source Strategy delineate VMT levels required to achieve legally mandated GHG emissions reduction targets. A lead agency should develop a project-level threshold based on those VMT levels, and may apply the following approach:

1. Propose a fair-share allocation of those budgets to their jurisdiction (e.g., by population);

[34] The California Air Resources Board has ascertained the limits of VMT growth compatible with California containing greenhouse gas emissions to levels research shows would allow for climate stabilization. (See *The 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (p. 78, p. 101); *Mobile Source Strategy* (p. 37).) CARB's *Updated Final Staff Report on Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets* illustrates that the current Regional Transportation Plans and Sustainable Communities Strategies will fall short of achieving the necessary on-road transportation-related GHG emissions reductions called for in the 2017 Scoping Plan (Figure 3, p. 35). Accordingly, OPR recommends not basing GHG emissions or transportation impact analysis for a transportation project solely on consistency with an RTP/SCS.

2. Determine the amount of VMT growth likely to result from background population growth, and subtract that from their "budget";
3. Allocate their jurisdiction's share between their various VMT-increasing transportation projects, using whatever criteria the lead agency prefers.

2. Estimating VMT Impacts from Transportation Projects

CEQA requires analysis of a project's potential growth-inducing impacts. (Pub. Resources Code, § 21100, subd. (b)(5); CEQA Guidelines, § 15126.2, subd. (d).) Many agencies are familiar with the analysis of growth inducing impacts associated with water, sewer, and other infrastructure. This technical advisory addresses growth that may be expected from roadway expansion projects.

Because a roadway expansion project can induce substantial VMT, incorporating quantitative estimates of induced VMT is critical to calculating both transportation and other impacts of these projects. Induced travel also has the potential to reduce or eliminate congestion relief benefits. An accurate estimate of induced travel is needed to accurately weigh costs and benefits of a highway capacity expansion project.

The effect of a transportation project on vehicle travel should be estimated using the "change in total VMT" method described in *Appendix 1*. This means that an assessment of total VMT without the project and an assessment with the project should be made; the difference between the two is the amount of VMT attributable to the project. The assessment should cover the full area in which driving patterns are expected to change. As with other types of projects, the VMT estimation should not be truncated at a modeling or jurisdictional boundary for convenience of analysis when travel behavior is substantially affected beyond that boundary.

Transit and Active Transportation Projects

Transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less-than-significant impact on transportation. This presumption may apply to all passenger rail projects, bus and bus rapid transit projects, and bicycle and pedestrian infrastructure projects. Streamlining transit and active transportation projects aligns with each of the three statutory goals contained in SB 743 by reducing GHG emissions, increasing multimodal transportation networks, and facilitating mixed use development.

Roadway Projects

Reducing roadway capacity (for example, by removing or repurposing motor vehicle travel lanes) will generally reduce VMT and therefore is presumed to cause a less-than-significant impact on transportation. Generally, no transportation analysis is needed for such projects.

Building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, typically induces additional vehicle travel. For the types of projects previously indicated as likely to lead to additional vehicle travel, an estimate should be made of the change in vehicle travel resulting from the project.

For projects that increase roadway capacity, lead agencies can evaluate induced travel quantitatively by applying the results of existing studies that examine the magnitude of the increase of VMT resulting from a given increase in lane miles. These studies estimate the percent change in VMT for every percent change in miles to the roadway system (i.e., "elasticity").[35] Given that lead agencies have discretion in choosing their methodology, and the studies on induced travel reveal a range of elasticities, lead agencies may appropriately apply professional judgment in studying the transportation effects of a particular project. The most recent major study, estimates an elasticity of 1.0, meaning that every percent change in lane miles results in a one percent increase in VMT.[36]

To estimate VMT impacts from roadway expansion projects:

1. Determine the total lane-miles over an area that fully captures travel behavior changes resulting from the project (generally the region, but for projects affecting interregional travel look at all affected regions).
2. Determine the percent change in total lane miles that will result from the project.
3. Determine the total existing VMT over that same area.
4. Multiply the percent increase in lane miles by the existing VMT, and then multiply that by the elasticity from the induced travel literature:

[% increase in lane miles] x [existing VMT] x [elasticity] = [VMT resulting from the project]

A National Center for Sustainable Transportation tool can be used to apply this method: https://ncst.ucdavis.edu/research/tools

This method would not be suitable for rural (non-MPO) locations in the state which are neither congested nor projected to become congested. It also may not be suitable for a new road that provides new connectivity across a barrier (e.g., a bridge across a river) if it would be expected to substantially

[35] See U.C. Davis, Institute for Transportation Studies (Oct. 2015) *Increasing Highway Capacity Unlikely to Relieve Traffic Congestion*; Boarnet and Handy (Sept. 2014) *Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions*, California Air Resources Board Policy Brief, available at https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf.
[36] See Duranton and Turner (2011) *The Fundamental Law of Road Congestion: Evidence from US cities*, available at http://www.nber.org/papers/w15376.

shorten existing trips. If it is likely to be substantial, the trips-shortening effect should be examined explicitly.

The effects of roadway capacity on vehicle travel can also be applied at a programmatic level. For example, in a regional planning process the lead agency can use that program-level analysis to streamline later project-level analysis. (See CEQA Guidelines, § 15168.) A program-level analysis of VMT should include effects of the program on land use patterns, and the VMT that results from those land use effects. In order for a program-level document to adequately analyze potential induced demand from a project or program of roadway capacity expansion, lead agencies cannot assume a fixed land use pattern (i.e., a land use pattern that does not vary in response to the provision of roadway capacity). A proper analysis should account for land use investment and development pattern changes that react in a reasonable manner to changes in accessibility created by transportation infrastructure investments (whether at the project or program level).

Mitigation and Alternatives

Induced VMT has the potential to reduce or eliminate congestion relief benefits, increase VMT, and increase other environmental impacts that result from vehicle travel.[37] If those effects are significant, the lead agency will need to consider mitigation or alternatives. In the context of increased travel that is induced by capacity increases, appropriate mitigation and alternatives that a lead agency might consider include the following:

- Tolling new lanes to encourage carpools and fund transit improvements
- Converting existing general purpose lanes to HOV or HOT lanes
- Implementing or funding off-site travel demand management
- Implementing Intelligent Transportation Systems (ITS) strategies to improve passenger throughput on existing lanes

Tolling and other management strategies can have the additional benefit of preventing congestion and maintaining free-flow conditions, conferring substantial benefits to road users as discussed above.

G. Analyzing Other Impacts Related to Transportation

While requiring a change in the methodology of assessing transportation impacts, Public Resources Code section 21099 notes that this change "does not relieve a public agency of the requirement to analyze a project's potentially significant transportation impacts related to air quality, noise, safety, or any other impact associated with transportation." OPR expects that lead agencies will continue to

[37] See National Center for Sustainable Transportation (Oct. 2015) *Increasing Highway Capacity Unlikely to Relieve Traffic Congestion*, available at http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf; see Duranton and Turner (2011) *The Fundamental Law of Road Congestion: Evidence from US cities*, available at http://www.nber.org/papers/w15376.

address mobile source emissions in the air quality and noise sections of an environmental document and the corresponding studies that support the analysis in those sections. Lead agencies should continue to address environmental impacts of a proposed project pursuant to CEQA's requirements, using a format that is appropriate for their particular project.

Because safety concerns result from many different factors, they are best addressed at a programmatic level (i.e., in a general plan or regional transportation plan) in cooperation with local governments, metropolitan planning organizations, and, where the state highway system is involved, the California Department of Transportation. In most cases, such an analysis would not be appropriate on a project-by-project basis. Increases in traffic volumes at a particular location resulting from a project typically cannot be estimated with sufficient accuracy or precision to provide useful information for an analysis of safety concerns. Moreover, an array of factors affect travel demand (e.g., strength of the local economy, price of gasoline), causing substantial additional uncertainty. Appendix B of OPR's General Plan Guidelines summarizes research which could be used to guide a programmatic analysis under CEQA. Lead agencies should note that automobile congestion or delay does not constitute a significant environmental impact (Pub. Resources Code, §21099(b)(2)), and safety should not be used as a proxy for road capacity.

H. VMT Mitigation and Alternatives

When a lead agency identifies a significant impact, it must identify feasible mitigation measures that could avoid or substantially reduce that impact. (Pub. Resources Code, § 21002.1, subd. (a).) Additionally, CEQA requires that an environmental impact report identify feasible alternatives that could avoid or substantially reduce a project's significant environmental impacts.

Indeed, the California Court of Appeal recently held that a long-term regional transportation plan was deficient for failing to discuss an alternative which could significantly reduce total vehicle miles traveled. In *Cleveland National Forest Foundation v. San Diego Association of Governments, et al.* (2017) 17 Cal.App.5th 413, the court found that omission "inexplicable" given the lead agency's "acknowledgment in its Climate Action Strategy that the state's efforts to reduce greenhouse gas emissions from on-road transportation will not succeed if the amount of driving, or vehicle miles traveled, is not significantly reduced." (*Cleveland National Forest Foundation*, *supra*, 17 Cal.App.5th at p. 436.) Additionally, the court noted that the project alternatives focused primarily on congestion relief even though "the [regional] transportation plan is a long-term and congestion relief is not necessarily an effective long-term strategy." (*Id.* at p. 437.) The court concluded its discussion of the alternatives analysis by stating: "Given the acknowledged long-term drawbacks of congestion relief alternatives, there is not substantial evidence to support the EIR's exclusion of an alternative focused primarily on significantly reducing vehicle trips." (*Ibid*.)

Several examples of potential mitigation measures and alternatives to reduce VMT are described below. However, the selection of particular mitigation measures and alternatives are left to the discretion of

the lead agency, and mitigation measures may vary, depending on the proposed project and significant impacts, if any. Further, OPR expects that agencies will continue to innovate and find new ways to reduce vehicular travel.

Potential measures to reduce vehicle miles traveled include, but are not limited to:

- Improve or increase access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate affordable housing into the project.
- Incorporate neighborhood electric vehicle network.
- Orient the project toward transit, bicycle and pedestrian facilities.
- Improve pedestrian or bicycle networks, or transit service.
- Provide traffic calming.
- Provide bicycle parking.
- Limit or eliminate parking supply.
- Unbundle parking costs.
- Provide parking cash-out programs.
- Implement roadway pricing.
- Implement or provide access to a commute reduction program.
- Provide car-sharing, bike sharing, and ride-sharing programs.
- Provide transit passes.
- Shifting single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services.
- Providing telework options.
- Providing incentives or subsidies that increase the use of modes other than single-occupancy vehicle.
- Providing on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms.
- Providing employee transportation coordinators at employment sites.
- Providing a guaranteed ride home service to users of non-auto modes.

Notably, because VMT is largely a regional impact, regional VMT-reduction programs may be an appropriate form of mitigation. In lieu fees have been found to be valid mitigation where there is both a commitment to pay fees and evidence that mitigation will actually occur. (*Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 140-141; *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727–728.) Fee programs are particularly useful to address cumulative impacts. (CEQA Guidelines, § 15130, subd. (a)(3) [a "project's incremental contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact"].) The mitigation program must undergo CEQA evaluation, either on the program as a whole, or the in-lieu fees or other mitigation must be evaluated

on a project-specific basis. (*California Native Plant Society v. County of El Dorado* (2009) 170 Cal.App.4th 1026.) That CEQA evaluation could be part of a larger program, such as a regional transportation plan, analyzed in a Program EIR. (CEQA Guidelines, § 15168.)

Examples of project alternatives that may reduce vehicle miles traveled include, but are not limited to:

- Locate the project in an area of the region that already exhibits low VMT.
- Locate the project near transit.
- Increase project density.
- Increase the mix of uses within the project or within the project's surroundings.
- Increase connectivity and/or intersection density on the project site.
- Deploy management strategies (e.g., pricing, vehicle occupancy requirements) on roadways or roadway lanes.

Appendix 1. Considerations About Which VMT to Count

Consistent with the obligation to make a good faith effort to disclose the environmental consequences of a project, lead agencies have discretion to choose the most appropriate methodology to evaluate project impacts.[38] A lead agency can evaluate a project's effect on VMT in numerous ways. The purpose of this document is to provide technical considerations in determining which methodology may be most useful for various project types.

Background on Estimating Vehicle Miles Traveled

Before discussing specific methodological recommendations, this section provides a brief overview of modeling and counting VMT, including some key terminology.

Here is an illustrative example of some methods of estimating vehicle miles traveled. Consider the following hypothetical travel day (all by automobile):

1. Residence to Coffee Shop
2. Coffee Shop to Work
3. Work to Sandwich Shop
4. Sandwich Shop to Work
5. Work to Residence
6. Residence to Store
7. Store to Residence

Trip-based assessment of a project's effect on travel behavior counts VMT from individual trips to and from the project. It is the most basic, and traditionally the most common, method of counting VMT. A trip-based VMT assessment of the residence in the above example would consider segments 1, 5, 6 and 7. For residential projects, the sum of home-based trips is called *home-based* VMT.

A *tour-based* assessment counts the entire home-back-to-home tour that includes the project. A tour-based VMT assessment of the residence in the above example would consider segments 1, 2, 3, 4, and 5 in one tour, and 6 and 7 in a second tour. A tour-based assessment of the workplace would include segments 1, 2, 3, 4, and 5. Together, all tours comprise *household* VMT.

---

[38] The California Supreme Court has explained that when an agency has prepared an environmental impact report:

> [T]he issue is not whether the [lead agency's] studies are irrefutable or whether they could have been better. The relevant issue is only whether the studies are sufficiently credible to be considered as part of the total evidence that supports the [lead agency's] finding[.]

(*Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 409; see also *Eureka Citizens for Responsible Gov't v. City of Eureka* (2007) 147 Cal.App.4th 357, 372.)

Both trip- and tour-based assessments can be used as measures of transportation efficiency, using denominators such as per capita, per employee, or per person-trip.

Trip- and Tour-based Assessment of VMT

As illustrated above, a tour-based assessment of VMT is a more complete characterization of a project's effect on VMT. In many cases, a project affects travel behavior beyond the first destination. The location and characteristics of the home and workplace will often be the main drivers of VMT. For example, a residential or office development located near high quality transit will likely lead to some commute trips utilizing transit, affecting mode choice on the rest of the tour.

Characteristics of an office project can also affect an employee's VMT beyond the work tour. For example, a workplace located at the urban periphery, far from transit, can require an employee to own a car, which in turn affects the entirety of an employee's travel behavior and VMT. For this reason, when estimating the effect of an office development on VMT, it may be appropriate to consider total employee VMT if data and tools, such as tour-based models, are available. This is consistent with CEQA's requirement to evaluate both direct and *indirect* effects of a project. (See CEQA Guidelines, § 15064, subd. (d)(2).)

Assessing Change in Total VMT

A third method, estimating the *change in total VMT* with and without the project, can evaluate whether a project is likely to divert existing trips, and what the effect of those diversions will be on total VMT. This method answers the question, "What is the net effect of the project on area VMT?" As an illustration, assessing the total change in VMT for a grocery store built in a food desert that diverts trips from more distant stores could reveal a net VMT reduction. The analysis should address the full area over which the project affects travel behavior, even if the effect on travel behavior crosses political boundaries.

Using Models to Estimate VMT

Travel demand models, sketch models, spreadsheet models, research, and data can all be used to calculate and estimate VMT (see Appendix F of the preliminary discussion draft). To the extent possible, lead agencies should choose models that have sensitivity to features of the project that affect VMT. Those tools and resources can also assist in establishing thresholds of significance and estimating VMT reduction attributable to mitigation measures and project alternatives. When using models and tools for those various purposes, agencies should use comparable data and methods, in order to set up an "apples-to-apples" comparison between thresholds, VMT estimates, and VMT mitigation estimates.

Models can work together. For example, agencies can use travel demand models or survey data to estimate existing trip lengths and input those into sketch models such as CalEEMod to achieve more

accurate results. Whenever possible, agencies should input localized trip lengths into a sketch model to tailor the analysis to the project location. However, in doing so, agencies should be careful to avoid double counting if the sketch model includes other inputs or toggles that are proxies for trip length (e.g., distance to city center). Generally, if an agency changes any sketch model defaults, it should record and report those changes for transparency of analysis. Again, trip length data should come from the same source as data used to calculate thresholds to be sure of an "apples-to-apples" comparison.

Additional background information regarding travel demand models is available in the California Transportation Commission's "2010 Regional Transportation Plan Guidelines," beginning at page 35.

Appendix 2. Induced Travel: Mechanisms, Research, and Additional Assessment Approaches

Induced travel occurs where roadway capacity is expanded in an area of present or projected future congestion. The effect typically manifests over several years. Lower travel times make the modified facility more attractive to travelers, resulting in the following trip-making changes:

- **Longer trips.** The ability to travel a long distance in a shorter time increases the attractiveness of destinations that are farther away, increasing trip length and vehicle travel.
- **Changes in mode choice.** When transportation investments are devoted to reducing automobile travel time, travelers tend to shift toward automobile use from other modes, which increases vehicle travel.
- **Route changes.** Faster travel times on a route attract more drivers to that route from other routes, which can increase or decrease vehicle travel depending on whether it shortens or lengthens trips.
- **Newly generated trips.** Increasing travel speeds can induce additional trips, which increases vehicle travel. For example, an individual who previously telecommuted or purchased goods on the internet might choose to accomplish those tasks via automobile trips as a result of increased speeds.
- **Land Use Changes.** Faster travel times along a corridor lead to land development farther along that corridor; that new development generates and attracts longer trips, which increases vehicle travel. Over several years, this induced growth component of induced vehicle travel can be substantial, making it critical to include in analyses.

Each of these effects has implications for the total amount of vehicle travel. These effects operate over different time scales. For example, changes in mode choice might occur immediately, while land use changes typically take a few years or longer. CEQA requires lead agencies to analyze both short-term and long-term effects.

Evidence of Induced Vehicle Travel. A large number of peer reviewed studies[39] have demonstrated a causal link between highway capacity increases and VMT increases. Many provide quantitative estimates of the magnitude of the induced VMT phenomenon. Collectively, they provide high quality evidence of the existence and magnitude of the induced travel effect.

[39] See, e.g., Boarnet and Handy (Sept. 2014) Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions, California Air Resources Board Policy Brief, available at https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf; National Center for Sustainable Transportation (Oct. 2015) *Increasing Highway Capacity Unlikely to Relieve Traffic Congestion*, available at http://www.dot.ca.gov/research/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf.

Most of these studies express the amount of induced vehicle travel as an "elasticity," which is a multiplier that describes the additional vehicle travel resulting from an additional lane mile of roadway capacity added. For example, an elasticity of 0.6 would signify an 0.6 percent increase in vehicle travel for every 1.0 percent increase in lane miles. Many of these studies distinguish "short run elasticity" (increase in vehicle travel in the first few years) from "long run elasticity" (increase in vehicle travel beyond the first few years). Long run elasticity is larger than short run elasticity, because as time passes, more of the components of induced vehicle travel materialize. Generally, short run elasticity can be thought of as excluding the effects of land use change, while long run elasticity includes them. Most studies find a long run elasticity between 0.6 and just over 1.0,[40] meaning that every increase in lanes miles of one percent leads to an increase in vehicle travel of 0.6 to 1.0 percent. The most recent major study finds the elasticity of vehicle travel by lanes miles added to be 1.03; in other words, each percent increase in lane miles results in a 1.03 percent increase in vehicle travel.[41] (An elasticity greater than 1.0 can occur because new lanes induce vehicle travel that spills beyond the project location.) In CEQA analysis, the long-run elasticity should be used, as it captures the full effect of the project rather than just the early-stage effect.

Quantifying Induced Vehicle Travel Using Models. Lead agencies can generally achieve the most accurate assessment of induced vehicle travel resulting from roadway capacity increasing projects by applying elasticities from the academic literature, because those estimates include vehicle travel resulting from induced land use. If a lead agency chooses to use a travel demand model, additional analysis would be needed to account for induced land use. This section describes some approaches to undertaking that additional analysis.

Proper use of a travel demand model can capture the following components of induced VMT:

- Trip length (generally increases VMT)
- Mode shift (generally shifts from other modes toward automobile use, increasing VMT)
- Route changes (can act to increase or decrease VMT)
- Newly generated trips (generally increases VMT)
    - Note that not all travel demand models have sensitivity to this factor, so an off-model estimate may be necessary if this effect could be substantial.

However, estimating long-run induced VMT also requires an estimate of the project's effects on land use. This component of the analysis is important because it has the potential to be a large component of

[40] See Boarnet and Handy (Sept. 2014) *Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions*, California Air Resources Board Policy Brief, p. 2, available at https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf.

[41] Duranton and Turner (2011) *The Fundamental Law of Road Congestion: Evidence from US cities*, available at http://www.nber.org/papers/w15376.

the overall induced travel effect. Options for estimating and incorporating the VMT effects that are caused by the subsequent land use changes include:

1. *Employ an expert panel.* An expert panel could assess changes to land use development that would likely result from the project. This assessment could then be analyzed by the travel demand model to assess effects on vehicle travel. Induced vehicle travel assessed via this approach should be verified using elasticities found in the academic literature.
2. *Adjust model results to align with the empirical research.* If the travel demand model analysis is performed without incorporating projected land use changes resulting from the project, the assessed vehicle travel should be adjusted upward to account for those land use changes. The assessed VMT after adjustment should fall within the range found in the academic literature.
3. *Employ a land use model, running it iteratively with a travel demand model.* A land use model can be used to estimate the land use effects of a roadway capacity increase, and the traffic patterns that result from the land use change can then be fed back into the travel demand model. The land use model and travel demand model can be iterated to produce an accurate result.

A project which provides new connectivity across a barrier, such as a new bridge across a river, may provide a shortened path between existing origins and destinations, thereby shortening existing trips. In rare cases, this trip-shortening effect might be substantial enough to reduce the amount of vehicle travel resulting from the project below the range found in the elasticities in the academic literature, or even lead a net reduction in vehicle travel overall. In such cases, the trip-shortening effect could be examined explicitly.

Whenever employing a travel demand model to assess induced vehicle travel, any limitation or known lack of sensitivity in the analysis that might cause substantial errors in the VMT estimate (for example, model insensitivity to one of the components of induced VMT described above) should be disclosed and characterized, and a description should be provided on how it could influence the analysis results. A discussion of the potential error or bias should be carried into analyses that rely on the VMT analysis, such as greenhouse gas emissions, air quality, energy, and noise.

Appendix B

ITE Guidelines

GUIDELINES FOR TRANSPORTATION IMPACT STUDIES IN THE SAN DIEGO REGION

May 2019

ACKNOWLEDGEMENTS

This technical paper was prepared by members of the Institute of Transportation Engineers, San Diego Section, Transportation Capacity and Mobility Task Force, SB 743 Subcommittee.

PRINCIPAL AUTHORS

Erik Ruehr, VRPA Technologies (Subcommittee Chair)
Katy Cole, Fehr and Peers
Mychal Loomis, Kimley-Horn and Associates
KC Yellapu, Linscott, Law & Greeenspan, Engineers
Justin Rasas, LOS Engineering

ADDITIONAL SB 743 SUBCOMMITTEE MEMBERS

Andrew Martin, Ascent Environmental
Alyssa Begley, Caltrans
Roger Sanchez-Rangel, Caltrans
Phuong Nguyen, Chen Ryan Associates
Scott Barker, City of Chula Vista
Meghan Cedeno, City of San Diego
George Ghossain, City of San Diego
Samir Hajjiri, City of San Diego
Minjie Mei, City of Santee
Sarah Brandenberg, Fehr and Peers
Larry Hofreiter, Port of San Diego
Mike Calandra, SANDAG
Keith Greer, SANDAG
Sandipan Bhattacharjee, Translutions
Jacob Armstrong, San Diego County
Kimberly Dodson, Caltrans
Monique Chen, Chen Ryan Associates
Craig Williams, City of Carlsbad
Claudia Brizuela, City of San Diego
Maureen Gardiner, City of San Diego
Ann Gonsalves, City of San Diego
Nic Abboud, City of San Marcos
Meghan Macias, EPD Solutions
Amy Jackson, Kimley- Horn and Associates
Cara Hilgesen, Linscott, Law & Greenspan, Engineers
Walter Musial, Linscott, Law & Greenspan, Engineers
Dawn Wilson, Michael Baker International
David Wong-Toi

TABLE OF CONTENTS

SECTION		PAGE
1.0	Background	1-1
2.0	Purpose of Guidelines	2-1
3.0	Project Coordination and Staff Consultation	3-1
PART I – CEQA TRANSPORTATION ANALYSIS		
4.0	Individual Land Development Projects and Specific Plans	4-1
5.0	Community Plans and General Plans	5-1
6.0	Transportation Projects	6-1
PART II – LOCAL TRANSPORTATION ANALYSIS		
7.0	Roadway	7-1
8.0	Transit	8-1
9.0	Bicycle	9-1
10.0	Pedestrian	10-1

APPENDICES

APPENDIX	
A.	Local Transportation Analysis Screen Check
B.	Ramp Meter Analysis
C.	Level of Service (LOS) Definitions

LIST OF FIGURES

SECTION—FIGURE #		PAGE
Figure 4–1	Transportation Impact Study Flow Chart – Individual Projects and Specific Plans	4-2
Figure 6–1	Transportation Impact Study Flow Chart – Transportation Projects	6-2
Figure 7–1	Flow Chart for LTA Roadway Analysis	7-2

LIST OF TABLES

SECTION—TABLE #		PAGE
Table 7–1	Thresholds for Roadway Improvements	7-6
Table 7–2	Roadway Classifications, Level of Service, and Average Daily Traffic	7-7

GUIDELINES FOR TRANSPORTATION IMPACT STUDIES (TIS) IN THE SAN DIEGO REGION

1.0 BACKGROUND

The original Guidelines for Traffic Impact Studies in the San Diego Region (ITE/SANTEC, 2000) have been in use for over 19 years. They were developed by a group of volunteers from the San Diego Section of the Institute of Transportation Engineers (ITE) and the San Diego Traffic Engineers Council (SANTEC). The guidelines were later incorporated into the region's Congestion Management Program (CMP) prepared by the San Diego Association of Governments (SANDAG, 2008). Although inclusion in the Congestion Management Program (CMP) increased the visibility of the guidelines for a period of time, SANDAG has since opted out of the CMP process.

The intent in preparing the year 2000 guidelines was to promote consistency in the methodology for traffic impact studies used by different agencies in the San Diego region. While these guidelines were not intended to be used as a standard or a requirement, they provided a methodology for traffic impact studies that was similar to the methodology used by most agencies within the region. Some agencies in the region have "adopted" the guidelines by specifying that traffic impact studies follow the procedures recommended by the guidelines. Other agencies, including San Diego County and the City of San Diego, prepared their own guidelines, which included some elements in common with the regional guidelines.

The impetus to develop a revised set of regional transportation impact study guidelines is primarily related to the passage of Senate Bill 743 (SB 743) in the fall of 2013. This legislation led to a change in the way that transportation impacts are measured under the California Environmental Quality Act (CEQA). Starting on July 1, 2020, automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development projects under CEQA. Instead, an alternative metric that supports the goals of the SB 743 legislation will be required. Although there is no requirement to use any particular metric, the use of vehicle miles traveled (VMT) has been recommended by the Governor's Office of Planning and Research (OPR). This requirement does not modify the discretion lead agencies have to develop their own methodologies or guidelines, or to analyze impacts to other components of the transportation system, such as walking, bicycling, transit, and safety. SB 743 also applies to transportation projects, although agencies were given flexibility in the determination of the performance measure for these types of projects.

The intent of SB 743 is to bring CEQA transportation analyses into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure instead of LOS is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks.

2.0 PURPOSE OF GUIDELINES

The guidelines described in this report were prepared to provide methodologies for transportation engineers and planners to conduct CEQA transportation analyses for land development and transportation projects in compliance with SB 743. Lead agencies may opt-in to using VMT at any time but will be required to use it for analysis of transportation impacts of land development projects starting July 1, 2020. In addition, methodologies are provided to evaluate automobile delay and LOS outside of the CEQA process. Although no longer incorporated in CEQA (starting July 1, 2020), automobile delay and LOS continue to be of interest to transportation engineers and planners who plan, design, operate, and maintain the roadway system. In addition, delay experienced due to traffic congestion is a concern to drivers and passengers of vehicles using the roadway system.

Given the need to prepare VMT-based CEQA transportation impact analyses to satisfy the requirements of SB 743 as well as the need to evaluate the performance of the roadway system based on delay and LOS, these guidelines are divided into separate parts. Part I is focused on CEQA transportation impact analyses, while Part II is focused on the more traditional LOS-based transportation analyses, called local transportation analysis for the purpose of these guidelines. Local transportation analysis includes evaluation of any multimodal transportation improvements (transit, bicycle, pedestrian) that are recommended to support a land development project but may or may not be required as mitigation measures for a project's significant VMT impacts. Background information for each is provided below with more detail included in the sections that follow.

CEQA TRANSPORTATION IMPACT ANALYSIS

The SB 743 legislation specified that the Governor's Office of Planning and Research (OPR) prepare guidelines for the implementation of SB 743. During the period from the passage of SB 743 in 2013 to the fall of 2018, OPR prepared various sets of guidelines and sought public comments from stakeholders. At the time of preparation of these transportation impact study guidelines, guidance regarding the changes to CEQA initiated by SB 743 were contained in the following documents:

- CEQA Guidelines Revisions: Revisions to the CEQA Guidelines were adopted into CEQA in December 2018 through a formal process conducted by the Natural Resources Agency. Additional changes can only be made through a future CEQA update process.

- Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory): The technical advisory provides recommendations for the preparation of transportation impact analyses under SB 743. It is not formally included in CEQA and can be revised by OPR at any time without going through a formal process. Updated versions of the technical advisory are expected to be issued by OPR as new information becomes available and as California agencies gain experience in applying SB 743 to actual projects. As of the time of preparation of these transportation impact study guidelines, the current version of the technical advisory was dated December 2018.

In addition to the differences described above, the CEQA Guidelines revisions and the technical advisory also differ in the extent to which they must be followed by local agencies. The CEQA Guidelines revisions are rules that must be followed in order to prepare an adequate CEQA document. In contrast, the technical

advisory provides statewide guidance based on evidence collected by OPR that can be refined or modified by local agencies with appropriate justification and substantial evidence. (Refer to CEQA Guidelines Section 15384 for a definition of substantial evidence). As an example, the CEQA Guidelines revisions specify that a land development project's effect on automobile delay does not cause a significant environmental impact. The use of VMT is suggested as a performance metric, but there is no indication of what level of VMT increase would cause a significant environmental impact. The technical advisory suggests various thresholds for the significance of VMT impacts but does not require the use of a particular threshold. Therefore, lead agencies would be prohibited from using automobile delay to determine significant transportation impacts and would be required to use VMT instead. Lead agencies have discretion to select their preferred significance thresholds and could choose to use the thresholds suggested in the technical advisory or develop alternative thresholds. Either decision should be supported by substantial evidence that considers the legislative intent objectives of SB 743 and the specific direction the statute provides regarding setting thresholds (per the excerpts below):

> SB 743 Statute - Legislative Intent – Senate Bill No. 743, Section (b)(2)
> *More appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.*
>
> SB 743 Statute – Section 21099(b)(1)
> *Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.*

Regardless of the changes described above, SB 743 is clear in its intent that CEQA documents continue to address noise, air quality, and safety (per the excerpt below):

> SB 743 Statute – Section 21099(b)(3)
> *This subdivision does not relieve a public agency of the requirement to analyze a project's potentially significant transportation impacts related to air quality, noise, safety, or any other impact associated with transportation. The methodology established by these guidelines shall not create a presumption that a project will not result in significant impacts related to air quality, noise, safety, or any other impact associated with transportation.*

Although State CEQA Guidelines section 15064.3 states that generally vehicle miles traveled is the most appropriate measure of transportation impacts, other relevant considerations may include the project's impact on transit and non-motorized travel. A complete environmental review will generally consider how projects effect VMT in addition to effects on walking, bicycling, transit, and safety.

The CEQA transportation impact analysis described in these transportation impact study guidelines is based on the technical advisory prepared by OPR, but refinements and clarifications have been added to reflect local conditions. For any subsequent revisions of the SB 743 technical advisory prepared by OPR, it would need to be determined whether the new information would suggest a change in the methodologies for conducting CEQA transportation impact studies in the San Diego region.

LOCAL TRANSPORTATION ANALYSIS

As stated above, localized traffic congestion remains a concern to transportation engineers and planners as well as the traveling public. It is recommended that consideration be given to preparation of a local

transportation analysis for all land development and transportation projects which evaluate a project's access and circulation within and nearby the project site. The local transportation analysis would provide analysis of roadway conditions where there is the potential that substantial worsening of traffic congestion would result due to implementation of the project. In addition, it would analyze the need for multimodal improvements in cases where there is the potential for the project to cause a substantial worsening of conditions for multimodal travel. Since any increases in traffic congestion or vehicular delay would not constitute a significant environmental impact, the local transportation analysis could be included in the project's CEQA document for information only or it could be provided in a separate document. The purposes of the local transportation analysis may include, but are not limited to the following:

- Recommendations for any roadway improvements that should be built/implemented by the project (or should be built/implemented by the project in coordination with other nearby land development projects) based on the project's expected effect on vehicular delay and LOS.

- Recommendations for any multimodal transportation improvements (transit, bicycle, pedestrian) that should be built/implemented by the project (or should be built/implemented by the project in coordination with other nearby land development projects). Recommended multimodal transportation improvements may be required as mitigation measures for transportation impacts related to VMT increases or they may be recommended for other reasons.

- Transportation analysis needed to determine the appropriate level of fees for multimodal transportation improvements if the local jurisdiction has a fee program in place.

- Documentation of the project's expected effect on vehicular delay and level of service in the nearby transportation system.

The roadway analysis methodologies recommended for conducting local transportation analysis, as detailed in Part II of these guidelines, are based on the previous regional traffic impact study guidelines, with changes to reflect evolution in the practice that has occurred. Users of these guidelines should note that transportation analysis advances occur each year as documented through key conferences, including the Transportation Research Board (TRB) Annual Meeting. Further, new data vendors, and new mobility options continue to evolve. As such, the recommended methodologies in this document may require ongoing updates and refinements. The recommended methodologies for multimodal transportation analysis generally reflect new procedures that were not included in the previous guidelines.

The intent of these guidelines is that agencies in the San Diego region be encouraged to implement Part I – CEQA guidelines to promote consistency in methodology and the pursuit of VMT reductions to meet regional and state goals. It is recognized that agencies may wish to make specific exceptions to these guidelines to account for local conditions. Agencies may also desire to have additional analyses conducted outside of the CEQA analyses to help inform staff and decision makers in reviewing a project. To that end, Part II – Local Transportation Analyses reflects an update to the previous regional Traffic Impact Study Guidelines.

3.0 PROJECT COORDINATION AND STAFF CONSULTATION

TIS preparers are encouraged to discuss the project with the lead agency's staff at an early stage in the planning process. An understanding of the level of detail and the assumptions required for the analysis should be reached. While a pre-submittal conference is highly encouraged, it may not be a requirement. For straightforward studies prepared by consultants familiar with these TIS procedures, a telephone call or email, followed by a verification of key assumptions, may suffice. Transportation impact studies should be prepared by a qualified transportation professional. Lead agencies should consider requiring that all transportation impact studies be prepared by or reviewed under the supervision of a licensed traffic engineer.

PART I – CEQA TRANSPORTATION ANALYSIS

4.0 INDIVIDUAL LAND DEVELOPMENT PROJECTS AND SPECIFIC PLANS

The recommended methodology for conducting a VMT analysis is based on guidance prepared by the California Governor's Office of Planning and Research (OPR) as provided in the published Technical Advisory on Evaluating Transportation Impacts in CEQA. At the time of writing of these guidelines, the current version of OPR's technical advisory was dated December 2018. The guidance recommended by OPR has been modified to be better suited to local conditions in the San Diego region. These modifications are noted in the details described later in this chapter.

The basic process is to compare a project's estimated VMT/capita or VMT/employee to average values on a regional, citywide, or community basis. The target is to achieve a project VMT/capita or VMT/employee that is 85% or less of the appropriate average based on suggestions in these guidelines. Note that lead agencies have discretion for choosing a VMT metric and threshold. The selection should represent how VMT reduction is balanced against other objectives of the lead agency and be supported by substantial evidence.

The methodology for determining VMT/capita or VMT/employee is related to the project's expected daily trip generation. The process for determining appropriate methodology to be used for conducting a VMT analysis for individual land development projects and specific plans is summarized in Figure 4-1.

The remainder of this section of the guidelines is divided into individual components that describe different aspects of the methodology. Other methodologies for VMT analysis could be considered at the discretion of the lead agency. However, it is recommended that any VMT methodologies within a particular analysis use consistent methodologies and that VMT analysis consider the differences between trip-based VMT analysis methodologies and tour-based VMT methodologies, as described in OPR's technical advisory.

MINIMUM PROJECT SIZE

It is recommended that lead agencies determine a minimum project size, below which VMT impacts are presumed to be less than significant. Two alternative approaches for determining minimum project size are described below.

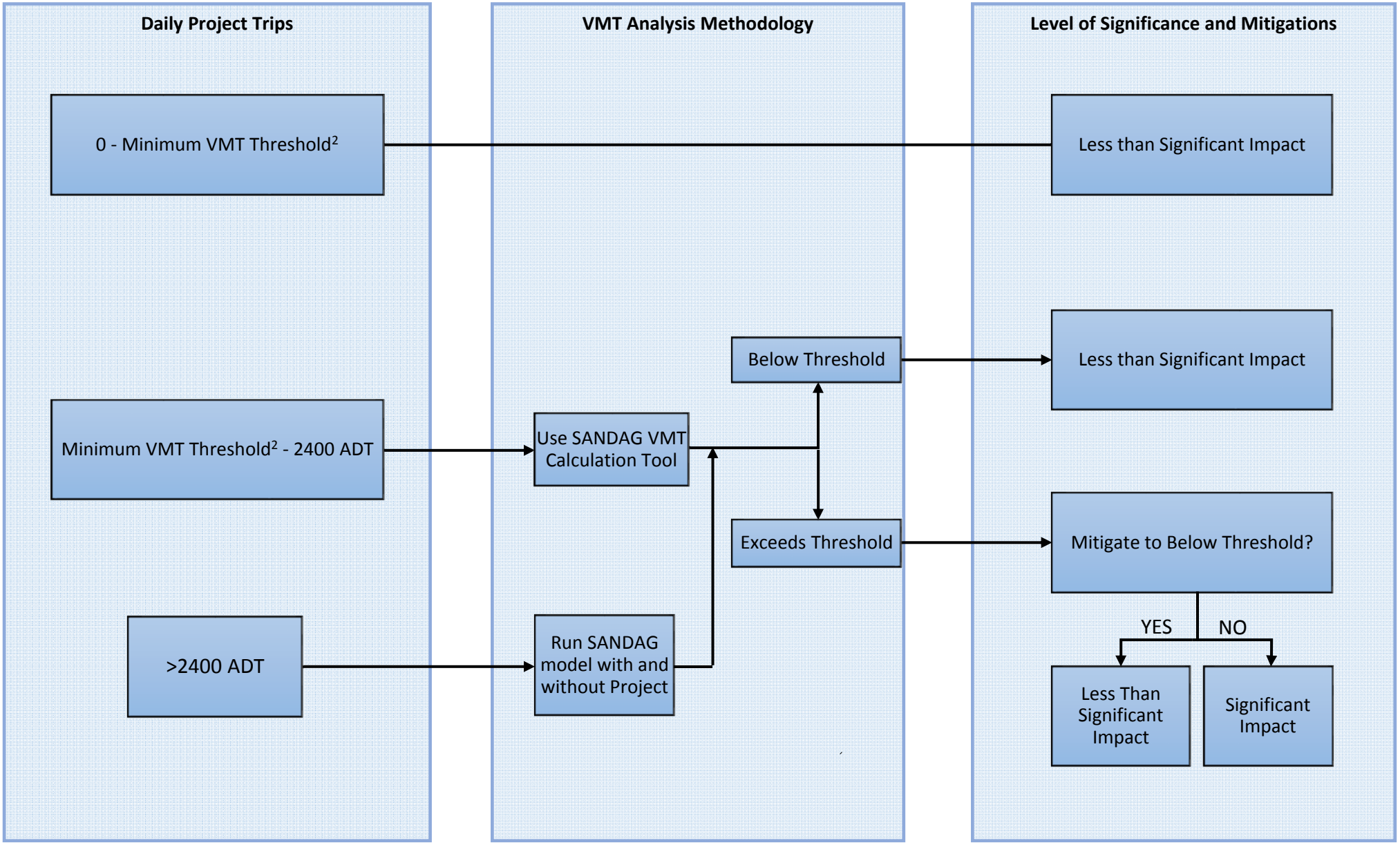
<u>Alternative 1 – Minimum Project Size Based on Previous TIS Guidelines</u>

Under this alternative, projects would be subjected to different levels of VMT analysis, depending on the size of the project and whether the project is consistent with the local jurisdiction's General Plan or Community Plan. Projects that are consistent with the General Plan or Community Plan are also considered to be consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The determination of minimum project size for VMT analysis described below differs from the statewide guidance provided by OPR. It is based on regional standards for transportation analyses that were documented in the Guidelines for Traffic Impact Studies in the San Diego Region (ITE/SANTEC, 2000) and have been in use for over 19 years.

The following level of VMT analysis is recommended based on project size (expressed in terms of Average Daily Trips generated by the project; also known as ADT) and zoning:

Figure 4-1
VMT Analysis for Individual Land Development Projects[1]



Footnotes:

1. VMT impacts presumed to be less than significant for certain local-serving retail projects, affordable housing projects, and projects within transit priority areas. See text.
2. Minimum VMT threshold to be determined by lead agency.

Projects Inconsistent with General Plan or Community Plan

ADT	Level of Analysis
0 – 500	VMT Analysis Not Needed/VMT Impacts Presumed Less Than Significant
500 and Greater	VMT Analysis Recommended

Projects Consistent with General Plan or Community Plan

ADT	Level of Analysis
0 – 1,000	VMT Analysis Not Needed/VMT Impacts Presumed Less Than Significant
1,000 and Greater	VMT Analysis Recommended

The advantage of this alternative for determining minimum project size is that it is based on the engineering judgment of professionals who are experts in determining the effect of projects on the transportation system. It has been used successfully for over 19 years in the San Diego region and has received wide acceptance from the transportation profession, decision makers, and the public. Transportation engineers and planners who support this alternative for determining minimum project size consider it to be equally valid for the current LOS-based transportation analyses as well as the new VMT-based analyses taking effect on July 1, 2020.

Alternative 2 – Minimum Project Size Based on Statewide Guidance

Under this alternative, the minimum project size for VMT analysis would be based on statewide guidance provided by OPR. In OPR's technical advisory, the minimum project size is based a categorical exemption in CEQA that allows expansion of existing structures under certain circumstances. On page 12 of the December 2018 technical advisory, footnote 19, the following language describes the situation: "CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. [CEQA Guidelines, § 15301, subd. (e)(2).]"

OPR uses a general office building as the appropriate project type for the determination of minimum project size based on the exemption described above. Typical ITE trip generation rates are then applied to a 10,000 square-foot general office building which yields a minimum project size based on 110 daily trips.

If this alternative is used in the San Diego region, it is recommended that the use of regional or local trip generation rates be considered in addition to the typical trip generation rate used by OPR. For example, using the SANDAG trip generation manual (Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002), a standard commercial office would generate 20 daily trips per 1,000 square feet. Therefore, a 10,000 square-foot office would be expected to generate 200 daily trips and projects that generate less than 200 daily trips would not require a VMT analysis and would be presumed to have less than significant VMT impacts.

One advantage of this alternative is that it is based on statewide guidance with a reference to CEQA provisions. A second advantage is that it was developed in consideration of VMT as the performance measure for the determination of the transportation impacts of land development projects.

PROJECTS LOCATED NEAR TRANSIT STATIONS

OPR's technical advisory contains the following guidance regarding projects located near transit stations:

- Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor will have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT.

An existing major transit stop is defined as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."

For the purposes of these guidelines, the distance between the project site and the transit station is typically based on direct walking distance without missing sidewalks or physical barriers.

Typically, a major transit stop would be considered to be applicable for this purpose if the transit stop were assumed to be in place in SANDAG's RTIP scenario (see Methodology for VMT analysis for further discussion of this scenario).

METHODOLOGY FOR VMT ANALYSIS

As mentioned above, it is recommended that VMT thresholds for SB 743 analysis will be developed by comparisons to average VMT/capita (for residential projects) or VMT/employee (for employment projects). The analysis can be conducted by comparing either the project VMT/capita or VMT/employee to both the San Diego regional average and the average for the city or community in which the project is located. It is recommended that if the project average is lower than either 85% of the regional average or 85% of the average for the city or community in which the project is located, the VMT impacts of the project can be presumed to be less than significant. Since this is the basis for the presumption of "less than significance," it will be up to each city in the San Diego region and the County to adopt this recommended presumption and either define its jurisdiction as a single community for the purposes of determining VMT thresholds or subdivide its jurisdiction into smaller communities for the purpose of SB 743 analysis.

It should be noted that OPR's technical advisory includes special considerations for affordable housing and these considerations are also recommended for use in the San Diego area. Projects that include 100% affordable housing in infill locations can be presumed to have a less than significant VMT impact. Infill locations will typically have better than average access to transit and/or greater opportunities for walking and bicycling trips. The exact definition of infill locations will need to be determined based on local conditions.

The VMT methodology recommended above differs from the statewide guidance recommended by OPR in the following ways:

- OPR recommends that VMT/capita comparisons for residential projects be made both on a regional and citywide basis. These guidelines recommend that a city may choose to do

comparisons at a community level rather than at the citywide level. This recommendation applies to all cities within San Diego County and provides the lead agencies flexibility and discretion for selecting the threshold that is appropriate for their agency, based on their values and substantial evidence. Many communities within cities in the San Diego Region have a size and population that is comparable to a typical city on a statewide basis. The unincorporated area of San Diego County also has a governing structure in place for its communities, and the choice to do VMT/capita comparisons at a community level is also recommended to be extended to the unincorporated area of the County. The Cities of Encinitas and Chula Vista are also examples of cities that have distinct communities which have been treated differently for various historical planning considerations.

- OPR recommends that VMT/employee comparisons for employment projects be conducted at a regional basis only, as compared to VMT/capita comparisons that are made both at a regional and citywide basis. These guidelines recommend that VMT/employee comparisons be made at both the regional and at the citywide level (or community level as described above). The San Diego Region is the third largest region in California (after the Los Angeles Area and the San Francisco Bay Area). While some employment trips are made across the region (or even outside the region), there is a large incentive to live and work within a relatively short distance, even within the same city or community, to avoid the relatively long commute distances that can be experienced by traveling across the region during peak commute hours.

- OPR recommends that the VMT/capita comparisons for projects in unincorporated county areas be based on the region's VMT/capita or the average VMT/capita of all cities within the county. These guidelines recommend that VMT/capita and VMT/employee comparisons for projects in the unincorporated area of San Diego County be made to the overall average VMT/capita and VMT/employee for the unincorporated area of the county (or for individual communities if the County decides to use individual communities rather than the entire unincorporated area for VMT comparisons). San Diego County is one of the largest counties in California in terms of geography and also one of the most diverse in terms of topography and climate. While the VMT/capita comparison recommended by OPR may make sense for some counties in California, the comparisons between unincorporated areas and averages of the cities make less sense in San Diego County, where there are great differences in terms of distance and other factors between rural and urban areas of the county.

It is recommended that once the SB 743 analysis communities have been defined by local jurisdictions, SANDAG should then calculate the average VMT/capita (for residential projects) and the average VMT/employee (for employment projects) for each city or community. This calculation can be based on the Regional Transportation Improvement Plan (RTIP) scenario for future land use and transportation network, which includes expected growth through the end of the RTIP scenario and transportation network improvements that are considered to be funded through the RTIP. It is recommended that the RTIP scenario used for VMT analysis purposes will be held constant once it is created and will only be changed with each update of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), typically every four years. It is recommended that the SANDAG online VMT analysis tool (described below) also be held constant and be updated on the same schedule as the RTP is updated and a new regional model is produced by SANDAG. If an online VMT analysis tool is not available for the RTIP scenario, it is recommended that analysts use the online VMT analysis tool published by SANDAG that most closely approximates the RTIP scenario.

Retail development falls into a category which is neither considered to be residential nor employment-based. For retail projects, these guidelines are based on the methodology recommended by OPR for retail projects. It is recommended that local-serving retail projects be presumed to have less than significant VMT impacts and regional-serving retail projects be presumed to have significant VMT impacts if they increase VMT above the level that would occur for conditions without the project. OPR's technical advisory recommends that lead agencies determine which retail projects are local-serving, but it does include a general guideline that retail projects larger than 50,000 square feet might be considered regional-serving rather than local-serving.

For some land development projects, it may not be immediately obvious whether the project is a residential project or an employment project. For these projects, the preferred methodology is to analyze the trip-making characteristics of the project and then use either the residential or employment methodology. For example, a hotel may be considered to have trip-making characteristics closer to an employment project, and therefore the employment methodology could be used for this land use category.

The recommended methodology for calculation of VMT depends on the size of the project as determined by the project's trip generation calculated in terms of ADT. The project's trip generation should be calculated using standard practice. For projects with a trip generation of less than 2,400 ADT, the recommended VMT analysis methodology is the SANDAG VMT calculation tool. SANDAG has prepared an online tool that calculates average VMT/capita and VMT/employee at the census tract level. Analysts would use this tool to determine the project's VMT/employee or VMT/capita to be compared to community, city, and/or regional averages.

Definitions of VMT/capita and VMT/employee that are used in SANDAG's VMT calculation tool are as follows:

- VMT/Capita: Includes all vehicle-based person trips grouped and summed to the home location of individuals who are drivers or passengers on each trip. It includes home-based and non-home-based trips. The VMT for each home is then summed for all homes in a particular census tract and divided by the population of that census tract to arrive at Resident VMT/Capita.

- VMT/Employee: Includes all vehicle-based person trips grouped and summed to the work location of individuals on the trip. This includes all trips, not just work-related trips. The VMT for each work location is then summed for all work locations in a particular census tract and divided by the number of employees of that census tract to arrive at Employee VMT/Employee.

The recommended methodology for projects over 2,400 ADT is to run the regional transportation model with and without the project to determine the project's net increase in VMT and then use that value to determine VMT/employee or VMT/capita to be compared to community, city, and/or regional averages.

REDVELOPMENT PROJECTS

Recommendations for VMT analysis of redevelopment projects are based on guidance provided by OPR with the clarifications provided below.

Redevelopment projects represent a special case since the recommended VMT thresholds for SB 743 implementation represent an efficiency metric. Under SB 743, the primary goal is for all new land

development projects to achieve efficiency from a VMT point of view. The efficiency or lack of efficiency of the existing land use is typically not relevant per OPR.

The following methodology is recommended:

- A redevelopment project that reduces absolute VMT (i.e. the total VMT with the project is less than the total VMT without the project) would be presumed to have less than significant VMT impacts.

- If a project increases absolute VMT, it is recommended that the VMT analysis methodology described above be applied to the proposed land use, as if the project was proposed on a vacant parcel (i.e. the existing land use didn't exist).

OPR's technical advisory includes specific recommendations that relate to redevelopment projects that replace affordable residential units with a smaller number of market-rate residential units. Those recommendations are also considered applicable for the purposes of these guidelines.

MIXED-USE PROJECTS

Recommendations for VMT analysis of mixed-use projects are based on guidance provided by OPR with additional clarifications recommended for use in the San Diego region.

The following steps are recommended:

- Calculate trip generation separately for each component of the mixed-use project using standard practice.

- Determine the reduction in external vehicle trips due to internal capture based on guidance provided in the ITE Trip Generation manual, MXD methodologies or other techniques.

- Apply the reduction in trips to the individual land uses so that the total trip generation of the individual land uses is equal to the total project trip generation, including internal capture.

- Using the reduced trip generation, determine the VMT/capita or VMT/employee for applicable land uses. SANDAG's online VMT calculation tool may be used to determine an average trip length for the land uses within a mixed-use development based on the reported VMT/capita or VMT/employee in the census tract where the project is located. The number of residents or employees will need to be estimated for each applicable land use. When using SANDAG's VMT calculation tool to estimate average trip length, analysts should be aware that the data produced by the SANDAG VMT calculation tool is based all resident VMT/capita, so it includes the VMT associated with all trips made by the resident for the day, for example trip from home to daycare to office; office to meeting to office; office to store to home. The ITE trip generation rate for residential is only home-based trips, i.e. trips that start or end at the residence. The effect of the distinction between ITE's data and the data produced by the SANDAG VMT calculation tool will vary by location, type of project, and other factors.

- Compare the VMT/capita or VMT/employee values calculated using the reduced trip generation to applicable VMT thresholds to determine whether the individual components of the mixed-use development would be expected to have a significant VMT impact. If any component of the mixed-

use development would be expected to have a significant VMT impact, the project as a whole would be considered to have a significant VMT impact.

- Local-serving retail within a mixed-use development can be presumed to have a less than significant VMT impact.

PROJECTS IN RURAL AREAS

Land development projects in rural areas may be given special consideration due to their unique trip-making characteristics. OPR's technical advisory contains the following guidance regarding projects in rural areas:

- "In rural areas of non-MPO counties (i.e., areas not near established or incorporated cities or towns), fewer options may be available for reducing VMT, and significance thresholds may be best determined on a case-by-case basis. Note, however, that clustered small towns and small town main streets may have substantial VMT benefits compared to isolated rural development, similar to the transit oriented development described above."

If interpreted literally, this guidance would not apply to the San Diego region since it is an MPO County. However, rural areas are considered to have similar trip-making characteristics regardless of whether they are located in an MPO County or not. Therefore, different thresholds than described above could be considered for the rural areas of San Diego County. In order to apply this concept, local agencies would designate a portion of their jurisdiction as rural and then establish a separate threshold for the determination of significant VMT impacts.

PHASED PROJECTS

For projects proposed to be built in phases, it is recommended that each phase of the project be evaluated separately. This evaluation would include a determination of whether significant VMT impacts would occur and whether mitigation is recommended. The evaluation of VMT for each phase would include consideration of the previous project phases. For example, a project with three phases would include the following analyses:

- VMT Analysis of Phase 1: Assumes development of Phase 1 only.

- VMT Analysis of Phase 2: Assumes development of Phases 1 and 2.

- VMT Analysis of Complete Project: Assumes development of Phases 1, 2, and 3.

LAND DEVELOPMENT PROJECTS WITH A ROADWAY COMPONENT

Some individual land development projects and specific plans include the implementation of roadways as a component of the project. This requires additional consideration since land development and roadway projects are likely have different significance thresholds for VMT analysis. See Chapter 6 for recommendations for VMT analysis of roadways and other transportation projects. Land development projects may also include transit, bicycle, and pedestrian facilities as components of the project, but these

types of projects would generally not be considered to increase VMT and would normally not need to be considered in the VMT analysis of a land development project.

For land development projects and specific plans with a roadway component, the following recommendations are provided:

- If it can be demonstrated that the roadway component of the project built on its own would have a less than significant impact, the roadway component of the project can be ignored and the VMT analysis can proceed based on analysis of the VMT aspects of the land development component of the project.

- If it can be demonstrated that the project as a whole would cause a net decrease in VMT, the VMT impact of the project may be considered less than significant.

- For projects with both land use and roadway components that are outside the circumstances described above, it is recommended that the VMT analysis be based on consideration of the net increase or decrease in VMT with the project implemented as compared to conditions without the project. For projects that would be expected to cause a net increase in VMT, the project would be expected to provide mitigation measures to reduce VMT to the level of the no project condition in order to have a less than significant impact. For projects in which the roadway component would require analysis of induced travel demand (see Chapter 6), the VMT generated by the induced travel should also be considered in the analysis.

MITIGATION

If a project's VMT exceeds the thresholds identified above for individual land development projects and specific plans, it may have a significant transportation impact. According to the OPR's technical advisory, when a significant impact is determined, feasible mitigation measures must be identified that could avoid or substantially reduce the impact. Lead agencies are generally given the discretion to determine what mitigation actions are "feasible," but they must rely on substantial evidence in making these determinations. In addition, CEQA requires the identification of feasible alternatives that could avoid or substantially reduce a project's significant environmental impacts.

Not all mitigation measures are physical improvements to the transportation network. A sample mitigation measure might include telework options for employees to reduce vehicular travel. Examples of other mitigation measures based on OPR's technical advisory include but are not limited to the following:

- Improve or increase access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate affordable housing into the project.
- Incorporate a neighborhood electric vehicle network.
- Orient the project toward transit, bicycle, and pedestrian facilities.
- Improve pedestrian or bicycle networks, or transit service.
- Provide traffic calming as a way to incentivize bicycling and/or walking.
- Provide bicycle parking.
- Limit or eliminate parking supply.
- Unbundle parking costs.
- Provide parking cash-out programs.

- Implement or provide access to a commute reduction program.
- Provide car-sharing, bike sharing, and ride-sharing programs.
- Provide partially or fully subsidized transit passes.
- Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services.
- Provide telework options.
- Provide incentives or subsidies that increase the use of modes other than a single-occupancy vehicle.
- Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, showers and locker rooms, and bicycle repair services.
- Provide employee transportation coordinators at employment sites.
- Provide a guaranteed ride home service to users of non-auto modes.
- Contribute to a mobility fee program that funds multimodal transportation improvements, such as those described above.

Additional mitigation measures may become acceptable as agencies continue to innovate and find new ways to reduce vehicular travel.

Changes to the project design or location could potentially reduce VMT. Project alternatives based on OPR's technical advisory that may reduce vehicle miles of travel include but are not limited to the following:

- Locate the project in an area of the region that already exhibits low VMT.
- Locate the project near transit.
- Increase project density.
- Increase the mix of uses within the project or within the project's surroundings.
- Increase connectivity and/or intersection density on the project site.

OPR's technical advisory notes that because VMT is largely a regional impact, regional VMT-reduction programs may be an appropriate form of mitigation. In-lieu fees and development impact fees have been found to be valid mitigation where there is both a commitment to pay fees and evidence that mitigation will actually occur.

Fee programs are particularly useful to address cumulative impacts. The physical improvements that constitute the mitigation program as a whole must undergo CEQA evaluation, and the imposition of development impact fees or in-lieu fees shall be in accordance with applicable regulations, such as the Mitigation Fee Act. Other mitigation must be evaluated on a project-specific basis. That CEQA evaluation could be part of a larger program, such as a regional transportation plan analyzed in a Program EIR.

Quantifying the reduction in VMT associated with potential mitigation measures for land development projects and specific plans is a relatively new endeavor for transportation engineers and planners. Therefore, these guidelines do not recommend a methodology that has been in practice or has generally been accepted for local use.

One current resource that has been identified to quantify the reduction in vehicle miles traveled associated with a particular mitigation measure is the latest edition of California Air Pollution Control Officers Association's *Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Green Gas Mitigation Measures* (CAPCOA, August 2010), also known

as the CAPCOA Report. This report provides a methodology to quantify the reductions in vehicle miles traveled for many of the mitigation measures listed above. At the time of preparation of these guidelines, new research was underway that would provide an update to the CAPCOA Report.

The following elements should be considered when utilizing the CAPCOA Report:

- The CAPCOA VMT reduction strategies include built environment changes and transportation demand management (TDM) actions. The built environment changes are scalable from the project site to larger geographic areas and are often captured in regional travel forecasting models such as the SANDAG model. Prior to any application of a built environment change to a project as mitigation, the project analyst should verify that the project VMT forecasting tool or model is appropriately accurate and sensitive to built-environment effects and that no double counting will occur in the application of the mitigation measure. The TDM actions are sensitive to the project site and ultimate building tenants. As such, VMT reductions associated with TDM actions cannot be guaranteed through CEQA mitigation without ongoing monitoring and adjustment.

- There are rules for calculating the VMT reduction when applying multiple mitigation measures. The CAPCOA Report rules should be considered.

- Only "new" mitigation measures should be included in the analysis to prevent double counting. For example, if the project is located near transit, the VMT reduction cannot be applied if the project utilized a model that factored in the project's proximity to transit. In addition, telecommuting is included in SANDAG's base model.

- Mitigation measures should be applied to the appropriate user group (employees, guest/patrons, etc.). If a certain measure applies to multiple user groups, the weighted average should be considered as the effect of the mitigation measure will vary based on the user group.

A second resource that is available is the VMT calculation tool that was provided as part of SANDAG's Mobility Management Toolbox project.

Additional VMT calculation tools are currently available or under development by several local agencies in California. Although these tools are being developed for specific jurisdictions, they could be adopted or modified for use in individual jurisdictions in San Diego County. At the time of development of these guidelines, the following calculation tools were publicly available.

- City of San Jose: A VMT calculation tool and other information can be found at the following website: http://www.sanjoseca.gov/vmt.

5.0 COMMUNITY PLANS AND GENERAL PLANS

The recommended methodology for conducting a VMT analysis for community plans and general plans is to compare the existing VMT/capita for the community plan or general plan area with the expected horizon year VMT/capita. The recommended target is to achieve a lower VMT/capita in the horizon year with the proposed plan than occurs for existing conditions.

The calculation of VMT for a planning area requires different considerations than the calculation of VMT for an individual project or a specific plan. Generally, the use of a computerized travel forecasting model (such as the SANDAG regional model) would be needed. For details on the calculation of VMT for a planning area, analysts are referred to ITE's paper on VMT calculations (Vehicle Miles Travelled Calculations Using the SANDAG Regional Model, 2013).

If VMT analysis for a community plan or general plan requires consideration of mitigation measures to mitigate significant VMT impacts, potential mitigation measures would be similar to those used for land development projects with some modifications. The following measures could be considered:

- Modify the land use plan to increase development in areas with low VMT/capita characteristics and/or decrease development in areas with high VMT/capita characteristics.
- Provide enhanced bicycle and/or pedestrian facilities.
- Add roadways to the street network if those roadways would provide shorter travel paths for existing and/or future trips.
- Improve or increase access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate a neighborhood electric vehicle network.
- Provide traffic calming to incentivize bicycling and walking.
- Limit or eliminate parking supply.
- Unbundle parking costs.
- Provide parking or roadway pricing or cash-out programs.
- Implement or provide access to a commute reduction program.
- Provide car-sharing, bike sharing, and ride-sharing programs.
- Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services.
- Provide telework options beyond those already assumed in current plans.
- Provide incentives or subsidies that increase the use of modes other than a single-occupancy vehicle.
- Provide employee transportation coordinators at employment sites.
- Provide a guaranteed ride home service to users of non-auto modes.

Additional mitigation measures may become acceptable as agencies continue to innovate and find new ways to reduce vehicular travel.

6.0 TRANSPORTATION PROJECTS

STATEWIDE GUIDANCE

Statewide guidance for the analysis of transportation projects after the implementation of SB 743 is based on the revisions to CEQA guidelines adopted in December 2018 and OPR's technical advisory dated December 2018. This guidance may be summarized as follows:

- The revised CEQA guidelines allow lead agencies the discretion to choose a performance measure and significance thresholds for the determination of the significant impacts of transportation projects, including the continued use of level of service as a performance measure.

- OPR's technical advisory recommends the use of VMT as the appropriate performance measure for transportation projects, but it does not include a recommendation for significance thresholds. It also states that transit, bicycle, and pedestrian projects can generally be presumed to have less than significant VMT impacts.

- If VMT is selected as the performance measure for roadway projects, OPR's technical advisory recommends the inclusion of induced travel demand in the VMT calculations for roadway projects. Induced travel demand is the travel demand that would be generated by new land development projects that are built as a result of reduced travel times provided by a new roadway project.

RECOMMENDATIONS FOR THE SAN DIEGO REGION

The approach to analysis of transportation projects recommended for use in the San Diego Region is summarized as follows:

- Transit, bicycle, and pedestrian projects can generally be presumed to have less than significant VMT impacts since they will tend to reduce VMT, as suggested by OPR's technical advisory.

- For roadway projects, VMT is the recommended performance measure. This performance measure is considered to be best suited to meeting the intent of SB 743, since focusing on VMT tends to encourage smart growth development, a reduction in vehicle trips, and the construction of multimodal transportation networks.

- VMT analysis for roadway projects can best be considered at regional, citywide, and community levels prior to the consideration of individual projects. Most roadway projects are included in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), city circulation elements of the general plan, and/or in the circulation elements of community plans. A typical process would be for a roadway to be added to a citywide or community plan first, then incorporated into the RTP/SCS prior to the initiation of a CEQA analysis for the project. Inclusion in the citywide or community plan is considered to be a point at which the project has been accepted into the future planning process. Therefore, inclusion of a project in the citywide or community plan is recommended as the threshold of significance for VMT analysis. It is recommended that projects included in the citywide or community plan may be presumed to have less than significant VMT impacts.

- Individual roadway projects that are not included in the citywide or community plan could be presumed to have less than significant VMT impacts if they have no net increase in VMT compared to the no project condition or if they provide mitigation measures that would reduce VMT to levels at or below the no project condition.

Additional details are provided below.

VMT is the recommended performance measure for the analysis of transportation projects. The recommended methodology for conducting a VMT analysis for transportation projects is to compare the project with the community plan or general plan in which the project is located to determine whether the project would increase VMT as compared to the VMT that would be expected to occur with the community plan or general plan. This is summarized in Figure 6-1. The analysis would vary depending on the mode of travel associated with the project and based on whether the project is currently included in the community plan or general plan.

- Transit, bicycle, and pedestrian projects that would encourage the use of these modes of travel would be expected to reduce VMT, would not require a detailed VMT analysis, and would be presumed to have a less than significant impact on transportation. For these project types, the presumption of less than significant impact would apply even if the project was not in the community plan or general plan.

- Roadway projects (or multimodal projects that include roadways) that are included in the community or general plan would be presumed to have less than significant VMT impacts. In the case of some projects, a similar project may have been included in the community plan or general plan, but revisions or refinements have been incorporated. If the revisions or refinements are expected to cause increases in VMT, analysis should be conducted to compare the proposed project to the project description in the community plan or general plan. Projects that cause VMT increases, in comparison to similar projects proposed in the community plan or general plan, would need to reduce VMT levels below the level of VMT expected in the community plan or general plan in order to avoid a significant VMT impact.

- Roadway projects (or multimodal projects that include roadways) that are not included in the community or general plan would need a detailed analysis of VMT to determine whether the project would be expected to increase or decrease VMT as compared to VMT levels in the community plan or general plan. For small projects, the VMT analysis could be conducted using sketch planning techniques. For large projects, the analysis would generally require the use of a computerized travel forecasting model (such as the SANDAG regional model). For very large projects (i.e. projects that would reduce travel time by five minutes or more for any individual trips), consideration should be given to conducting an analysis of induced demand as described in OPR's technical advisory. The five-minute threshold for analysis of induced demand is based on a research paper published by the Transportation Research Board (Effects of Increased Highway Capacity: Results of Household Travel Behavior Survey, Richard G. Dowling and Steven B. Colman, Transportation Research Record 1493, Transportation Research Board, 1995). This research concluded that projects that decrease travel time by more than five minutes for a large number of trips would probably warrant an upward adjustment of travel demand.

The statewide guidance for VMT analysis of transportation projects is less specific than the guidance provided for land development projects. In the case of transportation projects, new CEQA guidance allows

lead agencies the discretion to choose the performance measure for transportation analysis, including the use of level of service and delay as a performance measure. OPR's technical advisory provides guidance indicating that VMT is the preferred measure of effectiveness for transportation projects but it has no authority to require the use of VMT as a performance measure. Although OPR's technical advisory encourages the use of VMT as a performance measure, it does not recommend a particular threshold of significance for VMT.

Given the available statewide guidance, these guidelines recommend the use of VMT as the performance measure for transportation projects. The recommended significance threshold is the level of VMT expected based on the community plan or general plan in which the project is located. This methodology is recommended for the following reasons:

- Although the new CEQA guidance allows for the use of any appropriate performance measure for the analysis of transportation projects, the intent of the SB 743 legislation was taken into consideration in the selection of a performance measure. SB 743 is intended to promote multimodal transportation networks, encourage infill development, and promote reduction of greenhouse gases. VMT is considered to be the performance measure that best reflects this intent.

- OPR's technical advisory encourages the use of VMT as a performance measure. Although this recommendation is not binding, the intent of these guidelines is to follow OPR's guidance, except in cases where there are regional characteristics or other factors that suggest a revision or clarification.

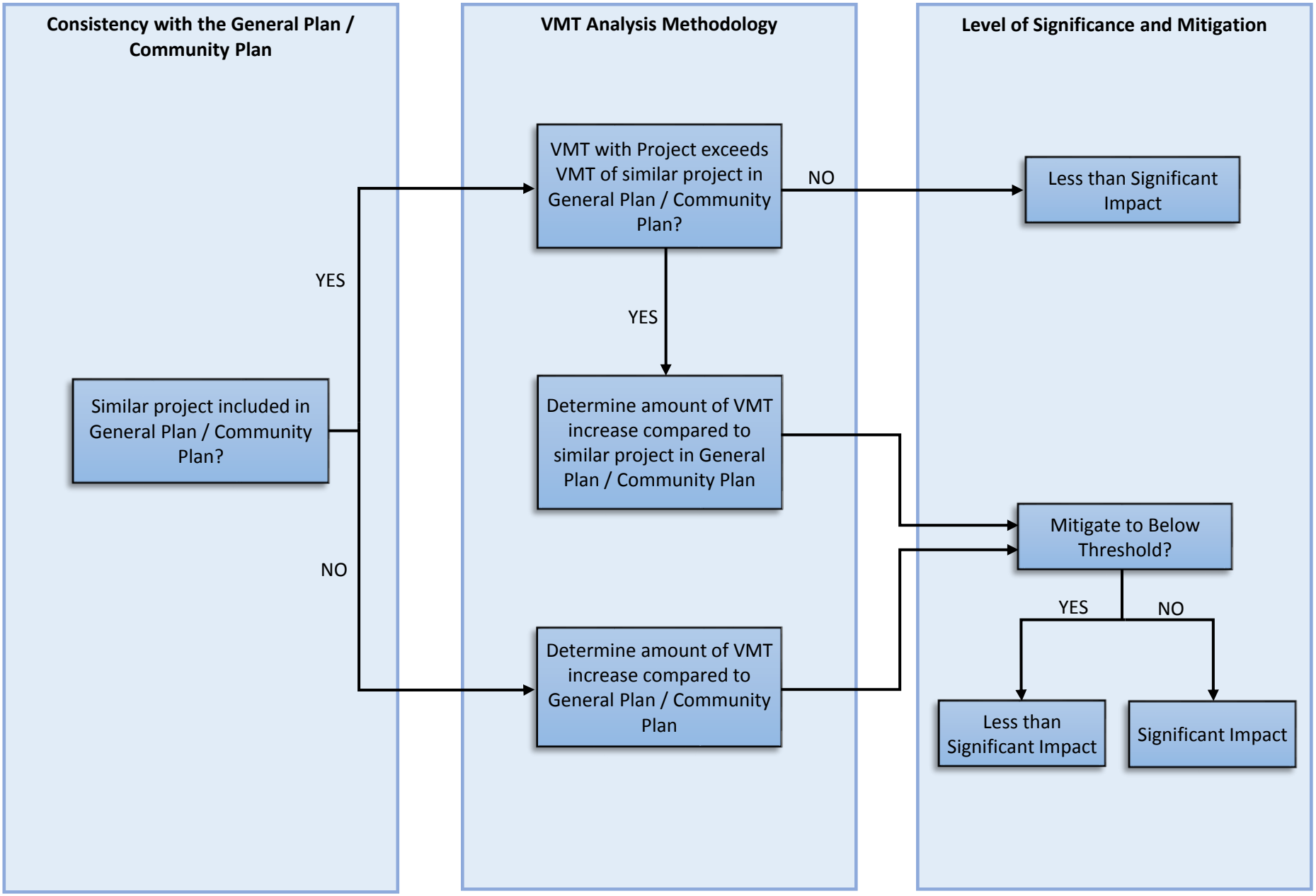
- The use of community plan or general plan consistency as a VMT threshold is based on the process by which transportation projects are incorporated into a community plan or general plan. In order for a transportation project to be incorporated into a community or general plan, a considerable amount of analysis is typically conducted. Community plans and general plans typically include the preparation of an Environmental Impact Report that considers a variety of environmental impacts, including transportation impacts. Since community plans and general plans are considered to represent sound urban planning decisions, consistency with these plans is considered to be a reasonable benchmark for the determination of a VMT significance threshold.

While the guidance described above is considered to be appropriate for larger transportation projects, smaller projects would be presumed to have less than significant VMT impacts based on their size or other considerations. Following is a list of projects considered to be in this category. This list in based on information in OPR's technical advisory, with revisions and clarifications based on local conditions:

1. Rehabilitation, maintenance, replacement and repair projects designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts, tunnels, transit systems, and assets that serve bicycle and pedestrian facilities) and that do not add motor vehicle capacity

2. Roadside safety devices or hardware installation such as median barriers and guardrails

Figure 6-1
VMT Analysis Flow Chart for Transportation Projects



3. Roadway shoulder enhancements to provide “breakdown space,” dedicated space for use only by transit vehicles, to provide bicycle access, or otherwise to improve safety, but which will not be used as automobile vehicle travel lanes

4. Addition of an auxiliary lane of less than two miles in length

5. Installation, removal, or reconfiguration of traffic lanes at intersections that are intended to provide operational or safety improvements

6. Addition of roadway capacity on local or collector streets provided the project also includes appropriate improvements for pedestrians, cyclists, and, if applicable, transit

7. Conversion of existing general purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel

8. Addition of a new lane that is intended to be restricted to use only by transit vehicles

9. Reduction in number of through lanes

10. Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles

11. Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features

12. Installation of traffic metering systems, detection systems, cameras, changeable message signs, and other electronics designed to optimize vehicle, bicycle, or pedestrian flow

13. Timing of signals to optimize vehicle, bicycle, or pedestrian flow

14. Installation of roundabouts or traffic circles

15. Installation or reconfiguration of traffic calming devices

16. Adoption of or increase in tolls

17. Addition of tolled lanes, where tolls are sufficient to mitigate any potential VMT increase

18. Initiation of new transit service

19. Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes

20. Removal or relocation of off-street or on-street parking spaces

21. Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs)

22. Addition of traffic wayfinding signage

23. Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way

24. Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel

25. Installation of publicly available alternative fuel/charging infrastructure

26. Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor

27. Roadway striping modifications that don't change the number of through lanes

Regardless of the project type and analysis method, projects that would be expected to have a significant VMT increase would be expected to consider mitigation measures. Potential mitigation measures would include the following:

- Deploy management strategies (e.g., pricing, vehicle occupancy requirements) on roadways or roadway lanes.
- Improve pedestrian or bicycle networks, or transit service.

Additional mitigation measures may become acceptable as agencies continue to innovate and find new ways to reduce vehicular travel.

PART II – LOCAL TRANSPORTATION ANALYSIS

7.0 ROADWAY

It is recommended that consideration be given to preparation of a local transportation analysis (LTA) for all land development and transportation projects. This section describes the recommended methodology for analysis of local roadway conditions.

The purpose of the roadway analysis portion of an LTA is to forecast, describe, and analyze how a development will affect existing and future circulation infrastructure for users of the roadway system, including vehicles, bicycles, pedestrians, and transit. The LTA assists transportation engineers and planners in both the development community and public agencies when making land use, mobility infrastructure, and other development decisions. An LTA quantifies the expected changes in transportation conditions and translates these changes into transportation system effects in the vicinity of a project.

The roadway transportation analysis included in an LTA is separate from the transportation impact analysis conducted as part of the environmental (CEQA) project review process, as described in Part I. The purpose of the roadway transportation analysis is to ensure that all projects provide a fair share of roadway infrastructure improvements in order to accommodate their multimodal transportation demands.

The following guidelines were prepared to assist local agencies throughout the San Diego Region in promoting consistency and uniformity in local transportation studies. These guidelines do not establish a legal standard for these functions but are intended to supplement any individual manuals or level of service objectives for the various jurisdictions. These guidelines attempt to consolidate regional efforts to identify when an LTA is needed, what professional procedures should be followed, and what constitutes a significant traffic effect that should be dealt with.

The instructions outlined in these guidelines are subject to update as future conditions and experience become available. Special situations may call for variation from these guidelines. It is recommended that consultants who prepare an LTA submit a scoping letter (methodology memo) for review by the lead agency to verify the application of these guidelines and to identify any analysis needed to address special circumstances. The scoping letter in this context is used for transportation analysis only and is not related to a formal scoping process that occurs with preparation of a CEQA study. Caltrans and lead agencies should agree on the specific methods used in local transportation analysis studies involving any State Route facilities, including metered and unmetered freeway ramps.

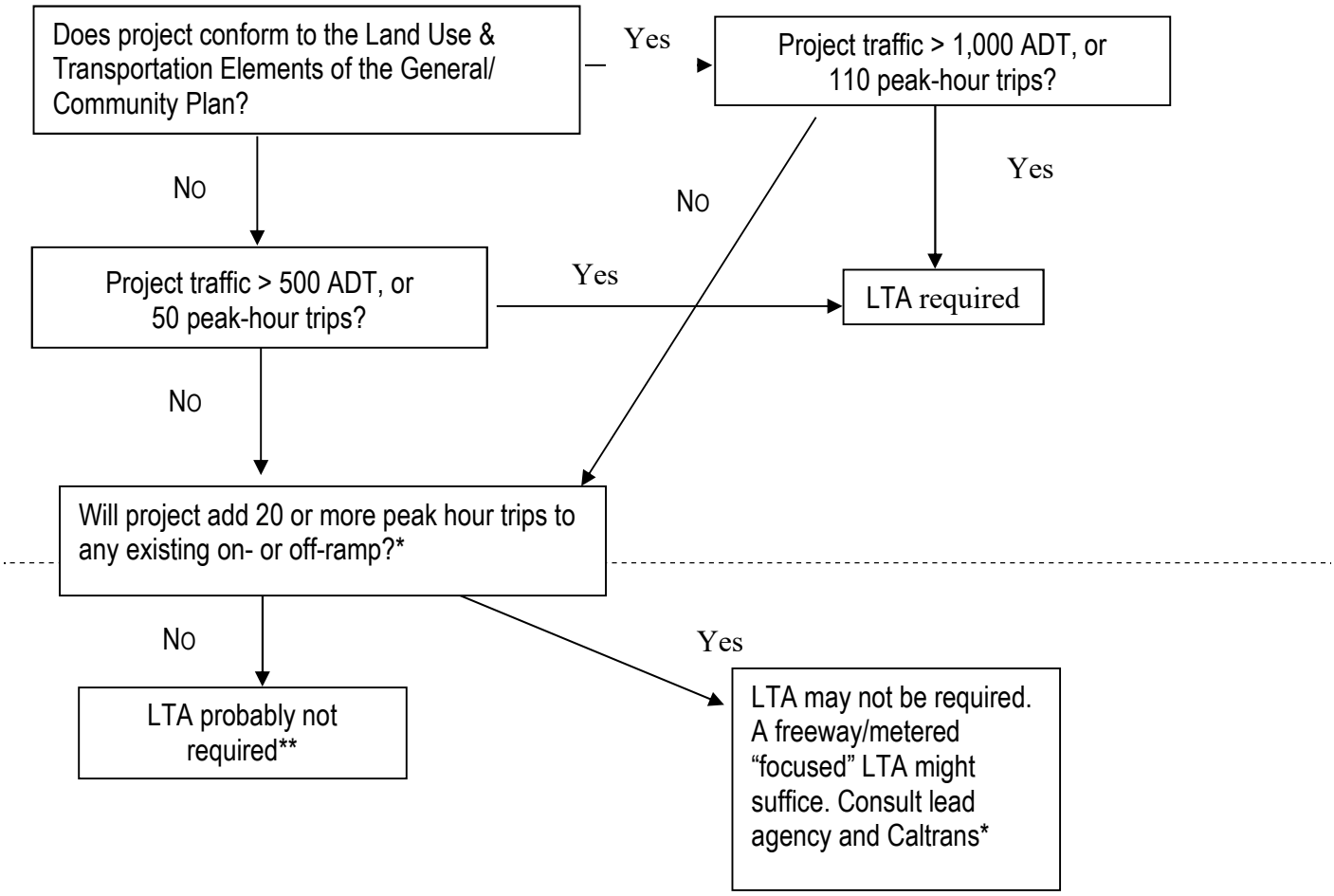
NEED FOR A STUDY

Figure 7-1 shows the flow chart for determination of when a roadway analysis should be conducted. A roadway analysis should be prepared for all projects which generate traffic greater than 1,000 total average daily driveway trips (ADT) or 100 peak-hour trips. If a proposed project is not in conformance with the land use and/or transportation element of the general or community plan, use threshold rates of 500 ADT or 50 peak-hour trips.

Early consultation with any affected jurisdictions is strongly encouraged since a “focused” or “abbreviated” roadway analysis may still be required – even if the above threshold rates are not met. An understanding of the level of detail and the assumptions required for the analysis should be reached. A pre-submittal in-person conference may not be required. However, the applicant should prepare a scoping letter for the agency’s review and approval prior to preparation of the analysis.

Figure 7-1

FLOW CHART FOR LTA ROADWAY ANALYSIS



* Check with Caltrans for current ramp metering rates. (See Attachment B – Ramp Metering Analysis)

** However, for health and safety reasons, and/or local and residential street issues, an "abbreviated" or "focused" LTA may still be requested by a local agency. (For example, this may include traffic backed up beyond an off-ramp's storage capacity or may include diverted traffic through an existing neighborhood.)

STUDY PARAMETERS

It is recommended that the geographic area examined in the LTA include the following for roadways:

- All local roadway segments between signalized intersections (including all State surface routes), intersections, and mainline freeway locations where the proposed project will add 50 or more peak-hour trips in either direction to the existing roadway traffic.

- All freeway entrance and exit ramps where the proposed project will add a substantial number of peak-hour trips to cause any traffic queues to exceed ramp storage capacities (see Figure 1). (NOTE: Care must be taken to include other ramps and intersections that may receive project traffic diverted as a result of already existing or project causing congestion at freeway entrances and exits.)

The data used in the LTA should generally not be more than two years old and should not reflect a temporary interruption (special events, construction detour, etc.) in the normal traffic patterns unless that is the nature of the project itself. If recent traffic data is not available, current counts should be made by the project applicant's consultant. For areas near beaches or bays, counts should be taken during summer or adjusted to reflect summer conditions.

In general, the region-wide goal for roadway level of service (LOS) on all freeways, roadway segments, and intersections is "D." For central urbanized areas, the goal may be to achieve a level of service of "E." Individual jurisdictions have slightly different LOS objectives.

SCENARIOS TO BE STUDIED

The following scenarios are recommended to be addressed in the roadway analysis (unless there is concurrence with the lead agency that one or more of these scenarios may be omitted). Some exceptions are noted at the end of this list:

Existing Conditions: Document existing traffic levels and peak-hour levels of service in the study area. Identify locations where roadways do not meet target levels of service for existing conditions.

Existing Plus Project Conditions: Analyze the effect of the proposed project in addition to existing conditions. This scenario identifies the effect of a project on the transportation network with no other changes in conditions.

Near-term (approved and pending): Analyze the cumulative conditions resulting from the development of "other" approved and "reasonably foreseeable" pending projects (application on file) that are expected to influence the study area. This is the baseline against which project effects are assessed. The lead agency may be able to provide copies of the traffic studies for the "other" projects if they are already approved. If data is not available for near-term cumulative projects, an ambient growth factor should be used. If applicable, transportation network improvements should also be included in this scenario. This would include programmed and fully funded network improvements that are scheduled to open prior to the project's expected opening day.

Near-term + Proposed Project: Analyze the effects of the proposed project at its expected opening day in addition to near-term baseline conditions. For phased projects, a separate analysis could be conducted for each phase.

Horizon Year: Identify traffic forecasts, typically 20 years in the future, through the output of a SANDAG model forecast or other computer model approved by the local agency.

Horizon Year + Proposed Project: Analyze the additional project traffic effect to the horizon year condition. When justified, and particularly in the case of very large developments or new general/community plans, a transportation model should be run with, and without, the additional development to show the net effect on all parts of the area's transportation system.

Analysis of near-term scenarios may not be necessary if this scenario is incorporated in the agency's Traffic Impact Fee (TIF) program. If an agency has established a fee program to cover near-term improvements on all key roadways, the payment of traffic impact fees could be considered to be sufficient to offset a project's effect on these roadways.

Horizon year studies may not be needed, depending on the discretion of the lead agency. Reasons for including these scenarios may vary, but they would generally be added because the proposed project is substantially different than was expected in the Community Plan/General Plan, or if the area near the project is expected to experience land use or network changes that have not been adequately accounted for in previous planning studies.

In order to use LOS criteria to determine the need for roadway improvements (see Table 7-1), proposed model or manual forecast adjustments must be made to address scenarios both with and without the project. Model data should be carefully verified to ensure accurate project and "other" cumulative project representation. In these cases, regional or subregional models conducted by SANDAG need to be reviewed for appropriateness.

PROJECT TRAFFIC GENERATION

Use of SANDAG [*Traffic Generators Manual* and *(Not So) Brief Guide….*] or City of San Diego (*Trip Generation Manual*) rates should first be considered. Trip generation rates from ITE's latest *Trip Generation Manual* or *ITE Journal* articles could also be considered. Smart growth projects should consider use of the SANDAG Smart Growth Trip Generation and Parking Study guidelines. If local and sufficient national data do not exist, conduct trip generation studies at multiple sites with characteristics similar to those of the proposed project.

Reasonable reductions to trip rates may also be considered: (a) with proper analysis of pass-by and diverted traffic on adjacent roadways, (b) for developments near transit stations, and (c) for mixed-use developments. (Note: Caltrans and local agencies may use different trip reduction rates. Early consultation with the reviewing agencies is strongly recommended.)

Project trips can be assigned and distributed either manually or by a computer model based upon review and approval of the local agency Traffic Engineer. The magnitude of the proposed project will usually determine which method is employed.

If the manual method is used, the trip distribution percentages could be derived from existing local traffic patterns or optionally (with local agency approval) by professional judgement. If the computer model is used, the trip distribution percentages could be derived from a computer generated "select zone assignment." The centroid connectors should accurately represent project access to the street network. Preferably the project would be represented by its own traffic zone. Some adjustments to the output volumes may be needed (especially at intersections) to smooth out volumes, quantify peak volumes, adjust for pass-by and diverted trips, and correct illogical output.

ANALYSIS OF PROJECT EFFECT ON THE ROADWAY SYSTEM

It is recommended that the roadway analysis determine the effect that a project will have for each of the previously outlined study scenarios. Peak-hour capacity analyses for freeways, roadway segments (ADTs may be used here to estimate V/C ratios), intersections, and freeway ramps can be conducted for existing, near-term, and long-term conditions. The methodologies used in determining the traffic effects are not only critical to the validity of the analysis, they are pertinent to the credibility and confidence the decision-makers have in the resulting findings, conclusions, and recommendations. Methodologies for roadway capacity analyses vary by agency and change over time so it is recommended that consultation be conducted with the lead agency and/or Caltrans to determine an appropriate methodology for a particular study.

NEED FOR ROADWAY IMPROVEMENTS

Table 7-1 indicates when a project's effect on the roadway system is considered to justify need for roadway improvements. That is, if a project's traffic effect causes the values in this table to be exceeded, roadway improvements should be considered. Table 7-2 provides guidance on the levels of ADT that can be accommodated on various types of roadways, based on level of service.

It is the responsibility of Caltrans, on Caltrans initiated projects, to analyze the effect of ramp metering, for initial as well as future operational effect, on local streets that intersect and feed entrance ramps to the freeway. Developers and/or local agencies, however, should consider improvements to existing ramp meter facilities, future ramp meter installations, or local streets, when those effects are attributable to new development and/or local agency roadway improvement projects. When conducting analyses related to ramp meters, it is recommended that analysts consider calibrating the analysis in the transportation impact study to observed conditions in the field.

Not all improvement measures can feasibly consist of roadway widening (new lanes or new capacity). A sample improvement might include financing toward a defined ITS (Intelligent Transportation System) project, enhanced traffic signal communications project, or active transportation projects. This type of improvement would allow a project applicant (especially with a relatively small project) to provide improvements to the roadway system by paying into a local or regional fee program, providing the fee can be established in the near future.

Other improvement measures may include Transportation Demand Management recommendations – transit facilities, bike facilities, walkability, telecommuting, traffic rideshare programs, flex-time, carpool incentives, parking cash-out, complete or partial subsidization of transit passes, etc. Additional improvement measures may be identified as future technologies and policies evolve.

Table 7-1

DETERMINATION OF THE NEED FOR ROADWAY IMPROVEMENTS

LEVEL OF SERVICE WITH PROJECT*	ALLOWABLE CHANGE DUE TO PROJECT EFFECT**					
	FREEWAYS		ROADWAY SEGMENTS		INTERSECTIONS	RAMP*** METERING
	V/C	SPEED (MPH)	V/C	SPEED (MPH)	DELAY (SEC.)	DELAY(MIN.)
E, & F (OR RAMP METER DELAYS ABOVE 15 MIN.)	0.01	1	0.02	1	2	2

NOTES:

* All level of service measurements are based upon Highway Capacity Manual (HCM) procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 7-2 or a similar LOS chart for each jurisdiction). The target LOS for freeways, roadways, and intersections is generally "D." For metered freeway ramps, LOS does not apply; however, ramp meter delays above 15 minutes are considered excessive.

** If a proposed project's traffic causes the values shown in the table to be exceeded, the effects of the project are determined to justify improvements. These changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible improvements within the LTA report that will maintain the traffic facility at the target LOS or restore to pre-project conditions. If the LOS with the proposed project becomes worse than the target (see above * note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, roadway improvements should be considered.

*** See Attachment B for ramp metering analysis.

KEY:
- V/C = Volume to Capacity ratio
- Speed = Speed measured in miles per hour
- Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters
- LOS = Level of Service

Table 7-2

ROADWAY CLASSIFICATIONS, LEVELS OF SERVICE (LOS) AND AVERAGE DAILY TRAFFIC (ADT)

			LEVEL OF SERVICE W/ADT				
STREET CLASSIFICATION	LANES		A	B	C	D	E
Expressway	6 lanes		30,000	42,000	60,000	70,000	80,000
Prime Arterial	6 lanes		25,000	35,000	50,000	55,000	60,000
Major Arterial	6 lanes		20,000	28,000	40,000	45,000	50,000
Major Arterial	4 lanes		15,000	21,000	30,000	35,000	40,000
Major Arterial (One-Way)	3 lanes		12,500	16,500	22,500	25,000	27,500
Major Arterial (One-Way)	2 lanes		10,000	13,000	17,500	20,000	22,500
Secondary Arterial/ Collector	4 lanes		10,000	14,000	20,000	25,000	30,000
Collector (no center lane)	4 lanes		5,000	7,000	10,000	13,000	15,000
Collector (continuous left-turn lane)	2 lanes		5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2 lanes		4,000	5,500	7,500	9,000	10,000
Collector (commercial- industrial fronting)	2 lanes		2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2 lanes		2,500	3,500	5,000	6,500	8,000
Collector (One-Way)	3 lanes		11,000	14,000	19,000	22,500	26,000
Collector (One-Way)	2 lanes		7,500	9,500	12,500	15,000	17,500
Collector (One-Way)	1 lane		2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2 lanes		---	---	2,200	---	---

NOTES:

1. The volumes and the average daily level of service listed above are only intended as a general planning guideline.
2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

8.0 TRANSIT

It is recommended that the geographic area examined in the LTA include the following for transit:

- All existing transit lines and transit stops within a ½ mile walking distance of the project
- Any planned transit lines or upgrades within a ½ mile walking distance of the project

In general, the region-wide goal for evaluating pedestrian, bicycle, and transit facilities is to identify opportunities to increase connectivity, frequency of service, and level of comfort. Individual jurisdictions may have different qualitative or quantitative ways of performing these evaluations.

9.0 BICYCLE

It is recommended that the geographic area examined in the LTA include the following for bicycle travel:

- All roadways adjacent to the project, extending in each direction to the nearest intersection with a classified roadway or with a Class I path
- Both directions of travel should be evaluated

In general, the region-wide goal for evaluating pedestrian, bicycle, and transit facilities is to identify opportunities to increase connectivity and level of comfort. Individual jurisdictions may have different qualitative or quantitative ways of performing these evaluations.

10.0 PEDESTRIAN

It is recommended that the geographic area examined in the LTA include the following for pedestrians:

- All pedestrian facilities directly connected to project access points or adjacent to the project development, extending in each direction to the nearest intersection with a classified roadway or connection with a Class I path
- Facilities connecting to transit stops within two blocks of the project
- Only facilities on the side of the project or along the walking route to transit stop
- Additional geographic areas may be included in certain cases to address special cases such as schools or retail centers

In general, the region-wide goal for evaluating pedestrian, bicycle, and transit facilities is to identify opportunities to increase connectivity and level of comfort. Individual jurisdictions may have different qualitative or quantitative ways of performing these evaluations.

APPENDICES

GUIDELINES FOR TRANSPORTATION IMPACT STUDIES IN THE SAN DIEGO REGION

APPENDIX A

ATTACHMENT A

Completed by Staff:
Date Received _____
Reviewer _____
Date Screen Check _____

LOCAL TRANSPORTATION ANALYSIS SCREEN CHECK

To be completed by consultant (including page #):
Name of Study _____
Consultant _____
Date Submitted _____

Indicate Page # in report:		Satisfactory YES	Satisfactory NO	NOT REQUIRED
pg. ___	1. Table of contents, list of figures and list of tables.	☐	☐	
pg. ___	2. Executive summary.	☐	☐	
pg. ___	3. Map of the proposed project location.	☐	☐	
	4. General project description and background information:			
pg. ___	a. Proposed project description (acres, dwelling units….)	☐	☐	
pg. ___	b. Total trip generation of proposed project.	☐	☐	
pg. ___	c. Community plan assumption for the proposed site.	☐	☐	
pg. ___	5. Parking, transit and on-site circulation discussions are included.	☐	☐	
pg. ___	6. Map of the Study Area and specific intersections studied in the traffic report.	☐	☐	
pg. ___	7. Existing Transportation Conditions:			
	a. Figure identifying roadway conditions including raised medians, median openings, separate left and right turn lanes, roadway and intersection dimensions, bike lanes, parking, number of travel lanes, posted speed, intersection controls, turn restrictions and intersection lane configurations.	☐	☐	
	b. Figure indicating the daily (ADT) and peak-hour volumes.	☐	☐	
	c. Figure or table showing level of service (LOS) for intersections during peak hours and roadway sections within the study area (include analysis sheets in an appendix).	☐	☐	
	8. Project Trip Generation:			
pg. ___	Table showing the calculated project generated daily (ADT) and peak hour volumes.	☐	☐	
pg. ___	9. Project Trip Distribution using the current travel demand model (provide a computer plot) or manual assignment if previously approved. (Identify which method was used.)	☐	☐	
	10. Project Traffic Assignment:			
pg. ___	a. Figure indicating the daily (ADT) and peak-hour volumes.	☐	☐	
pg. ___	b. Figure showing pass-by-trip adjustments, and, if cumulative trip rates are used.	☐	☐	☐
	11. Existing Near-term Cumulative Conditions:			
pg. ___	a. Figure indicating the daily (ADT) and peak-hour volumes.	☐	☐	
pg. ___	b. Figure or table showing the projected LOS for intersections during peak hours and roadway sections within the study area (analysis sheets included in the appendix).	☐	☐	
pg. ___	c. Traffic signal warrant analysis (Caltrans Traffic Manual) for	☐	☐	

Indicate Page # in report:		Satisfactory YES	NO	NOT REQUIRED
	appropriate locations.			
	12. Existing Near-term Cumulative Conditions + Proposed Project (each phase when applicable)			
pg. ___	a. Figure or table showing the projected LOS for intersections during peak hours and roadway sections with the project (analysis sheets included in the appendix).	☐	☐	
pg. ___	b. Figure showing other projects that were included in the study, and the assignment of their site traffic.	☐	☐	
pg. ___	c. Traffic signal warrant analysis for appropriate locations.	☐	☐	
	13. Horizon Year Transportation Conditions (if project conforms to the General/ Community Plan):			
pg. ___	a. Horizon Year ADT and street classification that reflect the Community Plan.	☐	☐	☐
pg. ___	b. Figure or table showing the horizon LOS for intersections during peak hours and roadway sections <u>with</u> and <u>without</u> the project (analysis sheets included in the appendix).	☐	☐	☐
pg. ___	c. Traffic signal warrant analysis at appropriate locations.	☐	☐	☐
	14. Horizon Year Transportation Conditions + Proposed Project (if project does not conform to the General/Community Plan):			
pg. ___	a. Horizon Year ADT and street classification as shown in the Community Plan.	☐	☐	☐
pg. ___	b. Horizon Year ADT and street classification for two scenarios: with the proposed project and with the land use assumed in the Community Plan.	☐	☐	☐
pg. ___	c. Figure or table showing the horizon LOS for intersections during peak hours and roadway sections for two scenarios: <u>with</u> and <u>without</u> the proposed project and with the land use assumed in the Community Plan (analysis sheets included in the appendix).	☐	☐	☐
pg. ___	d. Traffic signal warrant analysis at appropriate locations with the land use assumed in the General/Community Plan.	☐	☐	☐
pg. ___	15. A summary table showing the comparison of Existing, Existing + Near-term Cumulative, Existing + Near-term Cumulative + Proposed Project, Horizon Year, and Horizon Year + Proposed Project (if different from General/Community Plan), LOS on roadway sections and intersections during peak hours.	☐	☐	
pg. ___	16. A summary table showing the project's "significant traffic effects."	☐	☐	
	17. Transportation Improvements:			
pg. ___	a. Table identifying the improvements required that are the responsibility of the developer and others. A phasing plan is required if improvements are proposed in phases.	☐	☐	
pg. ___	b. Figure showing all proposed improvements that include: intersection lane configurations, lane widths, raised medians, median openings, roadway and intersection dimensions, right-of-way, offset, etc.	☐	☐	
pg. ___	18. The Highway Capacity Manual Operation Method or other approved method is used at appropriate locations within the study area.	☐	☐	
pg. ___	20. Appropriate freeway analysis is included.	☐	☐	☐

Indicate Page # in report:		Satisfactory YES	NO	NOT REQUIRED
pg. ___	21. Appropriate freeway ramp metering analysis is included.	☐	☐	☐
pg. ___	22. The traffic study is signed by a California Registered Traffic Engineer.	☐	☐	

THE STUDY SCREEN CHECK FOR THE SUBJECT PROJECT IS:

_____ Approved

_____ Not approved because the following items are missing:

_____

_____

_____

APPENDIX B

ATTACHMENT B

RAMP METERING ANALYSIS

Ramp metering analysis should be performed for each horizon year scenario in which ramp metering is expected. The following table shows relevant information that should be included in the ramp meter analysis, "Summary of Freeway Ramp Metering Effects."

LOCATION	DEMAND (veh/hr)[1]	METER RATE (veh/hr)[2]	EXCESS DEMAND (veh/hr)[3]	DELAY (min)[4]	QUEUE (feet)[5]

NOTES:

[1] DEMAND is the peak hour demand expected to use the on-ramp.

[2] METER RATE is the peak hour capacity expected to be processed through the ramp meter. This value should be obtained from Caltrans.

[3] EXCESS DEMAND = (DEMAND) – (METER RATE) or zero, whichever is greater.

[4] DELAY = $\frac{\text{EXCESS DEMAND}}{\text{METER RATE}}$ X 60 MINUTES/HOUR

[5] QUEUE = (EXCESS DEMAND) X 29 feet/vehicle

NOTE: Delay will be less at the beginning of metering. However, since peaks will almost always be more than one hour, delay will be greater after the first hour of metering. (See discussion on next page.)

SUMMARY OF FREEWAY RAMP METERING EFFECTS
(Lengthen as necessary to include all affected meter locations)

LOCATION(S)	PEAK HOUR	PEAK HOUR DEMAND D	FLOW (METER RATE) F	EXCESS DEMAND E	DELAY (MINUTES)	QUEUE Q (feet)
	AM PM					
	AM PM					
	AM PM					

DISCUSSION OF RAMP METER ANALYSIS

A. CAUTION: The ramp metering analysis shown in Attachment B may lead to grossly understated results for delay and queue length, since important aspects of queue growth are ignored. Also, the draft guidelines method derives average values instead of maximum values for delay and queue length. Utilizing average values instead of maximum values can lead to obscuring important effects, particularly in regard to queue length.

Predicting ramp meter delays and queues requires a storage-discharge type of analysis, where a pattern of arriving traffic at the meter is estimated by the analyst, and the discharge, or meter rate, is a somewhat fixed value set by Caltrans for each individual metered ramp.

Since a ramp meter queue continues to grow longer during all times that the arrival rate exceeds the discharge rate, the maximum queue length (and hence, the maximum delay) usually occurs after the end of the peak (or highest) one hour. This leads to the need for an analysis for the entire time period during which the arrival rate exceeds the meter rate, not just the peak hour. For a similar reason, the analysis needs to consider that a substantial queue may have already formed by the beginning of the "peak hour." Traffic arriving during the peak hour is then stacked onto an existing queue, not just starting from zero as the draft analysis suggests.

Experience shows that the theoretical queue length derived by this analysis often does not materialize. Motorists, after a brief time of adjustment, seek alternate travel paths or alternate times of arrival at the meter. The effect is to approximately minimize total trip time by seeking out the best combinations of route and departure time at the beginning of the trip. This causes at least two important changes in the pattern or arriving traffic at ramp meters. First, the peak period is spread out, with some traffic arriving earlier and some traffic arriving later than predicted. Second, a significant proportion of the predicted arriving traffic will use another ramp, use another freeway, or stay on surface streets.

It is acceptable to make reasonable estimates of these temporal and spatial (time and occupying space) diversions as long as all assumptions are stated and that the unmodified, or theoretical values are shown for comparison.

B. Additional areas for study include being able to define acceptable levels of service (LOS) and "significant" thresholds (e.g., a maximum ramp meter delay of 15 minutes) for metered freeway entrance ramps.

Currently there are no acceptable software programs for measuring project effects on metered freeway ramps nor does the Highway Capacity Manual (HCM) adequately address this issue. Hopefully in the near future a regionwide study will be initiated to determine what metering rate (at each metered ramp) would be required in order to guarantee that traffic will flow (even at LOS "E") on the entire freeway system during peak-hour conditions. From this, the ramp delays and resultant queue lengths might then be calculated. Overall, this is a very complex issue that needs considerable research and refinement in cooperation with Caltrans.

APPENDIX C

LEVEL OF SERVICE (LOS) DEFINITIONS (generally used by Caltrans)

The concept of Level of Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A Level of Service[s] definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort and convenience, and safety. Levels of Service definitions can generally be categorized as follows:

LOS	D/C*	Congestion/Delay	Traffic Description
		(Used for freeways, expressways and conventional highways[A])	
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
		(Used for conventional highways)	
"F"	>1.00	Considerable	Forced or breakdown. Delay measured in average flow, travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
		(Used for freeways and expressways)	
"F0"	1.01-1.25	Considerable 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe 1-2 hour delay	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe 2-3 hour delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe 3+ hours of delay	Gridlock.

[s] Level of Service can generally be calculated using the latest Highway Capacity Manual. However, contact Caltrans for more specific information on determining existing "free-flow" freeway speeds.
* Demand/Capacity ratio used for forecasts (V/C ratio used for operational analysis, where V = volume)
[A] Arterial LOS is based upon average "free-flow" travel speeds, and should refer to definitions in the HCM.

Appendix C

SANDAG Mobility Management VMT Reduction Calculator Tool Output

MOBILITY MANAGEMENT VMT REDUCTION CALCULATOR TOOL

Return to Main

Project Information

Project Name (optional):	**Fenway Mixed Use Project**
Project Address (optional):	**1900 N. Coast Hwy, Encinitas**
Project Type (optional):	**Mixed Use**
Scale of Analysis:	**Project/Site**
Analysis Location:	**Encinitas**
CPA (if applicable):	**n/a**

Project/Site Results

Project-Level Strategies		**VMT Type**	**Change in VMT**	**Exclusions**
Employer Commute Trip Reduction Programs				
1A	Voluntary Employer Commute Program	Employee commute trips	-6.2%	
1B	Mandatory Employer Commute Program	Employee commute trips		Strategy 1A selected
1C	Employer Carpool Program	Employee commute trips		Included in 1A or 1B
1D	Employer Transit Pass Subsidy	Employee commute trips		Included in 1A or 1B
1E	Employer Vanpool Program	Employee commute trips		Included in 1A or 1B
1F	Employer Telework Program	Employee commute trips		
Land Use Strategies				
2A	Transit Oriented Development	Project-generated trips		
2B	Mixed Use Development	Project-generated trips	-0.2%	
Parking Management				
3A	Parking Pricing	Project-generated trips		
3B	Parking Cash Out	Employee commute trips		
	Employee Commute Trips - Total Change in VMT		**-6.2%**	
	Project-Generated Trips - Total Change in VMT		**-0.2%**	

Citations for all Project-Level Strategies

1A. Voluntary Employer Commute Program
(1). California Air Pollution Control Officers Association. 2010. "Quantifying Greenhouse Gas Mitigation Measures." www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
(2). Cambridge Systematics. 2009. "Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions." Technical Appendices. Prepared for the Urban Land Institute. www.reconnectingamerica.org/assets/Uploads/2009movingcoolerexecsumandappend.pdf
(3). Boarnet, Marlon G., Hsin-Ping Hsu, and Susan Handy. 2014. "Impacts of Employer-Based Trip Reduction Programs and Vanpools on Passenger Vehicle Use and Greenhouse Gas Emissions: Policy Brief." www.arb.ca.gov/cc/sb375/policies/ebtr/ebtr_brief.pdf

1B. Mandatory Employer Commute Program
(1). California Air Pollution Control Officers Association. 2010. "Quantifying Greenhouse Gas Mitigation Measures." www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
(2). City of South San Francisco. 2015. "2015 Genentech Annual Report." http://ci-ssf-ca.granicus.com/MetaViewer.php?view_id=2&clip_id=859&meta_id=62028

(3). Cambridge Systematics. 2009. "Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions." Technical Appendices. Prepared for the Urban Land Institute. www.reconnectingamerica.org/assets/Uploads/2009movingcoolerexecsumandappend.pdf

1C. Employer Carpool Program
(1). Ewing, R. 1993. "TDM, Growth Management and the Other Four out of Five Trips." Transportation Quarterly, Vol. 48, No. 3.
(2). Victoria Transport Policy Institute. "Ridesharing: Carpooling and Vanpooling." TDM Encyclopedia. www.vtpi.org/tdm/tdm34.htm

(3). California Air Pollution Control Officers Association. 2010. "Quantifying Greenhouse Gas Mitigation Measures." www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
(4). New York State Department of Transportation. 2019. Data from 511NYRideshare program participants.

1D. Employer Transit Pass Subsidy
(1). Nelson Nygaard. 2010. "Santa Monica LUCE Trip Reduction Impacts Analysis." City of Santa Monica Land Use and Circulation Element, Final EIR. www.smgov.net/Departments/PCD/Plans/2010-Land-Use-and-Circulation-Element/
(2). Transportation Research Board. 2010. "TCRP Report 95 Chapter 19: Employer and Institutional TDM Strategies." www.trb.org/Publications/TCRPReport95.aspx

(3). Boarnet, Marlon G., Hsin-Ping Hsu, and Susan Handy. 2014. "Impacts of Employer-Based Trip Reduction Programs and Vanpools on Passenger Vehicle Use and Greenhouse Gas Emissions: Policy Brief." www.arb.ca.gov/cc/sb375/policies/ebtr/ebtr_brief.pdf

1E. Employer Vanpool Program
(1). SANDAG. 2018. Commute Behavior Survey.
(2). SANDAG. 2016. Activity Based Model. (v14.0.1, scenario ID 232)
(3). SANDAG. 2018. SANDAG Vanpool Program
(4). Transportation Research Board. 2005. "TCRP Report 95 Chapter 5 Buspools and Vanpools." www.trb.org/Publications/TCRPReport95.aspx
(5). New York State Department of Transportation. 2019. Data from 511NYRideshare program participants.

1F. Employer Telework Program
(1). Cambridge Systematics. 2009. "Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions." Technical Appendices. Prepared for the Urban Land Institute. www.reconnectingamerica.org/assets/Uploads/2009movingcoolerexecsumandappend.pdf
(2). California Air Pollution Control Officers Association. 2010. "Quantifying Greenhouse Gas Mitigation Measures." www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

2A. Transit Oriented Development
(1). Tal, G., et al. 2013. "Technical Background Document on the Impacts of Transit Access (Distance to Transit) Based on a Review of the Empirical Literature." www.arb.ca.gov/cc/sb375/policies/transitservice/transit_brief.pdf

(2). SANDAG. 2016. Activity Based Model. (v14.0.1, scenario ID 232)

(3). Lund, H., et al. 2004. "Travel Characteristics of Transit-Oriented Development in California." www.bart.gov/sites/default/files/docs/Travel_of_TOD.pdf

2B. Mixed Use Development
(1). SANDAG. 2016. Land Use Inventory (SPACECORE).
(2). Ewing, R., and Cervero, R. 2010. "Travel and the Built Environment - A Meta-Analysis." Journal of the American Planning Association.
(3). California Air Pollution Control Officers Association. 2010. "Quantifying Greenhouse Gas Mitigation Measures." www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

3A. Parking Pricing
(1). Transportation Research Board. 2009. "TCRP Report 95 Chapter 13 Parking Pricing and Fees". p13-4. www.trb.org/Publications/TCRPReport95.aspx
(2). Cambridge Systematics. 2009. "Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions." Technical Appendices. Prepared for the Urban Land Institute.

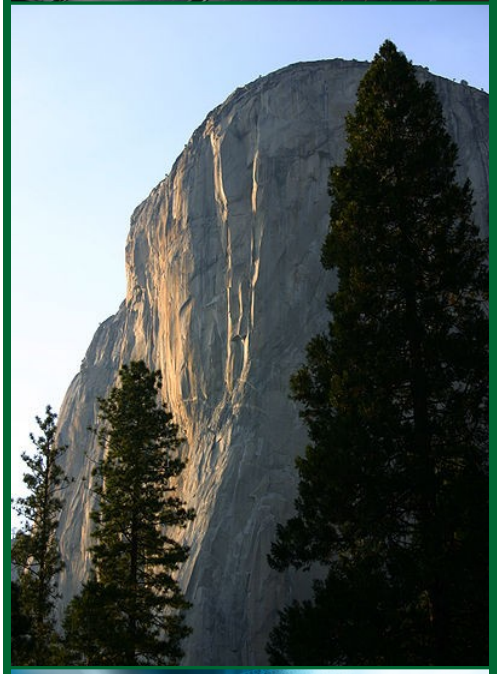
3B. Parking Cash Out
(1). California Air Resources Board. 2009. "California's Parking Cash-Out Program: An Informational Guide for Employers." www.arb.ca.gov/planning/tsaq/cashout/cashout_guide_0809.pdf
(2). Shoup, Donald C. 2005. "Parking Cash Out." Planners Advisory Service, American Planning Association. http://shoup.bol.ucla.edu/ParkingCashOut.pdf

Appendix D

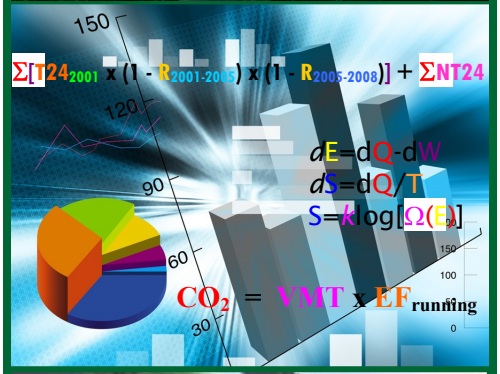
Excerpts from CAPCOA

CAPCOA

CALIFORNIA AIR POLLUTION CONTROL OFFICERS ASSOCIATION



Quantifying Greenhouse Gas Mitigation Measures



A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures

August, 2010

Chart 6-2: Transportation Strategies Organization

Transportation Measures (Five Subcategories) Global Maximum Reduction (all VMT):
urban = 75%; compact infill = 40%; suburban center or suburban with NEV = 20%; suburban = 15%

Global Cap for Road Pricing needs further study

Transportation Measures (Four Categories) Cross-Category Max Reduction (all VMT):
urban = 70%; compact infill = 35%; suburban center or suburban with NEV = 15%; suburban = 10%

Max Reduction = 15% overall; work VMT = 25%; school VMT = 65%;

Max Reduction = 25% (all VMT)

Land Use / Location	Neighborhood / Site Enhancement	Parking Policy / Pricing	Transit System Improvements	Commute Trip Reduction	Road Pricing Management	Vehicles
Max Reduction: urban = 65%; compact infill = 30%; suburban center = 10%; suburban = 5%	Max Reduction: without NEV = 5%; with NEV = 15%	Max Reduction = 20%	Max Reduction = 10%	(assumes mixed use) Max Reduction = 25% (work VMT)	Max Reduction = 25%	
Density (30%)	Pedestrian Network (2%)	Parking Supply Limits (12.5%)	Network Expansion (8.2%)	CTR Program Required = 21% work VMT Voluntary = 6.2% work VMT	Cordon Pricing (22%)	Electrify Loading Docks
Design (21.3%)	Traffic Calming (1%)	Unbundled Parking Costs (13%)	Service Frequency / Speed (2.5%)	Transit Fare Subsidy (20% work VMT)	Traffic Flow Improvements (45% CO_2)	Utilize Alternative Fueled Vehicles
Location Efficiency (65%)	NEV Network (14.4) <NEV Parking>	On-Street Market Pricing (5.5%)	Bus Rapid Transit (3.2%)	Employee Parking Cash-out (7.7% work VMT)	Required Contributions by Project	Utilize Electric or Hybrid Vehicles
Diversity (30%)	Car Share Program (0.7%)	Residential Area Parking Permits	Access Improvements	Workplace Parking Pricing (19.7% work VMT)		
Destination Accessibility (20%)	Bicycle Network <Lanes> <Parking> <Land Dedication for Trails>		Station Bike Parking	Alternative Work Schedules & Telecommute (5.5% work VMT)		
Transit Accessibility (25%)	Urban Non-Motorized Zones		Local Shuttles	CTR Marketing (5.5% work VMT)		
BMR Housing (1.2%)			Park & Ride Lots*	Employer-Sponsored Vanpool/Shuttle (13.4% work VMT)		
Orientation Toward Non-Auto Corridor				Ride Share Program (15% work VMT)		
Proximity to Bike Path				Bike Share Program		
				End of Trip Facilities		
				Preferential Parking Permit		
				School Pool (15.8% school VMT)		
				School Bus (6.3% school VMT)		

Note: Strategies in bold text are primary strategies with reported VMT reductions; non-bolded strategies are support or grouped strategies.

APPENDIX L-2
LOCAL TRANSPORTATION ANALYSIS

THIS PAGE INTENTIONALLY LEFT BLANK

CITY OF ENCINITAS
Marea Village Mixed-Use
(Hotel, Residential, Commercial)
1900 N. Coast Highway 101
June 23, 2021

Draft Local Transportation Analysis

Prepared by Justin Rasas (RCE 60690), a principal with:

LOS Engineering, Inc.
11622 El Camino Real, Suite 100, San Diego, CA 92130
Phone 619-890-1253

Job #1924

Table of Contents

Executive Summary v
1.0 Introduction 1
2.0 Transportation Analysis Methodology 4
2.1 Study Area 4
2.2 Study Scenarios 5
2.3 Traffic Analysis Methodology 5
2.3.1 Intersections 5
2.3.2 Street Segments 6
2.4 Project's Transportation Effect 8
3.0 Existing Conditions 9
3.1 Existing Street System 9
3.2 Existing Traffic Volumes and LOS Analyses 11
4.0 Project Description 15
4.1 Project Traffic Generation 15
4.2 Construction Traffic Generation 16
4.3 Project Access 17
4.4 Project Distribution and Assignment 17
4.5 Project On-Site Parking 17
5.0 Existing + Project Conditions 22
6.0 Cumulative Projects 25
7.0 Existing + Cumulative Conditions 29
8.0 Existing + Cumulative + Project Conditions 33
9.0 Horizon Year 2035 Conditions 37
10.0 Horizon Year 2035 + Project Conditions 41
11.0 Project Traffic Effects 45
11.1 Intersection of N. Coast Highway 101/Bishops Gate 45
11.2 Intersection of N. Coast Highway 101/Grandview Street 45
11.3 Intersection of La Costa Ave/N. Vulcan Avenue 46
11.4 Intersection of La Costa Ave/Sheridan Road 47
12.0 Conclusion 48
13.0 References 52

List of Figures

Figure 1: Project Location 2
Figure 2: Site Plan 3
Figure 3: Existing Roadway Conditions 10
Figure 4: Existing Volumes 12
Figure 5: Project Distribution (Before Streetscape) 18
Figure 6: Project Volumes (Before Streetscape) 19
Figure 7: Project Distribution (After Streetscape) 20
Figure 8: Project Volumes (After Streetscape) 21
Figure 9: Existing + Project Volumes 24
Figure 10: Cumulative Projects Planned Roadway Changes 27

Figure 11: Cumulative Project Volumes 28
Figure 12: Existing + Cumulative Volumes 30
Figure 13: Existing + Cumulative + Project Volumes 34
Figure 14: Horizon Year 2035 Volumes 38
Figure 15: Horizon Year 2035 + Project Volumes 42

List of Tables

Table 1: Intersection Level of Service Definitions (6th Edition HCM) 5
Table 2: Intersection Level of Service (HCM 2000) 6
Table 3: Carlsbad Blvd Street Segment LOS Based on Lane Capacity 6
Table 4: Street Segment Daily Capacity and LOS (City of Encinitas) 7
Table 5: City of Encinitas Street Segment LOS Based on V/C Ratios (Streetscape EIR) 7
Table 6: City of Encinitas Determination for Potential Roadway Improvements 8
Table 7: Existing Intersection Operations 13
Table 8: Existing Segment Daily Volumes and Operations 13
Table 9: Existing Segment Peak Hour Volumes and Operations 14
Table 10: Project Traffic Generation 15
Table 11: Project Construction Trip Generation 17
Table 12: Existing + Project Intersection Operations 22
Table 13: Existing + Project Segment Daily Volumes and Operations 22
Table 14: Existing + Project Segment Peak Hour Volumes and Operations 23
Table 15: Cumulative Traffic Generation 26
Table 16: Existing + Cumulative Intersection Operations 29
Table 17: Existing + Project Segment Daily Volumes and Operations 29
Table 18: Existing + Cumulative Segment Peak Hour Volumes and Operations 31
Table 19: Existing + Cumulative + Project Intersection Operations 33
Table 20: Existing + Cumulative + Project Segment Daily Volumes and Operations 33
Table 21: Existing + Cumulative + Project Segment Peak Hour Volumes and Operations 35
Table 22: Horizon Year 2035 Intersection Operations 37
Table 23: Horizon Year 2035 Segment Daily Volumes and Operations 39
Table 24: Horizon Year 2035 Segment Peak Hour Volumes and Operations 39
Table 25: Horizon Year 2035 + Project Intersection Operations 41
Table 26: Horizon Year 2035 + Project Segment Daily Volumes and Operations 43
Table 27: Horizon Year 2035 + Project Segment Peak Hour Volumes and Operations 43
Table 28: N. Coast Highway 101/Grandview St Operations with Improvements 46
Table 29: La Costa Ave/N. Vulcan Ave LOS with Mitigation 46
Table 30: La Costa Ave/Sheridan Rd LOS with Mitigation 47

Appendices

Appendix A ..... Excerpts from City of Carlsbad Growth Management Plan
Appendix B ..... Excerpts from City of Encinitas General Plan
Appendix C ..... Excerpts from City of Encinitas Housing Element
Appendix D ..... Excerpts from Streetscape Traffic Study
Appendix E ..... Excerpts from ITE Guidelines
Appendix F ..... Excerpts from City of Carlsbad General Plan

Appendix G.....Excerpts from City of Encinitas Circulation Plan
Appendix H.....Count Data
Appendix I ..... Existing Intersection LOS Calculations
Appendix J .....Project Trip Details
Appendix K..... Existing + Project Intersection LOS Calculations
Appendix L .....Cumulative Project Roadway Changes
Appendix M .....Cumulative Project Volumes
Appendix N.....Existing + Cumulative Intersection LOS Calculations
Appendix O..... Existing + Cumulative + Project Intersection LOS Calculations
Appendix P ..... Excerpts from Ponto and Streetscape EIRs for Horizon Year Volumes
Appendix Q.....Horizon Year 2035 Intersection LOS Calculations
Appendix R.....Horizon Year 2035 + Project Intersection LOS Calculations
Appendix S .....N. Coast Hwy/Grandview Int. LOS Calculations with Mitigation
Appendix T .....La Costa/N. Vulcan Int. LOS Calculations with Mitigation and Signal Warrant
Appendix U..... La Costa/Sheridan Int. LOS Calculations with Mitigation and Signal Warrant

Executive Summary
Marea Village Mixed-Use

This Local Transportation Analysis (LTA) determines if the proposed project is calculated to create any traffic effects on the study area roadways in the vicinity of the project. The project includes a 30-room hotel, 94 multi-family units, and 18,261 square feet of commercial/retail space on the westside of North Coast Highway 101 approximately 500 feet south of La Costa Avenue located in the City of Encinitas, California. The project will replace an existing commercial/retail center of approximately 7,582 square feet with active businesses.

This analysis is based on the local San Diego Institute of Transportation Engineers (ITE) *Guidelines for Traffic Impact Studies in the San Diego Region*, May 2019 traffic analysis criteria. The project traffic generation was calculated using the SANDAG trip rates from the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. The project site has active uses creating traffic; therefore, a traffic credit was applied because the existing uses will be replaced by the project. Additionally, the existing and proposed project have pass-by trips already on the study roadways. The project is calculated to generate a net increase of 1,122 ADT, 60 AM peak hour trips, and 102 PM peak hour trips. The project is calculated to have an effect to the following intersections because project traffic exceeds the allowable change in vehicular delays:

1) Intersection of N. Coast Highway 101/Bishops Gate under existing + project, and existing + cumulative + project conditions. A roundabout is proposed as part of the City's Streetscape Project; however, the roundabout is forecasted to operate at LOS E in the PM peak hour with project traffic. The AM peak hour is calculated to operate at acceptable LOS. The goal of Streetscape is to reduce the number of southbound vehicle lanes to accommodate a dedicated bike lane, reduce travel speeds, and implement roundabouts to better balanced mobility between motorists, bicyclists, and pedestrians. If the project pulls building permits before Streetscape completes the roundabout, then the project will provide **a fair share contribution of 6.2%** towards this roundabout or other City directed location as the proportional means to reduce the traffic effect.

2) Intersection of N. Coast Highway 101/Grandview St under existing + project conditions. A roundabout is proposed as part of the City's Streetscape Project. The roundabout is forecasted to operate at LOS E in the PM peak hour with project traffic; however, the project no longer has an effect with the roundabout because the change in delay is 0.6 seconds, which is less than the allowable 2.0 seconds. The AM peak hour is calculated to operate at acceptable LOS. The goal of Streetscape is to reduce the number of southbound vehicle lanes to accommodate a dedicated bike lane, reduce travel speeds, and implement roundabouts to better balanced mobility between motorists, bicyclists, and pedestrians. If the project pulls building permits before Streetscape completes the roundabout as the proportional means to reduce the traffic effect, then the project will provide a **fair share contribution of 2.9%** towards this roundabout or other City directed location.

3) Intersection of La Costa Ave/N. Vulcan Ave under existing + project + cumulative, and horizon year 2035 + project conditions. The traffic effect is reduced to acceptable LOS with an improvement of a traffic signal under existing + project + cumulative conditions. Under Existing + Project + Cumulative conditions, the recommended improvement is a **fair share contribution of 2.7%** towards a future traffic signal. Under horizon year 2035 + project conditions, in addition to a traffic signal an additional westbound left turn lane is required to have a forecasted acceptable LOS. Under Horizon Year 2035 + Project conditions, the recommended improvement is a **fair share contribution of 2.3%** toward a horizon year intersection improvement that may be a westbound left turn lane or other to be determined improvement as the proportional means to reduce the traffic effect.

4) Intersection of La Costa Ave/Sheridan Rd under horizon year 2035 + project conditions. The traffic effect is reduced to acceptable LOS with an improvement of a traffic signal. Under Horizon Year 2035 + Project conditions, the recommended improvement is a **fair share contribution of 2.4%** toward a horizon year 2035 traffic signal or other City directed location as the proportional means to reduce the traffic effect.

1.0 Introduction

The purpose of this Local Transportation Analysis is to analyze potential traffic effects from traffic generated by a mixed-use project consisting of 30-room resort hotel, 94 multi-family units, and 18,261 square feet of commercial/retail space on the westside of North Coast Highway 101 approximately 500 feet south of La Costa Avenue in the City of Encinitas, California. The project will replace an existing commercial/retail center of approximately 7,582 square feet with active businesses. The regional location of the project is shown in **Figure 1**. A site plan is shown in **Figure 2.**

This report describes the existing roadway network in the vicinity of the project site and includes a review of the existing and proposed activities for weekday peak AM and PM periods, and daily traffic conditions when the project is completed. The format of this study includes the following chapters:

1.0 Introduction
2.0 Transportation Analysis Methodology
3.0 Existing Conditions
4.0 Project Description
5.0 Existing + Project Conditions
6.0 Cumulative Projects
7.0 Existing + Cumulative Conditions
8.0 Existing + Cumulative + Project Conditions
9.0 Horizon Year 2035 Conditions
10.0 Horizon Year 2035 + Project Conditions
11.0 Project Traffic Effects
12.0 Conclusion
13.0 References

Figure 1: Project Location

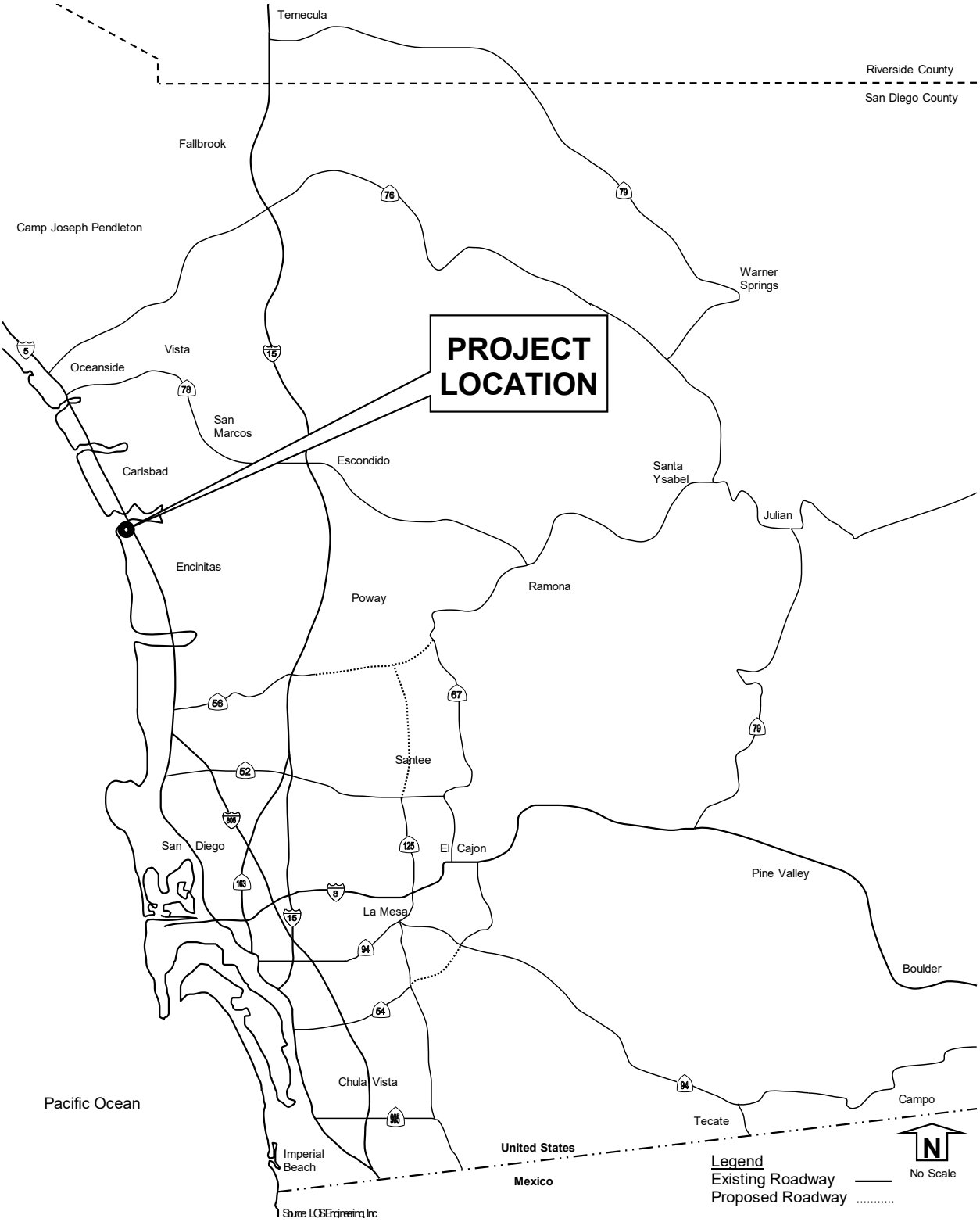
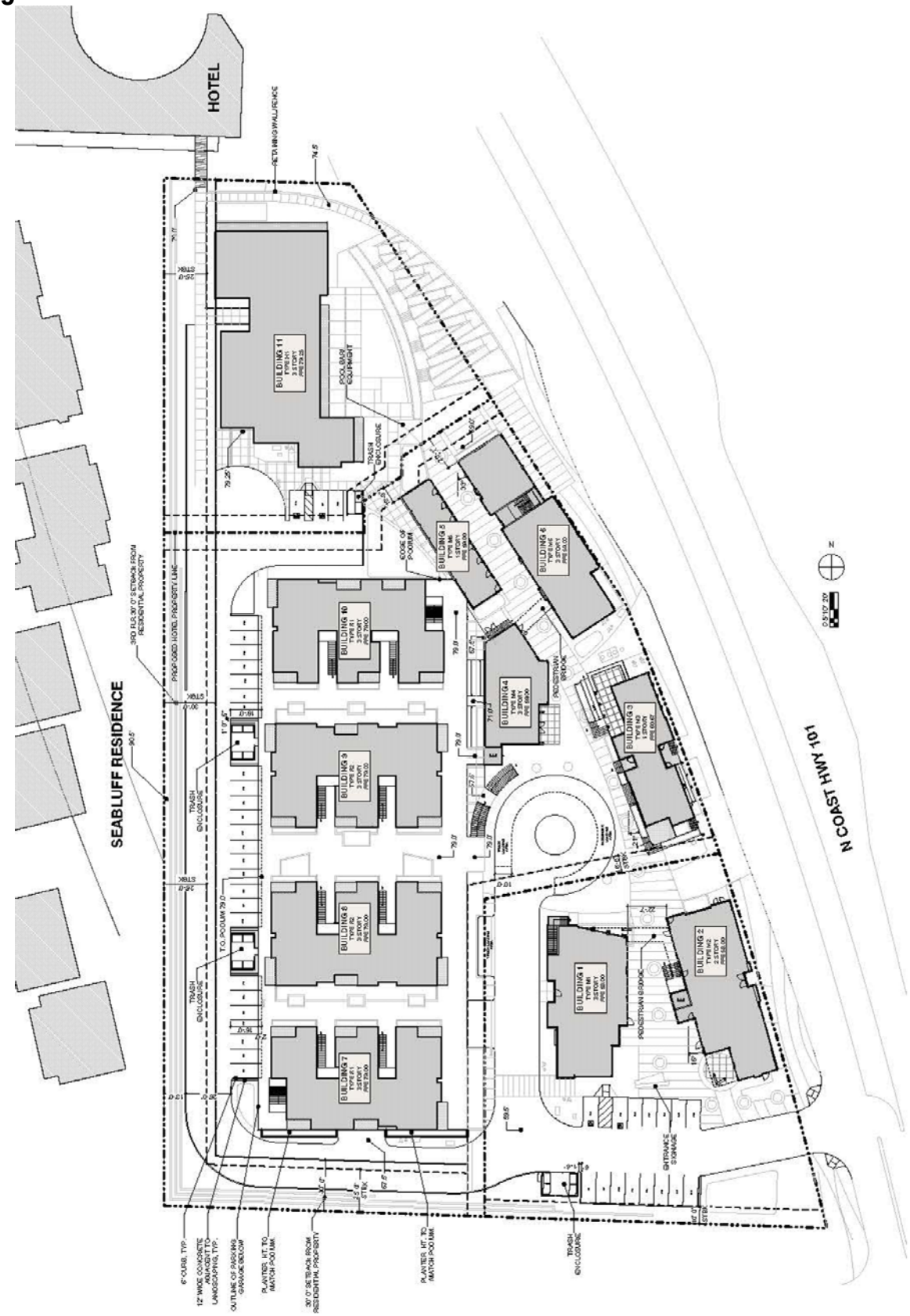


Figure 2: Site Plan



Source: Stephen Dalton Architects

2.0 Transportation Analysis Methodology

A Local Transportation Analysis (LTA) is provided to fulfill the Encinitas Municipal Code 23.08.060 requirement of a traffic analysis for projects with more than 2,000 square feet of building area and/or any residential project with five or more units.

This traffic study was prepared based on direction from City staff on the study intersections and roadway segments; the scenarios to be analyzed; and the methods required for analysis. The criteria for each of these parameters are included herein.

2.1 Study Area

The following intersections were included in this study:

1) Carlsbad Blvd SB/Avenida Encinas (signalized)
2) Carlsbad Blvd NB/Avenida Encinas (signalized)
3) North Coast Highway 101/La Costa Ave (signalized)
4) North Coast Highway 101/Project Access (future intersection)
5) North Coast Highway 101/Bishops Gate (un-signalized)
6) North Coast Highway 101/Grandview St (un-signalized)
7) North Coast Highway 101/Sands Mobile Home Park (un-signalized)
8) North Coast Highway 101/Jupiter St (un-signalized)
9) North Coast Highway 101/Leucadia Ave (signalized)
10) La Costa Avenue/N. Vulcan Avenue (un-signalized)
11) La Costa Avenue/Sheridan Rd (un-signalized)
12) La Costa Avenue/I-5 Southbound Ramps (signalized)
13) La Costa Avenue/I-5 Northbound Ramps (signalized)

The following street segments were included in this study:

1) Carlsbad Blvd from Avenida Encinas to La Costa Ave
2) North Coast Highway 101 from La Costa Ave to 600 ft S. of La Costa Ave
3) North Coast Highway 101 from 600 ft S. of La Costa Ave to Bishops Gate
4) North Coast Highway 101 from Bishops Gate to Grandview St
5) North Coast Highway 101 from Grandview St to Jupiter St
6) North Coast Highway 101 from Jupiter St to Leucadia Blvd
7) La Costa Avenue from N. Coast Highway 101 to N. Vulcan Ave
8) La Costa Avenue from N. Vulcan Ave to Sheridan Rd
9) La Costa Avenue from Sheridan Rd to I-5

2.2 Study Scenarios

The number of scenarios to be analyzed is typically based on the size of the project. For this project, the following scenarios were included based on direction from City staff:

1) Existing Conditions
2) Existing + Project Conditions
3) Existing + Cumulative Conditions (cumulative projects and planned roadway changes)
4) Existing + Cumulative + Project Conditions
5) Horizon Year 2035 Streetscape EIR Conditions
6) Horizon Year 2035 Streetscape EIR + Project Conditions

2.3 Traffic Analysis Methodology

The traffic analyses prepared for this study were based on the *Highway Capacity Manual* (HCM) operations analysis using Level of Service (LOS) evaluation criteria. The operating conditions of the study intersections and street segments were measured using the HCM LOS designations, which ranges from A through F. LOS A represents the best operating condition and LOS F denotes the worst operating condition.

2.3.1 Intersections

Two of the study intersections are located within the City of Carlsbad while the remaining intersections are located within the City of Encinitas. The same LOS criteria was applied to all study intersections.

The study intersections were analyzed based on the **operational analysis** outlined in the 6th Edition HCM. This process defines LOS in terms of **average control delay** per vehicle, which is measured in seconds. LOS at the intersections were calculated using the computer software program Synchro 10 (Trafficware Corporation). The 6th Edition HCM LOS for the range of delay by seconds for intersections is shown in **Table 1**.

TABLE 1: INTERSECTION LEVEL OF SERVICE DEFINITIONS (6TH EDITION HCM)

Level of Service	Un-Signalized Control Delay for TWSC, AWSC, and Roundabout (sec/veh where v/c ≤ 1)	Signalized Control Delay (sec/veh where v/c ≤ 1)
A	0-10	≤ 10
B	> 10-15	> 10-20
C	> 15-25	> 20-35
D	> 25-35	> 35-55
E	> 35-50	> 55-80
F	> 50	> 80

Source: 6th Edition HCM. TWSC: Two Way Stop Control. AWSC: All Way Stop Control. For unsignalized intersections, the control delay is the worst movement delay in seconds/vehicle.

Please note that the 6th Edition of HCM does not support intersection analyses for clustered intersections, such as Carlsbad Blvd SB & NB at Avenida Encinas. At these two locations, HCM 2000 was used for the analysis. The HCM 2000 LOS for the range of delay by seconds for intersections is shown in **Table 2**.

TABLE 2: INTERSECTION LEVEL OF SERVICE (HCM 2000)

Level of Service	Un-Signalized Control Delay (seconds/vehicle)	Signalized Control Delay (seconds/vehicle)
A	0-10	0-10
B	> 10-15	> 10-20
C	> 15-25	> 20-35
D	> 25-35	> 35-55
E	>35-50	> 55-80
F	> 50	> 80

Source: Highway Capacity Manual 2000.

2.3.2 Street Segments

Street segment capacities were analyzed based on the underlying jurisdiction's criteria. N. Coast Hwy 101 north of La Costa Ave becomes Carlsbad Blvd. Carlsbad Blvd was analyzed using the City of Carlsbad criteria while the N. Coast Hwy 101 and La Costa Ave were analyzed using City of Encinitas criteria.

The City of Carlsbad uses a one-direction capacity of 1,820 vehicles per lane per hour for LOS capacity calculations for Carlsbad Blvd based on the physical characteristic of 2 travel lanes (per direction) on a divided roadway with a 50 MPH speed limit. The source of the Carlsbad segment capacity is included in **Appendix A**. The segment LOS based on the directional lane capacity is shown in **Table 3**.

TABLE 3: CARLSBAD BLVD STREET SEGMENT LOS BASED ON LANE CAPACITY

Level of Service	Lane Capacity (Vehicles)
C	850
D	1,690
E	1,850
F	Greater 1,850

Source: City of Carlsbad Growth Management Program Year 2018 Traffic Conditions Report.

The street segment daily volumes were analyzed based on the functional classification of the roadway using the City of Encinitas *Public Road Standards* General Plan Circulation Element Roadway Capacity Standards and the peak hour directional segment methodology as outlined in the *North Coast Highway 101 Leucadia Streetscape Improvement Project* Final EIR, dated February 2018 ("Streetscape EIR"). The daily segment volumes provide an initial capacity check to comply with the City's General Plan while the peak hour directional segment methodology provides a more detailed LOS analysis as used in the Streetscape EIR. The peak hour directional segment analysis was used to determine if the project traffic created a traffic effect for consistency with the Streetscape EIR.

The roadway segment daily capacity based on the General Plan are summarized in **Table 4**. The City of Encinitas General Plan segment capacities are included in **Appendix B**.

TABLE 4: STREET SEGMENT DAILY CAPACITY AND LOS (CITY OF ENCINITAS)

Facility Type	Number of Lanes	LOS C	LOS D	LOS E
Prime Arterial	6	<46,000	<51,200	<57,000
Prime Arterial – Augmented	6	<53,000	<60,000	<66,000
Major Roadway	4	<28,200	<31,600	<35,200
Major Roadway - Augmented	4+	<36,300	<41,000	<45,400
Collector Roadway	4	<26,000	<29,200	<32,400
Modified Major (1)	3	<21,150	<23,700	<26,400
Local Roadway - Augmented	2+	<16,000	<18,000	<20,000
Local Roadway	2	<11,200	<12,600	<14,000

Source: City of Encinitas *Public Road Standards* April 1991. (1) The 3 lane Major capacity taken at 75% of the 4-lane capacity as documented in the City of Encinitas Housing Element Traffic Impact Study, Jan 27, 2016.

Portions of North Coast Highway 101 are reduced to three lanes (two lanes in one direction and one lane in the remaining direction). The capacity for the three-lane section was based on 75% of a 4-lane roadway as documented in the *City of Encinitas Housing Element* Traffic Impact Study, January 27, 2016. Excerpts from the City of Encinitas Housing Element are included in **Appendix C**.

A detailed peak hour directional segment methodology was used for the segment analysis as documented in the *North Coast Highway 101 Leucadia Streetscape Improvement Project* Final EIR, dated February 2018 ("Streetscape EIR"). Excerpts from the Michael Baker International (MBI) traffic study prepared for the Streetscape EIR documenting the directional segment methodology are included in **Appendix D**. The segment LOS thresholds are summarized in **Table 5**.

TABLE 5: CITY OF ENCINITAS STREET SEGMENT LOS BASED ON V/C RATIOS (STREETSCAPE EIR)

LOS	Volume over Capacity Ratio
A	< 0.41
B	0.42 -0.62
C	0.63 – 0.79
D	0.80 – 0.92
E	0.93 – 1.00
F	> 1.00

Source: MBI *Highway 101 Streetscape Project Traffic Impact Analysis Report* November 2016.

2.4 Project's Transportation Effect

If a proposed project's traffic causes the values shown in the **Table 6** to be exceeded, the effects of the project are determined to justify improvements (ITE excerpts included in **Appendix E**).

TABLE 6: CITY OF ENCINITAS DETERMINATION FOR POTENTIAL ROADWAY IMPROVEMENTS

Level of Service with Project*	Allowable Change Due to Project Effect**				
	Freeways	Roadway Segments		Intersections	Ramp Metering
	V/C	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
E & F	0.01	0.02	1	2	2*

Source: San Diego ITE Guidelines for Transportation Impact Studies in the San Diego Region, 2019.

* All level of service measurements are based upon Highway Capacity Manual (HCM) procedures for peak-hour conditions. The target LOS for freeways, roadways, and intersections is generally "D". For metered freeway ramps, LOS does not apply; however, ramp meter delays above 15 minutes are considered excessive.

** If a proposed project's traffic causes the values shown in the table to be exceeded, the effects of the project are determined to justify improvements. These changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible improvements within the LTA report that will maintain the traffic facility at the target LOS or restore to pre-project conditions. If the LOS with the proposed project becomes worse than the target (see above * note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, roadway improvements should be considered.

*** See Attachment B for ramp metering analysis.

Key: V/C = Volume to Capacity
Speed = Speed measured in miles per hour
Delay = Average stopped delay per vehicle measures in seconds for intersection, or minutes for ramp meters
LOS = Level of Service

3.0 Existing Conditions

This section describes the study area streets, peak hour volumes, and existing LOS.

3.1 Existing Street System

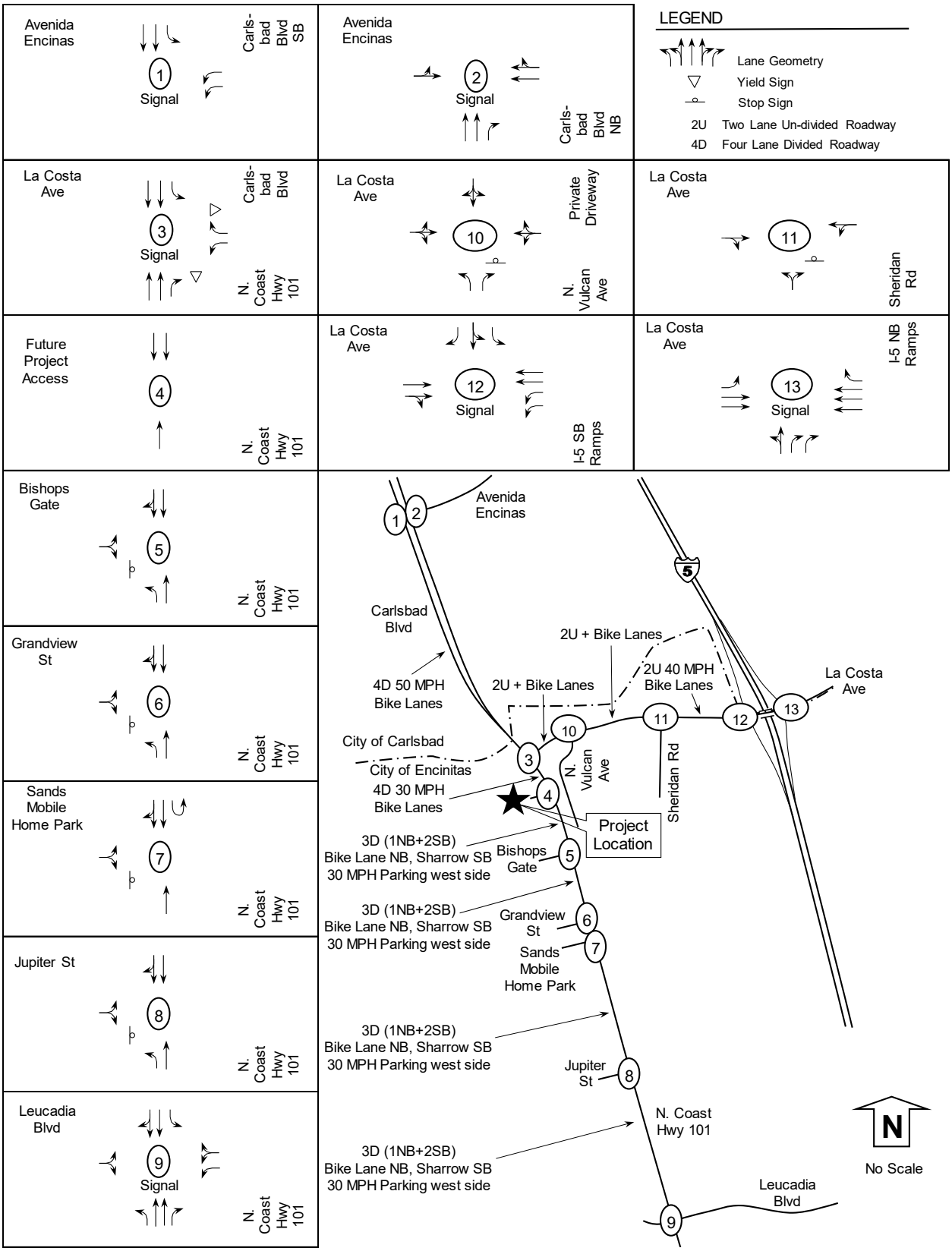
In the vicinity of the project, the following roadways were analyzed for this report and are described below. The General Plan street classifications are ultimate classifications. The existing roadway conditions are shown in **Figure 3**.

Carlsbad Boulevard from Avenida Encinas to La Costa Ave is mostly constructed as a four (4) lane divided roadway with two travel lanes in each direction. Bike lanes are provided on both sides of the roadway. There are no sidewalks on this segment. The posted speed limit is 50 Miles Per Hour (MPH). This segment of La Costa Avenue is classified as a *Coastal Street* in the *Carlsbad General Plan*, September 2015 (excerpt included in **Appendix F**).

La Costa Avenue from North Coast Highway 101 to I-5 is currently constructed as a two (2) lane roadway with one travel lane in each direction. Bike lanes are provided on both sides of the roadway. There are no sidewalks on this segment. The posted speed limit is 40 Miles Per Hour (MPH). This segment of La Costa Avenue is classified as a 4-lane *Collector Roadway* on the City of Encinitas Circulation Plan (**Appendix G**).

North Coast Highway 101 from the City of Carlsbad limits to La Costa Avenue is constructed as a four (4) lane divided roadway. North Coast Highway 101 from La Costa Avenue to approximately 600 feet south of La Costa Avenue is generally built as a four (4) lane divided roadway with bike lanes in each direction. North Coast Highway 101 from approximately 600 feet south of La Costa Avenue to Leucadia Blvd is generally built as a three (3) lane divided roadway with 1 northbound lane with adjacent Class II bike lane and 2 southbound lanes with the outside lane having intermittent bike "Sharrow" markings (Class III). Parking is generally permitted. The posted speed limit is 35 MPH. This segment is classified as a 4-lane *Major Roadway* on the City of Encinitas Circulation Plan (Appendix G).

Figure 3: Existing Roadway Conditions



3.2 Existing Traffic Volumes and LOS Analyses

Intersection counts were collected between 7:00 AM to 9:00 AM for the AM commuter period and from 4:00 PM to 6:00 PM for the PM commuter period. The count dates are noted in parentheses for the study intersections below:

1) Carlsbad Blvd SB/Avenida Encinas (Thurs, November 7, 2019)
2) Carlsbad Blvd NB/Avenida Encinas (Thurs, November 7, 2019)
3) North Coast Highway 101/La Costa Ave (Thurs, November 7, 2019)
4) North Coast Highway 101/Project Access (through movement vol. from above intersection)
5) North Coast Highway 101/Bishops Gate (Wed, November 13, 2019)
6) North Coast Highway 101/Grandview St (Wed, November 13, 2019)
7) North Coast Highway 101/Sands Mobile Home Park (Thurs, November 7, 2019)
8) North Coast Highway 101/Jupiter St (Wed, November 13, 2019)
9) North Coast Highway 101/Leucadia Ave (Thurs, November 7, 2019)
10) La Costa Avenue/N. Vulcan Avenue (Tue, February 4, 2020)
11) La Costa Avenue/Sheridan Rd (Thurs, November 7, 2019)
12) La Costa Avenue/I-5 Southbound Ramps (Thurs, November 7, 2019)
13) La Costa Avenue/I-5 Northbound Ramps (Thurs, November 7, 2019)

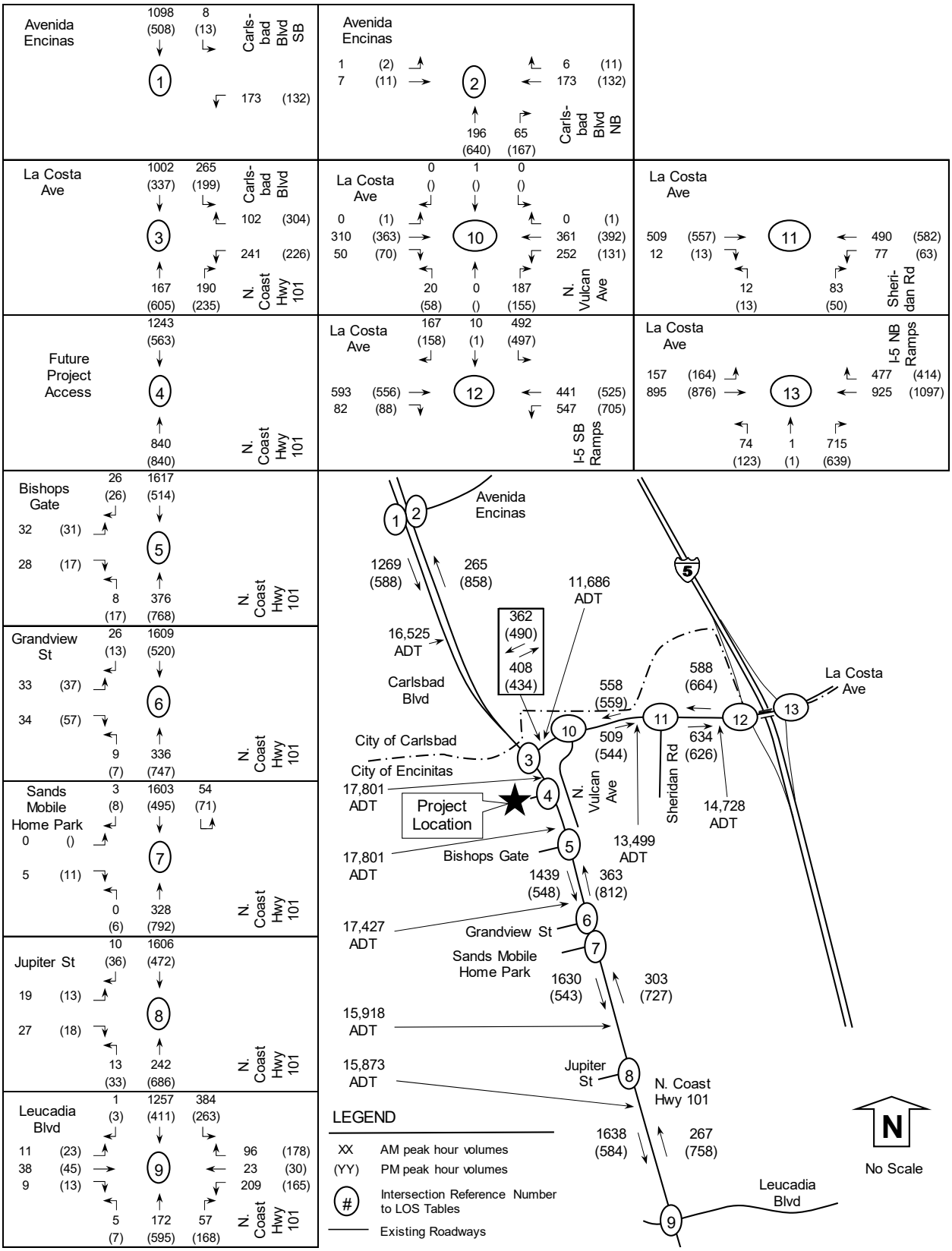
Daily counts (24 hour) were collected for the study segments with count dates noted in parentheses below:

1) Carlsbad Blvd from Avenida Encinas to La Costa Ave (Thurs, November 7, 2019)
2) North Coast Highway 101 from La Costa Ave to 600 ft S. of La Costa Ave (Wed, November 13, 2019)
3) North Coast Highway 101 from 600 ft S. of La Costa Ave to Bishops Gate (Wed, November 13, 2019)
4) North Coast Highway 101 from Bishops Gate to Grandview St (Wed, November 13, 2019)
5) North Coast Highway 101 from Grandview St to Jupiter St (Wed, November 13, 2019)
6) North Coast Highway 101 from Jupiter St to Leucadia Blvd (Wed, November 13, 2019)
7) La Costa Avenue from N. Coast Highway 101 to N. Vulcan Ave (Thurs, November 7, 2019)
8) La Costa Avenue from N. Vulcan Ave to Sheridan Rd (Thurs, November 7, 2019)
9) La Costa Avenue from Sheridan Rd to I-5 (Thurs, November 7, 2019)

The peak hours volumes used for the segment analysis were obtained from adjacent intersection volumes for near-term conditions and from the Streetscape EIR for horizon year conditions. The near-term peak hour segment volumes were averaged from the intersections bracketing the segment.

Existing volumes are shown on **Figure 4**, with count data included in **Appendix H**.

Figure 4: Existing Volumes



The LOS calculated for the intersection is shown in **Table 7.** The daily capacity for the street segments is shown in **Table 8** with the segments hourly LOS shown **Table 9**. For unsignalized intersections, the minor approach delay is shown if the minor leg is a public street and overall delay is shown if the minor approach is a private driveway such as the project driveway. Intersection LOS calculations are included in **Appendix I**.

TABLE 7: EXISTING INTERSECTION OPERATIONS

Intersection and (Analysis)[1]	Approach	Peak Hour	Existing Delay[2]	Existing LOS[3]
1) Carlsbad Blvd SB	All	AM	7.9	A
at Avenida Encinas (S)	All	PM	16.4	B
2) Carlsbad Blvd NB	All	AM	17.7	B
at Avenida Encinas (S)	All	PM	13.5	B
3) N. Coast Hwy at	All	AM	9.0	A
La Costa Ave (S)	All	PM	10.1	B
4 N. Coast Hwy at	All	AM	DNE	NA
Project Access (U)	All	PM	DNE	NA
5) N. Coast Hwy at	Minor	AM	41.2	**E**
Bishops Gate (U)	Minor	PM	18.1	C
6) N. Coast Hwy at	Minor	AM	61.0	**F**
Grandview St (U)	Minor	PM	15.2	C
7) N. Coast Hwy at	Minor	AM	19.5	C
Sands MHP (U)	Minor	PM	10.2	B
8) N. Coast Hwy at	Minor	AM	37.9	**E**
Jupiter St (U)	Minor	PM	13.8	B
9) N. Coast Hwy at	All	AM	21.4	C
Leucadia Blvd (S)	All	PM	24.1	C
10) La Costa Ave at	Minor	AM	39.6	**E**
N Vulcan Ave (U)	Minor	PM	21.7	C
11) La Costa Ave at	Minor	AM	17.6	C
Sheridan Rd (U)	Minor	PM	18.6	C
12) La Costa Ave at	All	AM	23.6	C
I-5 SB Ramps (S)	All	PM	25.8	C
13) La Costa Ave at	All	AM	23.3	C
I-5 NB Ramps (S)	All	PM	20.4	C

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized. Minor street approach (worst approach delay reported). 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. DNE: Does Not Exist. NA: Not Applicable.

TABLE 8: EXISTING SEGMENT DAILY VOLUMES AND OPERATIONS

Segment	Functional Classification	LOS E Capacity	Existing Daily Volume	Existing LOS
Carlsbad Boulevard				
Avenida Encinas to La Costa Ave	4 Lane Major	42,200	16,525	C
North Coast Highway 101				
La Costa Ave to 600' S. of La Costa	4 Lane Major	35,200	17,801	C
600' S. of La Costa to Bishops Gate	3 Lane Major	26,400	17,801	C
Bishops Gate to Grandview St	3 Lane Major	26,400	17,427	C
Grandview St to Jupiter St	3 Lane Major	26,400	15,918	C
Jupiter St to Leucadia Blvd	3 Lane Major	26,400	15,873	C
La Costa Avenue				
N. Coast Hwy to N. Vulcan	2 Lane Coll.	14,000	11,686	D
N. Vulcan to Sheridan Rd	2 Lane Coll.	14,000	13,499	**E**
Sheridan Rd to I-5	2 Ln Aug. Coll.	20,000	14,728	C

Notes: 2 Ln Aug. Coll. = 2 Lane Augmented Collector. Daily volume is a 24 hour volume. LOS: Level of Service. Carlsbad Boulevard capacity and LOS from City of Carlsbad 2018 Growth Management Program.

TABLE 9: EXISTING SEGMENT PEAK HOUR VOLUMES AND OPERATIONS

	Segment	Dir	Lanes	Segment Capacity	Existing Pk Hr Vol.	V/C	LOS
Carlsbad Blvd	*AM Peak Hour*						
	Btw Avenida Encinas	NB	2 lanes	3,640	265	0.073	C
	and La Costa Ave	SB	2 lanes	3,640	1,269	0.349	D
	(PM) Peak Hour						
	Btw Avenida Encinas	NB	2 lanes	3,640	(858)	0.236	D
	and La Costa Ave	SB	2 lanes	3,640	(588)	0.162	C
North Coast Highway 101	*AM Peak Hour*						
	Btw La Costa Ave	NB	1 lane	2,000	363	0.182	A
	and Grandview St	SB	2 lanes	2,800	1,439	0.514	B
	Btw Grandview St	NB	1 lane	1,800	303	0.168	A
	and Jupiter St	SB	2 lanes	2,800	1,630	0.582	B
	Btw Jupiter St	NB	1 lane	1,800	267	0.148	A
	and Leucadia Blvd	SB	2 lanes	2,800	1,638	0.585	B
	(PM) Peak Hour						
	Btw La Costa Ave	NB	1 lane	2,000	(812)	0.406	A
	and Grandview St	SB	2 lanes	2,800	(548)	0.196	A
	Btw Grandview St	NB	1 lane	1,800	(727)	0.404	A
	and Jupiter St	SB	2 lanes	2,800	(543)	0.194	A
	Btw Jupiter St	NB	1 lane	1,800	(758)	0.421	B
	and Leucadia Blvd	SB	2 lanes	2,800	(584)	0.208	A
La Costa Avenue	*AM Peak Hour*						
	Btw Coast Hwy 101	EB	1 lane	1,800	408	0.226	A
	and Vulcan Ave	WB	1 lane	1,800	362	0.201	A
	Btw Vulcan Ave	EB	1 lane	1,800	509	0.283	A
	and Sheridan Rd	WB	1 lane	1,800	558	0.310	A
	Btw Sheridan Rd	EB	1 lane	1,800	634	0.352	A
	and I-5 SB Ramps	WB	1 lane	1,800	588	0.326	A
	(PM) Peak Hour						
	Btw Coast Hwy 101	EB	1 lane	1,800	(434)	0.241	A
	and Vulcan Ave	WB	1 lane	1,800	(490)	0.272	A
	Btw Vulcan Ave	EB	1 lane	1,800	(544)	0.302	A
	and Sheridan Rd	WB	1 lane	1,800	(559)	0.311	A
	Btw Sheridan Rd	EB	1 lane	1,800	(626)	0.348	A
	and I-5 SB Ramps	WB	1 lane	1,800	(664)	0.369	A

Carlsbad Blvd capacity from Carlsbad 2018 Growth Management Program. Remaining capacities from Streetscape Final EIR.

Under existing conditions, the study elements were calculated to operate at LOS D or better, except for:

1) Intersection of N. Coast Highway 101/Bishops Gate (LOS E AM),
2) Intersection of N. Coast Highway 101/Grandview St (LOS F AM),
3) Intersection of N. Coast Highway 101/Jupiter St (LOS E AM),
4) Intersection of La Costa Ave/N. Vulcan Ave (LOS E AM), and
5) Segment of La Costa Ave from N. Vulcan to Sheridan (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hours operations).

4.0 Project Description

The mixed-use project includes a 30-room hotel, 96 multi-family units, and 18,261 square feet of commercial/retail space on the westside of North Coast Highway 101 approximately 500 feet south of La Costa Avenue located in the City of Encinitas, California. The project will replace a commercial/retail center with approximately 7,582 square feet of active businesses.

4.1 Project Traffic Generation

Project traffic generation was calculated using the San Diego Association of Governments (SANDAG) trip rates from the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. The project site has active uses creating traffic; therefore, a traffic credit was applied because the existing uses will be replaced by the project. Additionally, the existing and proposed project have pass-by trips already on the study roadways. The project is calculated to generate a net increase of 1,122 ADT, 60 AM peak hour trips (22 inbound and 38 outbound), and 102 PM peak hour trips (58 inbound and 44 outbound) as shown in **Table 10**.

TABLE 10: PROJECT TRAFFIC GENERATION

Proposed								AM					PM	
Land Use	**Rate**	**Size & Units**		**ADT**	**%**	**Split**		**IN**	**OUT**	**%**	**Split**		**IN**	**OUT**
Proposed project														
Resort Hotel	10 /Room	30	Rooms	300	5%	0.6	0.4	9	6	7%	0.4	0.6	8	13
Multi-Family (>20 du/acre)	6 /DU	94	DU	564	8%	0.2	0.8	9	36	9%	0.7	0.3	36	15
Specialty Retail/Strip Commercial	40 /KSF	8,584	SF	343	3%	0.6	0.4	6	4	9%	0.5	0.5	15	15
Restaurant (sit down high turnover)	160 /KSF	3,905	SF	625	8%	0.5	0.5	24	25	8%	0.6	0.4	30	20
Restaurant (quality)	100 /KSF	2,134	SF	213	1%	0.6	0.4	1	1	8%	0.7	0.3	12	5
Office	20 /KSF	3,638	SF	73	14%	0.9	0.1	9	1	13%	0.2	0.8	2	8
Project Driveway Trips:				**2,118**				**58**	**73**				**103**	**76**
Pass-By Trips per SANDAG rates (Existing trips already on Coast Hwy)														
Specialty Retail (Pass-By=15% ADT & AM; 10% PM):				-52				-1	-1				-2	-2
Restaurant High Turnover (Pass-By=12% ADT & AM; 20% PM):				-75				-3	-3				-6	-4
Restaurant Quality (Pass-By=12% ADT & AM; 10% PM):				-26				0	0				-1	-1
Office (Pass-By=4% ADT, AM & PM):				-3				0	0				0	0
Project Primary & Diverted Trips:				*1,963*				*54*	*69*				*94*	*70*
Existing use to be removed														
Restaurant (sit down high turnover)	160 /KSF	5,333	SF	853	8%	0.5	0.5	34	34	8%	0.6	0.4	41	27
Specialty Retail/Strip Commercial	40 /KSF	2,249	SF	90	3%	0.6	0.4	2	1	9%	0.5	0.5	4	4
Credit For Existing Use Driveway Trips:				*943*				*36*	*35*				*45*	*31*
Pass-By Trips per SANDAG rates (Existing trips already on Coast Hwy)														
Restaurant (Pass-By=12% ADT&AM, 20%PM):				-102				-4	-4				-8	-5
Credit For Existing Use Primary & Diverted Trips:				*841*				*32*	*31*				*37*	*26*
Net Change in Primary & Diverted Trips (for anlaysis):				***1,122***				***22***	***38***				***58***	***44***

Source: SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region,* April 2002. SF - Square Feet. ADT - Average Daily Traffic. Split-percent inbound and outbound. Spreadsheet rounding may result in ±1 to the above numbers.

4.2 Construction Traffic Generation

Project construction traffic was based on client provided data forecasted for the project site based on experience at similarly sized construction sites. Construction traffic includes soil export, deliveries, and workers based on the different phases of construction activities.

Soil export accounts for the removal of soil and sand to which the sand export may be used for beach replenishment (if implemented). The destination of soil export and potential sand replenishment locations are currently unknown. Therefore, the applicant/operator will be instructed to use truck legal routes as identified in the City of Encinitas and Carlsbad Municipal codes. The truck legal routes include Carlsbad Blvd, Coast Highway, Encinitas Blvd, La Costa Ave, and Palomar Airport Rd. The trucks removing the export may use a variation of the noted truck legal routes to reach I-5 and beach restoration areas. The export is forecasted require up to 60 workdays (this incorporates weather and/or construction sequencing delays) with an anticipated maximum of 85 truck per day from approximately 7 AM to 7 PM. The export operations ADT is calculated by multiplying 85 trucks by 2 for a round trip of 170 ADT that is multiplied by a Passenger Car Equivalent (PCE) of 2.0 to equal 340 ADT. The export operations are anticipated to occur over a 10 to 12-hour day resulting in a range of 28 to 34 peak hour trips. The higher 34 peak hour trips equate to approximately 17 inbound and 17 outbound PCE trips (while the actual number of trucks would be approximately 8 or 9 inbound and 8 or 9 outbound due to the PCE). In addition to the truck trips, the export operations will have up to 35 employees (70 ADT) that typically arrive on site just before 7 AM and leave on or around 7 PM, which are outside the commuter peak periods. Therefore, the employee peak hour trips are forecasted at 5 AM inbound with 0 outbound and 0 PM inbound and 5 outbound. The combination of truck export and employees results in a forecasted daily trip total of 410 ADT, an AM peak hour of 23 trips (14 inbound and 9 outbound) and 23 PM trips (9 inbound and 14 outbound). Construction workers are forecasted to park on-site or along Coast Highway during the soil export phase.

Site construction covers the initial foundation to the final finish work. The highest concentration occurs during the interior and final site work phase (for about 5 months) with up to 200 construction workers (440 ADT). These workers start at 7 AM, thus they will arrive before 7AM and will not add traffic during the 7-9 AM peak hour period. These workers will typically leave around 3:30 PM with approximately 20% staying late on concrete pour days or other prolonged construction elements (but not all days). Thus, the PM peak hour may have up to 40 PM outbound construction worker trips on some days. Delivery of materials and concrete will vary significantly during the overall construction; however, the highest truck concentration is anticipated to be concrete trucks required for vertical pours resulting in approximately 10 trucks per day (20 ADT x 2 PCE = 40 ADT). The concrete deliveries typically are spread throughout the day and are anticipated to have 2 AM and 2 PM peak hour trips (1 inbound and 1 outbound). When converted to a PCE, the peak hour trips are calculated at 4 AM and 4 PM peak hour trips (2 inbound and 2 outbound). The highest parking requirements occurs for about 5 months during the peak of up to 200 construction workers. During this peak period, trade partners are requested to have their workers carpool, which is already observed to occur on the adjacent construction project. Therefore, the anticipated parking needs during this peak period is about 140 spaces. Construction parking is proposed on-site (about 30 spaces) and along east side of Coast Highway south of La Costa Ave (unassigned area that can accommodate the temporary 110 spaces) to accommodate the peak 5-month parking demand of about 140 spaces.

As shown in **Table 11**, the peak construction trip generation of 440 ADT, 23 AM peak hour trips, and 50 PM peak hour trips is less than what was analyzed for the project; therefore, the project trip generation analysis accounts for the analysis of construction traffic.

TABLE 11: PROJECT CONSTRUCTION TRIP GENERATION

Construction Trip Generation by Phase	Approximate Duration by Phase	Construction Workers by Phase	Deliveries/ Trucks by Phase	ADT	AM Pk Hr 1hr btw 7-9		PM Pk Hr 1hr btw 4-6	
					IN	OUT	IN	OUT
Soil Export	2-3 months	up to 35	85	410	14	9	9	14
Site Construction	about 15 months	up to 200	10	440	2	2	2	41
			Maximum:	**440**	**14**	**9**	**9**	**41**

4.3 Project Access

The project access is proposed with full ingress movements and right-turn only egress movement.

4.4 Project Distribution and Assignment

Project trips were distributed to the adjacent roadway network based on surrounding productions and attractions, access to I-5, and coordination with City staff.

The project traffic that will be added to the study area is based on the net change in primary and diverted trips that accounts for the trip credit of the existing commercial use being replaced by this project. The Project access was analyzed using driveway trips without applying the trip credit whereas the non-driveway intersections were analyzed with the application of the trip credit.

The City's Streetscape project will affect the project distribution along N. Coast Hwy 101 just south of the project. All of the outbound project traffic initially travels south with 60% making a U-turn to travel north. Before the implementation of Streetscape, the first possible location to make a U-turn from a southbound left turn bay is at the Sands Mobile Park median break (intersection #7). After the implementation of Streetscape, the first U-turn will be possible at Bishops Gate (Intersection #5) because this intersection will become a roundabout. Details regarding the driveway trips, primary and diverted trips before and after Streetscape are included in **Appendix J**.

The project distribution before Streetscape is shown in **Figure 5** with assignment of project volumes shown in **Figure 6.**

The project distribution after Streetscape is shown in **Figure 7** with assignment of project volumes shown in **Figure 8.**

4.5 Project On-Site Parking

The project parking details are located on the Architectural site plan, which include a requirement of 256.5 spaces with 257 proposed spaces. Additionally, 6 bicycle spaces and 9 motorcycle spaces will be provided.

Figure 5: Project Distribution (Before Streetscape)

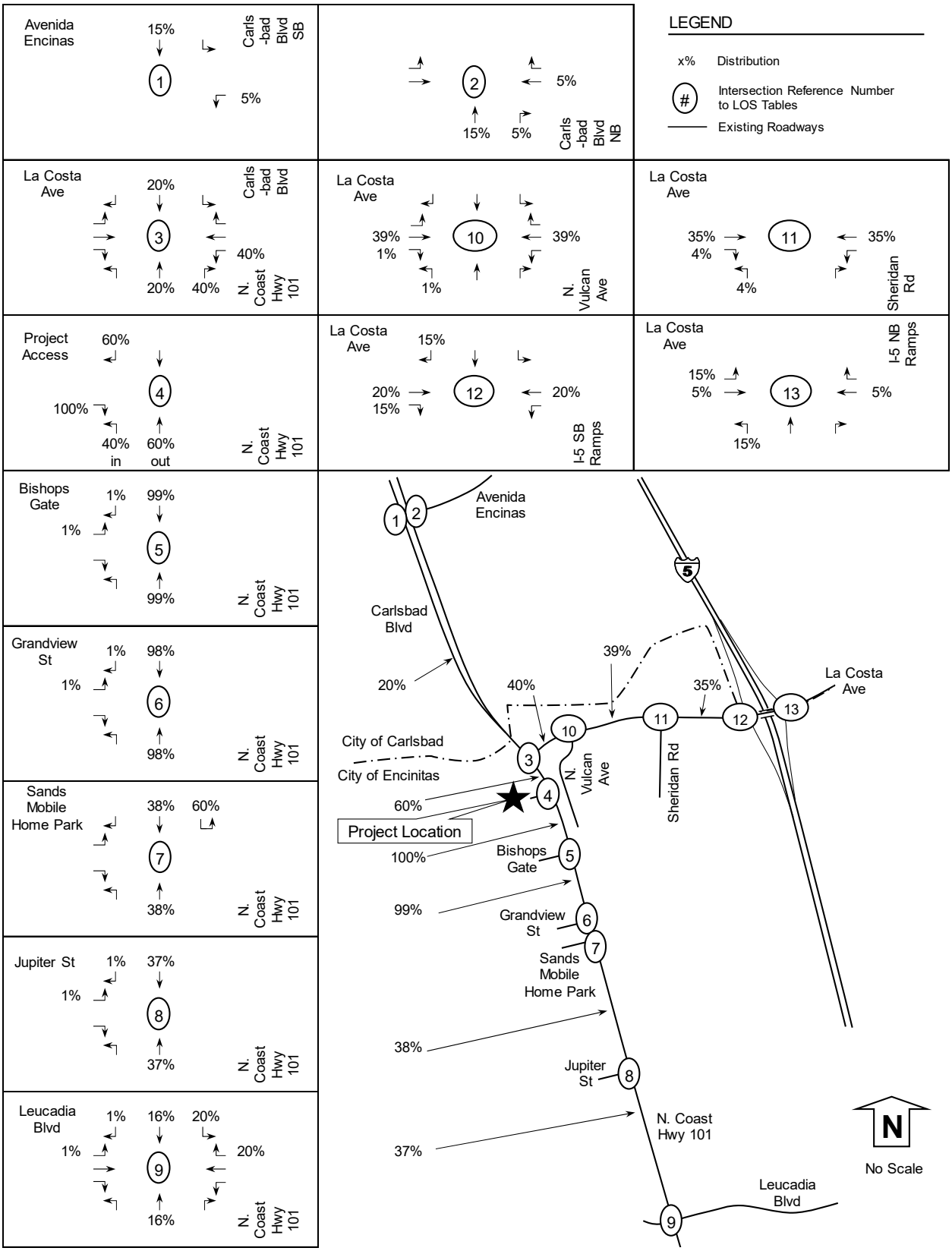


Figure 6: Project Volumes (Before Streetscape)

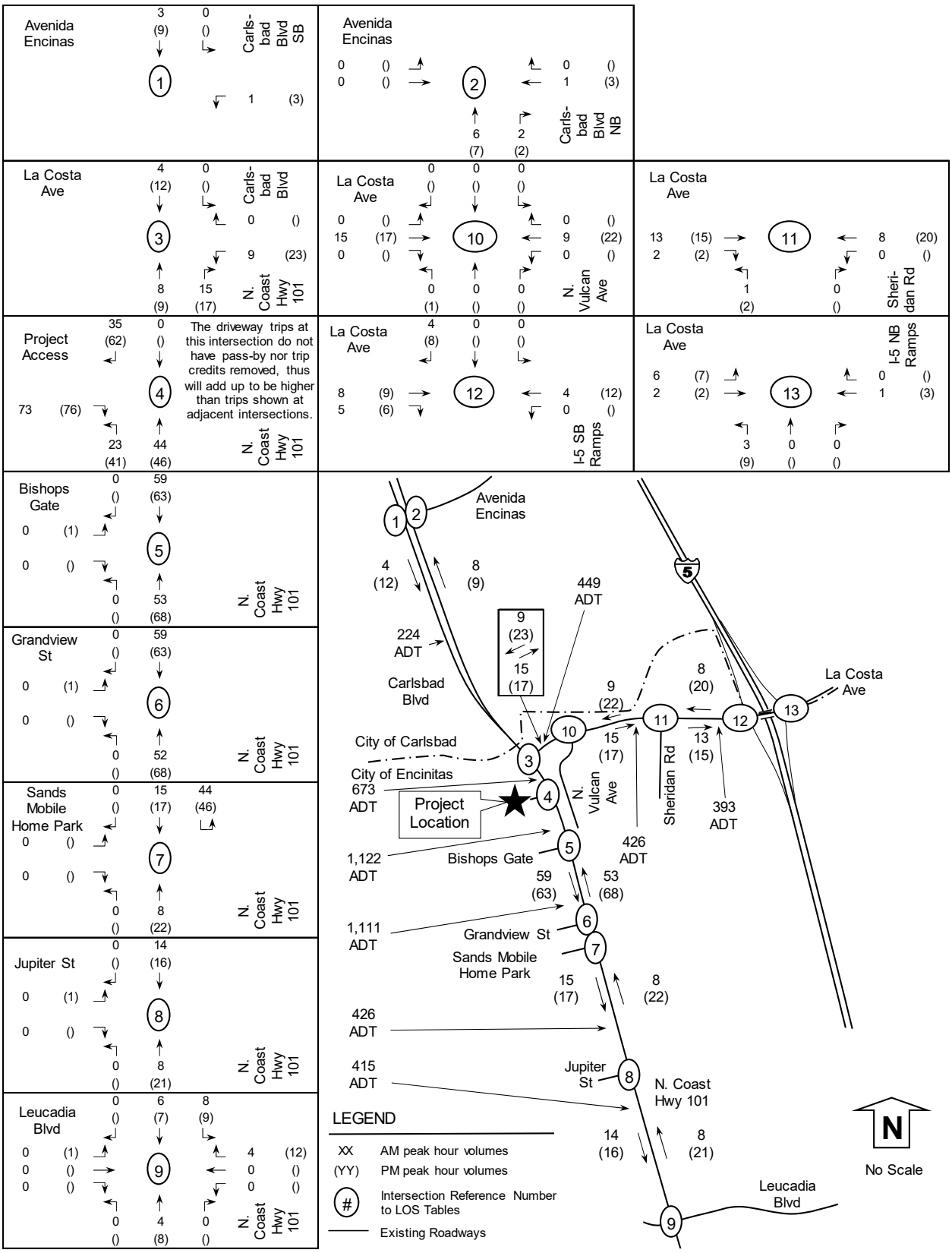


Figure 7: Project Distribution (After Streetscape)

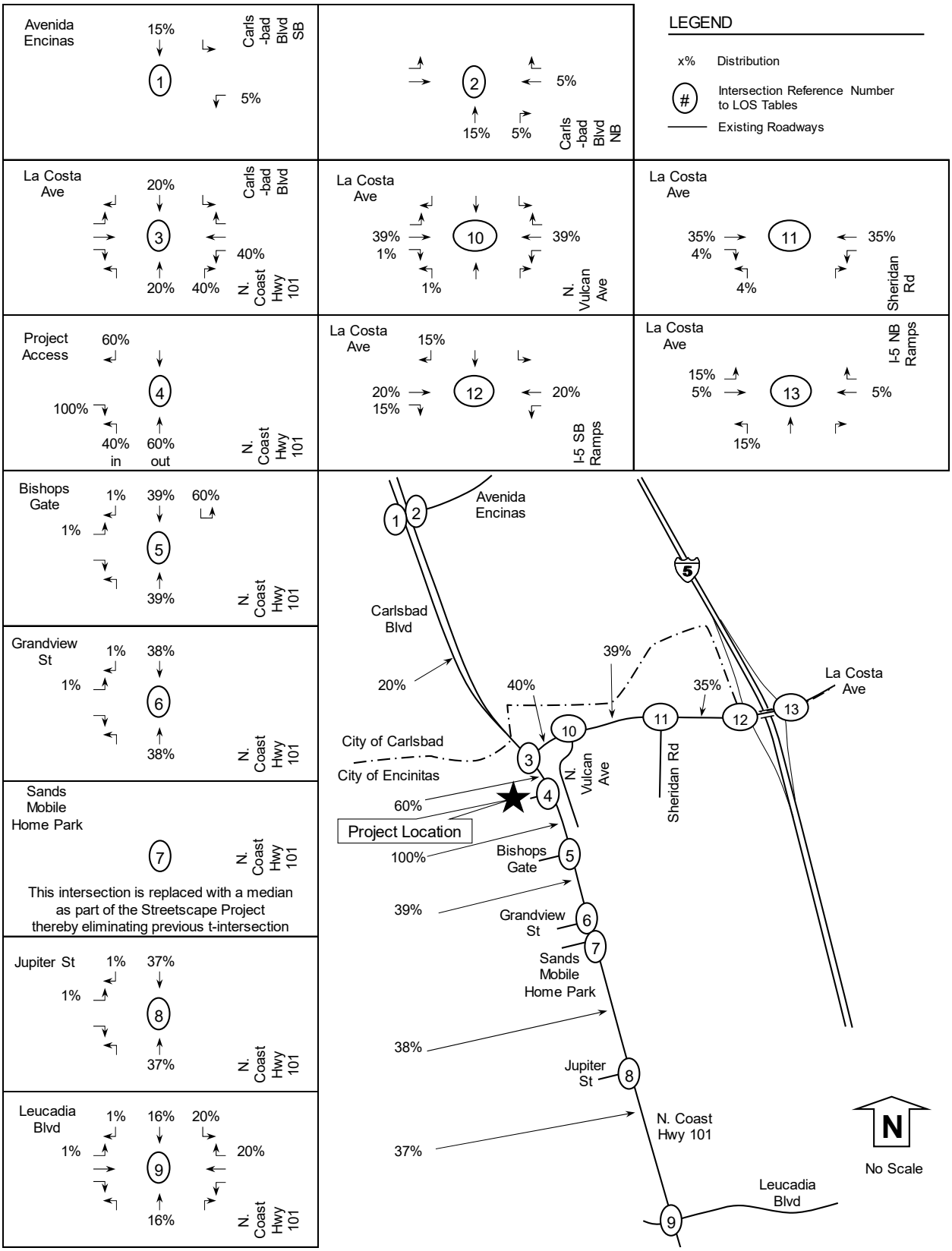
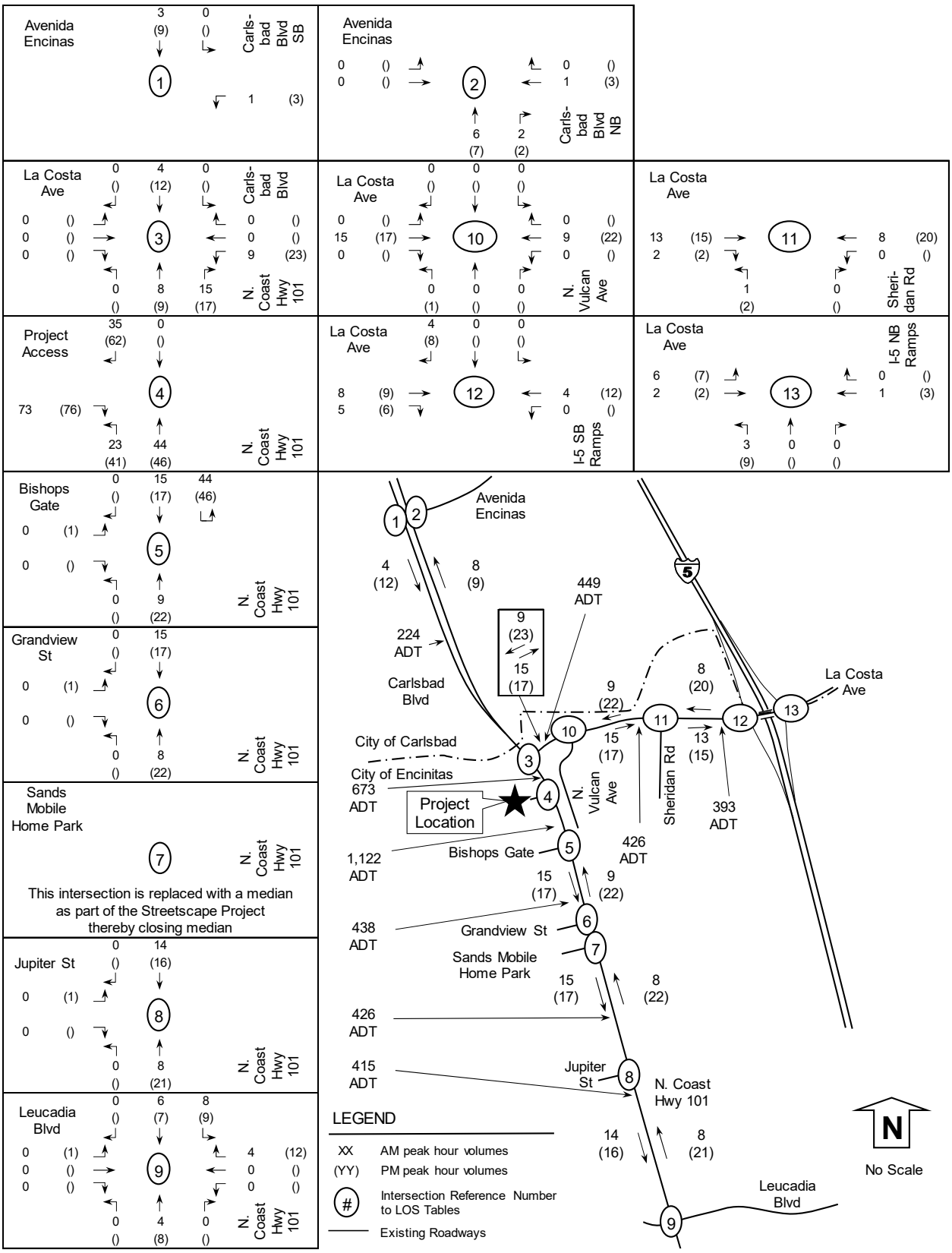


Figure 8: Project Volumes (After Streetscape)



5.0 Existing + Project Conditions

This scenario accounts for the addition of project traffic (using the before Streetscape distribution and assignment) onto existing volumes. The peak hour intersection volumes and daily traffic volumes are shown in **Figure 9**. The LOS calculated for the intersection is shown in **Table 11.** The daily capacity for the street segments is shown in **Table 13** with the segments hourly LOS shown **Tables 14**. Intersection LOS calculations are included in **Appendix K**.

TABLE 12: EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection and	Approach	Peak	Existing		Existing + Project			
(Analysis)[1]		Hour	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delta[4]	Effect?[5]
1) Carlsbad Blvd SB	All	AM	7.9	A	8.4	A	0.5	No
at Avenida Encinas (S)	All	PM	16.4	B	16.6	B	0.2	No
2) Carlsbad Blvd NB	All	AM	17.7	B	17.8	B	0.1	No
at Avenida Encinas (S)	All	PM	13.5	B	13.7	B	0.2	No
3) N. Coast Hwy at	All	AM	9.0	A	9.3	A	0.3	No
La Costa Ave (S)	All	PM	10.1	B	11.4	B	1.3	No
4 N. Coast Hwy at	All	AM	DNE	NA	0.7	A	NA	No
Project Access (U)	All	PM	DNE	NA	0.8	A	NA	No
5) N. Coast Hwy at	Minor	AM	41.2	**E**	45.9	**E**	4.7	**Yes**
Bishops Gate (U)	Minor	PM	18.1	C	19.9	C	1.8	No
6) N. Coast Hwy at	Minor	AM	61.0	**F**	70.1	**F**	9.1	**Yes**
Grandview St (U)	Minor	PM	15.2	C	16.4	C	1.2	No
7) N. Coast Hwy at	Minor	AM	19.5	C	19.7	C	0.2	No
Sands MHP (U)	Minor	PM	10.2	B	10.3	B	0.1	No
8) N. Coast Hwy at	Minor	AM	37.9	**E**	39.1	**E**	1.2	No
Jupiter St (U)	Minor	PM	13.8	B	14.2	B	0.4	No
9) N. Coast Hwy at	All	AM	21.4	C	21.6	C	0.2	No
Leucadia Blvd (S)	All	PM	24.1	C	24.9	C	0.8	No
10) La Costa Ave at	Minor	AM	39.6	**E**	41.0	**E**	1.4	No
N Vulcan Ave (U)	Minor	PM	21.7	C	23.5	C	1.8	No
11) La Costa Ave at	Minor	AM	17.6	C	18.4	C	0.8	No
Sheridan Rd (U)	Minor	PM	18.6	C	20.1	C	1.5	No
12) La Costa Ave at	All	AM	23.6	C	23.6	C	0.0	No
I-5 SB Ramps (S)	All	PM	25.8	C	26.5	C	0.7	No
13) La Costa Ave at	All	AM	23.3	C	23.5	C	0.2	No
I-5 NB Ramps (S)	All	PM	20.4	C	20.6	C	0.2	No

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized. Minor street approach (worst approach delay reported). 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. 4) Delta is the increase in delay from project. 5) Project effect if threshold is exceeded. DNE: Does Not Exist. NA: Not Applicable.

TABLE 13: EXISTING + PROJECT SEGMENT DAILY VOLUMES AND OPERATIONS

Segment	Functional Classification	LOS E Capacity	Existing Daily Volume	Existing LOS	Proj. Daily Vol.	Existing + Project Daily Volume	Existing + Project LOS
Carlsbad Boulevard							
Avenida Encinas to La Costa Ave	4 Lane Major	42,200	16,525	C	224	16,749	C
North Coast Highway 101							
La Costa Ave to 600' S. of La Costa	4 Lane Major	35,200	17,801	C	673	18,474	C
600' S. of La Costa to Bishops Gate	3 Lane Major	26,400	17,801	C	1,122	18,923	C
Bishops Gate to Grandview St	3 Lane Major	26,400	17,427	C	1,111	18,538	C
Grandview St to Jupiter St	3 Lane Major	26,400	15,918	C	426	16,344	C
Jupiter St to Leucadia Blvd	3 Lane Major	26,400	15,873	C	415	16,288	C
La Costa Avenue							
N. Coast Hwy to N. Vulcan	2 Lane Coll.	14,000	11,686	D	449	12,135	D
N. Vulcan to Sheridan Rd	2 Lane Coll.	14,000	13,499	**E**	426	13,925	**E**
Sheridan Rd to I-5	2 Ln Aug. Coll.	20,000	14,728	C	393	15,121	C

Notes: 2 Ln Aug. Coll. = 2 Lane Augmented Collector. Daily volume is a 24 hour volume. LOS: Level of Service
Carlsbad Boulevard capacity and LOS from City of Carlsbad 2018 Growth Management Program.

TABLE 14: EXISTING + PROJECT SEGMENT PEAK HOUR VOLUMES AND OPERATIONS

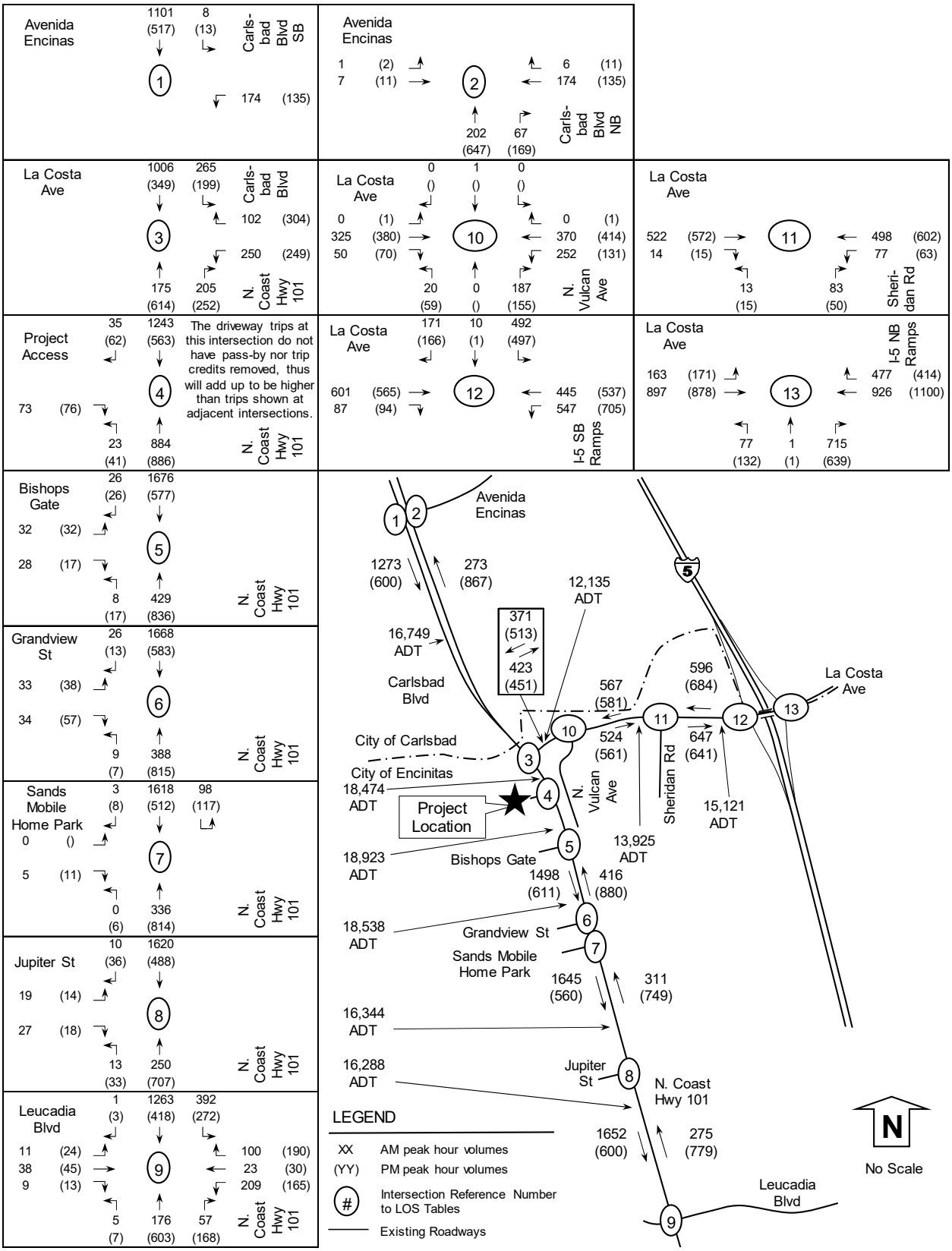
	Segment	Dir	Lanes	Segment Capacity	Existing Pk Hr Vol.	Existing V/C	Existing LOS	Project Pk Hr Vol.	Existing + Project Pk Hr Vol.	Existing + Project V/C	Existing + Project LOS	V/C Δ	Effect?
Carlsbad Blvd	*AM Peak Hour*												
	Btw Avenida Encinas	NB	2 lanes	3,640	265	0.073	C	8	273	0.075	C	0.002	No
	and La Costa Ave	SB	2 lanes	3,640	1,269	0.349	D	4	1,273	0.350	D	0.001	No
	(PM) Peak Hour												
	Btw Avenida Encinas	NB	2 lanes	3,640	(858)	0.236	D	(9)	(867)	0.238	D	0.002	No
	and La Costa Ave	SB	2 lanes	3,640	(588)	0.162	C	(12)	(600)	0.165	C	0.003	No
North Coast Highway 101	*AM Peak Hour*												
	Btw La Costa Ave	NB	1 lane	2,000	363	0.182	A	9	372	0.186	A	0.005	No
	and Grandview St	SB	2 lanes	2,800	1,439	0.514	B	15	1,454	0.519	B	0.005	No
	Btw Grandview St	NB	1 lane	1,800	303	0.168	A	8	311	0.173	A	0.004	No
	and Jupiter St	SB	2 lanes	2,800	1,630	0.582	B	15	1,645	0.587	B	0.005	No
	Btw Jupiter St	NB	1 lane	1,800	267	0.148	A	8	275	0.153	A	0.004	No
	and Leucadia Blvd	SB	2 lanes	2,800	1,638	0.585	B	14	1,652	0.590	B	0.005	No
	(PM) Peak Hour												
	Btw La Costa Ave	NB	1 lane	2,000	(812)	0.406	A	(22)	(834)	0.417	B	0.011	No
	and Grandview St	SB	2 lanes	2,800	(548)	0.196	A	(17)	(565)	0.202	A	0.006	No
	Btw Grandview St	NB	1 lane	1,800	(727)	0.404	A	(22)	(749)	0.416	B	0.012	No
	and Jupiter St	SB	2 lanes	2,800	(543)	0.194	A	(17)	(560)	0.200	A	0.006	No
	Btw Jupiter St	NB	1 lane	1,800	(758)	0.421	B	(21)	(779)	0.433	B	0.012	No
	and Leucadia Blvd	SB	2 lanes	2,800	(584)	0.208	A	(16)	(600)	0.214	A	0.006	No
La Costa Avenue	*AM Peak Hour*												
	Btw Coast Hwy 101	EB	1 lane	1,800	408	0.226	A	15	423	0.235	A	0.008	No
	and Vulcan Ave	WB	1 lane	1,800	362	0.201	A	9	371	0.206	A	0.005	No
	Btw Vulcan Ave	EB	1 lane	1,800	509	0.283	A	15	524	0.291	A	0.008	No
	and Sheridan Rd	WB	1 lane	1,800	558	0.310	A	9	567	0.315	A	0.005	No
	Btw Sheridan Rd	EB	1 lane	1,800	634	0.352	A	13	647	0.359	A	0.007	No
	and I-5 SB Ramps	WB	1 lane	1,800	588	0.326	A	8	596	0.331	A	0.004	No
	(PM) Peak Hour												
	Btw Coast Hwy 101	EB	1 lane	1,800	(434)	0.241	A	(17)	(451)	0.250	A	0.009	No
	and Vulcan Ave	WB	1 lane	1,800	(490)	0.272	A	(23)	(513)	0.285	A	0.013	No
	Btw Vulcan Ave	EB	1 lane	1,800	(544)	0.302	A	(17)	(561)	0.312	A	0.009	No
	and Sheridan Rd	WB	1 lane	1,800	(559)	0.311	A	(22)	(581)	0.323	A	0.012	No
	Btw Sheridan Rd	EB	1 lane	1,800	(626)	0.348	A	(15)	(641)	0.356	A	0.008	No
	and I-5 SB Ramps	WB	1 lane	1,800	(664)	0.369	A	(20)	(684)	0.380	A	0.011	No

Carlsbad Blvd capacity from Carlsbad 2018 Growth Management Program. Remaining capacities from Streetscape Final EIR.

Under existing plus project conditions, the study elements were calculated to operate at LOS D or better, except for (bold indicates project effect):

1) **Intersection of N. Coast Highway 101/Bishops Gate (LOS E AM),**
2) **Intersection of N. Coast Highway 101/Grandview St (LOS F AM),**
3) Intersection of N. Coast Highway 101/Jupiter St (LOS E AM),
4) Intersection of La Costa Ave/N. Vulcan Ave (LOS E AM), and
5) Segment of La Costa Ave from N. Vulcan to Sheridan (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

Figure 9: Existing + Project Volumes



6.0 Cumulative Projects

Based on a review of City of Encinitas on-line cumulative projects and coordination with Encinitas staff the following cumulative projects were determined to add sufficient traffic to the study area for analysis. Many cumulative projects on the City of Encinitas webpage are either too far away from the study area or their traffic would travel away from the study area; however, the following cumulative projects are anticipated to add traffic to the study area as noted below.

1) Encinitas Project Number 04-268 (Encinitas Beach Hotel at 2100 N. Coast Highway 101). A 130-room hotel calculated to generate 1,300 ADT with 78 AM and 104 PM peak hour trips.

2) Encinitas Project Number 13-187 (378 Fulvia St). A residential project with 9 dwelling units calculated to generate 78 ADT with 6 AM and 8 PM peak hour trips.

3) Encinitas Project Number 15-222 (Weston at 510 La Costa Ave). A residential project with 48 lots calculated to generate (with a credit for two existing homes) 460 ADT with 38 AM and 46 PM peak hour trip.

4) Encinitas Project Number 17-152 (1569 Lorraine Dr). A residential project with 1 dwelling unit calculated to generate 10 ADT with 1 AM and 1 PM peak hour trip.

5) Encinitas Project Number 17-197 (740 N. Coast Hwy 101). A mixed-use project with a net increase in traffic generation of 116 ADT with 16 AM and 16 PM peak hour trip.

6) Encinitas Project Number 17-280 (1251 N. Vulcan). A residential project with 9 dwelling units calculated to generate 90 ADT with 7 AM and 9 PM peak hour trips.

7) Encinitas Project Number 18-135 (Skyloft Rd). A senior housing project with 108 beds located across 18 separate structures (homes) calculated to generate 270 ADT with 10 AM and 22 PM peak hour trips.

8) Encinitas Project Number 18-188 (Hotel at 516 La Costa Ave). A 17-room hotel and restaurant calculated to generate 170 ADT with 11 AM and 14 PM peak hour trips.

9) Encinitas Project Number 18-220 (555 N. Vulcan Ave). A redevelopment project from an existing commercial business to 12 multi-family units resulting in a net reduction of overall trip generation, thus no new trips added to the study area.

10) Encinitas Housing Element Candidate Site AD08 (1967 N. Vulcan Ave). A redevelopment project from an existing commercial business to 72 multi-family units resulting in a trip generation increase of 372 ADT with 32 AM and 34 PM peak hour trips.

11) Carlsbad Project Number 2016-0002-MS (Ponto Beachfront in the vicinity of Carlsbad Blvd/Avenida Encinas) A mixed use project that includes 136 townhomes and 18,000 sf for retail and restaurants is calculated to have trip generation of 2,912 ADT with 187 AM and 258 PM peak hour trips.

12) Carlsbad Project Number GPA 2019-0004 (Newage Luxury Resort on the southeast corner of Avenida Encinas and Carlsbad Blvd). A resort hotel with 322 rooms calculated to have trip generation of 3,220 ADT with 193 AM and 258 PM peak hour trips.

13) Unknown and/or distant cumulative projects. Background peak hour volumes (ranging from single digits up to 35 peak hour trips depending on intersection location) were added to the study area to account for unknown and/or distant cumulative projects.

A summary of cumulative traffic generation is included in **Table 15.**

TABLE 15: CUMULATIVE TRAFFIC GENERATION

Cumulative Project		Rate	Size & Units	ADT	%	Split		AM IN	AM OUT	%	Split		PM IN	PM OUT
1)	Encinitas 04-268	10 /Room	130 Rooms	1,300	6%	0.6	0.4	47	31	8%	0.6	0.4	62	42
2)	Encintas 13-187	10 /DU	9 DU	90	8%	0.3	0.7	2	5	10%	0.7	0.3	6	3
3)	Encintas 15-222	10 /DU	46 DU	460	8%	0.3	0.7	11	26	10%	0.7	0.3	32	14
4)	Encinitas 17-152	10 /DU	1 DU	10	8%	0.3	0.7	0	1	10%	0.7	0.3	1	0
5)	Encinitas 17-197	Mixed use (net increase):		16				8	8				8	8
6)	Encinitas 17-280	10 /DU	9 DU	90	8%	0.3	0.7	2	5	10%	0.7	0.3	6	3
7)	Encinitas 18-135	2.5 /Bed	108 Beds	270	4%	0.6	0.4	6	4	8%	0.5	0.5	11	11
8)	Encinitas 18-188	10 /Room	17 Rooms	170	6%	0.6	0.4	7	4	8%	0.6	0.4	9	5
9)	Encinitas 18-220	Redevelopment project resulting in no traffic increase												
10)	Encinitas Housing Element AD08	6 /DU	90 DU	540	8%	0.2	0.8	9	35	10%	0.7	0.3	38	16
11a)	Carlsbad Ponto Multi-Family	8 /DU	136 DU	1,088	8%	0.2	0.8	17	70	10%	0.7	0.3	76	33
11b)	Carlsbad Ponto Retail	40 /KSF	9,200 SF	368	3%	0.6	0.4	7	4	9%	0.5	0.5	17	17
11c)	Carlsbad Ponto Rest. High turnover	160 /KSF	6,600 SF	1,056	8%	0.5	0.5	42	42	8%	0.6	0.4	51	34
11d)	Carlsbad Ponto Rest. Quality	100 /KSF	4,000 SF	400	1%	0.6	0.4	2	2	8%	0.7	0.3	22	10
12)	Carlsbad Newage Resort Hotel	10 /Room	322 Rooms	3,220	6%	0.6	0.4	7	77	8%	0.6	0.4	9	103
13)	Unknown/distant			200				35	35				35	35
	Totals			**9,278**				**204**	**349**				**384**	**333**

Source: SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region,* April 2002. DU: Dwelling Unit.

ADT-Average Daily Traffic; Split-percent inbound and outbound. Spreadsheet rounding may result in ±1 to the above numbers.

There are several roadway changes as part of two cumulative projects. The intersection of N. Coast Highway 101 at La Costa Ave is currently being expanded to include a fourth (west leg) as part of cumulative project #04-268 (130-room hotel at 2100 N. Coast Highway 101). The City of Encinitas Streetscape Project includes roundabouts along N. Coast Highway 101 at Bishops Gate, at Grandview St, and at Jupiter St. The proposed changes to existing conditions by the cumulative projects are shown in **Figure 10** with details included in **Appendix L**.

The cumulative project traffic volumes are shown in **Figure 11** and the cumulative project traffic assignments are included in **Appendix M**.

Figure 10: Cumulative Projects Planned Roadway Changes

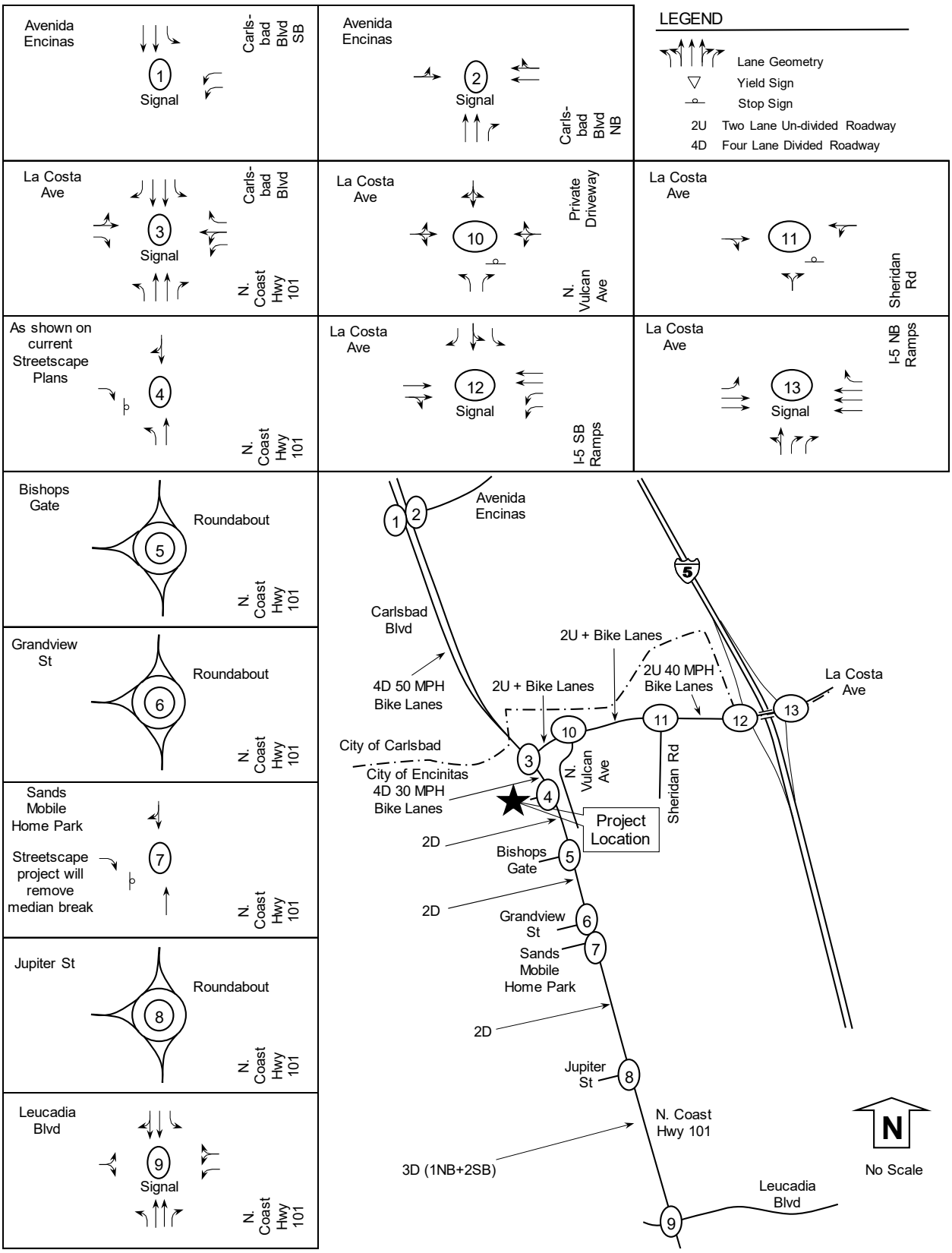
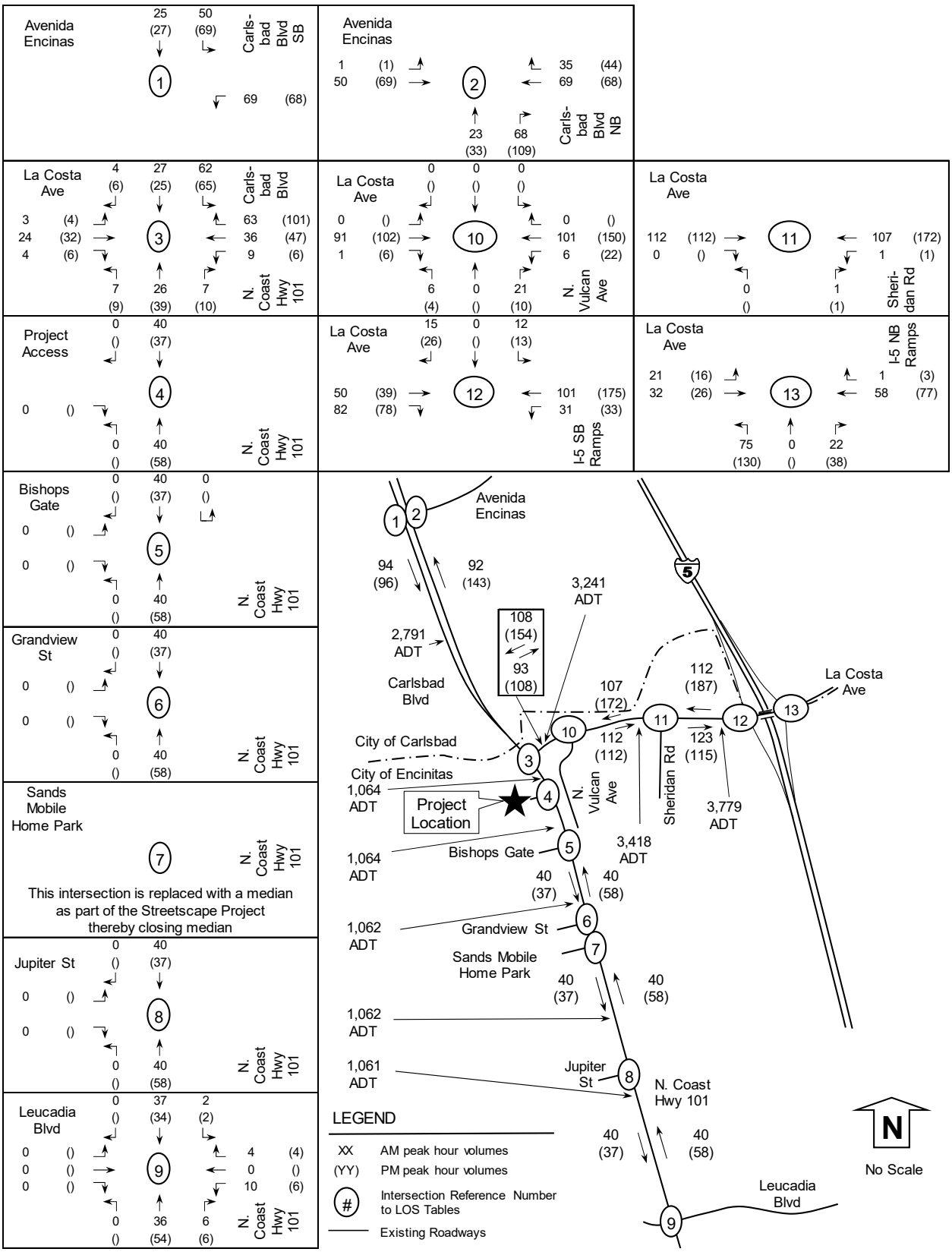


Figure 11: Cumulative Project Volumes



7.0 Existing + Cumulative Conditions

This scenario accounts for the addition of cumulative traffic onto the existing traffic. The peak hour intersection and daily traffic volumes are shown in **Figure 12**. The LOS calculated for the intersection is shown in **Table 16.** The segment daily capacity is shown in **Table 17** with the segment hourly LOS shown **Table 18**. Intersection LOS calculations are included in **Appendix N**.

TABLE 16: EXISTING + CUMULATIVE INTERSECTION OPERATIONS

Intersection and (Analysis)[1]	Approach	Peak Hour	Existing + Cumulative Delay[2]	Existing + Cumulative LOS[3]
1) Carlsbad Blvd SB	All	AM	10.5	B
at Avenida Encinas (S)	All	PM	10.4	B
2) Carlsbad Blvd NB	All	AM	25.5	C
at Avenida Encinas (S)	All	PM	25.3	B
3) N. Coast Hwy at	All	AM	21.0	B
La Costa Ave (S)	All	PM	47.7	D
4 N. Coast Hwy at	All	AM	DNE	NA
Project Access (U)	All	PM	DNE	NA
5) N. Coast Hwy at	Minor	AM	47.0	**E**
Bishops Gate (R)	Minor	PM	7.4	A
6) N. Coast Hwy at	Minor	AM	36.2	**E**
Grandview St (R)	Minor	PM	7.5	A
7) N. Coast Hwy at	NA	AM	New	NA
Sand MPH (median)	NA	PM	Median	NA
8) N. Coast Hwy at	Minor	AM	26.5	D
Jupiter St (R)	Minor	PM	7.1	A
9) N. Coast Hwy at	All	AM	22.8	C
Leucadia Blvd (S)	All	PM	25.6	C
10) La Costa Ave at	Minor	AM	58.4	**F**
N Vulcan Ave (U)	Minor	PM	50.0	**F**
11) La Costa Ave at	Minor	AM	23.2	C
Sheridan Rd (U)	Minor	PM	29.9	D
12) La Costa Ave at	All	AM	24.4	C
I-5 SB Ramps (S)	All	PM	27.0	C
13) La Costa Ave at	All	AM	37.8	D
I-5 NB Ramps (S)	All	PM	22.3	C

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized, (R) Roundabout. Minor street approach (worst approach delay reported). 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. DNE: Does Not Exist. NA: Not Applicable.

TABLE 17: EXISTING + PROJECT SEGMENT DAILY VOLUMES AND OPERATIONS

Segment	Functional Classification	LOS E Capacity	Existing + Cumulative Daily Volume	Existing + Cumulative LOS
Carlsbad Boulevard				
Avenida Encinas to La Costa Ave	4 Lane Major	42,200	19,316	C
North Coast Highway 101				
La Costa Ave to 600' S. of La Costa	2 Ln Aug. Coll.	20,000	18,865	**E**
600' S. of La Costa to Bishops Gate	2 Ln Aug. Coll.	20,000	18,865	**E**
Bishops Gate to Grandview St	2 Ln Aug. Coll.	20,000	18,489	**E**
Grandview St to Jupiter St	2 Ln Aug. Coll.	20,000	16,980	D
Jupiter St to Leucadia Blvd	3 Lane Major	26,400	16,934	C
La Costa Avenue				
N. Coast Hwy to N. Vulcan	2 Lane Coll.	14,000	14,927	**F**
N. Vulcan to Sheridan Rd	2 Lane Coll.	14,000	16,917	**F**
Sheridan Rd to I-5	2 Ln Aug. Coll.	20,000	18,507	**E**

Notes: 2 Ln Aug. Coll. = 2 Lane Augmented Collector. Daily volume is a 24 hour volume. LOS: Level of Service
Carlsbad Boulevard capacity and LOS from City of Carlsbad 2018 Growth Management Program.

Figure 12: Existing + Cumulative Volumes

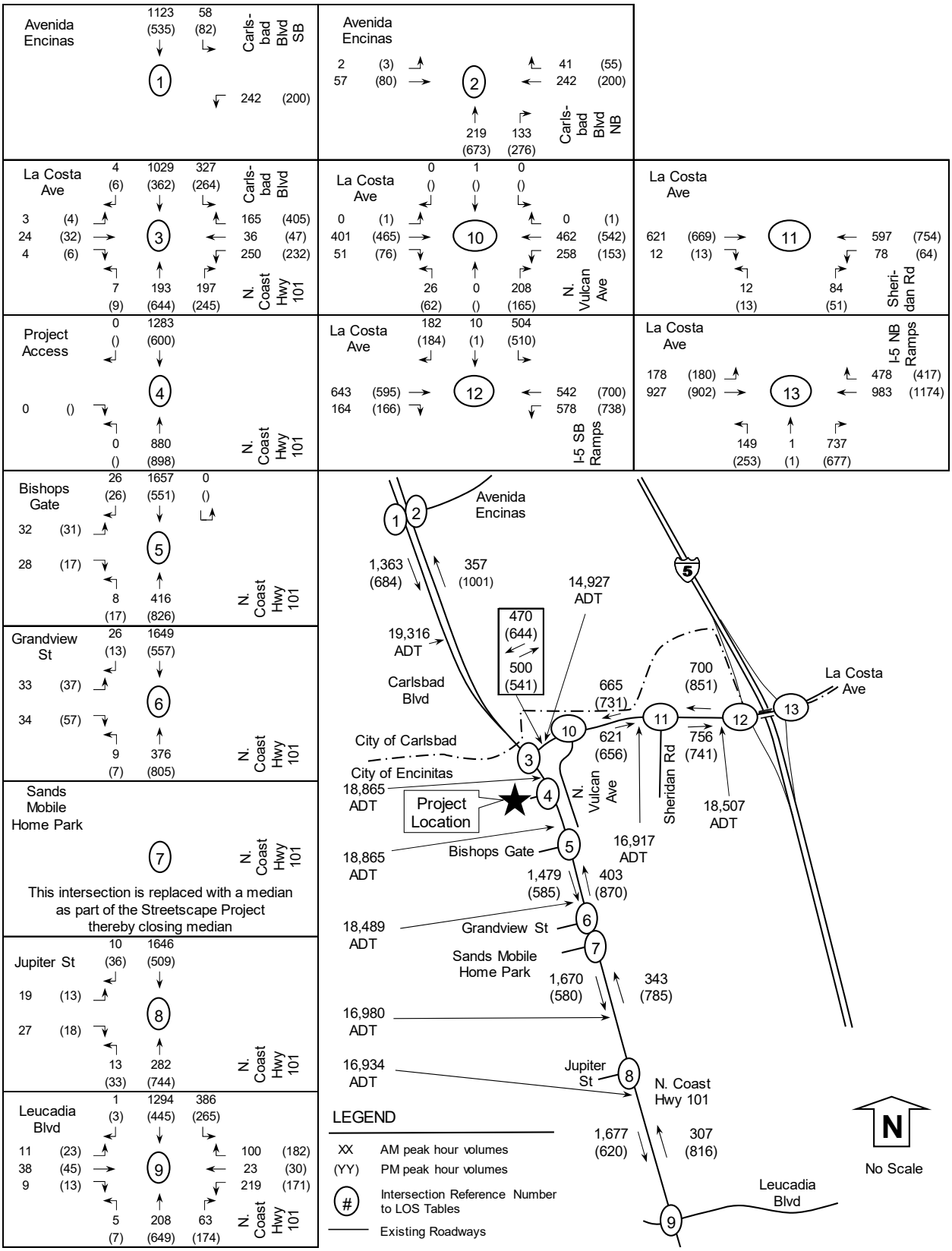


TABLE 18: EXISTING + CUMULATIVE SEGMENT PEAK HOUR VOLUMES AND OPERATIONS

	Segment	Dir	Lanes	Existing + Cumulative Segment Capacity	Existing + Cumulative Pk Hr Vol.	Existing + Cumulative V/C	Existing + Cumulative LOS
Carlsbad Blvd	*AM Peak Hour*						
	Btw Avenida Encinas	NB	2 lanes	3,640	357	0.098	C
	and La Costa Ave	SB	2 lanes	3,640	1,363	0.374	D
	(PM) Peak Hour						
	Btw Avenida Encinas	NB	2 lanes	3,640	(1001)	0.275	D
	and La Costa Ave	SB	2 lanes	3,640	(684)	0.188	C
North Coast Highway 101	*AM Peak Hour*						
	Btw La Costa Ave	NB	1 lane	1,900	403	0.212	A
	and Grandview St	SB	1 lane	1,800	1,479	0.822	D
	Btw Grandview St	NB	1 lane	1,800	343	0.191	A
	and Jupiter St	SB	1 lane	1,800	1,670	0.928	**E**
	Btw Jupiter St	NB	1 lane	1,800	307	0.171	A
	and Leucadia Blvd	SB	2 lanes	3,400	1,677	0.493	B
	(PM) Peak Hour						
	Btw La Costa Ave	NB	1 lane	1,900	(870)	0.458	B
	and Grandview St	SB	1 lane	1,800	(585)	0.325	A
	Btw Grandview St	NB	1 lane	1,800	(785)	0.436	B
	and Jupiter St	SB	1 lane	1,800	(580)	0.322	A
	Btw Jupiter St	NB	1 lane	1,800	(816)	0.453	B
	and Leucadia Blvd	SB	2 lanes	3,400	(620)	0.182	A
La Costa Avenue	*AM Peak Hour*						
	Btw Coast Hwy 101	EB	1 lane	1,800	500	0.278	A
	and Vulcan Ave	WB	1 lane	1,800	470	0.261	A
	Btw Vulcan Ave	EB	1 lane	1,800	621	0.345	A
	and Sheridan Rd	WB	1 lane	1,800	665	0.369	A
	Btw Sheridan Rd	EB	1 lane	1,800	756	0.420	B
	and I-5 SB Ramps	WB	1 lane	1,800	700	0.389	A
	(PM) Peak Hour						
	Btw Coast Hwy 101	EB	1 lane	1,800	(541)	0.301	A
	and Vulcan Ave	WB	1 lane	1,800	(644)	0.358	A
	Btw Vulcan Ave	EB	1 lane	1,800	(656)	0.364	A
	and Sheridan Rd	WB	1 lane	1,800	(731)	0.406	A
	Btw Sheridan Rd	EB	1 lane	1,800	(741)	0.411	B
	and I-5 SB Ramps	WB	1 lane	1,800	(851)	0.473	B

Carlsbad Blvd capacity from Carlsbad 2018 Growth Management Program. Remaining capacities from Streetscape Final EIR.

Under existing plus cumulative conditions, the study elements were calculated to operate at LOS D or better, except for the:

1) Intersection of N. Coast Hwy 101/Bishops Gate (LOS E AM),
2) Intersection of N. Coast Hwy 101/Grandview St (LOS E AM),
3) Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),
4) Segment of N. Coast Hwy 101 from La Costa Ave to 600' S. of La Costa Ave (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
5) Segment of N. Coast Hwy 101 from 600' S. of La Costa Ave to Bishops Gate (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
6) Segment of N. Coast Hwy 101 from Bishops Gate to Grandview St (LOS E daily; however,

this segment operates at acceptable LOS under AM and PM peak hour operations),

7) Segment of N. Coast Hwy 101 from Grandview St. to Jupiter St. (LOS E SB AM),
8) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
9) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
10) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

8.0 Existing + Cumulative + Project Conditions

This scenario accounts for the addition of project traffic (using the after Streetscape distribution and assignment) onto existing plus cumulative traffic with volumes shown in **Figure 13**. The intersection LOS are shown in **Table 19.** The segment daily capacity is shown in **Table 20** with the segment hourly LOS shown **Table 21**. Intersection LOS calculations are included in **Appendix O**.

TABLE 19: EXISTING + CUMULATIVE + PROJECT INTERSECTION OPERATIONS

Intersection and	Approach	Peak	Existing + Cumulative		Existing + Cumulative + Project			
(Analysis)[1]		Hour	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delta[4]	Effect?[5]
1) Carlsbad Blvd SB	All	AM	10.5	B	10.8	B	0.3	No
at Avenida Encinas (S)	All	PM	10.4	B	10.4	A	0.0	No
2) Carlsbad Blvd NB	All	AM	25.5	C	26.4	B	0.9	No
at Avenida Encinas (S)	All	PM	25.3	B	25.5	B	0.2	No
3) N. Coast Hwy at	All	AM	21.0	B	21.2	C	0.2	No
La Costa Ave (S)	All	PM	47.7	D	49.6	D	1.9	No
4 N. Coast Hwy at	All	AM	DNE	NA	1.7	A	NA	No
Project Access (U)	All	PM	DNE	NA	0.9	A	NA	No
5) N. Coast Hwy at	Minor	AM	47.0	**E**	49.3	**E**	2.3	**Yes**
Bishops Gate (R)	Minor	PM	7.4	A	7.6	A	0.2	No
6) N. Coast Hwy at	Minor	AM	36.2	**E**	37.4	**E**	1.2	No
Grandview St (R)	Minor	PM	7.5	A	7.7	A	0.2	No
7) N. Coast Hwy at	NA	AM	New	NA	New	NA	NA	No
Sand MPH (median)	NA	PM	Median	NA	Median	NA	NA	No
8) N. Coast Hwy at	Minor	AM	26.5	D	27.6	D	1.1	No
Jupiter St (R)	Minor	PM	7.1	A	7.3	A	0.2	No
9) N. Coast Hwy at	All	AM	22.8	C	23.0	C	0.2	No
Leucadia Blvd (S)	All	PM	25.6	C	26.8	C	1.2	No
10) La Costa Ave at	Minor	AM	58.4	**F**	60.9	**F**	2.5	**Yes**
N Vulcan Ave (U)	Minor	PM	50.0	**F**	58.5	**F**	8.5	**Yes**
11) La Costa Ave at	Minor	AM	23.2	C	24.7	C	1.5	No
Sheridan Rd (U)	Minor	PM	29.9	D	34.3	D	4.4	No
12) La Costa Ave at	All	AM	24.4	C	24.5	C	0.1	No
I-5 SB Ramps (S)	All	PM	27.0	C	27.1	C	0.1	No
13) La Costa Ave at	All	AM	37.8	D	37.9	D	0.1	No
I-5 NB Ramps (S)	All	PM	22.3	C	22.7	C	0.4	No

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized, (R) Roundabout. Minor street approach (worst approach delay reported). 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. 4) Delta is the increase in delay from project. 5) DNE: Does Not Exist. NA: Not Applicable. 5) Project effect if threshold is exceeded.

TABLE 20: EXISTING + CUMULATIVE + PROJECT SEGMENT DAILY VOLUMES AND OPERATIONS

Segment	Functional Classification	LOS E Capacity	Existing + Cumulative Daily Volume	Existing + Cumulative LOS	Proj. Daily Vol.	E + C + Project Daily Volume	E + C + Project LOS
Carlsbad Boulevard							
Avenida Encinas to La Costa Ave	4 Lane Major	42,200	19,316	C	224	19,540	C
North Coast Highway 101							
La Costa Ave to 600' S. of La Costa	2 Ln Aug. Coll.	20,000	18,865	**E**	673	19,538	**E**
600' S. of La Costa to Bishops Gate	2 Ln Aug. Coll.	20,000	18,865	**E**	1,122	19,987	**E**
Bishops Gate to Grandview St	2 Ln Aug. Coll.	20,000	18,489	**E**	438	18,927	**E**
Grandview St to Jupiter St	2 Ln Aug. Coll.	20,000	16,980	D	426	17,406	D
Jupiter St to Leucadia Blvd	3 Lane Major	26,400	16,934	C	415	17,349	C
La Costa Avenue							
N. Coast Hwy to N. Vulcan	2 Lane Coll.	14,000	14,927	**F**	449	15,376	**F**
N. Vulcan to Sheridan Rd	2 Lane Coll.	14,000	16,917	**F**	426	17,343	**F**
Sheridan Rd to I-5	2 Ln Aug. Coll.	20,000	18,507	**E**	393	18,900	**E**

Notes: 2 Ln Aug. Coll. = 2 Lane Augmented Collector. Daily volume is a 24 hour volume. LOS: Level of Service
Carlsbad Boulevard capacity and LOS from City of Carlsbad 2018 Growth Management Program.

Figure 13: Existing + Cumulative + Project Volumes

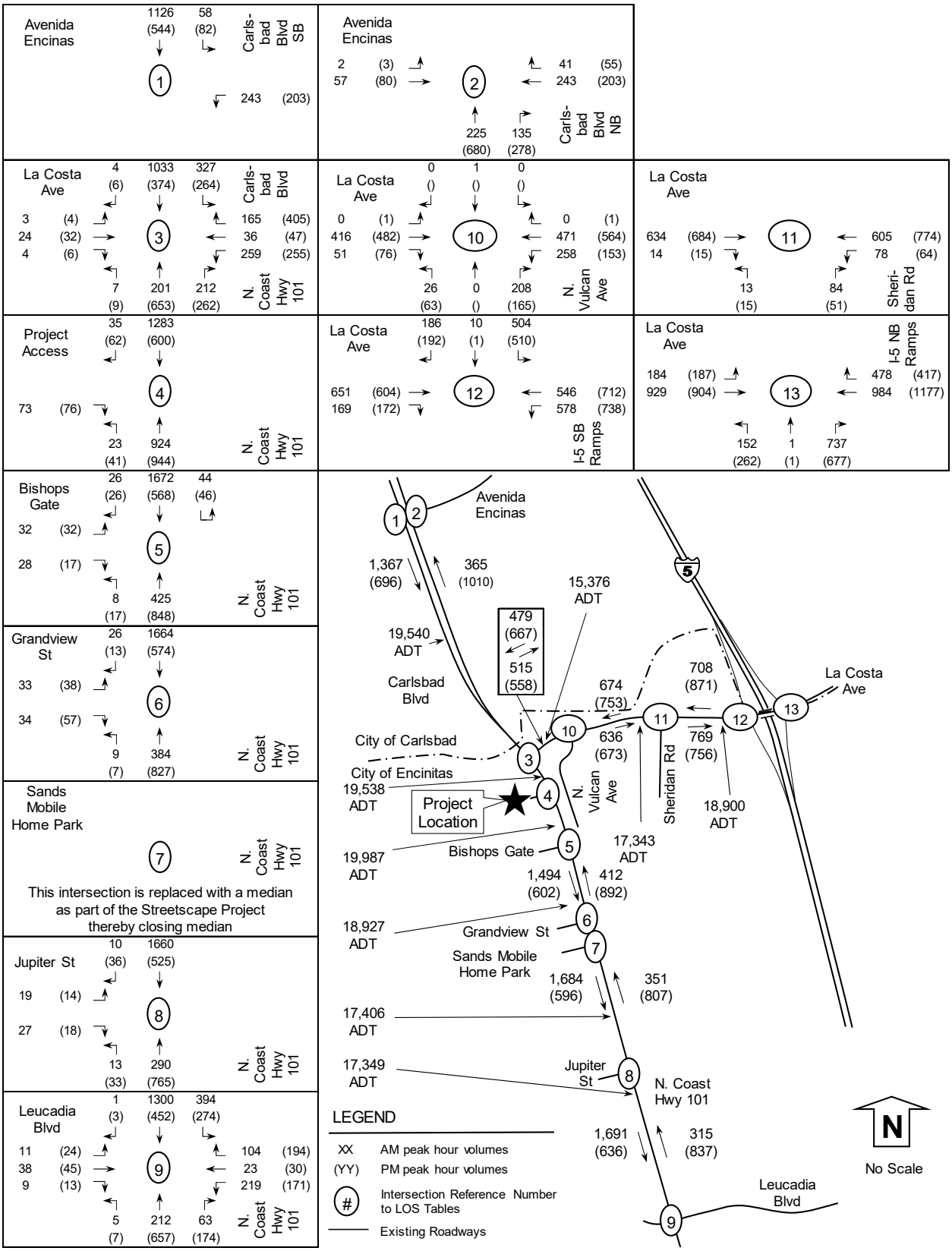


TABLE 21: EXISTING + CUMULATIVE + PROJECT SEGMENT PEAK HOUR VOLUMES AND OPERATIONS

	Segment	Dir	Lanes	Existing + Cumulative Segment Capacity	Existing + Cumulative Pk Hr Vol.	Existing + Cumulative V/C	Existing + Cumulative LOS	Project Pk Hr Vol.	Existing + Cumulative + Project Pk Hr Vol.	Existing + Cumulative + Project V/C	Existing + Cumulative + Project LOS	Existing + Cumulative + Project V/C Δ	Effect?
Carlsbad Blvd	*AM Peak Hour*												
	Btw Avenida Encinas	NB	2 lanes	3,640	357	0.098	C	8	365	0.100	C	0.002	No
	and La Costa Ave	SB	2 lanes	3,640	1,363	0.374	D	4	1,367	0.375	D	0.001	No
	(PM) Peak Hour												
	Btw Avenida Encinas	NB	2 lanes	3,640	(1001)	0.275	D	(9)	(1010)	0.277	D	0.002	No
	and La Costa Ave	SB	2 lanes	3,640	(684)	0.188	C	(12)	(696)	0.191	C	0.003	No
North Coast Highway 101	*AM Peak Hour*												
	Btw La Costa Ave	NB	1 lane	1,900	403	0.212	A	9	412	0.217	A	0.005	No
	and Grandview St	SB	1 lane	1,800	1,479	0.822	D	15	1,494	0.830	D	0.008	No
	Btw Grandview St	NB	1 lane	1,800	343	0.191	A	8	351	0.195	A	0.004	No
	and Jupiter St	SB	1 lane	1,800	1,670	0.928	**E**	15	1,685	0.936	**E**	0.008	No
	Btw Jupiter St	NB	1 lane	1,800	307	0.171	A	8	315	0.175	A	0.004	No
	and Leucadia Blvd	SB	2 lanes	3,400	1,677	0.493	B	14	1,691	0.497	B	0.004	No
	(PM) Peak Hour												
	Btw La Costa Ave	NB	1 lane	1,900	(870)	0.458	B	(22)	(892)	0.469	B	0.012	No
	and Grandview St	SB	1 lane	1,800	(585)	0.325	A	(17)	(602)	0.334	A	0.009	No
	Btw Grandview St	NB	1 lane	1,800	(785)	0.436	B	(22)	(807)	0.448	B	0.012	No
	and Jupiter St	SB	1 lane	1,800	(580)	0.322	A	(17)	(597)	0.331	A	0.009	No
	Btw Jupiter St	NB	1 lane	1,800	(816)	0.453	B	(21)	(837)	0.465	B	0.012	No
	and Leucadia Blvd	SB	2 lanes	3,400	(620)	0.182	A	(16)	(636)	0.187	A	0.005	No
La Costa Avenue	*AM Peak Hour*												
	Btw Coast Hwy 101	EB	1 lane	1,800	500	0.278	A	15	515	0.286	A	0.008	No
	and Vulcan Ave	WB	1 lane	1,800	470	0.261	A	9	479	0.266	A	0.005	No
	Btw Vulcan Ave	EB	1 lane	1,800	621	0.345	A	15	636	0.353	A	0.008	No
	and Sheridan Rd	WB	1 lane	1,800	665	0.369	A	9	674	0.374	A	0.005	No
	Btw Sheridan Rd	EB	1 lane	1,800	756	0.420	B	13	769	0.427	B	0.007	No
	and I-5 SB Ramps	WB	1 lane	1,800	700	0.389	A	8	708	0.393	A	0.004	No
	(PM) Peak Hour												
	Btw Coast Hwy 101	EB	1 lane	1,800	(541)	0.301	A	(17)	(558)	0.310	A	0.009	No
	and Vulcan Ave	WB	1 lane	1,800	(644)	0.358	A	(23)	(667)	0.371	A	0.013	No
	Btw Vulcan Ave	EB	1 lane	1,800	(656)	0.364	A	(17)	(673)	0.374	A	0.009	No
	and Sheridan Rd	WB	1 lane	1,800	(731)	0.406	A	(22)	(753)	0.418	B	0.012	No
	Btw Sheridan Rd	EB	1 lane	1,800	(741)	0.411	B	(15)	(756)	0.420	B	0.008	No
	and I-5 SB Ramps	WB	1 lane	1,800	(851)	0.473	B	(20)	(871)	0.484	B	0.011	No

Carlsbad Blvd capacity from Carlsbad 2018 Growth Management Program. Remaining capacities from Streetscape Final EIR.

Under existing plus cumulative plus project conditions, the study elements were calculated to operate at LOS D or better, except for (bold indicates project effect):

1) **Intersection of N. Coast Hwy 101/Bishops Gate (LOS E AM),**
2) Intersection of N. Coast Hwy 101/Grandview St (LOS E AM),
3) **Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),**
4) Segment of N. Coast Hwy 101 from La Costa Ave to 600' S. of La Costa Ave (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
5) Segment of N. Coast Hwy 101 from 600' S. of La Costa Ave to Bishops Gate (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),

6) Segment of N. Coast Hwy 101 from Bishops Gate to Grandview St (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
7) Segment of N. Coast Hwy 101 from Grandview St. to Jupiter St. (LOS E SB AM),
8) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
9) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
10) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

9.0 Horizon Year 2035 Conditions

This scenario represents horizon year 2035 conditions. Year 2035 volumes were obtained from the *North Coast Highway 101 Leucadia Streetscape Improvement Project* Final EIR, dated February 2018 ("Streetscape EIR"). Excerpts from the Michael Baker International (MBI) traffic study prepared for the Streetscape EIR documenting the year 2035 volumes are included in Appendix D. Please note some of the Streetscape EIR volumes are lower than existing plus cumulative volumes and as such are calculated to operate better than near-term conditions. The intersections of Carlsbad Blvd/Avenida Encinas SB and Carlsbad Blvd/Avenida Encinas NB are located in Carlsbad and were not included in the Streetscape EIR; therefore, year 2030 volumes were obtained from the Ponto EIR and factored up 1% per year to represent year 2035 volumes. Horizon year volumes from the Ponto and Streetscape EIRs are included in **Appendix P**. The year 2035 network was based on Streetscape EIR as shown previously in Figure 10. The volumes are shown in **Figure 14**.

The intersection LOS are shown in **Table 22.** The segment daily capacity is shown in **Table 23** with the segment hourly LOS shown **Table 24**. For unsignalized intersections, the minor approach delay is shown if the minor leg is a public street and overall delay is shown if the minor approach is a private driveway such as the project driveway. Intersection LOS calculations are included in **Appendix Q.**

TABLE 22: HORIZON YEAR 2035 INTERSECTION OPERATIONS

Intersection and (Analysis)[1]	Approach	Peak Hour	Horizon Year 2035 Delay[2]	Horizon Year 2035 LOS[3]
1) Carlsbad Blvd SB	All	AM	17.1	B
at Avenida Encinas (S)	All	PM	19.3	B
2) Carlsbad Blvd NB	All	AM	33.5	C
at Avenida Encinas (S)	All	PM	29.3	C
3) N. Coast Hwy at	All	AM	37.0	D
La Costa Ave (S)	All	PM	53.5	D
4 N. Coast Hwy at	All	AM	DNE	NA
Project Access (U)	All	PM	DNE	NA
5) N. Coast Hwy at	All	AM	34.1	D
Bishops Gate (R)	All	PM	9.7	A
6) N. Coast Hwy at	All	AM	26.3	D
Grandview St (R)	All	PM	9.9	A
7) N. Coast Hwy at	All	AM	New	NA
Sand MPH (median)	All	PM	Median	NA
8) N. Coast Hwy at	All	AM	21.0	D
Jupiter St (R)	All	PM	9.7	A
9) N. Coast Hwy at	All	AM	31.7	C
Leucadia Blvd (S)	All	PM	34.0	C
10) La Costa Ave at	NB	AM	147.7	**F**
N Vulcan Ave (U)	NB	PM	121.5	**F**
11) La Costa Ave at	NB	AM	61.2	**F**
Sheridan Rd (U)	NB	PM	30.7	D
12) La Costa Ave at	All	AM	31.3	C
I-5 SB Ramps (S)	All	PM	28.0	C
13) La Costa Ave at	All	AM	45.6	D
I-5 NB Ramps (S)	All	PM	40.8	D

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized, (R) Roundabout. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service. DNE: Does Not Exist. NA: Not Applicable.

Figure 14: Horizon Year 2035 Volumes

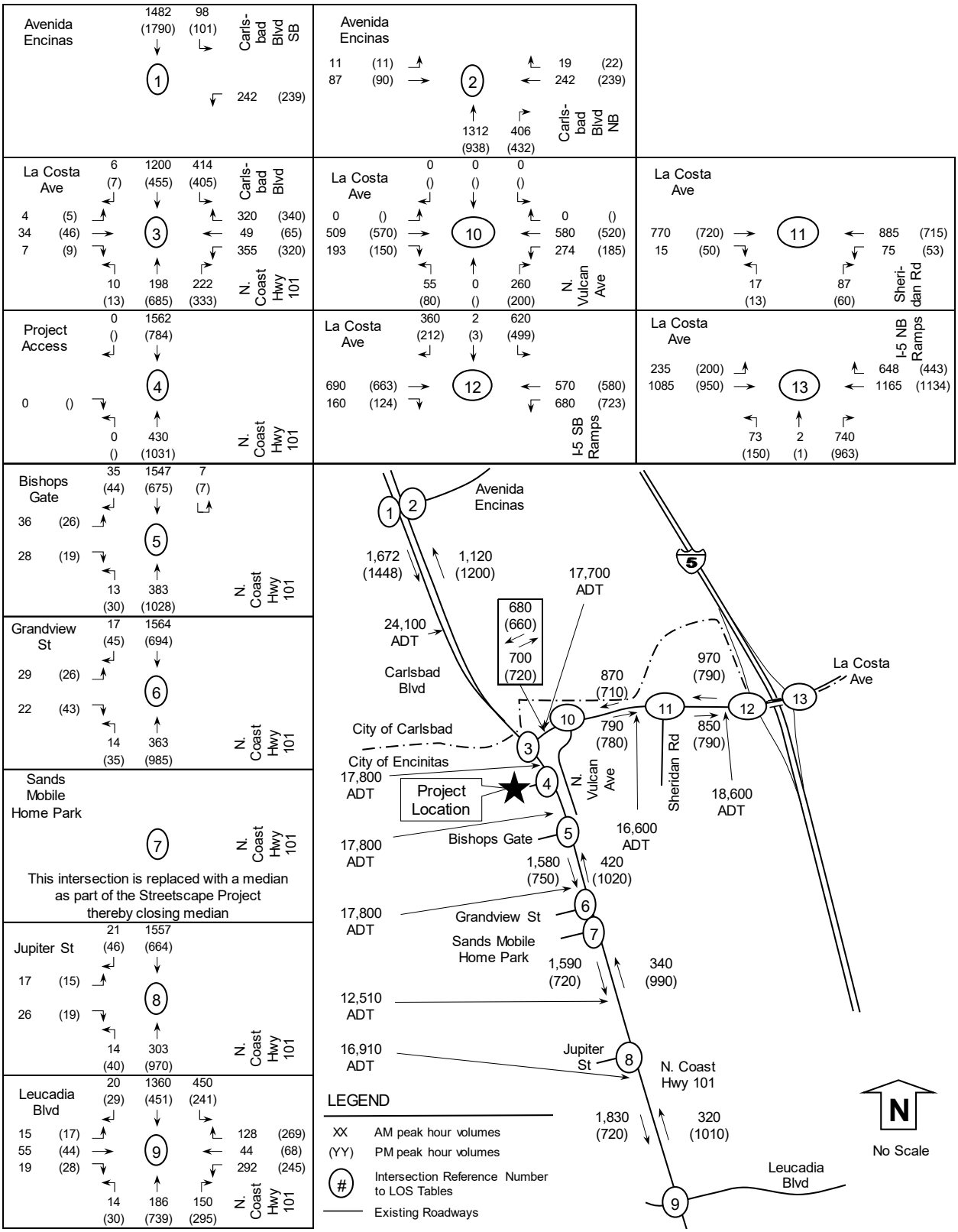


TABLE 23: HORIZON YEAR 2035 SEGMENT DAILY VOLUMES AND OPERATIONS

Segment	Functional Classification	LOS E Capacity	Horizon Year (2035) Daily Volume	LOS
Carlsbad Boulevard				
Avenida Encinas to La Costa Ave	4 Lane Major	42,200	24,100	D
North Coast Highway 101				
La Costa Ave to 600' S. of La Costa	2 Ln Aug. Coll.	20,000	17,800	D
600' S. of La Costa to Bishops Gate	2 Ln Aug. Coll.	20,000	17,800	D
Bishops Gate to Grandview St	2 Ln Aug. Coll.	20,000	17,800	D
Grandview St to Jupiter St	2 Ln Aug. Coll.	20,000	12,510	C
Jupiter St to Leucadia Blvd	3 Lane Major	26,400	16,910	C
La Costa Avenue				
N. Coast Hwy to N. Vulcan	2 Lane Coll.	14,000	17,700	**F**
N. Vulcan to Sheridan Rd	2 Lane Coll.	14,000	16,600	**F**
Sheridan Rd to I-5	2 Ln Aug. Coll.	20,000	18,600	**E**

Notes: 2 Ln Aug. Coll. = 2 Lane Augmented Collector. Daily volume is a 24 hour volume. LOS: Level of Service
Carlsbad Boulevard capacity and LOS from City of Carlsbad 2018 Growth Management Program.

TABLE 24: HORIZON YEAR 2035 SEGMENT PEAK HOUR VOLUMES AND OPERATIONS

	Segment	Dir	Lanes	Year 2035 Streetscape Segment Capacity	Pk Hr Vol.	V/C	LOS
Carlsbad Blvd	*AM Peak Hour*						
	Btw Avenida Encinas	NB	2 lanes	3,640	1,120	0.308	D
	and La Costa Ave	SB	2 lanes	3,640	1,672	0.459	D
	(PM) Peak Hour						
	Btw Avenida Encinas	NB	2 lanes	3,640	(1200)	0.330	D
	and La Costa Ave	SB	2 lanes	3,640	(1448)	0.398	D
North Coast Highway 101	*AM Peak Hour*						
	Btw La Costa Ave	NB	1 lane	1,900	420	0.221	A
	and Grandview St	SB	1 lane	1,800	1,580	0.878	D
	Btw Grandview St	NB	1 lane	1,800	340	0.189	A
	and Jupiter St	SB	1 lane	1,800	1,590	0.883	D
	Btw Jupiter St	NB	1 lane	1,800	320	0.178	A
	and Leucadia Blvd	SB	2 lanes	3,400	1,830	0.538	B
	(PM) Peak Hour						
	Btw La Costa Ave	NB	1 lane	1,900	(1020)	0.537	B
	and Grandview St	SB	1 lane	1,800	(750)	0.417	B
	Btw Grandview St	NB	1 lane	1,800	(990)	0.550	B
	and Jupiter St	SB	1 lane	1,800	(720)	0.400	A
	Btw Jupiter St	NB	1 lane	1,800	(1010)	0.561	B
	and Leucadia Blvd	SB	2 lanes	3,400	(720)	0.212	A
La Costa Avenue	*AM Peak Hour*						
	Btw Coast Hwy 101	EB	1 lane	1,800	700	0.389	A
	and Vulcan Ave	WB	1 lane	1,800	680	0.378	A
	Btw Vulcan Ave	EB	1 lane	1,800	790	0.439	B
	and Sheridan Rd	WB	1 lane	1,800	870	0.483	B
	Btw Sheridan Rd	EB	1 lane	1,800	850	0.472	B
	and I-5 SB Ramps	WB	1 lane	1,800	970	0.539	B
	(PM) Peak Hour						
	Btw Coast Hwy 101	EB	1 lane	1,800	(720)	0.400	A
	and Vulcan Ave	WB	1 lane	1,800	(660)	0.367	A
	Btw Vulcan Ave	EB	1 lane	1,800	(780)	0.433	B
	and Sheridan Rd	WB	1 lane	1,800	(710)	0.394	A
	Btw Sheridan Rd	EB	1 lane	1,800	(790)	0.439	B
	and I-5 SB Ramps	WB	1 lane	1,800	(790)	0.439	B

Carlsbad Blvd capacity from Carlsbad 2018 Growth Management Program. Remaining capacities from Streetscape Final EIR.

Under horizon year 2035 conditions, the study elements were calculated to operate at LOS D or better, except for:

1) Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),
2) Intersection of La Costa Ave/Sheridan Rd (LOS F AM),
3) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
4) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
5) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

10.0 Horizon Year 2035 + Project Conditions

This scenario accounts for the addition of project traffic (using the after Streetscape distribution and assignment) onto horizon year 2035 traffic. The peak hour intersection volumes and daily traffic volumes are shown in **Figure 15**.

The intersection LOS are shown in **Table 25.** The segment daily capacity is shown in **Table 26** with the segment hourly LOS shown **Table 27**. For unsignalized intersections, the minor approach delay is shown if the minor leg is a public street and overall delay is shown if the minor approach is a private driveway such as the project driveway. Intersection LOS calculations are included in **Appendix R**.

TABLE 25: HORIZON YEAR 2035 + PROJECT INTERSECTION OPERATIONS

Intersection and	Approach	Peak	Horizon Year 2035		Horizon Year 2035 + Project			
(Analysis)[1]		Hour	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delta[4]	Effect?[5]
1) Carlsbad Blvd SB	All	AM	17.1	B	17.3	B	0.2	No
at Avenida Encinas (S)	All	PM	19.3	B	19.7	B	0.4	No
2) Carlsbad Blvd NB	All	AM	33.5	C	34.0	C	0.5	No
at Avenida Encinas (S)	All	PM	29.3	C	29.5	C	0.2	No
3) N. Coast Hwy at	All	AM	37.0	D	37.3	D	0.3	No
La Costa Ave (S)	All	PM	53.5	D	54.2	D	0.7	No
4 N. Coast Hwy at	All	AM	DNE	NA	3.9	A	NA	No
Project Access (U)	All	PM	DNE	NA	1.0	A	NA	No
5) N. Coast Hwy at	All	AM	34.1	D	35.7	**E**	1.6	No
Bishops Gate (R)	All	PM	9.7	A	10.0	A	0.3	No
6) N. Coast Hwy at	All	AM	26.3	D	27.7	D	1.4	No
Grandview St (R)	All	PM	9.9	A	10.3	B	0.4	No
7) N. Coast Hwy at	All	AM	New	NA	New	NA	NA	No
Sand MPH (median)	All	PM	Median	NA	Median	NA	NA	No
8) N. Coast Hwy at	All	AM	21.0	D	21.8	C	0.8	No
Jupiter St (R)	All	PM	9.7	A	10.0	A	0.3	No
9) N. Coast Hwy at	All	AM	31.7	C	32.2	C	0.5	No
Leucadia Blvd (S)	All	PM	34.0	C	36.1	D	2.1	No
10) La Costa Ave at	NB	AM	147.7	**F**	161.5	**F**	13.8	**Yes**
N Vulcan Ave (U)	NB	PM	121.5	**F**	142.7	**F**	21.2	**Yes**
11) La Costa Ave at	NB	AM	61.2	**F**	69.7	**F**	8.5	**Yes**
Sheridan Rd (U)	NB	PM	30.7	D	35.1	**E**	4.4	**Yes**
12) La Costa Ave at	All	AM	31.3	C	31.6	C	0.3	No
I-5 SB Ramps (S)	All	PM	28.0	C	28.1	C	0.1	No
13) La Costa Ave at	All	AM	45.6	D	46.2	D	0.6	No
I-5 NB Ramps (S)	All	PM	40.8	D	41.0	D	0.2	No

Notes:1) Intersection Analysis-(S) Signalized, (U) Unsignalized. 2) Delay-HCM Average Control Delay in sec. 3) LOS: Level of Service. 4) Delta is the increase in delay from project. 5) Project effect if threshold is exceeded.

Figure 15: Horizon Year 2035 + Project Volumes

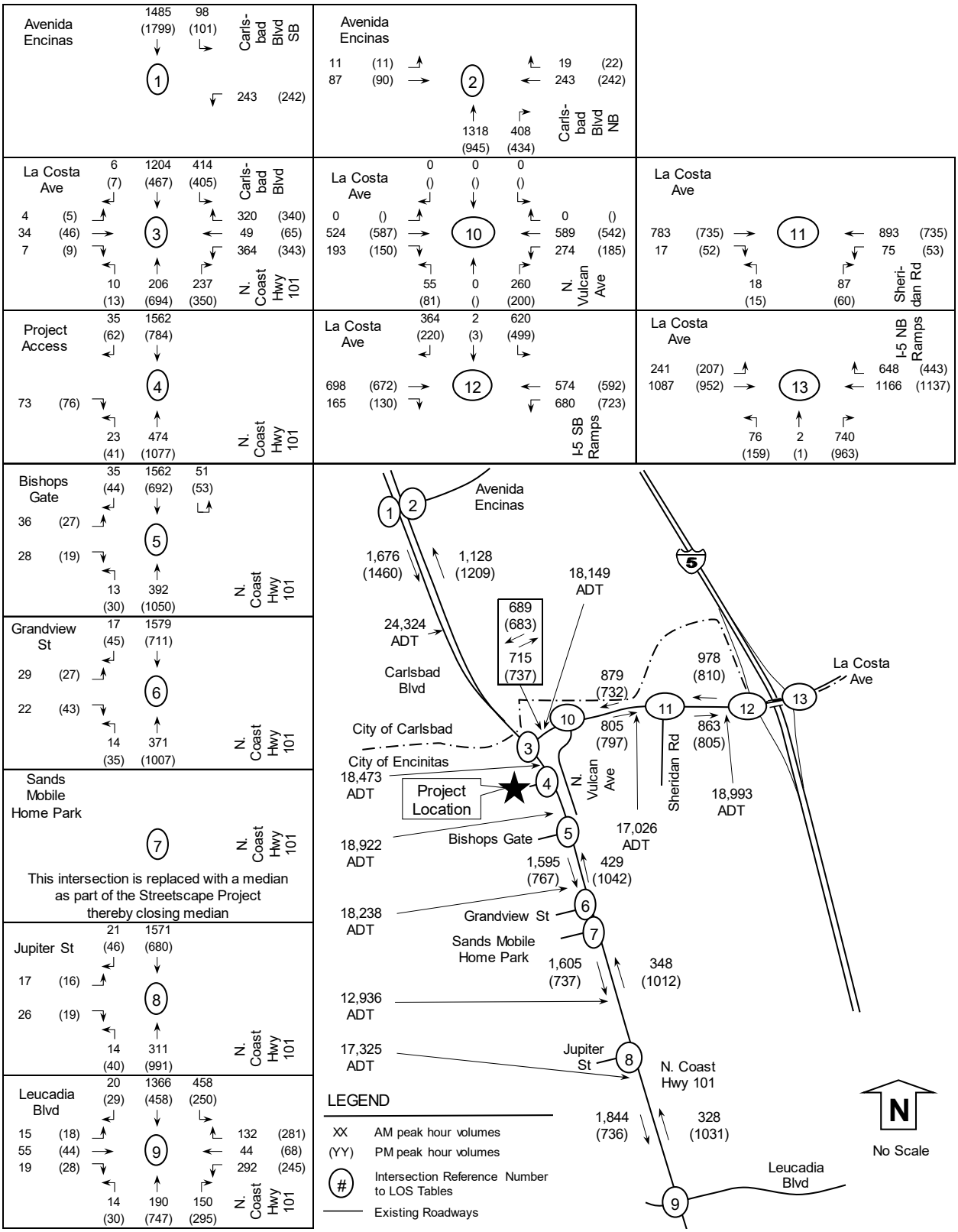


TABLE 26: HORIZON YEAR 2035 + PROJECT SEGMENT DAILY VOLUMES AND OPERATIONS

Segment	Functional Classification	LOS E Capacity	Horizon Year (2035) Daily Volume	LOS	Proj. Daily Vol.	Horizon Year + Project Daily Volume	LOS
Carlsbad Boulevard							
Avenida Encinas to La Costa Ave	4 Lane Major	42,200	24,100	D	224	24,324	D
North Coast Highway 101							
La Costa Ave to 600' S. of La Costa	2 Ln Aug. Coll.	20,000	17,800	D	673	18,473	**E**
600' S. of La Costa to Bishops Gate	2 Ln Aug. Coll.	20,000	17,800	D	1,122	18,922	**E**
Bishops Gate to Grandview St	2 Ln Aug. Coll.	20,000	17,800	D	438	18,238	**E**
Grandview St to Jupiter St	2 Ln Aug. Coll.	20,000	12,510	C	426	12,936	C
Jupiter St to Leucadia Blvd	3 Lane Major	26,400	16,910	C	415	17,325	C
La Costa Avenue							
N. Coast Hwy to N. Vulcan	2 Lane Coll.	14,000	17,700	**F**	449	18,149	**F**
N. Vulcan to Sheridan Rd	2 Lane Coll.	14,000	16,600	**F**	426	17,026	**F**
Sheridan Rd to I-5	2 Ln Aug. Coll.	20,000	18,600	**E**	393	18,993	**E**

Notes: Aug. Coll. = Augmented Collector. Daily volume is a 24 hour volume. LOS: Level of Service
Carlsbad Boulevard capacity and LOS from City of Carlsbad 2018 Growth Management Program.

TABLE 27: HORIZON YEAR 2035 + PROJECT SEGMENT PEAK HOUR VOLUMES AND OPERATIONS

	Segment	Dir	Lanes	Year 2035 Streetscape Segment Capacity	Pk Hr Vol.	V/C	LOS	Project Pk Hr Vol.	Year 2035 Streetscape + Project Pk Hr Vol.	V/C	LOS	V/C Δ	Effect
Carlsbad Blvd	*AM Peak Hour*												
	Btw Avenida Encinas	NB	2 lanes	3,640	1,120	0.308	D	8	1,128	0.310	D	0.002	No
	and La Costa Ave	SB	2 lanes	3,640	1,672	0.459	D	4	1,676	0.460	D	0.001	No
	(PM) Peak Hour												
	Btw Avenida Encinas	NB	2 lanes	3,640	(1200)	0.330	D	(9)	(1209)	0.332	D	0.002	No
	and La Costa Ave	SB	2 lanes	3,640	(1448)	0.398	D	(12)	(1460)	0.401	D	0.003	No
North Coast Highway 101	*AM Peak Hour*												
	Btw La Costa Ave	NB	1 lane	1,900	420	0.221	A	9	429	0.226	A	0.005	No
	and Grandview St	SB	1 lane	1,800	1,580	0.878	D	15	1,595	0.886	D	0.008	No
	Btw Grandview St	NB	1 lane	1,800	340	0.189	A	8	348	0.193	A	0.004	No
	and Jupiter St	SB	1 lane	1,800	1,590	0.883	D	15	1,605	0.892	D	0.008	No
	Btw Jupiter St	NB	1 lane	1,800	320	0.178	A	8	328	0.182	A	0.004	No
	and Leucadia Blvd	SB	2 lanes	3,400	1,830	0.538	B	14	1,844	0.542	B	0.004	No
	(PM) Peak Hour												
	Btw La Costa Ave	NB	1 lane	1,900	(1020)	0.537	B	(22)	(1042)	0.548	B	0.012	No
	and Grandview St	SB	1 lane	1,800	(750)	0.417	B	(17)	(767)	0.426	B	0.009	No
	Btw Grandview St	NB	1 lane	1,800	(990)	0.550	B	(22)	(1012)	0.562	B	0.012	No
	and Jupiter St	SB	1 lane	1,800	(720)	0.400	A	(17)	(737)	0.409	A	0.009	No
	Btw Jupiter St	NB	1 lane	1,800	(1010)	0.561	B	(21)	(1031)	0.573	B	0.012	No
	and Leucadia Blvd	SB	2 lanes	3,400	(720)	0.212	A	(16)	(736)	0.216	A	0.005	No
La Costa Avenue	*AM Peak Hour*												
	Btw Coast Hwy 101	EB	1 lane	1,800	700	0.389	A	15	715	0.397	A	0.008	No
	and Vulcan Ave	WB	1 lane	1,800	680	0.378	A	9	689	0.383	A	0.005	No
	Btw Vulcan Ave	EB	1 lane	1,800	790	0.439	B	15	805	0.447	B	0.008	No
	and Sheridan Rd	WB	1 lane	1,800	870	0.483	B	9	879	0.488	B	0.005	No
	Btw Sheridan Rd	EB	1 lane	1,800	850	0.472	B	13	863	0.479	B	0.007	No
	and I-5 SB Ramps	WB	1 lane	1,800	970	0.539	B	8	978	0.543	B	0.004	No
	(PM) Peak Hour												
	Btw Coast Hwy 101	EB	1 lane	1,800	(720)	0.400	A	(17)	(737)	0.409	A	0.009	No
	and Vulcan Ave	WB	1 lane	1,800	(660)	0.367	A	(23)	(683)	0.379	A	0.013	No
	Btw Vulcan Ave	EB	1 lane	1,800	(780)	0.433	B	(17)	(797)	0.443	B	0.009	No
	and Sheridan Rd	WB	1 lane	1,800	(710)	0.394	A	(22)	(732)	0.407	A	0.012	No
	Btw Sheridan Rd	EB	1 lane	1,800	(790)	0.439	B	(15)	(805)	0.447	B	0.008	No
	and I-5 SB Ramps	WB	1 lane	1,800	(790)	0.439	B	(20)	(810)	0.450	B	0.011	No

Carlsbad Blvd capacity from Carlsbad 2018 Growth Management Program. Remaining capacities from Streetscape Final EIR.

Under horizon year 2035 plus project conditions, the study elements were calculated to operate at LOS D or better, except for (bold indicates project effect):

1) Intersection of N. Coast Hwy 101/Bishops Gate (LOS E AM)
2) **Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),**
3) **Intersection of La Costa Ave/Sheridan Rd (LOS F AM & LOS E PM),**
4) Segment of N. Coast Hwy 101 from La Costa Ave to 600' S. of La Costa Ave (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
5) Segment of N. Coast Hwy 101 from 600' S. of La Costa Ave to Bishops Gate (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
6) Segment of N. Coast Hwy 101 from Bishops Gate to Grandview St (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
7) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
8) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
9) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

11.0 Project Traffic Effects

The project is calculated to have a traffic effect to the following intersections because project traffic exceeds the allowable change in vehicular delays. The locations include:

1) Intersection of N. Coast Highway 101/Bishops Gate under existing + project, and existing + cumulative + project conditions.
2) Intersection of N. Coast Highway 101/Grandview St under existing + project conditions.
3) Intersection of La Costa Ave/N. Vulcan Ave under existing + project + cumulative, and horizon year 2035 + project conditions.
4) Intersection of La Costa Ave/Sheridan Rd under horizon year 2035 + project conditions.

11.1 Intersection of N. Coast Highway 101/Bishops Gate

This intersection is calculated to have a project effect under existing + project, and existing + cumulative + project conditions. A roundabout is proposed as part of the City's Streetscape Project; however, the roundabout is forecasted to operate at LOS E in the PM peak hour with project traffic. The AM peak hour is calculated to operate at acceptable LOS. The goal of Streetscape is to reduce the number of southbound vehicle lanes to accommodate a dedicated bike lane, reduce travel speeds, and implement roundabouts to better balanced mobility between motorists, bicyclists, and pedestrians.

If the project pulls building permits before Streetscape completes the roundabout, then the project will provide a **fair share contribution of 6.2%** towards this roundabout or other City direct location as the proportional means to reduce the traffic effect. The 6.2% is the higher percentage of project traffic between AM & PM peak hours as follows: AM 68 project peak hour trips divided by 2,092 existing peak hour trips = 3.3%; PM 86 project peak hour trips divided by 1,378 existing peak hour trips = 6.2% (controls).

11.2 Intersection of N. Coast Highway 101/Grandview Street

This intersection is calculated to have a project effect under existing + project conditions. A roundabout is proposed as part of the City's Streetscape Project. The roundabout is forecasted to operate at LOS E in the PM peak hour with project traffic; however, the project no longer has an effect because the change in delay is 0.6 seconds, which is less than the allowable 2.0 seconds as shown in **Table 28** (LOS calculations included in **Appendix S**). The AM peak hour is calculated to operate at acceptable LOS. The goal of Streetscape is to reduce the number of southbound vehicle lanes to accommodate a dedicated bike lane, reduce travel speeds, and implement roundabouts to better balanced mobility between motorists, bicyclists, and pedestrians.

If the project pulls building permits before Streetscape completes the roundabout, then the project will provide a **fair share contribution of 2.9%** towards this roundabout or other City directed location as the proportional means to reduce the traffic effect. The 2.9% is the higher percentage of project traffic between AM & PM peak hours as follows: AM 23 project peak hour

trips divided by 2,047 existing peak hour trips = 1.1%; PM 40 project peak hour trips divided by 1,381 existing peak hour trips = 2.9% (controls).

TABLE 28: N. COAST HIGHWAY 101/GRANDVIEW ST OPERATIONS WITH IMPROVEMENTS

Intersection and (Analysis)[1]	Approach	Peak Hour	Existing Delay[2]	Existing LOS[3]	Existing + Project Delay[2]	Existing + Project LOS[3]	Existing + Project Delta[4]	Existing + Project Effect[5]
6) N. Coast Hwy at Grandview St (U)	EB	AM	61.0	**F**	70.1	**F**	9.1	**Yes**
With Streetscape Planned Roundabout								
6) N. Coast Hwy at Grandview St (R)	All	AM	35.0	D	35.6	**E**	0.6	No

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized. 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. 4) Delta is the increase in delay from project. 5) Project effect if threshold is exceeded.

11.3 Intersection of La Costa Ave/N. Vulcan Avenue

This intersection is calculated to have a traffic effect under existing + project + cumulative, and horizon year 2035 + project conditions. The traffic effect is reduced to acceptable LOS with an improvement of a traffic signal under existing + project + cumulative conditions. Under horizon year 2035 + project conditions, in addition to a traffic signal an additional westbound left turn lane is required to have a forecasted acceptable LOS. Sufficient ROW may not exist for an additional left turn lane (for year 2034), thus City coordination and/or monitoring of traffic volumes may be required to determine if the forecasted volumes materialize to require a separate left turn lane. The California Manual on Traffic Control Devices (MUTCD) 2014 Revision 5 (effective 3/27/20) Warrant 2 (Four-Hour Vehicular Volume) is satisfied based on existing year 2020 volumes. The LOS without and with the traffic signal is shown in **Table 29**. The signal warrant calculations and LOS calculations are included in **Appendix T**.

TABLE 29: LA COSTA AVE/N. VULCAN AVE LOS WITH MITIGATION

Intersection and (Analysis)[1]	Approach	Peak Hour	Existing + Cumulative Delay[2]	Existing + Cumulative LOS[3]	Existing + Cumulative + Project Delay[2]	Existing + Cumulative + Project LOS[3]	Existing + Cumulative + Project Delta[4]	Existing + Cumulative + Project Effect[5]
10) La Costa Ave at	NB	AM	58.4	**F**	60.9	**F**	2.5	**Yes**
N Vulcan Ave (U)	NB	PM	50.0	**F**	58.5	**F**	8.5	**Yes**
With Improvement of a Traffic Signal								
10) La Costa Ave at	All	AM			11.7	B		No
N Vulcan Ave (S)	All	PM			9.7	A		No
Intersection and (Analysis)[1]	**Approach**	**Peak Hour**	**Horizon Year Delay[2]**	**Horizon Year LOS[3]**	**Horizon Year 2035 + Project Delay[2]**	**Horizon Year 2035 + Project LOS[3]**	**Horizon Year 2035 + Project Delta[4]**	**Horizon Year 2035 + Project Effect[5]**
10) La Costa Ave at	NB	AM	147.7	**F**	161.5	**F**	13.8	**Yes**
N Vulcan Ave (U)	NB	PM	121.5	**F**	142.7	**F**	21.2	**Yes**
With Improvement of a Traffic Signal and additional WB left turn lane								
10) La Costa Ave at	All				33.4	C		No
N Vulcan Ave (S)	All				20.8	C		No

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized. 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. 4) Delta is the increase in delay from project. 5) Project effect if threshold is exceeded.

Under Existing + Project + Cumulative conditions, the recommended improvement is a **fair share contribution of 2.7%** towards a future traffic signal as the proportional means to reduce the traffic effect. The 2.7% is the higher percentage of project traffic between AM & PM peak hours as follows: AM 24 project peak hour trips divided by 1,407 existing + cumulative peak hour trips = 1.7%; PM 40 project peak hour trips divided by 1,465 existing + cumulative peak hour trips = 2.7% (controls).

Under Horizon Year 2035 + Project conditions, the recommended improvement is a **fair share contribution of 2.3%** toward a horizon year intersection improvement that may be a westbound left turn lane or other to be determined improvement as the proportional means to reduce the traffic effect. The 2.3% is the higher percentage of project traffic between AM & PM peak hours as follows: AM 24 project peak hour trips divided by 1,871 horizon year peak hour trips = 1.3%; PM 40 project peak hour trips divided by 1,705 horizon year peak hour trips = 2.3% (controls).

11.4 Intersection of La Costa Ave/Sheridan Road

This intersection is calculated to have a traffic effect under horizon year 2035 + project conditions. The traffic effect is reduced to acceptable LOS with an improvement of a traffic signal. The California MUTCD 2014 Revision 5 (effective 3/27/20) Warrant 3 (Peak-Hour Vehicular Volume) is satisfied based on horizon year 2035 volumes. The LOS without and with the traffic signal is shown in **Table 30**. The signal warrant calculations and LOS calculations are included in **Appendix U**. It is recommended that the applicant coordinate with City staff to determine the appropriate proportional means to reduce the traffic effect.

TABLE 30: LA COSTA AVE/SHERIDAN RD LOS WITH MITIGATION

Intersection and	Approach	Peak	Horizon Year		Horizon Year 2035 + Project			
(Analysis)[1]		Hour	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delta[4]	Effect[5]
11) La Costa Ave at	NB	AM	61.2	**F**	69.7	**F**	8.5	**Yes**
Sheridan Rd (U)	NB	PM	30.7	**D**	35.1	**E**	4.4	**Yes**
With Improvement of a Traffic Signal								
11) La Costa Ave at	All	AM			7.2	A		No
Sheridan Rd (S)	All	PM			5.8	A		No

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized. 2) Delay - HCM Average Control Delay in sec. 3) LOS: Level of Service. 4) Delta is the increase in delay from project. 5) Project effect if threshold is exceeded.

Under Horizon Year 2035 + Project conditions, the recommended improvement is a **fair share contribution of 2.4%** toward a horizon year 2035 traffic signal or other City directed location as the proportional means to reduce the traffic effect. The 2.4% is the higher percentage of project traffic between AM & PM peak hours as follows: AM 24 project peak hour trips divided by 1,849 horizon year peak hour trips = 1.3%; PM 39 project peak hour trips divided by 1,611 horizon year peak hour trips = 2.4% (controls).

12.0 Conclusion

This analysis determined if there were any potential traffic effects on the study roadways from the addition of project traffic. The project includes a 30-room hotel, 94 multi-family units, and 18,261 square feet of commercial/retail space on the westside of North Coast Highway 101 approximately 500 feet south of La Costa Avenue located in the City of Encinitas, California. The project will replace an existing commercial/retail center of approximately 7,582 square feet with active businesses.

This analysis is based on the local San Diego Institute of Transportation Engineers (ITE) *Guidelines for Traffic Impact Studies in the San Diego Region* traffic analysis criteria. The project traffic generation was calculated using the SANDAG trip rates from the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. The project site has active uses creating traffic; therefore, a traffic credit was applied because the existing uses will be replaced by the project. Additionally, the existing and proposed project have pass-by trips already on the study roadways. The project is calculated to generate a net increase of 1,122 ADT, 60 AM peak hour trips, and 102 PM peak hour trips.

Under existing conditions, the study elements were calculated to operate at LOS D or better, except for:

1) Intersection of N. Coast Highway 101/Bishops Gate (LOS E AM),
2) Intersection of N. Coast Highway 101/Grandview St (LOS F AM),
3) Intersection of N. Coast Highway 101/Jupiter St (LOS E AM),
4) Intersection of La Costa Ave/N. Vulcan Ave (LOS E AM), and
5) Segment of La Costa Ave from N. Vulcan to Sheridan (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hours operations).

Under existing plus project conditions, the study elements were calculated to operate at LOS D or better, except for (bold indicates project effect):

1) Intersection of N. Coast Highway 101/Bishops Gate (LOS E AM),
2) Intersection of N. Coast Highway 101/Grandview St (LOS F AM),
3) Intersection of N. Coast Highway 101/Jupiter St (LOS E AM),
4) Intersection of La Costa Ave/N. Vulcan Ave (LOS E AM), and
5) Segment of La Costa Ave from N. Vulcan to Sheridan (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

Under existing plus cumulative conditions, the study elements were calculated to operate at LOS D or better, except for the:

1) Intersection of N. Coast Hwy 101/Bishops Gate (LOS E AM),
2) Intersection of N. Coast Hwy 101/Grandview St (LOS E AM),
3) Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),
4) Segment of N. Coast Hwy 101 from La Costa Ave to 600' S. of La Costa Ave (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
5) Segment of N. Coast Hwy 101 from 600' S. of La Costa Ave to Bishops Gate (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour

operations),

6) Segment of N. Coast Hwy 101 from Bishops Gate to Grandview St (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
7) Segment of N. Coast Hwy 101 from Grandview St. to Jupiter St. (LOS E SB AM),
8) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
9) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
10) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

Under existing plus cumulative plus project conditions, the study elements were calculated to operate at LOS D or better, except for (bold represents project effect):

1) Intersection of N. Coast Hwy 101/Bishops Gate (LOS E AM),
2) Intersection of N. Coast Hwy 101/Grandview St (LOS E AM),
3) Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),
4) Segment of N. Coast Hwy 101 from La Costa Ave to 600' S. of La Costa Ave (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
5) Segment of N. Coast Hwy 101 from 600' S. of La Costa Ave to Bishops Gate (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
6) Segment of N. Coast Hwy 101 from Bishops Gate to Grandview St (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
7) Segment of N. Coast Hwy 101 from Grandview St. to Jupiter St. (LOS E SB AM),
8) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
9) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
10) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

Under horizon year 2035 conditions, the study elements were calculated to operate at LOS D or better, except for:

1) Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),
2) Intersection of La Costa Ave/Sheridan Rd (LOS F AM),
3) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
4) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
5) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

Under horizon year 2035 plus project conditions, the study elements were calculated to operate at LOS D or better, except for (bold indicates project effect):

1) Intersection of N. Coast Hwy 101/Bishops Gate (LOS E AM)
2) **Intersection of La Costa Ave/N. Vulcan Ave (LOS F AM & PM),**
3) **Intersection of La Costa Ave/Sheridan Rd (LOS F AM & LOS E PM),**
4) Segment of N. Coast Hwy 101 from La Costa Ave to 600' S. of La Costa Ave (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
5) Segment of N. Coast Hwy 101 from 600' S. of La Costa Ave to Bishops Gate (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
6) Segment of N. Coast Hwy 101 from Bishops Gate to Grandview St (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
7) Segment of La Costa Ave from N. Coast Hwy to N. Vulcan Ave (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations),
8) Segment of La Costa Ave from N. Vulcan Ave to Sheridan Rd (LOS F daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations), and
9) Segment of La Costa Ave from Sheridan Rd to I-5 (LOS E daily; however, this segment operates at acceptable LOS under AM and PM peak hour operations).

The project is calculated to have an effect to the following intersections because project traffic exceeds the allowable change in vehicular delays. The locations include:

1) Intersection of N. Coast Highway 101/Bishops Gate under existing + project, and existing + cumulative + project conditions. A roundabout is proposed as part of the City's Streetscape Project; however, the roundabout is forecasted to operate at LOS E in the PM peak hour with project traffic. The AM peak hour is calculated to operate at acceptable LOS. The goal of Streetscape is to reduce the number of southbound vehicle lanes to accommodate a dedicated bike lane, reduce travel speeds, and implement roundabouts to better balanced mobility between motorists, bicyclists, and pedestrians. If the project pulls building permits before Streetscape completes the roundabout, then the project will provide **a fair share contribution of 6.2%** towards this roundabout or other City directed location as the proportional means to reduce the traffic effect.

2) Intersection of N. Coast Highway 101/Grandview St under existing + project conditions. A roundabout is proposed as part of the City's Streetscape Project. The roundabout is forecasted to operate at LOS E in the PM peak hour with project traffic; however, the project no longer has an effect with the roundabout because the change in delay is 0.6 seconds, which is less than the allowable 2.0 seconds. The AM peak hour is calculated to operate at acceptable LOS. The goal of Streetscape is to reduce the number of southbound vehicle lanes to accommodate a dedicated bike lane, reduce travel speeds, and implement roundabouts to better balanced mobility between motorists, bicyclists, and pedestrians. If the project pulls building permits before Streetscape completes the roundabout as the proportional means to reduce the traffic effect, then the project will provide a **fair share contribution of 2.9%** towards this roundabout or other City directed location.

3) Intersection of La Costa Ave/N. Vulcan Ave under existing + project + cumulative, and horizon year 2035 + project conditions. The traffic effect is reduced to acceptable LOS with an improvement of a traffic signal under existing + project + cumulative conditions. Under Existing + Project + Cumulative conditions, the recommended improvement is a **fair share contribution of 2.7%** towards a future traffic signal. Under horizon year 2035 + project conditions, in addition to a traffic signal an additional westbound left turn lane is required to have a forecasted acceptable LOS. Under Horizon Year 2035 + Project conditions, the recommended improvement is a **fair share contribution of 2.3%** toward a horizon year intersection improvement that may be a westbound left turn lane or other to be determined improvement as the proportional means to reduce the traffic effect.

4) Intersection of La Costa Ave/Sheridan Rd under horizon year 2035 + project conditions. The traffic effect is reduced to acceptable LOS with an improvement of a traffic signal. Under Horizon Year 2035 + Project conditions, the recommended improvement is a **fair share contribution of 2.4%** toward a horizon year 2035 traffic signal or other City directed location as the proportional means to reduce the traffic effect.

13.0 References

City of Carlsbad *General Plan* September 2015.

City of Encinitas *Circulation Element* May 11, 1995.

City of Encinitas *2014-2021 Housing Element Update* Traffic Impact Study May, 2018.

Highway Capacity Manual (2000 and 6th Edition).

San Diego Institute of Transportation Engineers (ITE). May 2019. *Guidelines for Transportation Impact Studies in the San Diego Region*.

San Diego Association of Governments (SANDAG). April 2002. *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*.

Trafficware Corporation. Synchro 10.0 computer software.

Appendix A

Excerpts from City of Carlsbad Growth Management Plan

Growth Management Program

Year 2018 Traffic Conditions Report

Prepared for:

City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

Prepared by:

Jason Stack, TE
Principal Manager

5865 Avenida Encinas, Suite 142-B
Carlsbad, CA 92008

June 19, 2019

Roadway Service Volume Table - Generalized Data

Segment Capacity Threshold for Arterial Streets

Hourly Volume in Peak Direction

Lanes	Speed Limit	Median	B	C	D	E
1	35	Undivided	**	180	590	740
	35	Divided	**	190	630	780
2	35	Divided	**	520	1390	1540
	45	Divided	**	600	1560	1760
	50	Divided	**	850	1690	1820
	55	Divided	**	1050	1800	1890
3	35	Divided	**	680	2230	2540
	45	Divided	**	2040	2660	2700
	50	Divided	**	2360	2760	2800
	55	Divided	390	2600	2870	2900
4	45	Divided	**	2780	3560	3620

Hourly Volume in Both Direction

Lanes	Speed Limit	Median	B	C	D	E
2	35	Undivided	**	340	1100	1380
	35	Divided	**	360	1170	1450
4	35	Divided	**	970	2580	2860
	45	Divided	**	1120	2890	3260
	50	Divided	**	1580	3130	3380
	55	Divided	**	1950	3340	3500
5	55	Divided	**	3395	4343	4455
6	35	Divided	**	1260	4130	4720
	50	Divided	**	4380	5120	5180
	55	Divided	730	4820	5320	5360
7	45	Divided	**	4483	5785	5878

Annual Average Daily Traffic

Lanes	Speed Limit	Median	B	C	D	E
2	35	Undivided	**	4200	13700	17200
	35	Divided	**	4400	14600	18100
4	35	Divided	**	12100	32200	35800
	45	Divided	**	13900	36200	40800
	50	Divided	**	19700	39200	42200
	55	Divided	**	24400	41700	43800
6	35	Divided	**	15800	51700	59000
	50	Divided	**	54700	63900	64800
	55	Divided	9100	60200	66500	67000

Segment Capacity Threshold for Industrial Streets

Hourly Volume in Peak Direction

Lanes	Speed Limit	Median	B	C	D	E
1	25	Undivided	**	110	450	560
	25	Divided	**	140	610	720
	35	Undivided	**	180	590	740
	35	Divided	**	190	630	780
	40	Undivided	**	216	708	888
	40	Divided	**	228	756	936

Hourly Volume in Both Direction

Lanes	Speed Limit	Median	B	C	D	E
2	25	Undivided	**	200	800	990
	25	Divided	**	250	1080	1270
	35	Undivided	**	340	1100	1380
	35	Divided	**	360	1170	1450
	40	Undivided	**	408	1320	1656
	40	Divided	**	432	1404	1740

Annual Average Daily Traffic

Lanes	Speed Limit	Median	B	C	D	E
2	25	Undivided	**	2200	8900	11000
	25	Divided	**	2800	12000	14100
	35	Undivided	**	4200	13700	17200
	35	Divided	**	4400	14600	18100
	40	Undivided	**	5040	16440	20640
	40	Divided	**	5280	17520	21720

Roadway Service Volume Table - Specific Corridors

N/S Streets	Limits	Roadway Classification	Peak Direction A	B	C	D	E
El Camino Real	City Limits to Marron Road	6/35/D	**	**	**	**	1400
	Marron Road to Carlsbad Village Drive	6/35/D	**	140	2070	2520	##
	Carlsbad Village Drive to Tamarack Avenue	6/55/D	1930	2850	2900	##	##
	Tamarack Avenue to Cannon Road	6/55/D	**	**	2400	2800	##
	Cannon Road to College Boulevard	2/55/D - NB	**	1060	1860	##	##
		3/55/D - SB	**	2150	2900	##	##
	College Boulevard to Palomar Airport Road	6/55/D	270	2750	2940	##	##
	Palomar Airport Road to Camino Vida Roble	6/55/D	**	**	1330	2510	2580
	Camino Vida Roble to Poinsettia Lane	2/55/D - NB	**	970	2020	2100	##
		3/55/D - SB	**	1470	2820	2900	##
	Poinsettia Lane to Aviara Parkway-Alga Road	6/55/D	**	**	2100	2820	2900
	Aviara Parkway-Alga Road to La Costa Avenue	3/55/D - NB	**	1390	2580	##	##
		2/55/D - SB	**	800	1920	##	##
	La Costa Avenue to Leucadia Boulevard	6/55/D	**	**	1880	2820	2880
College Boulevard	City Limits to Carlsbad Village Drive	4/45/D	**	**	930	1680	1770
	Carlsbad Village Drive to Cannon Road	4/45/D	**	**	1040	1760	1800
	El Camino Real to Aston Avenue	4/50/D	**	**	390	1440	1810
	Aston Avenue to Palomar Airport Road	2/50/D - NB	880	1680	##	##	##
		2/50/D - SB	80	970	1040	##	##
Aviara Parkway	Palomar Aiport Road to Poinsettia Lane	4/45/D	**	**	**	1130	1630
Melrose Drive	City Limits to Palomar Airport Road	4/55/D - NB	**	**	1710	2740	2830
		3/55/D - SB	**	**	**	930	1630
	Palomar Airport Road to Poinsettia Lane	6/55/D	**	490	2720	2880	##
	Poinsettia Lane to Rancho Santa Fe Road	6/55/D	**	**	1400	2100	##
Rancho Santa Fe Road	City Limits to Camino Junipero	6/55/D	**	2520	3160	##	##
	Camino Junipero to La Costa Avenue	6/55/D	**	1400	2660	2700	##
	La Costa Avenue to Calle Barcelona	6/50/D	**	460	2410	2480	##
	Calle Barcelona to Olivenhain Road	6/50/D	**	540	2810	3040	##
E/W Streets	**Limits**	**Roadway Classification**	**Peak Direction A**	**B**	**C**	**D**	**E**
Cannon Road	Avenida Encinas to Paseo del Norte	4/35/D	**	**	**	730	1320
	Paseo del Norte to Car Country	4/50/D	**	390	1630	1770	1800
	Car Country to Legoland Drive	4/50/D	**	1170	1660	1700	##
	Legoland Drive to Faraday Avenue	4/50/D	**	270	1280	1320	##
	Faraday Avenue to El Camino Real	4/50/D	**	**	1280	1620	##
	El Camino Real to College Boulevard	4/50/D	**	**	280	1310	1690
Faraday Avenue	Van Allen Way to El Camino Real	4/40/D	**	**	220	1400	1680
	El Camino Real to Melrose Drive	4/50/D	**	**	1370	1640	##
Palomar Airport Road	Carlsbad Boulevard to Avenida Encinas	2/35/U	**	520	760	##	##
	Avenida Encinas to Paseo del Norte	3/35/D - EB	**	**	**	**	250
		2/35/D - WB	**	**	**	**	650
	Paseo del Norte to Armada	3/45/D - EB	**	**	1640	2660	2740
		4/45/D - WB	**	**	2250	3570	3680
	Armada to Aviara Parkway	6/55/D	**	650	2760	2940	##
	Aviara Parkway to Camino Vida Roble	6/55/D	440	2720	2900	##	##
	Camino Vida Roble to El Camino Real	6/55/D	**	790	2140	##	##
	El Camino Real to El Fuerte	6/55/D	**	1290	2830	2900	##
	El Fuerte to Melrose Drive	6/55/D	**	1230	2860	2940	##
	Melrose Drive to City Limits	6/55/D	**	340	2590	2900	##
Poinsettia Lane	Avenida Encinas to Paseo del Norte	4/35/D	**	**	**	180	1190
	Paseo del Norte to Aviara Parkway	4/50/D	**	**	1330	1770	1840
La Costa Avenue	Piraeus Street to El Camino Real	4/55/D	**	1450	1700	##	##

** Indicates LOS cannot be achieved during peak hour.(e.g., signal spacing is too close to achieve smooth traffic flows even at low volumes).

Indicates the capacity jumps to LOS F because intersection capacities have been reached. (i.e., travel speeds quickly degrade to LOS F).

Appendix B

Excerpts from City of Encinitas General Plan

THE CITY OF ENCINITAS
CALIFORNIA

PUBLIC ROAD STANDARDS

April, 1991

TABLE 2
GENERAL PLAN CIRCULATION ELEMENT
ROADWAY CAPACITY STANDARDS *

Facility Type	# of Lanes	ADT Capacity LOS C	LOS D	LOS E
FREEWAY	6	108,00	120,000	135,000
	8	145,000	160,000	175,000
	10	175,000	195,000	215,000
Prime Arterial	6	46,000	51,200	57,000
Prime Arterial-Augmented	6	53,000	60,000	66,000
Major Roadway	4	28,200	31,600	35,200
Major Roadway-Augmented	4+	36,300	41,000	45,400
Collector Roadway	4	26,000	29,200	32,400
Local Roadway-Augmented	2+	16,000	18,000	20,000
Local Roadway	2	11,200	12,600	14,000

NOTE:
1. Capacity means the maximum volume for the stated level of service.
2. The above Standards are not applicable to non-circulation element roadways.

* From City of Encinitas General Plan Circulation Element.

Appendix C

Excerpts from City of Encinitas Housing Element

City of Encinitas Housing Element Traffic Impact Study

Draft Report | January 27, 2016

Prepared For:

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024

Prepared By:

CHEN RYAN
CHEN RYAN ASSOCIATES, INC.
239 Laurel Street, Suite 203
San Diego, CA 92101

Table 3.2
Existing Roadway Segment Level of Service

Roadway	Segment	Count Date	Count Source	Functional Classification[1]	ADT	Capacity (LOS E)	V/C	LOS	Jurisdiction
Carlsbad Blvd	Between Poinsettia Lane and Avenida Encinas	June 2015	AVC	4-Lane Major Arterial	12,160	40,000	0.304	A	City of Carlsbad
	Between Avenida Encinas and La Costa Avenue	June 2015	AVC	4-Lane Major Arterial	16,194	40,000	0.405	B	City of Carlsbad
North Coast Highway 101	Between La Costa Avenue and 600 feet south of La Costa Avenue	June 2015	PTD	4-Lane Major Roadway	18,070	35,200	0.513	C or better	City of Encinitas
	Between 600 feet south of La Costa Avenue and Leucadia Blvd	June 2015	PTD	3-Lane Major Roadway[2]	17,378	26,400	0.658	C or better	City of Encinitas
	Between Leucadia Blvd and Cadmus Street	June 2015	PTD	4-Lane Major Roadway	19,145	35,200	0.544	C or better	City of Encinitas
	Between Cadmus Street and Marcheta Street	June 2015	PTD	4-Lane Major Roadway	19,145	35,200	0.544	C or better	City of Encinitas
	Between Marcheta Street and 660 feet south of Marcheta Street	June 2015	PTD	4-Lane Major Roadway	19,145	35,200	0.544	C or better	City of Encinitas
	Between 660 feet south of Marcheta Street and Encinitas Blvd	June 2015	PTD	4-Lane Major Roadway	19,145	35,200	0.544	C or better	City of Encinitas
South Coast Highway 101	Between Encinitas Blvd and D Street	June 2015	PTD	4-Lane Major Roadway	18,746	35,200	0.533	C or better	City of Encinitas
	Between D Street and E Street	June 2015	PTD	4-Lane Major Roadway	18,746	35,200	0.533	C or better	City of Encinitas
	Between E Street and F Street	June 2015	PTD	4-Lane Major Roadway	18,746	35,200	0.533	C or better	City of Encinitas
	Between F Street and H Street	June 2015	PTD	4-Lane Major Roadway	18,746	35,200	0.533	C or better	City of Encinitas
	Between H Street and J Street	June 2015	PTD	4-Lane Major Roadway	20,337	35,200	0.578	C or better	City of Encinitas

Table 3.2
Existing Roadway Segment Level of Service

Roadway	Segment	Count Date	Count Source	Functional Classification[1]	ADT	Capacity (LOS E)	V/C	LOS	Jurisdiction
Birmingham Drive	Between San Elijo Avenue and MacKinnon Avenue	June 2015	PTD	2-Lane Local Roadway - Augmented	14,588	20,000	0.729	C or better	City of Encinitas
	Between MacKinnon Avenue and Carol View Drive	June 2015	PTD	2-Lane Local Roadway - Augmented	14,588	20,000	0.729	C or better	City of Encinitas
	Between Carol View Drive and I-5 SB Ramps	June 2015	PTD	2-Lane Local Roadway - Augmented	14,588	20,000	0.729	C or better	City of Encinitas
	Between I-5 SB Ramps and I-5 NB Ramps	June 2015	PTD	2-Lane Local Roadway	16,342	14,000	1.167	**F**	City of Encinitas
	Between I-5 NB Ramps and Villa Cardiff Drive	June 2015	PTD	2-Lane Local Roadway	8,248	14,000	0.589	C or better	City of Encinitas
	Between Villa Cardiff Drive and Playa Riviera	June 2015	PTD	2-Lane Local Roadway	8,248	14,000	0.589	C or better	City of Encinitas
	Between Playa Riviera and Freda Lane	June 2015	PTD	2-Lane Local Roadway	8,248	14,000	0.589	C or better	City of Encinitas
	Between Freda Lane and Lake Drive	June 2015	PTD	2-Lane Local Roadway	8,248	14,000	0.589	C or better	City of Encinitas

Source: Chen Ryan Associates; January 2016

Notes:
Bold letter indicates substandard LOS E or F.
[1] Functional Classification is representative of existing segment functionality and does not take into consideration the ultimate or final classification.
[2] 3-Lane Major Roadway is 75% capacity of a 4-Lane Major Roadway.
[3] 3-Lane Collector is 75% capacity of a 4-Lane Collector.
[4] 5-Lane Prime is 84% capacity of 6-Lane Prime Arterial (SANTEC).
[5] 5-Lane Major is 84% capacity of 6-Lane Major Arterial (SANTEC).
[6] 3-Lane Collector is 75% capacity of 4-Lane Collector (SANTEC).

Appendix D

Excerpts from Streetscape Traffic Study

VOLUME 1
FINAL ENVIRONMENTAL IMPACT REPORT

North Coast Highway 101 Streetscape Improvement Project

Case No.: 10-035 DR/CDP/EIR and 10-036 GPA/SPA/LCPA
State Clearinghouse (SCH) No. 2015091084

Lead Agency/Project Applicant:

City of Encinitas
Development Services Department
Contact: Stephanie Kellar, Project Manager
505 South Vulcan Avenue
Encinitas, California 92024

Preparer:

Michael Baker International
9755 Clairemont Mesa Boulevard, Suite 100
San Diego, California 92124

February 2018

Highway 101 Streetscape Project

TRAFFIC IMPACT ANALYSIS REPORT

Prepared for

City of Encinitas

505 S. Vulcan Avenue,
Encinitas, CA 92024

Prepared by

Michael Baker
INTERNATIONAL

5050 Avenida Encinas, Suite 260, Carlsbad, CA 92008
CONTACT: Robert Davis 760.603.6244 ROBERTDAVIS@mbakerintl.com

November 29, 2016

JN 137350

Table 1
Signalized, Un-signalized and Roundabout Intersections
Level of Service & Delay Ranges

LOS	Delay (seconds/vehicle)	
	Signalized Intersections	Un-signalized and Roundabout Intersections
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: 2000 Highway Capacity Manual and 2010 Highway Capacity Manual.

Roadway Segment Analysis Methodology

To better evaluate the segment operations, peak hour directional segment analysis was conducted which evaluates the worst case condition. The capacity of the segment was determined by factoring the base saturation flow rate of 2,000 vehicles per hour per lane (VPHPL) to account for friction due to on-street parking and due to turning vehicles at minor side street intersections. For the existing roadway geometry conditions along Highway 101, a composite total of 30% flow rate reduction was assumed, in the southbound direction, with a reduction of 20% due to parking friction and 10% due to turning vehicle friction. In the northbound direction, a reduction of 10% was assumed due to turning vehicle friction at stop-controlled side streets. Along Highway 101, it was assumed that the reduction in roadway capacity for project alternatives will not be the same as that of the existing geometry. With the bike lanes proposed in the project design, a buffer is created between the travelling vehicles and vehicles either parking or turning. Therefore, for the project alternative scenarios in the southbound direction, the reduction in base saturation flow rate was adjusted by 10% for parking friction and 5% due to turning vehicles at stop-controlled side streets, for a combined total of 15%. In the northbound direction, a reduction of 5% was assumed due to turning vehicle friction. For La Costa Avenue a reduction of 10% was assumed due to turning vehicle friction in both directions and for all scenarios.

The peak hour directional volume of the segment was then divided by the adjusted capacity to determine the volume to capacity (v/c) ratio of the segment. This ratio was then compared to the LOS thresholds for segments defined in the SANTEC/ITE traffic study guideline to determine the LOS of the segment. The SANTEC/ITE LOS thresholds for segments is shown in Table 2 below:

Table 2
Segment Level of Service Thresholds Based on V/C Ratios

LOS	V/C Ratio
A	< 0.41
B	0.42 – 0.62
C	0.63 – 0.79
D	0.80 – 0.92
E	0.93 – 1.00
F	> 1.00

Appendix E

Excerpts from ITE Guidelines

GUIDELINES FOR TRANSPORTATION IMPACT STUDIES IN THE SAN DIEGO REGION

May 2019

7.0 ROADWAY

It is recommended that consideration be given to preparation of a local transportation analysis (LTA) for all land development and transportation projects. This section describes the recommended methodology for analysis of local roadway conditions.

The purpose of the roadway analysis portion of an LTA is to forecast, describe, and analyze how a development will affect existing and future circulation infrastructure for users of the roadway system, including vehicles, bicycles, pedestrians, and transit. The LTA assists transportation engineers and planners in both the development community and public agencies when making land use, mobility infrastructure, and other development decisions. An LTA quantifies the expected changes in transportation conditions and translates these changes into transportation system effects in the vicinity of a project.

The roadway transportation analysis included in an LTA is separate from the transportation impact analysis conducted as part of the environmental (CEQA) project review process, as described in Part I. The purpose of the roadway transportation analysis is to ensure that all projects provide a fair share of roadway infrastructure improvements in order to accommodate their multimodal transportation demands.

The following guidelines were prepared to assist local agencies throughout the San Diego Region in promoting consistency and uniformity in local transportation studies. These guidelines do not establish a legal standard for these functions but are intended to supplement any individual manuals or level of service objectives for the various jurisdictions. These guidelines attempt to consolidate regional efforts to identify when an LTA is needed, what professional procedures should be followed, and what constitutes a significant traffic effect that should be dealt with.

The instructions outlined in these guidelines are subject to update as future conditions and experience become available. Special situations may call for variation from these guidelines. It is recommended that consultants who prepare an LTA submit a scoping letter (methodology memo) for review by the lead agency to verify the application of these guidelines and to identify any analysis needed to address special circumstances. The scoping letter in this context is used for transportation analysis only and is not related to a formal scoping process that occurs with preparation of a CEQA study. Caltrans and lead agencies should agree on the specific methods used in local transportation analysis studies involving any State Route facilities, including metered and unmetered freeway ramps.

NEED FOR A STUDY

Figure 7-1 shows the flow chart for determination of when a roadway analysis should be conducted. A roadway analysis should be prepared for all projects which generate traffic greater than 1,000 total average daily driveway trips (ADT) or 100 peak-hour trips. If a proposed project is not in conformance with the land use and/or transportation element of the general or community plan, use threshold rates of 500 ADT or 50 peak-hour trips.

Early consultation with any affected jurisdictions is strongly encouraged since a “focused” or “abbreviated” roadway analysis may still be required – even if the above threshold rates are not met. An understanding of the level of detail and the assumptions required for the analysis should be reached. A pre-submittal in-person conference may not be required. However, the applicant should prepare a scoping letter for the agency’s review and approval prior to preparation of the analysis.

Table 7-1

DETERMINATION OF THE NEED FOR ROADWAY IMPROVEMENTS

LEVEL OF SERVICE WITH PROJECT*	ALLOWABLE CHANGE DUE TO PROJECT EFFECT**					
	FREEWAYS		ROADWAY SEGMENTS		INTERSECTIONS	RAMP*** METERING
	V/C	SPEED (MPH)	V/C	SPEED (MPH)	DELAY (SEC.)	DELAY(MIN.)
E, & F (OR RAMP METER DELAYS ABOVE 15 MIN.)	0.01	1	0.02	1	2	2

NOTES:

* All level of service measurements are based upon Highway Capacity Manual (HCM) procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 7-2 or a similar LOS chart for each jurisdiction). The target LOS for freeways, roadways, and intersections is generally "D." For metered freeway ramps, LOS does not apply; however, ramp meter delays above 15 minutes are considered excessive.

** If a proposed project's traffic causes the values shown in the table to be exceeded, the effects of the project are determined to justify improvements. These changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible improvements within the LTA report that will maintain the traffic facility at the target LOS or restore to pre-project conditions. If the LOS with the proposed project becomes worse than the target (see above * note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, roadway improvements should be considered.

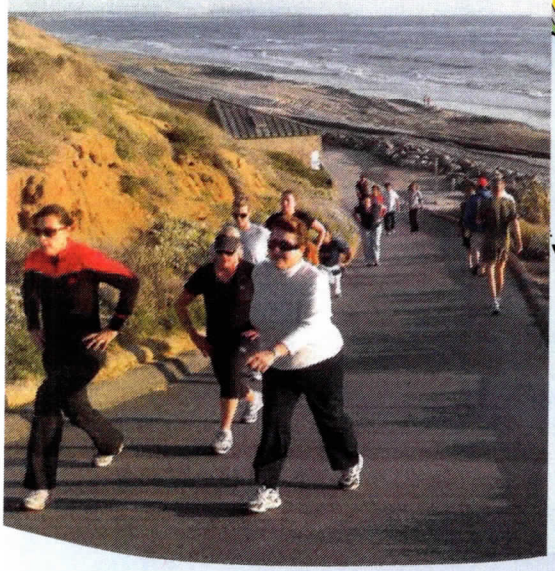
*** See Attachment B for ramp metering analysis.

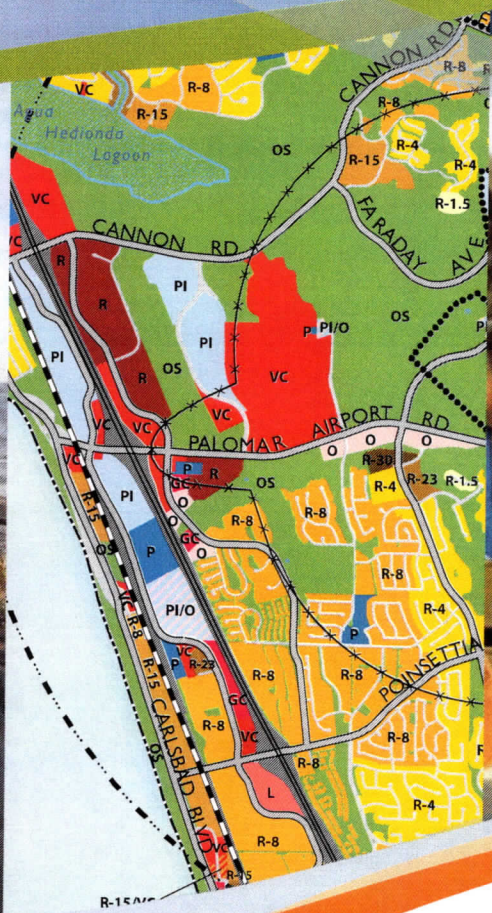
KEY:
- V/C = Volume to Capacity ratio
- Speed = Speed measured in miles per hour
- Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters
- LOS = Level of Service

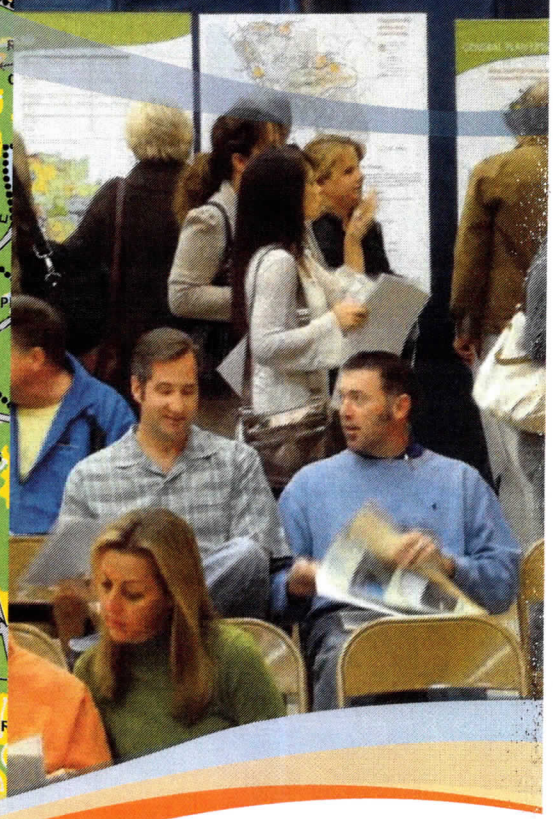
Appendix F

Excerpts from City of Carlsbad General Plan

City of Carlsbad
California







Carlsbad General Plan

September 2015

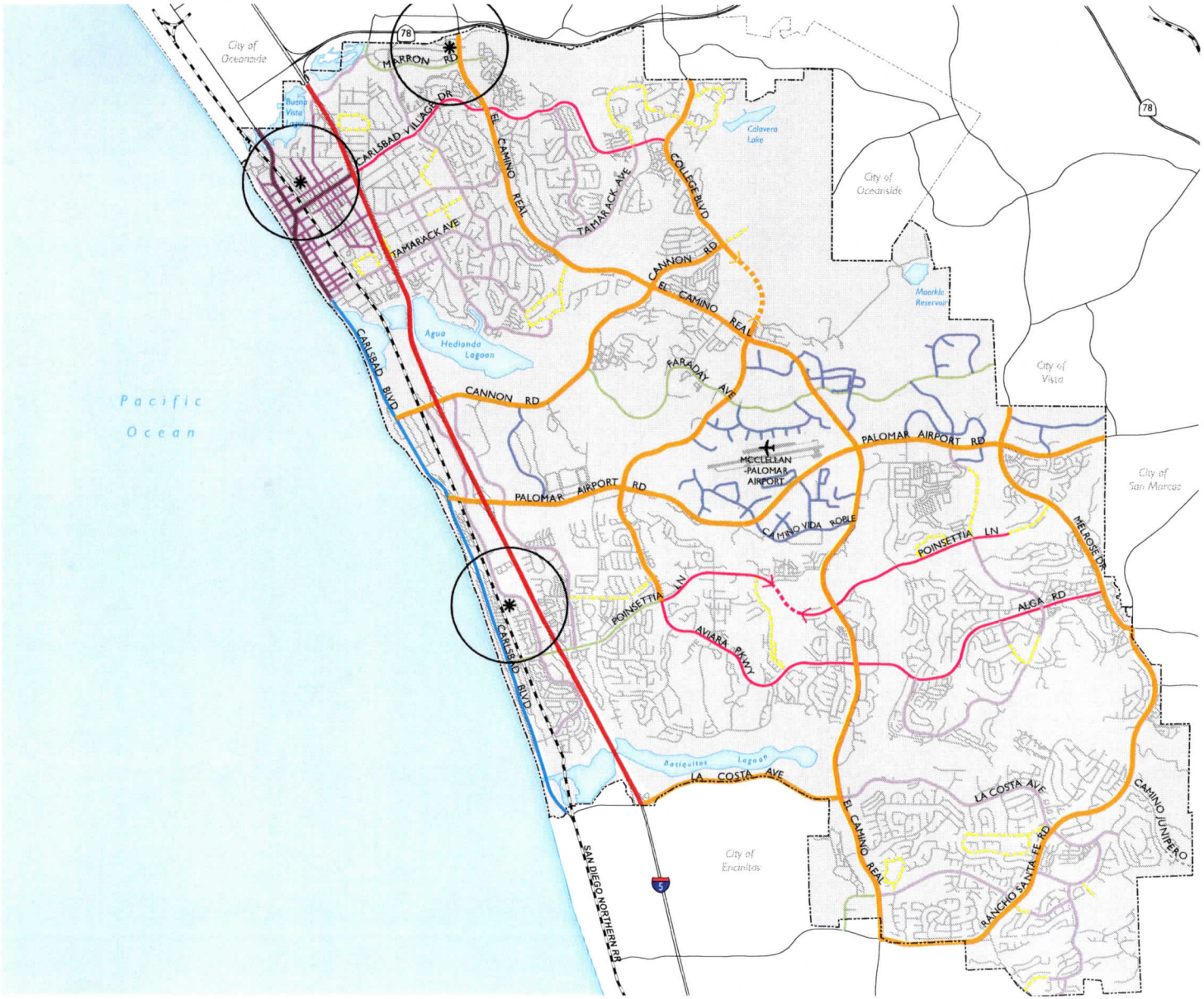


Figure 3-1: Street System

- Freeway
- Arterial Streets
- Identity Streets
- Village Streets
- Arterial Connector Streets
- Neighborhood Connector Streets
- Coastal Streets
- School Streets
- Employment/Transit Connector Streets
- Industrial Streets
- Local/Neighborhood Street
- Planned Arterial Streets
- Planned Arterial Connector Streets
- Planned Local/Neighborhood Streets
- Highways
- Railroad
- Transit Centers
- Half Mile Radius
- City Limits

500 ACRES

100 ACRES

0 0.5 1 2
Miles

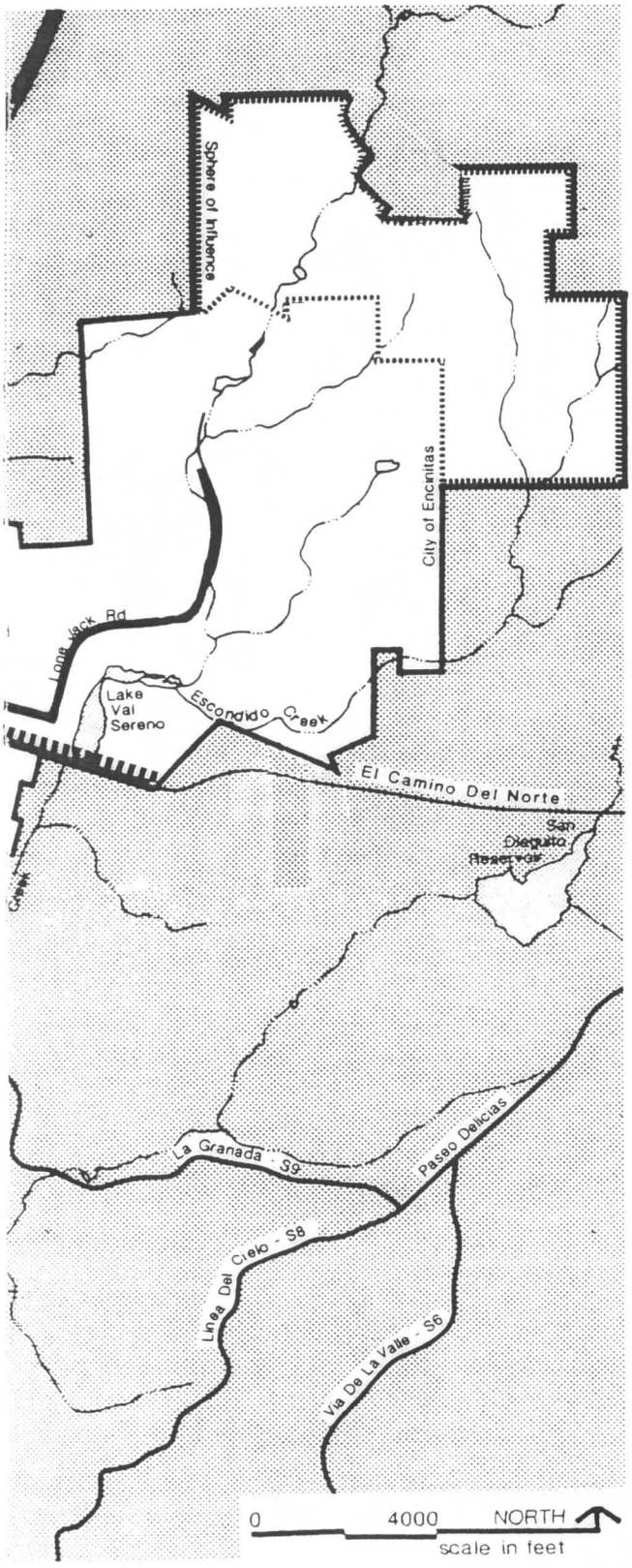
Source: City of Carlsbad, 2013; SANDAG, 2013; Fehr & Peers, 2013; Dyett & Bhatia, 2013.

3-17

Appendix G

Excerpts from City of Encinitas Circulation Plan

SOURCE: Austin-Foust Associates, Inc.



Freeway

Prime Arterial (6 Lanes)

Major (4 Lanes)

Collector (4 Lanes)

Local Street (2 Lanes)

Augmented Facility

Limited Facility

Interchange Reconstruction

NOTE: Leucadia Blvd. between Interstate 5 and El Camino Real designated as "Scenic Roadway" with 85 foot right-of-way (ROW)

Figure 2
Circulation Plan

Encinitas
General Plan
3/29/89

Appendix H

Count Data

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Avenida Encinas

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Avenida Encinas Eastbound			Avenida Encinas Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	36	11	5	224	0	0	0	0	41	0	3	320
7:15 AM	0	27	10	3	321	0	0	0	0	46	0	1	408
7:30 AM	0	53	12	2	247	0	0	0	0	35	0	1	350
7:45 AM	0	59	14	2	293	0	0	0	0	47	0	3	418
8:00 AM	0	57	29	1	237	0	0	0	0	45	0	1	370
8:15 AM	0	62	24	3	201	0	0	0	0	29	0	4	323
8:30 AM	0	42	15	8	167	0	0	0	0	25	0	2	259
8:45 AM	1	61	22	4	127	0	0	0	0	30	0	5	250
TOTAL VOLUMES:	1	397	137	28	1817	0	0	0	0	298	0	20	2698

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	196	65	8	1098	0	0	0	0	173	0	6	1546

PEAK HR FACTOR:	0.759	0.853	0.000	0.895	0.925

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Avenida Encinas Eastbound			Avenida Encinas Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	6	0	0	0	0	0	0	0	0	1	0	7
7:15 AM	0	2	0	0	0	0	0	2	0	0	1	0	5
7:30 AM	0	16	0	0	0	0	0	0	0	0	0	1	17
7:45 AM	0	4	1	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	5	1	0	0	0	1	0	0	0	0	0	7
8:15 AM	0	5	0	0	0	0	0	1	0	0	0	0	6
8:30 AM	0	6	0	0	0	0	0	0	0	0	2	0	8
8:45 AM	0	10	1	0	0	0	0	0	0	0	0	0	11
TOTAL VOLUMES:	0	54	3	0	0	0	1	3	0	0	4	1	66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	27	2	0	0	0	1	2	0	0	1	1	34

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Avenida Encinas East Leg	Avenida Encinas West Leg	TOTAL
7:00 AM	3	1	0	0	4
7:15 AM	1	6	0	0	7
7:30 AM	0	2	0	0	2
7:45 AM	1	2	0	0	3
8:00 AM	7	1	0	0	8
8:15 AM	2	2	0	0	4
8:30 AM	6	3	0	0	9
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	21	17	0	0	38

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	9	11	0	0	20

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Avenida Encinas

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:00 PM to 5:00 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Avenida Encinas Eastbound			Avenida Encinas Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	150	29	3	189	0	0	0	0	40	0	2	414
4:15 PM	0	155	43	0	111	0	0	0	0	33	0	3	345
4:30 PM	0	181	49	6	115	0	0	0	0	34	0	3	388
4:45 PM	1	154	46	4	93	0	0	0	0	25	0	3	326
5:00 PM	0	197	36	5	100	0	0	0	0	18	0	3	359
5:15 PM	0	179	34	5	96	0	0	0	0	27	0	5	346
5:30 PM	0	149	33	1	84	0	0	0	0	13	0	2	282
5:45 PM	0	202	31	3	98	0	0	0	0	27	0	2	363
TOTAL VOLUMES:	2	1367	301	27	886	0	0	0	0	217	0	23	2823

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	2	640	167	13	508	0	0	0	0	132	0	11	1473

PEAK HR FACTOR:	0.879	0.678	0.000	0.851	0.889

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Avenida Encinas Eastbound			Avenida Encinas Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	4	1	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	6	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:15 PM	0	4	0	0	0	1	0	0	0	0	0	0	5
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	16	3	0	0	1	0	1	0	0	0	0	21

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	10	3	0	0	0	0	0	0	0	0	0	13

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Avenida Encinas East Leg	Avenida Encinas West Leg	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	3	0	0	0	3
4:30 PM	3	0	0	1	4
4:45 PM	8	0	0	0	8
5:00 PM	2	4	0	0	6
5:15 PM	1	0	0	0	1
5:30 PM	2	4	0	0	6
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	19	8	0	1	28

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	14	0	0	1	15

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: La Costa Avenue

Date: 11/7/2019
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	26	39	51	201	0	0	0	0	69	0	20	406
7:15 AM	0	28	38	85	286	0	0	0	0	45	0	23	505
7:30 AM	0	41	38	52	262	0	0	0	0	67	0	18	478
7:45 AM	0	56	58	73	257	0	0	0	0	66	0	26	536
8:00 AM	0	42	56	55	197	0	0	0	0	63	0	35	448
8:15 AM	0	58	54	52	192	0	0	0	0	73	0	32	461
8:30 AM	0	38	45	51	165	0	0	0	0	74	0	19	392
8:45 AM	0	55	34	39	113	0	0	0	0	74	0	36	351
TOTAL VOLUMES:	0	344	362	458	1673	0	0	0	0	531	0	209	3577

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	167	190	265	1002	0	0	0	0	241	0	102	1967

PEAK HR FACTOR:	0.783	0.854	0.000	0.875	0.917

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	4	6
7:15 AM	0	1	0	0	1	0	0	0	0	1	0	0	3
7:30 AM	0	3	1	1	0	0	0	0	0	0	0	19	24
7:45 AM	0	3	0	0	1	0	0	0	0	0	0	1	5
8:00 AM	0	3	0	0	0	0	0	0	0	0	0	2	5
8:15 AM	0	8	0	1	1	0	0	0	0	0	0	0	10
8:30 AM	0	10	0	1	5	0	0	0	0	0	0	1	17
8:45 AM	0	7	2	1	2	0	0	0	0	1	0	0	13
TOTAL VOLUMES:	0	35	3	4	10	0	0	0	0	4	0	27	83

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	10	1	1	2	0	0	0	0	1	0	22	37

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	6	0	0	6
7:30 AM	0	1	1	0	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	7	0	0	7
8:30 AM	0	3	0	0	3
8:45 AM	0	2	0	0	2
TOTAL VOLUMES:	0	19	1	0	20

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	7	1	0	8

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: La Costa Avenue

Date: 11/7/2019
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **5:00 PM to 6:00 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	147	43	99	157	0	0	0	0	42	0	56	544
4:15 PM	0	132	55	60	93	0	0	0	0	70	0	71	481
4:30 PM	0	170	49	47	80	0	0	0	0	43	0	64	453
4:45 PM	0	138	50	48	58	0	0	0	0	54	0	72	420
5:00 PM	0	171	67	67	99	0	0	0	0	48	0	81	533
5:15 PM	0	146	58	65	77	0	0	0	0	49	0	59	454
5:30 PM	0	132	56	32	79	0	0	0	0	80	0	83	462
5:45 PM	0	156	54	35	82	0	0	0	0	49	0	81	457
TOTAL VOLUMES:	0	1192	432	453	725	0	0	0	0	435	0	567	3804

PM Peak Hr Begins at: 500 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	605	235	199	337	0	0	0	0	226	0	304	1906

PEAK HR FACTOR:	0.882	0.807	0.000	0.813	0.894

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	0	0	0	0	0	0	1	3
4:45 PM	0	4	2	1	0	0	0	0	0	0	0	0	7
5:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	9	4	2	0	0	0	0	0	0	0	1	16

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	2	1	1	0	0	0	0	0	0	0	0	4

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
4:00 PM	0	2	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	2	0	0	2
4:45 PM	0	3	1	0	4
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	8	1	0	9

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	1	0	0	1

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Bishops Gate

Date: 11/13/19
Day: WEDNESDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Bishops Gate Eastbound			Bishops Gate Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	57	0	4	277	2	11	0	4	0	0	0	357
7:15 AM	2	60	0	1	403	4	5	0	7	0	0	0	482
7:30 AM	2	93	0	8	436	3	8	0	9	0	0	0	559
7:45 AM	0	104	0	3	446	9	10	0	5	0	0	0	577
8:00 AM	4	119	0	0	332	10	9	0	7	0	0	0	481
8:15 AM	3	85	0	1	333	9	6	0	6	0	0	0	443
8:30 AM	1	101	0	1	365	14	8	0	9	0	0	0	499
8:45 AM	3	89	0	0	416	5	5	0	5	0	0	0	523
TOTAL VOLUMES:	17	708	0	18	3008	56	62	0	52	0	0	0	3921

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	8	376	0	12	1617	26	32	0	28	0	0	0	2099

PEAK HR FACTOR:	0.780	0.903	0.882	0.000	0.909

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Bishops Gate Eastbound			Bishops Gate Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	3	0	0	4	0	0	0	0	0	0	0	7
7:15 AM	0	2	0	0	4	1	0	0	0	0	0	0	7
7:30 AM	0	2	0	0	8	0	0	0	0	0	0	0	10
7:45 AM	0	2	0	0	6	0	0	0	0	0	0	0	8
8:00 AM	0	2	0	0	6	0	0	0	0	0	0	0	8
8:15 AM	0	6	0	0	4	0	0	0	0	0	0	0	10
8:30 AM	0	5	0	0	4	0	0	0	0	0	0	0	9
8:45 AM	0	11	0	0	1	0	0	0	1	0	0	0	13
TOTAL VOLUMES:	0	33	0	0	37	1	0	0	1	0	0	0	72

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	8	0	0	24	1	0	0	0	0	0	0	33

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Bishops Gate East Leg	Bishops Gate West Leg	TOTAL
7:00 AM	0	0	0	2	2
7:15 AM	0	0	0	2	2
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	5	5
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	4	4
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	17	17

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	9	9

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Bishops Gate

Date: 11/13/19
Day: WEDNESDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:00 PM to 5:00 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Bishops Gate Eastbound			Bishops Gate Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	4	200	0	3	130	5	5	0	5	0	0	0	352
4:15 PM	4	179	0	1	126	12	12	0	4	0	0	0	338
4:30 PM	4	197	0	1	130	1	6	0	4	0	0	0	343
4:45 PM	5	192	0	0	128	8	8	0	4	0	0	0	345
5:00 PM	6	189	0	2	133	11	4	0	2	0	0	0	347
5:15 PM	2	180	0	1	135	13	2	0	1	0	0	0	334
5:30 PM	4	210	0	0	114	6	1	0	2	0	0	0	337
5:45 PM	3	148	0	3	113	8	3	0	5	0	0	0	283
TOTAL VOLUMES:	32	1495	0	11	1009	64	41	0	27	0	0	0	2679

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	17	768	0	5	514	26	31	0	17	0	0	0	1378

PEAK HR FACTOR:	0.962	0.980	0.750	0.000	0.979

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Bishops Gate Eastbound			Bishops Gate Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	9	0	0	6	0	0	0	0	0	0	0	15
4:15 PM	0	7	0	0	9	1	0	0	0	0	0	0	17
4:30 PM	0	0	0	0	7	0	0	0	0	0	0	0	7
4:45 PM	0	3	0	0	3	1	0	0	0	0	0	0	7
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	20	0	0	27	2	0	0	0	0	0	0	49

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	19	0	0	25	2	0	0	0	0	0	0	46

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Bishops Gate East Leg	Bishops Gate West Leg	TOTAL
4:00 PM	0	1	0	2	3
4:15 PM	0	0	0	1	1
4:30 PM	0	3	0	1	4
4:45 PM	0	3	0	0	3
5:00 PM	0	0	0	4	4
5:15 PM	0	2	0	2	4
5:30 PM	0	2	0	0	2
5:45 PM	0	3	0	1	4
TOTAL VOLUMES:	0	14	0	11	25

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	7	0	4	11

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Grandview Street

Date: 11/13/19
Day: WEDNESDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Grandview Street Eastbound			Grandview Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	56	0	1	277	12	3	0	7	0	0	0	359
7:15 AM	3	54	0	1	394	9	5	0	7	0	0	0	473
7:30 AM	2	84	0	1	414	2	10	0	12	0	0	0	525
7:45 AM	2	92	0	1	466	5	6	0	7	0	0	0	579
8:00 AM	2	106	0	4	335	10	12	0	8	0	0	0	477
8:15 AM	2	79	0	1	335	4	13	0	11	0	0	0	445
8:30 AM	0	90	0	0	350	8	7	0	6	0	0	0	461
8:45 AM	3	84	0	2	416	6	7	0	19	0	0	0	537
TOTAL VOLUMES:	17	645	0	11	2987	56	63	0	77	0	0	0	3856

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	9	336	0	7	1609	26	33	0	34	0	0	0	2054

PEAK HR FACTOR:	0.799	0.870	0.761	0.000	0.887

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Grandview Street Eastbound			Grandview Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	2	0	0	6	0	0	0	0	0	0	0	8
7:15 AM	0	2	0	0	6	0	1	0	0	0	0	0	9
7:30 AM	0	1	0	0	6	1	0	0	0	0	0	0	8
7:45 AM	0	1	0	0	5	0	0	0	0	0	0	0	6
8:00 AM	0	3	0	0	4	0	0	0	0	0	0	0	7
8:15 AM	0	2	0	0	4	0	0	0	0	0	0	0	6
8:30 AM	0	3	0	0	5	0	0	0	0	0	0	0	8
8:45 AM	0	6	0	0	0	1	2	0	0	0	0	0	9
TOTAL VOLUMES:	0	20	0	0	36	2	3	0	0	0	0	0	61

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	7	0	0	21	1	1	0	0	0	0	0	30

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Grandview Street East Leg	Grandview Street West Leg	TOTAL
7:00 AM	3	0	0	1	4
7:15 AM	3	0	0	0	3
7:30 AM	7	0	0	8	15
7:45 AM	4	0	0	3	7
8:00 AM	0	0	0	0	0
8:15 AM	2	0	0	0	2
8:30 AM	0	0	0	1	1
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	20	0	0	13	33

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	14	0	0	11	25

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Grandview Street

Date: 11/13/19
Day: WEDNESDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:30 PM to 5:30 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Grandview Street Eastbound			Grandview Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	203	0	0	125	9	3	0	18	0	0	0	359
4:15 PM	6	176	0	0	125	4	4	0	7	0	0	0	322
4:30 PM	3	204	0	0	127	3	4	0	9	0	0	0	350
4:45 PM	3	193	0	1	129	2	7	0	17	0	0	0	352
5:00 PM	0	181	0	0	128	4	11	0	11	0	0	0	335
5:15 PM	1	169	0	1	136	4	15	0	20	0	0	0	346
5:30 PM	3	200	0	2	118	2	2	0	9	0	0	0	336
5:45 PM	1	147	0	0	110	6	4	0	11	0	0	0	279
TOTAL VOLUMES:	18	1473	0	4	998	34	50	0	102	0	0	0	2679

PM Peak Hr Begins at: 430 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	7	747	0	2	520	13	37	0	57	0	0	0	1383

PEAK HR FACTOR:	0.911	0.949	0.671	0.000	0.982

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Grandview Street Eastbound			Grandview Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	8	0	0	5	1	0	0	0	0	0	0	14
4:15 PM	0	3	0	0	4	0	0	0	0	0	0	0	7
4:30 PM	0	1	0	0	15	0	0	0	0	0	0	0	16
4:45 PM	0	2	0	0	2	0	0	0	1	0	0	0	5
5:00 PM	0	5	0	0	3	0	0	0	0	0	0	0	8
5:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
5:30 PM	0	1	0	0	5	0	0	0	0	0	0	0	6
5:45 PM	0	3	0	0	7	0	0	0	0	0	0	0	10
TOTAL VOLUMES:	0	24	0	0	43	1	0	0	1	0	0	0	69

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	9	0	0	22	0	0	0	1	0	0	0	32

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Grandview Street East Leg	Grandview Street West Leg	TOTAL
4:00 PM	1	0	0	3	4
4:15 PM	4	0	0	4	8
4:30 PM	2	0	0	6	8
4:45 PM	1	0	0	2	3
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	8	0	0	17	25

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	3	0	0	9	12

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Sand Mobile Home Park

Date: 11/7/19
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Sand Mobile Home Park Eastbound			Sand Mobile Home Park Westbound			
	NL	NT	NR	S Uturn	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	86	0	4	279	0	0	0	2	0	0	0	371
7:15 AM	0	74	0	14	381	2	0	0	2	0	0	0	473
7:30 AM	0	74	0	13	417	1	0	0	2	0	0	0	507
7:45 AM	0	87	0	14	468	0	0	0	1	0	0	0	570
8:00 AM	0	93	0	13	337	0	0	0	0	0	0	0	443
8:15 AM	0	101	0	12	347	1	0	0	1	0	0	0	462
8:30 AM	0	98	0	14	344	0	0	0	1	0	0	0	457
8:45 AM	0	120	0	24	420	1	0	0	2	0	0	0	567
TOTAL VOLUMES:	0	733	0	108	2993	5	0	0	19	0	0	0	3858

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	S Uturn	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	328	0	54	1603	3	0	0	5	0	0	0	1993

PEAK HR FACTOR:	0.882	0.861	0.625	0.000	0.874

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Sand Mobile Home Park Eastbound			Sand Mobile Home Park Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	5	0	0	5	0	0	0	0	0	0	0	10
7:15 AM	0	11	0	0	5	0	0	0	0	0	0	0	16
7:30 AM	0	5	0	0	11	0	0	0	0	0	0	0	16
7:45 AM	0	2	0	0	8	0	0	0	0	0	0	0	10
8:00 AM	0	27	0	0	10	0	0	0	0	0	0	0	37
8:15 AM	0	10	0	0	8	0	0	0	0	0	0	0	18
8:30 AM	0	8	0	0	3	0	0	0	0	0	0	0	11
8:45 AM	0	9	0	0	8	0	0	0	0	0	0	0	17
TOTAL VOLUMES:	0	77	0	0	58	0	0	0	0	0	0	0	135

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	45	0	0	34	0	0	0	0	0	0	0	79

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Sand Mobile Home Park East Leg	Sand Mobile Home Park West Leg	TOTAL
7:00 AM	8	0	0	0	8
7:15 AM	2	0	0	0	2
7:30 AM	4	0	0	0	4
7:45 AM	0	0	0	0	0
8:00 AM	6	0	0	0	6
8:15 AM	5	0	0	0	5
8:30 AM	3	0	0	0	3
8:45 AM	8	0	0	0	8
TOTAL VOLUMES:	36	0	0	0	36

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	12	0	0	0	12

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Sand Mobile Home Park

Date: 11/7/19
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:30 PM to 5:30 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Sand Mobile Home Park Eastbound			Sand Mobile Home Park Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	191	0	17	131	2	0	0	5	0	0	0	346
4:15 PM	1	183	0	15	124	3	0	0	1	0	0	0	327
4:30 PM	3	206	0	19	119	2	0	0	4	0	0	0	353
4:45 PM	1	194	0	22	135	1	0	0	3	0	0	0	356
5:00 PM	0	187	0	13	117	4	0	0	3	0	0	0	324
5:15 PM	2	205	0	17	124	1	0	0	1	0	0	0	350
5:30 PM	1	193	0	10	109	1	0	0	2	0	0	0	316
5:45 PM	1	167	0	15	113	1	0	0	1	0	0	0	298
TOTAL VOLUMES:	9	1526	0	128	972	15	0	0	20	0	0	0	2670

PM Peak Hr Begins at: 430 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	6	792	0	71	495	8	0	0	11	0	0	0	1383

PEAK HR FACTOR:	0.955	0.908	0.688	0.000	0.971

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Sand Mobile Home Park Eastbound			Sand Mobile Home Park Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	3	0	0	5	0	0	0	0	0	0	0	8
4:15 PM	0	4	0	0	3	0	0	0	0	0	0	0	7
4:30 PM	0	2	0	0	8	0	0	0	0	0	0	0	10
4:45 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
5:00 PM	0	7	0	0	4	0	0	0	0	0	0	0	11
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	0	5	0	0	5	0	0	0	0	0	0	0	10
5:45 PM	0	4	0	0	2	0	0	0	0	0	0	0	6
TOTAL VOLUMES:	0	28	0	0	32	0	0	0	0	0	0	0	60

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	12	0	0	17	0	0	0	0	0	0	0	29

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Sand Mobile Home Park East Leg	Sand Mobile Home Park West Leg	TOTAL
4:00 PM	3	0	0	0	3
4:15 PM	1	0	0	0	1
4:30 PM	5	0	0	0	5
4:45 PM	2	0	0	0	2
5:00 PM	1	0	0	0	1
5:15 PM	1	0	0	0	1
5:30 PM	4	0	0	0	4
5:45 PM	2	0	0	0	2
TOTAL VOLUMES:	19	0	0	0	19

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	9	0	0	0	9

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Jupiter Street

Date: 11/13/19
Day: WEDNESDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Jupiter Street Eastbound			Jupiter Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	32	0	1	283	1	5	0	6	0	0	0	329
7:15 AM	2	41	0	2	385	0	2	0	2	0	0	0	434
7:30 AM	4	62	0	1	417	2	3	0	8	0	0	0	497
7:45 AM	3	73	0	4	430	2	9	0	10	0	0	0	531
8:00 AM	4	66	0	12	374	6	5	0	7	0	0	0	474
8:15 AM	8	58	0	4	344	4	6	0	2	0	0	0	426
8:30 AM	1	73	0	3	331	7	4	0	5	0	0	0	424
8:45 AM	7	48	0	1	370	7	4	0	9	0	0	0	446
TOTAL VOLUMES:	30	453	0	28	2934	29	38	0	49	0	0	0	3561

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	13	242	0	19	1606	10	19	0	27	0	0	0	1936

PEAK HR FACTOR:	0.839	0.938	0.605	0.000	0.911

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Jupiter Street Eastbound			Jupiter Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	3	0	0	7	0	0	0	0	0	0	0	10
7:15 AM	0	2	0	0	3	0	0	0	0	0	0	0	5
7:30 AM	0	1	0	0	6	0	0	0	0	0	0	0	7
7:45 AM	0	2	0	0	10	0	0	0	0	0	0	0	12
8:00 AM	0	2	0	0	6	1	0	0	0	0	0	0	9
8:15 AM	0	2	0	0	4	0	0	0	0	0	0	0	6
8:30 AM	1	4	0	0	5	0	0	0	0	0	0	0	10
8:45 AM	1	7	0	0	1	0	0	0	0	0	0	0	9
TOTAL VOLUMES:	2	23	0	0	42	1	0	0	0	0	0	0	68

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	7	0	0	25	1	0	0	0	0	0	0	33

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Jupiter Street East Leg	Jupiter Street West Leg	TOTAL
7:00 AM	1	0	0	6	7
7:15 AM	1	0	0	1	2
7:30 AM	1	0	0	3	4
7:45 AM	0	0	0	1	1
8:00 AM	2	0	0	4	6
8:15 AM	0	0	0	4	4
8:30 AM	1	0	0	0	1
8:45 AM	1	0	0	8	9
TOTAL VOLUMES:	7	0	0	27	34

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	4	0	0	9	13

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Jupiter Street

Date: 11/13/19
Day: WEDNESDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:45 PM to 5:45 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Jupiter Street Eastbound			Jupiter Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8	174	0	6	126	5	3	0	2	0	0	0	324
4:15 PM	5	155	0	6	116	7	3	0	2	0	0	0	294
4:30 PM	1	174	0	3	107	5	7	0	6	0	0	0	303
4:45 PM	5	175	0	1	124	8	4	0	4	0	0	0	321
5:00 PM	6	168	0	2	116	8	2	0	6	0	0	0	308
5:15 PM	10	173	0	3	125	11	4	0	2	0	0	0	328
5:30 PM	12	170	0	0	107	9	3	0	6	0	0	0	307
5:45 PM	7	143	0	5	111	8	1	0	1	0	0	0	276
TOTAL VOLUMES:	54	1332	0	26	932	61	27	0	29	0	0	0	2461

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	33	686	0	6	472	36	13	0	18	0	0	0	1264

PEAK HR FACTOR:	0.982	0.924	0.861	0.000	0.963

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Jupiter Street Eastbound			Jupiter Street Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	9	0	0	5	0	0	0	0	0	0	0	14
4:15 PM	0	6	0	0	7	0	0	0	0	0	0	0	13
4:30 PM	0	2	0	0	14	1	0	0	0	0	0	0	17
4:45 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	17	0	0	31	1	0	0	0	0	0	0	49

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	5	0	0	0	0	0	0	0	5

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Jupiter Street East Leg	Jupiter Street West Leg	TOTAL
4:00 PM	0	0	0	3	3
4:15 PM	0	0	0	3	3
4:30 PM	0	0	0	8	8
4:45 PM	0	0	0	5	5
5:00 PM	0	0	0	3	3
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	2	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	24	24

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	10	10

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Leucadia Boulevard

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:30 AM to 8:30 AM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Leucadia Boulevard Eastbound			Leucadia Boulevard Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	23	20	44	236	0	1	7	4	32	1	16	385
7:15 AM	0	28	14	59	324	0	4	19	6	39	4	16	513
7:30 AM	0	38	10	96	317	0	7	13	0	34	4	21	540
7:45 AM	1	48	22	110	284	0	3	15	3	51	7	25	569
8:00 AM	2	51	10	88	330	0	1	4	3	72	11	24	596
8:15 AM	2	35	15	90	326	1	0	6	3	52	1	26	557
8:30 AM	1	52	19	87	215	0	5	9	2	45	9	30	474
8:45 AM	0	45	17	127	257	0	1	11	2	37	7	21	525
TOTAL VOLUMES:	7	320	127	701	2289	1	22	84	23	362	44	179	4159

AM Peak Hr Begins at: 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	5	172	57	384	1257	1	11	38	9	209	23	96	2262

PEAK HR FACTOR:	0.824	0.982	0.690	0.766	0.949

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Leucadia Boulevard Eastbound			Leucadia Boulevard Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	2	0	0	6	0	0	2	2	0	0	0	12
7:15 AM	0	2	0	0	1	0	0	1	0	1	0	0	5
7:30 AM	0	0	0	0	1	0	2	0	0	0	0	1	4
7:45 AM	0	0	0	1	5	0	0	4	3	2	1	0	16
8:00 AM	0	1	0	0	3	0	0	0	0	0	0	1	5
8:15 AM	0	4	0	0	5	0	0	0	0	1	0	0	10
8:30 AM	0	3	0	0	2	0	0	0	0	0	0	1	6
8:45 AM	0	14	0	0	2	0	0	0	0	0	0	0	16
TOTAL VOLUMES:	0	26	0	1	25	0	2	7	5	4	1	3	74

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	5	0	1	14	0	2	4	3	3	1	2	35

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Leucadia Boulevard East Leg	Leucadia Boulevard West Leg	TOTAL
7:00 AM	3	0	0	1	4
7:15 AM	3	0	0	2	5
7:30 AM	9	0	0	1	10
7:45 AM	6	0	0	6	12
8:00 AM	3	0	0	0	3
8:15 AM	6	0	0	3	9
8:30 AM	9	0	0	1	10
8:45 AM	9	0	0	5	14
TOTAL VOLUMES:	48	0	0	19	67

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	24	0	0	10	34

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Coast Highway
E/W: Leucadia Boulevard

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:00 PM to 5:00 PM**

Vehicle Counts

	Coast Highway Northbound			Coast Highway Southbound			Leucadia Boulevard Eastbound			Leucadia Boulevard Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	142	44	70	127	0	9	15	4	46	7	43	509
4:15 PM	2	159	45	73	112	0	2	7	2	37	6	47	492
4:30 PM	0	146	43	53	96	1	6	10	3	38	8	40	444
4:45 PM	3	148	36	67	76	2	6	13	4	44	9	48	456
5:00 PM	2	139	46	63	82	0	6	9	3	45	5	45	445
5:15 PM	0	175	47	70	91	0	7	15	6	44	5	41	501
5:30 PM	3	164	49	52	90	0	5	8	4	42	5	64	486
5:45 PM	4	139	35	50	99	0	8	13	3	44	2	30	427
TOTAL VOLUMES:	16	1212	345	498	773	3	49	90	29	340	47	358	3760

PM Peak Hr Begins at: 400 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	7	595	168	263	411	3	23	45	13	165	30	178	1901

PEAK HR FACTOR:	0.934	0.859	0.723	0.923	0.934

Bicycle Counts

	Coast Highway Northbound			Coast Highway Southbound			Leucadia Boulevard Eastbound			Leucadia Boulevard Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	0	0	3	0	0	0	0	0	2	0	5
4:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	2
4:30 PM	0	5	0	0	6	0	0	1	0	0	1	0	13
4:45 PM	0	2	1	0	3	0	0	0	0	0	1	0	7
5:00 PM	1	2	0	0	0	0	0	1	0	1	0	0	5
5:15 PM	0	0	3	0	0	0	0	0	0	0	1	0	4
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	1	9	5	0	12	0	0	4	0	2	5	0	38

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	7	2	0	12	0	0	1	0	1	4	0	27

Pedestrian Counts

	Coast Highway North Leg	Coast Highway South Leg	Leucadia Boulevard East Leg	Leucadia Boulevard West Leg	TOTAL
4:00 PM	7	0	0	0	7
4:15 PM	4	0	0	2	6
4:30 PM	10	0	0	4	14
4:45 PM	6	0	0	3	9
5:00 PM	13	0	0	6	19
5:15 PM	4	0	0	5	9
5:30 PM	1	0	0	8	9
5:45 PM	15	0	0	12	27
TOTAL VOLUMES:	60	0	0	40	100

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	27	0	0	9	36

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Vulcan Ave & La Costa Ave
City: Encinitas
Control: 1-Way Stop(NB)

Project ID: 20-04032-002
Date: 2/4/2020

Total

NS/EW Streets:	N Vulcan Ave				N Vulcan Ave				La Costa Ave				La Costa Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	0	39	0	0	0	0	0	0	79	9	0	23	51	0	0	205
7:15 AM	5	0	32	0	0	0	0	0	0	61	8	0	37	54	0	0	197
7:30 AM	4	0	57	0	0	0	0	0	0	78	10	0	67	88	0	0	304
7:45 AM	4	0	48	0	0	1	0	0	0	71	15	0	65	92	0	0	296
8:00 AM	5	0	38	0	0	0	0	0	0	82	9	0	60	100	0	0	294
8:15 AM	7	0	44	0	0	0	0	0	0	79	16	0	60	81	0	0	287
8:30 AM	8	0	39	0	0	0	0	0	0	73	23	0	57	90	1	0	291
8:45 AM	7	0	40	0	0	0	0	0	0	68	12	0	71	85	0	0	283
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	44	0	337	0	0	1	0	0	0	591	102	0	440	641	1	0	2157
APPROACH %'s :	11.55%	0.00%	88.45%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	85.28%	14.72%	0.00%	40.67%	59.24%	0.09%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	20	0	187	0	0	1	0	0	0	310	50	0	252	361	0	0	1181
PEAK HR FACTOR :	0.714	0.000	0.820	0.000	0.000	0.250	0.000	0.000	0.000	0.945	0.781	0.000	0.940	0.903	0.000	0.000	0.971
	0.848				0.250				0.947				0.958				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	14	0	44	0	0	0	0	0	0	77	15	0	41	90	0	0	281
4:15 PM	13	0	39	0	0	0	1	0	0	102	18	0	28	85	0	0	286
4:30 PM	14	0	31	0	0	0	0	0	0	78	17	0	43	93	0	1	277
4:45 PM	15	0	38	0	0	0	0	0	0	69	14	0	31	78	0	0	245
5:00 PM	19	0	39	0	0	0	0	0	0	104	11	0	38	100	0	0	311
5:15 PM	9	0	48	1	0	0	0	0	1	55	17	0	24	84	0	0	239
5:30 PM	16	0	32	0	0	0	0	0	0	116	15	0	40	105	0	0	324
5:45 PM	14	0	36	0	0	0	0	0	0	88	27	1	29	103	1	0	299
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	114	0	307	1	0	0	1	0	1	689	134	1	274	738	1	1	2262
APPROACH %'s :	27.01%	0.00%	72.75%	0.24%	0.00%	0.00%	100.00%	0.00%	0.12%	83.52%	16.24%	0.12%	27.02%	72.78%	0.10%	0.10%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	58	0	155	1	0	0	0	0	1	363	70	1	131	392	1	0	1173
PEAK HR FACTOR :	0.763	0.000	0.807	0.250	0.000	0.000	0.000	0.000	0.250	0.782	0.648	0.250	0.819	0.933	0.250	0.000	0.905
	0.922								0.830				0.903				

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Sheridan Road
E/W: La Costa Avenue

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:30 AM to 8:30 AM**

Vehicle Counts

	Sheridan Road Northbound			Sheridan Road Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	11	0	0	0	0	109	0	14	106	0	242
7:15 AM	1	0	22	0	0	0	1	129	0	10	106	1	270
7:30 AM	3	0	28	0	0	0	0	117	2	22	112	0	284
7:45 AM	1	0	22	0	0	0	0	151	5	13	119	1	312
8:00 AM	4	0	15	0	0	0	0	128	3	20	139	1	310
8:15 AM	4	0	18	0	0	0	0	113	2	22	120	1	280
8:30 AM	0	0	17	0	0	0	0	101	6	9	127	1	261
8:45 AM	7	0	11	0	0	0	1	94	4	18	141	2	278
TOTAL VOLUMES:	22	0	144	0	0	0	2	942	22	128	970	7	2237

AM Peak Hr Begins at: 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	12	0	83	0	0	0	0	509	12	77	490	3	1186

PEAK HR FACTOR:	0.766	0.000	0.835	0.891	0.950

Bicycle Counts

	Sheridan Road Northbound			Sheridan Road Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	0	0	1	0	1	0	0	0	0	6	0	9
7:15 AM	1	0	0	1	0	0	0	1	0	0	0	0	3
7:30 AM	0	0	0	4	1	0	0	3	0	0	20	0	28
7:45 AM	0	0	0	0	0	1	0	0	0	0	1	0	2
8:00 AM	1	0	0	1	0	0	0	0	0	0	1	0	3
8:15 AM	0	0	0	1	0	1	0	0	1	0	0	0	3
8:30 AM	0	0	0	2	0	0	0	1	0	0	0	0	3
8:45 AM	0	0	1	2	0	1	0	3	0	0	0	0	7
TOTAL VOLUMES:	3	0	1	12	1	4	0	8	1	0	28	0	58

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	1	0	0	6	1	2	0	3	1	0	22	0	36

Pedestrian Counts

	Sheridan Road North Leg	Sheridan Road South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	1	0	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	2	0	2	4
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	2	2
TOTAL VOLUMES:	2	2	0	4	8

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	2	0	2	4

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: Sheridan Road
E/W: La Costa Avenue

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:45 PM to 5:45 PM**

Vehicle Counts

	Sheridan Road Northbound			Sheridan Road Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9	0	18	0	0	0	1	165	6	15	123	1	338
4:15 PM	9	1	22	0	0	0	0	148	5	21	127	2	335
4:30 PM	6	0	21	0	0	0	1	122	3	12	101	0	266
4:45 PM	2	0	6	0	0	0	0	142	1	16	152	0	319
5:00 PM	4	1	13	0	0	0	1	148	3	20	144	1	335
5:15 PM	5	0	18	0	0	0	2	150	4	10	142	2	333
5:30 PM	2	0	13	0	0	0	0	117	5	17	144	1	299
5:45 PM	4	0	13	0	0	0	1	104	0	19	142	1	284
TOTAL VOLUMES:	41	2	124	0	0	0	6	1096	27	130	1075	8	2509

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	13	1	50	0	0	0	3	557	13	63	582	4	1286

PEAK HR FACTOR:	0.696	0.000	0.918	0.966	0.960

Bicycle Counts

	Sheridan Road Northbound			Sheridan Road Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	1	0	1	0	2	0	0	0	0	5
4:15 PM	0	0	0	0	0	1	0	2	0	0	4	0	7
4:30 PM	0	0	0	0	0	0	0	1	0	1	2	0	4
4:45 PM	0	0	0	1	0	0	0	2	2	0	0	0	5
5:00 PM	0	0	0	0	0	3	0	1	0	0	1	0	5
5:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	1	4	0	6	0	8	2	1	7	0	29

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	3	0	3	0	3	2	0	1	0	12

Pedestrian Counts

	Sheridan Road North Leg	Sheridan Road South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	3	3
4:45 PM	0	0	0	2	2
5:00 PM	0	0	0	3	3
5:15 PM	1	0	0	0	1
5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	1	8	10

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	1	0	1	5	7

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: I-5 SB Ramps
E/W: La Costa Avenue

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:30 AM to 8:30 AM**

Vehicle Counts

	I-5 SB Ramps Northbound			I-5 SB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	65	0	33	0	106	31	183	99	0	517
7:15 AM	0	0	0	98	0	36	0	124	28	175	89	0	550
7:30 AM	0	0	0	115	3	50	0	152	20	150	98	0	588
7:45 AM	0	0	0	141	1	36	0	168	23	112	109	0	590
8:00 AM	0	0	0	122	2	38	0	148	14	147	127	0	598
8:15 AM	0	0	0	114	4	43	0	125	25	138	107	0	556
8:30 AM	0	0	0	154	3	61	0	123	14	129	86	0	570
8:45 AM	0	0	0	115	1	71	0	100	19	137	97	0	540
TOTAL VOLUMES:	0	0	0	924	14	368	0	1046	174	1171	812	0	4509

AM Peak Hr Begins at: 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	492	10	167	0	593	82	547	441	0	2332

PEAK HR FACTOR:	0.000	0.940	0.884	0.901	0.975

Bicycle Counts

	I-5 SB Ramps Northbound			I-5 SB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	16	0	16
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	4
TOTAL VOLUMES:	0	0	0	0	0	0	0	5	0	1	21	0	27

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	0	0	1	17	0	18

Pedestrian Counts

	I-5 SB Ramps North Leg	I-5 SB Ramps South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	1	1	0	0	2

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	1	0	0	0	1

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: I-5 SB Ramps
E/W: La Costa Avenue

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:45 PM to 5:45 PM**

Vehicle Counts

	I-5 SB Ramps Northbound			I-5 SB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	0	125	0	42	0	119	71	166	97	0	620
4:15 PM	0	0	0	129	2	48	0	150	45	153	111	0	638
4:30 PM	0	0	0	119	1	31	0	127	25	186	97	0	586
4:45 PM	0	0	0	124	0	36	0	132	24	161	144	0	621
5:00 PM	0	0	0	133	1	40	0	140	20	162	123	0	619
5:15 PM	0	0	0	126	0	43	0	161	24	198	125	0	677
5:30 PM	0	0	0	114	0	39	0	123	20	184	133	0	613
5:45 PM	0	0	0	124	0	48	0	112	28	166	131	0	609
TOTAL VOLUMES:	0	0	0	994	4	327	0	1064	257	1376	961	0	4983

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	497	1	158	0	556	88	705	525	0	2530

PEAK HR FACTOR:	0.000	0.943	0.870	0.952	0.934

Bicycle Counts

	I-5 SB Ramps Northbound			I-5 SB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	2	0	0	3	0	5
4:30 PM	0	0	0	0	1	0	0	1	0	0	2	0	4
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	9	0	0	5	0	15

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	3	0	0	0	0	3

Pedestrian Counts

	I-5 SB Ramps North Leg	I-5 SB Ramps South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: I-5 NB Ramps
E/W: La Costa Avenue

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **7:00 AM to 9:00 AM**
Peak Hour: **7:15 AM to 8:15 AM**

Vehicle Counts

	I-5 NB Ramps Northbound			I-5 NB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	0	121	0	0	0	29	142	0	0	264	86	657
7:15 AM	17	0	187	0	0	0	32	192	0	0	238	101	767
7:30 AM	20	1	180	0	0	0	38	215	0	0	226	123	803
7:45 AM	16	0	178	0	0	0	45	257	0	0	204	127	827
8:00 AM	21	0	170	0	0	0	42	231	0	0	257	126	847
8:15 AM	17	1	135	0	0	0	51	183	0	0	226	126	739
8:30 AM	19	0	128	0	0	0	51	227	0	0	190	98	713
8:45 AM	14	0	145	0	0	0	46	171	0	0	214	120	710
TOTAL VOLUMES:	139	2	1244	0	0	0	334	1618	0	0	1819	907	6063

AM Peak Hr Begins at: 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	74	1	715	0	0	0	157	895	0	0	925	477	3244

PEAK HR FACTOR:	0.968	0.000	0.871	0.915	0.957

Bicycle Counts

	I-5 NB Ramps Northbound			I-5 NB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	16	0	17
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	4
TOTAL VOLUMES:	0	0	0	0	0	0	0	6	0	0	23	0	29

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	1	0	0	19	0	20

Pedestrian Counts

	I-5 NB Ramps North Leg	I-5 NB Ramps South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	1	0	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	2	0	0	0	2

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	1	0	0	0	1

PO Box 1178
Corona, CA 92880
951-268-6268

Location: Encinitas
N/S: I-5 NB Ramps
E/W: La Costa Avenue

Date: 11/7
Day: THURSDAY
Project # 143-19780

TURNING MOVEMENT COUNT

Count Period: **4:00 PM to 6:00 PM**
Peak Hour: **4:45 PM to 5:45 PM**

Vehicle Counts

	I-5 NB Ramps Northbound			I-5 NB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	1	163	0	0	0	35	213	0	0	240	118	793
4:15 PM	23	0	155	0	0	0	45	230	0	0	238	102	793
4:30 PM	14	2	166	0	0	0	31	213	0	0	263	112	801
4:45 PM	32	0	155	0	0	0	40	217	0	0	274	99	817
5:00 PM	33	0	156	0	0	0	39	231	0	0	259	110	828
5:15 PM	23	0	164	0	0	0	47	228	0	0	287	118	867
5:30 PM	35	1	164	0	0	0	38	200	0	0	277	87	802
5:45 PM	40	1	196	0	0	0	30	202	0	0	261	79	809
TOTAL VOLUMES:	223	5	1319	0	0	0	305	1734	0	0	2099	825	6510

PM Peak Hr Begins at: 445 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	123	1	639	0	0	0	164	876	0	0	1097	414	3314

PEAK HR FACTOR:	0.954	0.000	0.945	0.933	0.956

Bicycle Counts

	I-5 NB Ramps Northbound			I-5 NB Ramps Southbound			La Costa Avenue Eastbound			La Costa Avenue Westbound			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	0	0	0	0	0	3	0	0	1	0	4
4:15 PM	0	0	0	0	0	0	0	2	0	0	3	0	5
4:30 PM	0	0	0	0	0	0	0	1	0	0	3	0	4
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	10	0	0	8	0	18

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	4	0	0	1	0	5

Pedestrian Counts

	I-5 NB Ramps North Leg	I-5 NB Ramps South Leg	La Costa Avenue East Leg	La Costa Avenue West Leg	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

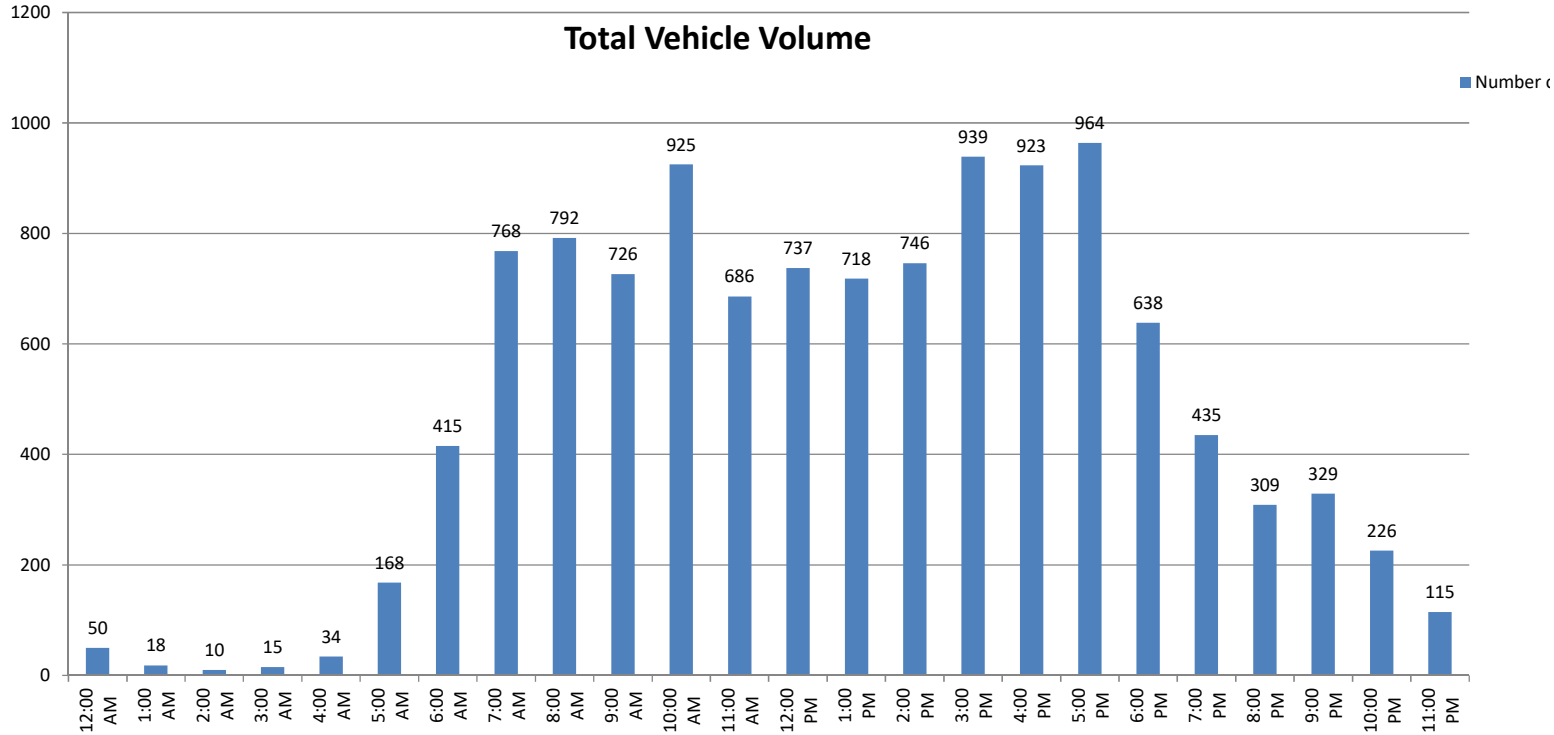
24 Hour Volume Plot

La Costa Avenue

B/ North Coast Highway 101 - North Vulcan Avenue

11/7/2019

Start Time	11/7/2019
12:00 AM	50
1:00 AM	18
2:00 AM	10
3:00 AM	15
4:00 AM	34
5:00 AM	168
6:00 AM	415
7:00 AM	768
8:00 AM	792
9:00 AM	726
10:00 AM	925
11:00 AM	686
12:00 PM	737
1:00 PM	718
2:00 PM	746
3:00 PM	939
4:00 PM	923
5:00 PM	964
6:00 PM	638
7:00 PM	435
8:00 PM	309
9:00 PM	329
10:00 PM	226
11:00 PM	115
Total	11686



Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

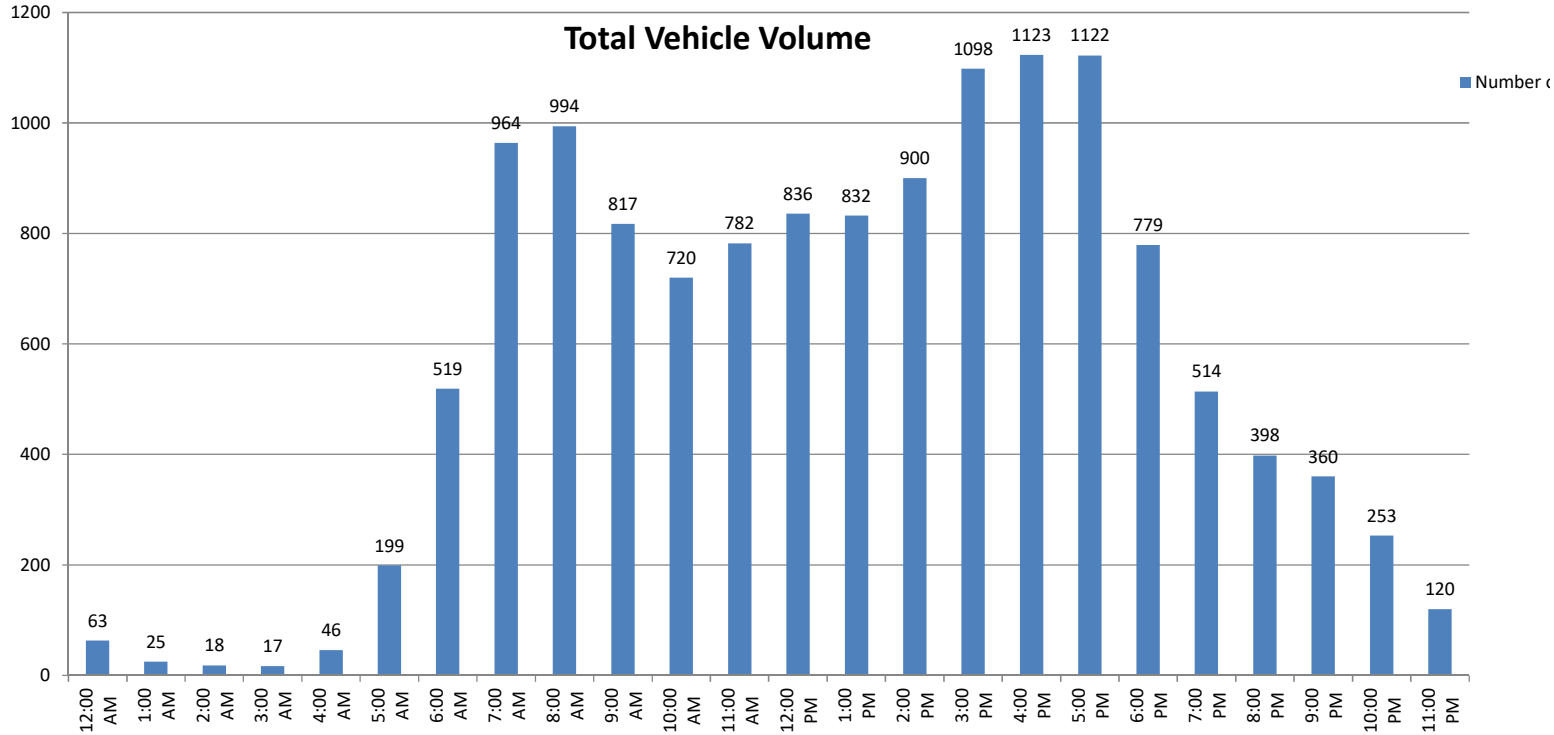
24 Hour Volume Plot

La Costa Avenue

B/ North Vulcan Avenue - Sheridan Road

11/7/2019

Start Time	11/7/2019
12:00 AM	63
1:00 AM	25
2:00 AM	18
3:00 AM	17
4:00 AM	46
5:00 AM	199
6:00 AM	519
7:00 AM	964
8:00 AM	994
9:00 AM	817
10:00 AM	720
11:00 AM	782
12:00 PM	836
1:00 PM	832
2:00 PM	900
3:00 PM	1098
4:00 PM	1123
5:00 PM	1122
6:00 PM	779
7:00 PM	514
8:00 PM	398
9:00 PM	360
10:00 PM	253
11:00 PM	120
Total	13499



Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

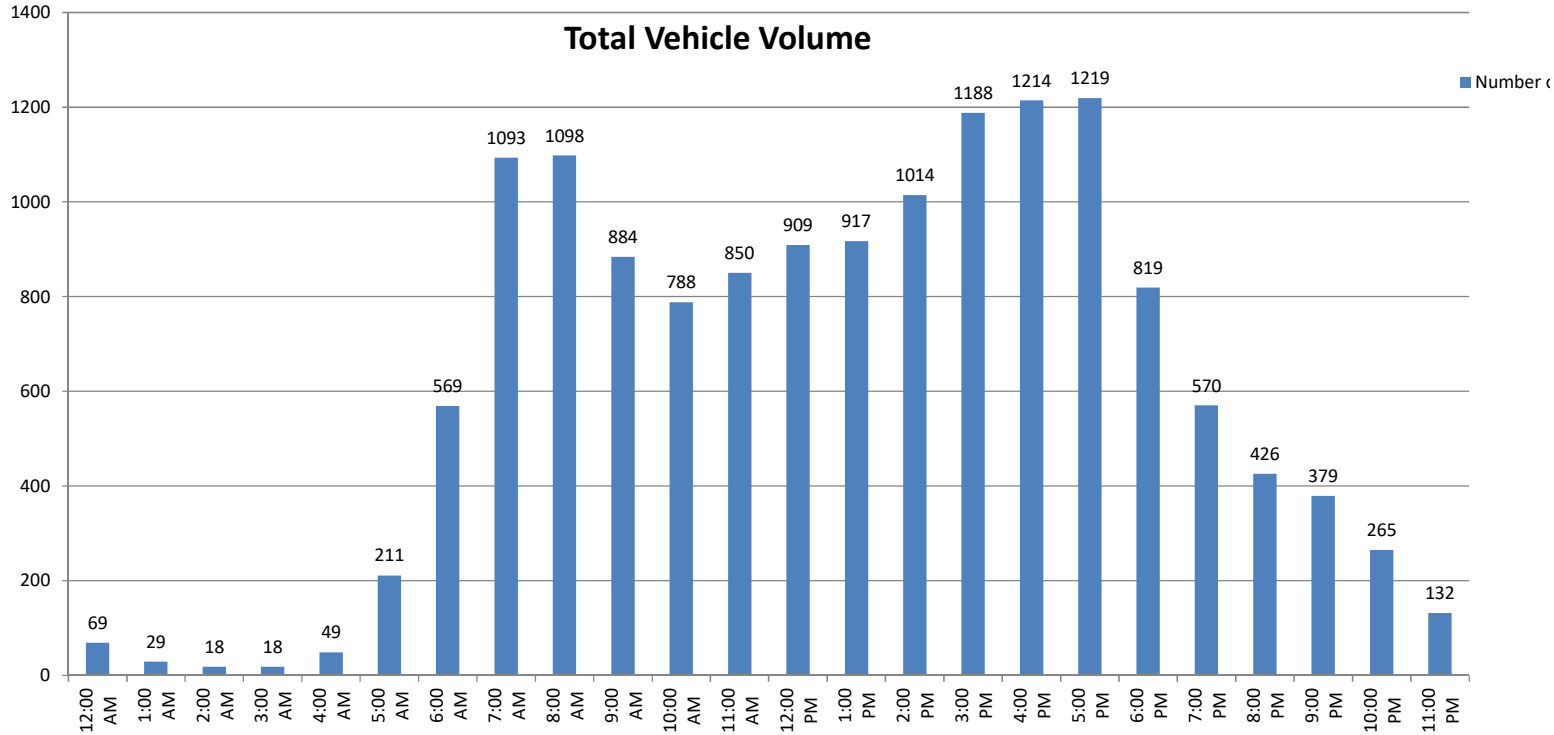
24 Hour Volume Plot

La Costa Avenue

B/ Sheridan Road - Interstate 5

11/7/2019

Start Time	11/7/2019
12:00 AM	69
1:00 AM	29
2:00 AM	18
3:00 AM	18
4:00 AM	49
5:00 AM	211
6:00 AM	569
7:00 AM	1093
8:00 AM	1098
9:00 AM	884
10:00 AM	788
11:00 AM	850
12:00 PM	909
1:00 PM	917
2:00 PM	1014
3:00 PM	1188
4:00 PM	1214
5:00 PM	1219
6:00 PM	819
7:00 PM	570
8:00 PM	426
9:00 PM	379
10:00 PM	265
11:00 PM	132
Total	14728



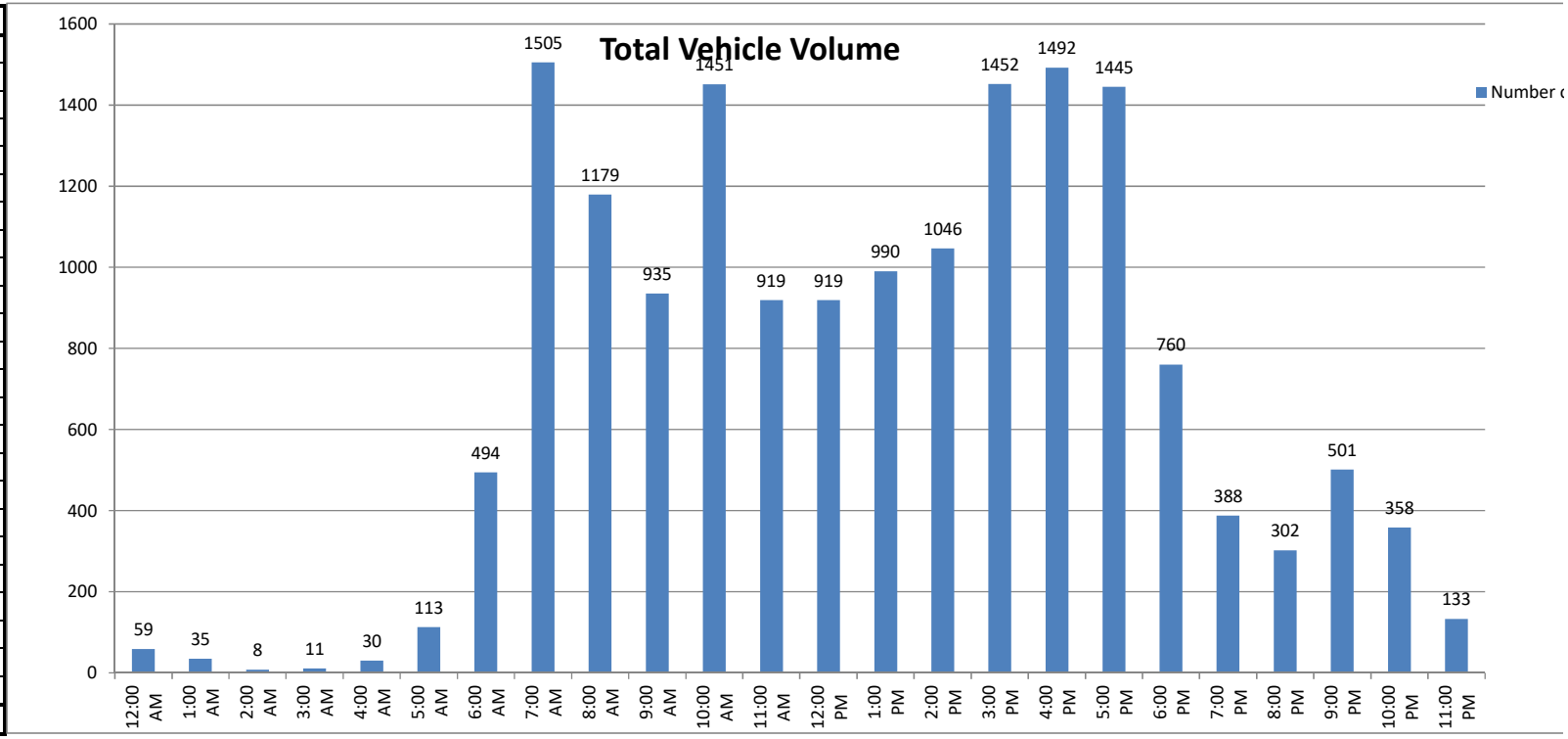
Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

24 Hour Volume Plot

North Coast Highway 101
B/ Avenida Encinas - La Costa Avenue
11/7/2019

Start Time	11/7/2019
12:00 AM	59
1:00 AM	35
2:00 AM	8
3:00 AM	11
4:00 AM	30
5:00 AM	113
6:00 AM	494
7:00 AM	1505
8:00 AM	1179
9:00 AM	935
10:00 AM	1451
11:00 AM	919
12:00 PM	919
1:00 PM	990
2:00 PM	1046
3:00 PM	1452
4:00 PM	1492
5:00 PM	1445
6:00 PM	760
7:00 PM	388
8:00 PM	302
9:00 PM	501
10:00 PM	358
11:00 PM	133
Total	16525



Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

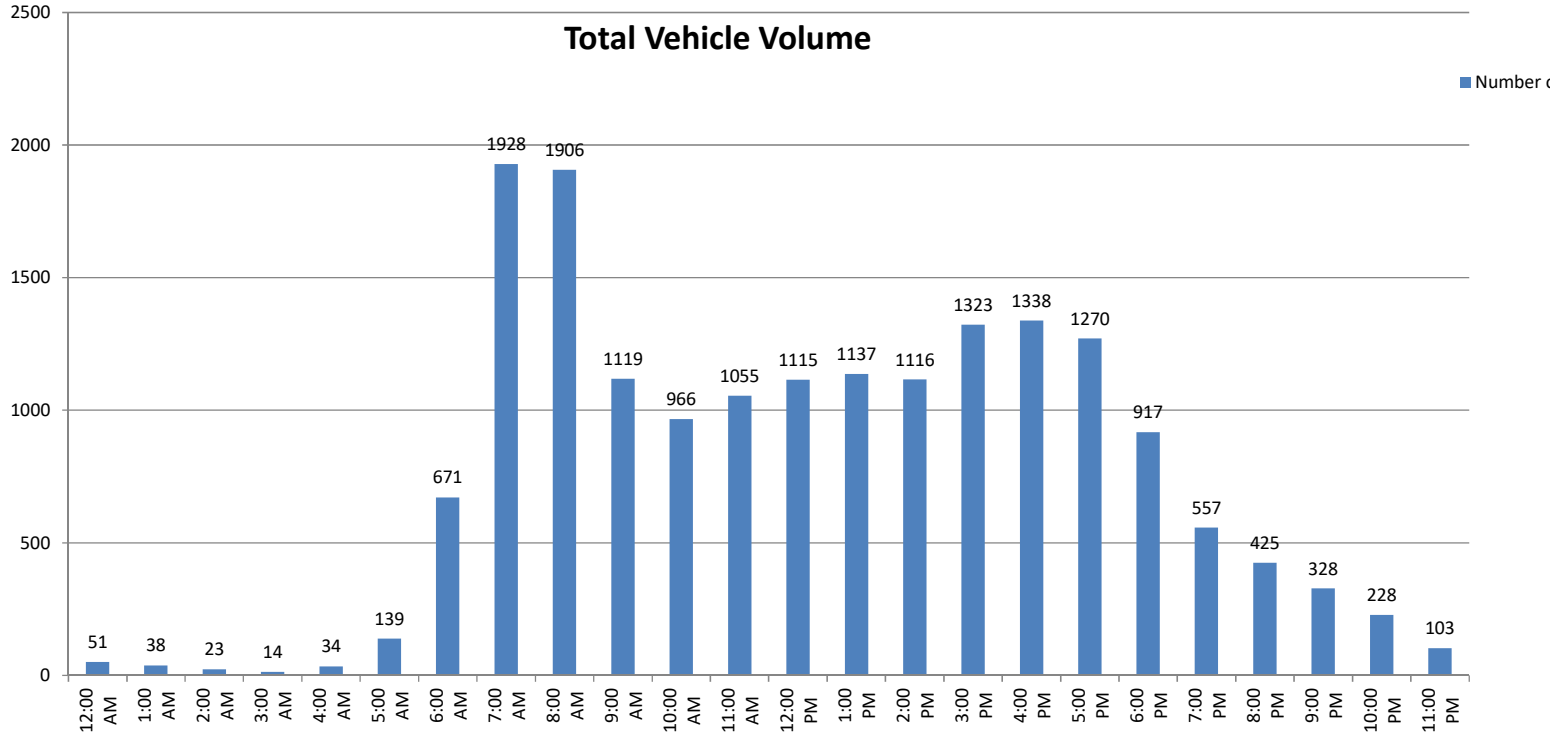
24 Hour Volume Plot

North Coast Highway 101

B/ La Costa Avenue - Bishops Gate Road

11/13/2019

Start Time	#########
12:00 AM	51
1:00 AM	38
2:00 AM	23
3:00 AM	14
4:00 AM	34
5:00 AM	139
6:00 AM	671
7:00 AM	1928
8:00 AM	1906
9:00 AM	1119
10:00 AM	966
11:00 AM	1055
12:00 PM	1115
1:00 PM	1137
2:00 PM	1116
3:00 PM	1323
4:00 PM	1338
5:00 PM	1270
6:00 PM	917
7:00 PM	557
8:00 PM	425
9:00 PM	328
10:00 PM	228
11:00 PM	103
Total	17801



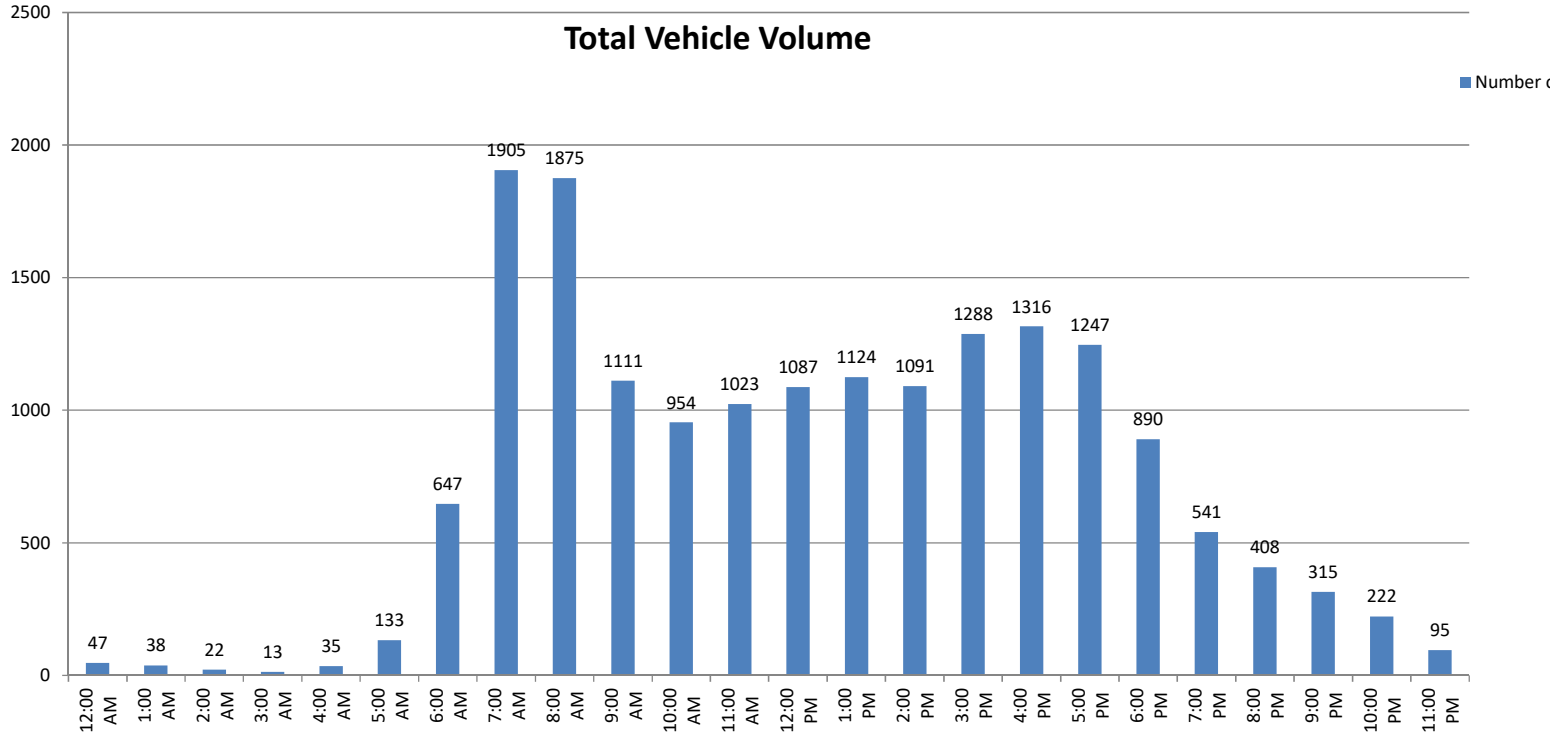
Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

24 Hour Volume Plot

North Coast Highway 101
B/ Bishops Gate Road - Grandview Street
11/13/2019

Start Time	#########
12:00 AM	47
1:00 AM	38
2:00 AM	22
3:00 AM	13
4:00 AM	35
5:00 AM	133
6:00 AM	647
7:00 AM	1905
8:00 AM	1875
9:00 AM	1111
10:00 AM	954
11:00 AM	1023
12:00 PM	1087
1:00 PM	1124
2:00 PM	1091
3:00 PM	1288
4:00 PM	1316
5:00 PM	1247
6:00 PM	890
7:00 PM	541
8:00 PM	408
9:00 PM	315
10:00 PM	222
11:00 PM	95
Total	17427



Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

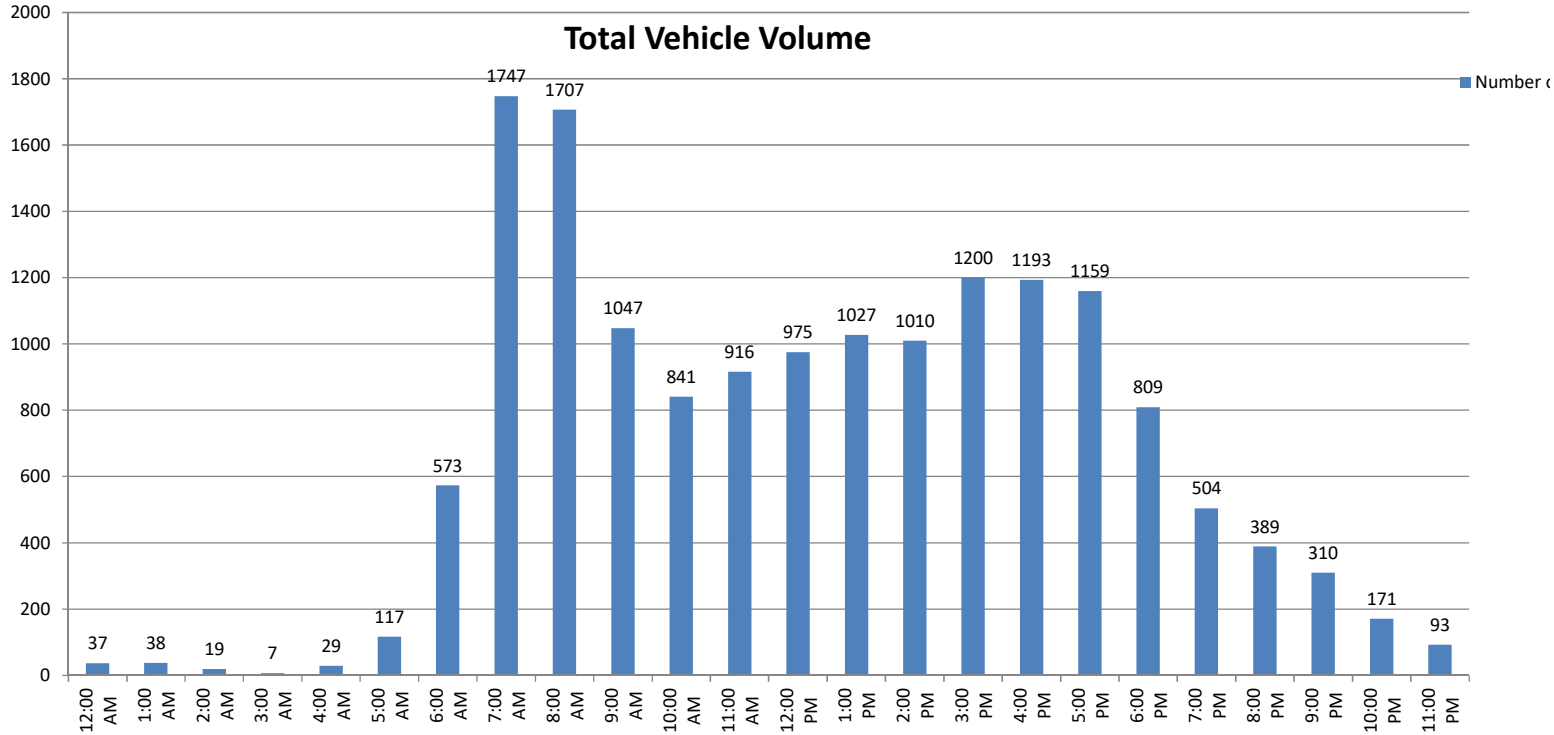
24 Hour Volume Plot

North Coast Highway 101

B/ Grandview Street - Jupiter Street

11/13/2019

Start Time	#########
12:00 AM	37
1:00 AM	38
2:00 AM	19
3:00 AM	7
4:00 AM	29
5:00 AM	117
6:00 AM	573
7:00 AM	1747
8:00 AM	1707
9:00 AM	1047
10:00 AM	841
11:00 AM	916
12:00 PM	975
1:00 PM	1027
2:00 PM	1010
3:00 PM	1200
4:00 PM	1193
5:00 PM	1159
6:00 PM	809
7:00 PM	504
8:00 PM	389
9:00 PM	310
10:00 PM	171
11:00 PM	93
Total	15918



Volumes represent the combined totals for both directions

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878

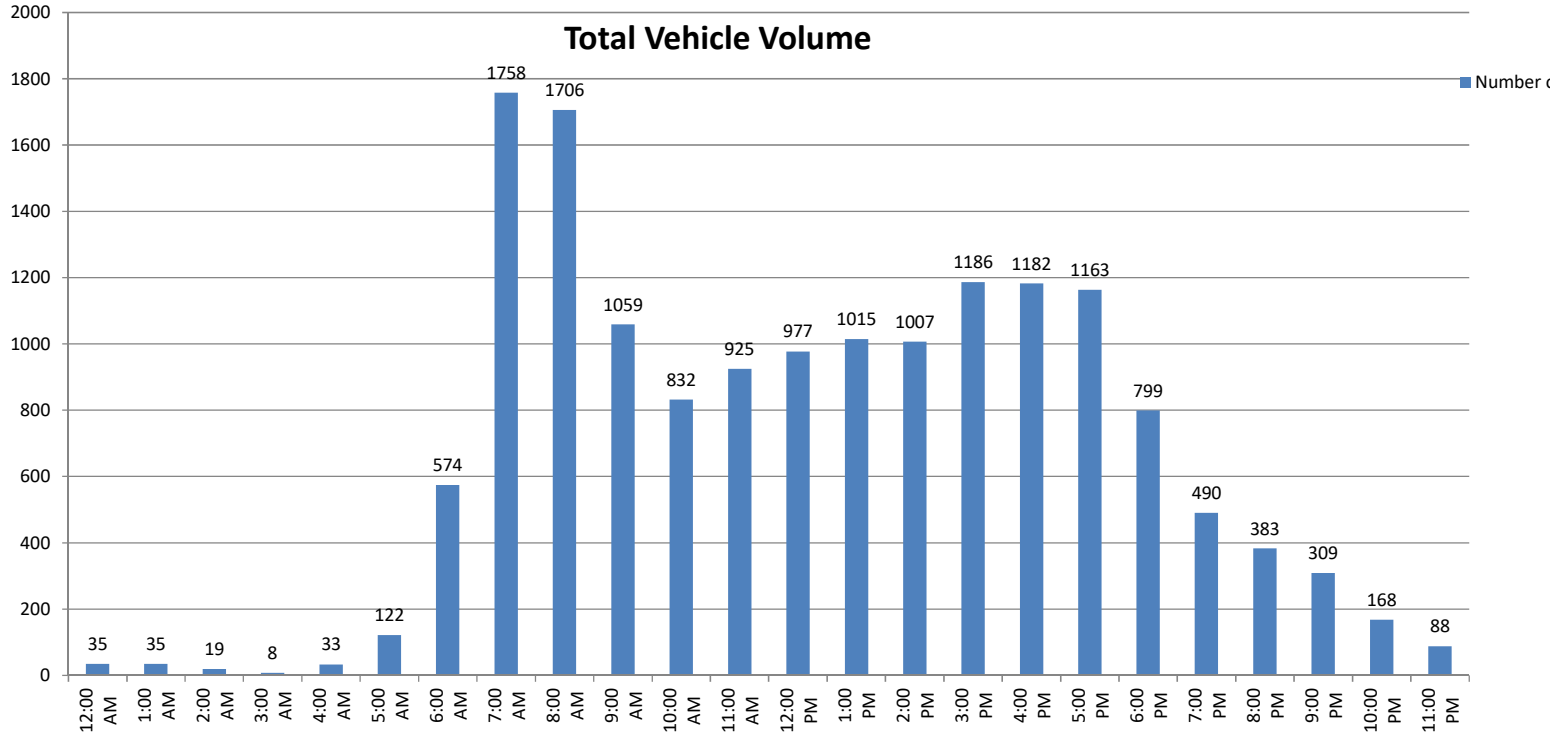
24 Hour Volume Plot

North Coast Highway 101

B/ Jupiter Street - Leucadia Boulevard

11/13/2019

Start Time	#########
12:00 AM	35
1:00 AM	35
2:00 AM	19
3:00 AM	8
4:00 AM	33
5:00 AM	122
6:00 AM	574
7:00 AM	1758
8:00 AM	1706
9:00 AM	1059
10:00 AM	832
11:00 AM	925
12:00 PM	977
1:00 PM	1015
2:00 PM	1007
3:00 PM	1186
4:00 PM	1182
5:00 PM	1163
6:00 PM	799
7:00 PM	490
8:00 PM	383
9:00 PM	309
10:00 PM	168
11:00 PM	88
Total	15873



Volumes represent the combined totals for both directions

Appendix I

Existing Intersection LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	173	0	0	0	8	1098
Future Volume (vph)	173	0	0	0	8	1098
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				0.53	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				945	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				945	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	186	0	0	0	9	1181
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	186	0	0	0	9	1181
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		30		30		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	9.1				0.6	43.5
Effective Green, g (s)	9.1				0.6	43.5
Actuated g/C Ratio	0.14				0.01	0.66
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	476				8	2346
v/s Ratio Prot	c0.05				0.01	c0.33
v/s Ratio Perm						
v/c Ratio	0.39				1.12	0.50
Uniform Delay, d1	25.7				32.5	5.6
Progression Factor	0.07				1.00	1.00
Incremental Delay, d2	0.5				366.8	0.2
Delay (s)	2.4				399.3	5.8
Level of Service	A				F	A
Approach Delay (s)	2.4		0.0			8.7
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	7	0	0	173	6	0	196	65	0	0	0
Future Volume (vph)	1	7	0	0	173	6	0	196	65	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			1.00			1.00	0.87			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			1.00			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1852			3514			3539	1381			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1852			3514			3539	1381			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	8	0	0	186	6	0	211	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	60	0	0	0
Lane Group Flow (vph)	0	9	0	0	189	0	0	211	10	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			30			30			30			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		1.0			9.1			38.9	9.1			
Effective Green, g (s)		1.0			9.1			38.9	9.1			
Actuated g/C Ratio		0.02			0.14			0.59	0.14			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		28			487			2098	191			
v/s Ratio Prot		c0.00			c0.05			c0.06				
v/s Ratio Perm									0.01			
v/c Ratio		0.32			0.39			0.10	0.05			
Uniform Delay, d1		32.0			25.7			5.8	24.5			
Progression Factor		1.61			1.00			1.00	1.00			
Incremental Delay, d2		6.6			0.5			0.1	0.1			
Delay (s)		58.1			26.2			5.9	24.6			
Level of Service		E			C			A	C			
Approach Delay (s)		58.1			26.2			10.5			0.0	
Approach LOS		E			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	65.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	241	102	167	190	265	1002
Future Volume (veh/h)	241	102	167	190	265	1002
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	262	0	182	0	288	1089
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	317		2532		928	2532
Arrive On Green	0.18	0.00	0.71	0.00	0.71	0.71
Sat Flow, veh/h	1781	1585	3647	1585	1190	3647
Grp Volume(v), veh/h	262	0	182	0	288	1089
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1190	1777
Q Serve(g_s), s	10.3	0.0	1.1	0.0	7.1	9.3
Cycle Q Clear(g_c), s	10.3	0.0	1.1	0.0	8.2	9.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	317		2532		928	2532
V/C Ratio(X)	0.83		0.07		0.31	0.43
Avail Cap(c_a), veh/h	732		2532		928	2532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	3.2	0.0	4.4	4.3
Incr Delay (d2), s/veh	5.5	0.0	0.1	0.0	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	0.3	0.0	1.5	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.4	0.0	3.2	0.0	5.3	4.9
LnGrp LOS	C		A		A	A
Approach Vol, veh/h	262	A	182	A		1377
Approach Delay, s/veh	34.4		3.2			5.0
Approach LOS	C		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		56.0				56.0	17.0
Change Period (Y+Rc), s		4.0				4.0	4.0
Max Green Setting (Gmax), s		52.0				52.0	30.0
Max Q Clear Time (g_c+I1), s		3.1				11.3	12.3
Green Ext Time (p_c), s		1.3				12.2	0.7

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	28	8	376	1617	26
Future Vol, veh/h	32	28	8	376	1617	26
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	29	8	384	1650	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2084	859	1687	0	-	0
Stage 1	1674	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	52	300	377	-	-	-
Stage 1	138	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	50	295	374	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	134	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	41.2	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	374	-	159	-	-
HCM Lane V/C Ratio	0.022	-	0.385	-	-
HCM Control Delay (s)	14.8	-	41.2	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.7	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	34	9	336	1609	26
Future Vol, veh/h	33	34	9	336	1609	26
Conflicting Peds, #/hr	15	15	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	38	10	378	1808	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2251	949	1852	0	-	0
Stage 1	1838	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	40	262	325	-	-	-
Stage 1	112	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	38	255	321	-	-	-
Mov Cap-2 Maneuver	91	-	-	-	-	-
Stage 1	107	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	61	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	321	-	135	-	-
HCM Lane V/C Ratio	0.032	-	0.558	-	-
HCM Control Delay (s)	16.6	-	61	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	2.8	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	5	0	328	54	1603	3
Future Vol, veh/h	0	5	0	328	54	1603	3
Conflicting Peds, #/hr	15	15	15	0	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	0	6	0	377	62	1843	3

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2376	953	-	0	-	-	0
Stage 1	1984	-	-	-	-	-	-
Stage 2	392	-	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-	-
Pot Cap-1 Maneuver	33	260	0	-	-	-	-
Stage 1	93	-	0	-	-	-	-
Stage 2	682	-	0	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	32	254	-	-	-	-	-
Mov Cap-2 Maneuver	32	-	-	-	-	-	-
Stage 1	92	-	-	-	-	-	-
Stage 2	674	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.5	0	
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	-	254	-	-	-
HCM Lane V/C Ratio	-	0.023	-	-	-
HCM Control Delay (s)	-	19.5	-	-	-
HCM Lane LOS	-	C	-	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	27	13	242	1606	10
Future Vol, veh/h	19	27	13	242	1606	10
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	30	14	266	1765	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2085	908	1786	0	-	0
Stage 1	1781	-	-	-	-	-
Stage 2	304	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	52	279	345	-	-	-
Stage 1	121	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	49	274	342	-	-	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	115	-	-	-	-	-
Stage 2	742	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	37.9	0.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	342	-	159	-	-
HCM Lane V/C Ratio	0.042	-	0.318	-	-
HCM Control Delay (s)	16	-	37.9	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	38	9	209	23	96	5	172	57	384	1257	1
Future Volume (veh/h)	11	38	9	209	23	96	5	172	57	384	1257	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.93	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	40	9	172	90	101	5	181	60	404	1323	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	52	12	301	130	146	9	1053	451	461	2002	2
Arrive On Green	0.04	0.04	0.04	0.17	0.17	0.17	0.01	0.30	0.30	0.26	0.55	0.55
Sat Flow, veh/h	351	1169	263	1781	770	864	1781	3554	1524	1781	3644	3
Grp Volume(v), veh/h	61	0	0	172	0	191	5	181	60	404	645	679
Grp Sat Flow(s),veh/h/ln	1782	0	0	1781	0	1634	1781	1777	1524	1781	1777	1870
Q Serve(g_s), s	2.3	0.0	0.0	6.1	0.0	7.6	0.2	2.6	2.0	15.0	17.8	17.8
Cycle Q Clear(g_c), s	2.3	0.0	0.0	6.1	0.0	7.6	0.2	2.6	2.0	15.0	17.8	17.8
Prop In Lane	0.20		0.15	1.00		0.53	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	80	0	0	301	0	276	9	1053	451	461	976	1027
V/C Ratio(X)	0.76	0.00	0.00	0.57	0.00	0.69	0.53	0.17	0.13	0.88	0.66	0.66
Avail Cap(c_a), veh/h	412	0	0	412	0	378	103	1053	451	644	976	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	0.0	0.0	26.4	0.0	27.0	34.3	18.0	17.8	24.6	11.0	11.0
Incr Delay (d2), s/veh	13.9	0.0	0.0	1.7	0.0	3.2	39.2	0.4	0.6	9.9	3.5	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	2.6	0.0	3.1	0.2	1.1	0.7	7.2	6.8	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.5	0.0	0.0	28.1	0.0	30.2	73.5	18.4	18.4	34.4	14.5	14.4
LnGrp LOS	D	A	A	C	A	C	E	B	B	C	B	B
Approach Vol, veh/h		61			363			246			1728	
Approach Delay, s/veh		46.5			29.2			19.5			19.1	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.9	24.5		7.1	4.4	42.0		15.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	17.0	4.6		4.3	2.2	19.8		9.6
Green Ext Time (p_c), s	0.8	1.0		0.2	0.0	9.0		0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	310	50	252	361	0	20	0	187	0	1	0
Future Vol, veh/h	0	310	50	252	361	0	20	0	187	0	1	0
Conflicting Peds, #/hr	5	0	5	5	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	337	54	274	392	0	22	0	203	0	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	397	0	0	396	0	0	1310	-	369	1411	1341	397
Stage 1	-	-	-	-	-	-	369	-	-	945	945	-
Stage 2	-	-	-	-	-	-	941	-	-	466	396	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1162	-	-	1163	-	-	136	0	677	116	152	652
Stage 1	-	-	-	-	-	-	651	0	-	314	340	-
Stage 2	-	-	-	-	-	-	316	0	-	577	604	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1157	-	-	1158	-	-	103	-	674	62	105	649
Mov Cap-2 Maneuver	-	-	-	-	-	-	103	-	-	62	105	-
Stage 1	-	-	-	-	-	-	648	-	-	313	236	-
Stage 2	-	-	-	-	-	-	219	-	-	403	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	16.1	39.6
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	103	674	1157	-	-	1158	-	-	105
HCM Lane V/C Ratio	0.211	0.302	-	-	-	0.237	-	-	0.01
HCM Control Delay (s)	49.1	12.6	0	-	-	9.1	0	-	39.6
HCM Lane LOS	E	B	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	0.7	1.3	0	-	-	0.9	-	-	0

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	12	77	490	12	83
Future Vol, veh/h	509	12	77	490	12	83
Conflicting Peds, #/hr	0	25	25	0	25	25
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	536	13	81	516	13	87

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	574	0	1271	593
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	703	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	999	-	185	506
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	491	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	978	-	157	485
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	425	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	17.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	384	-	-	978	-
HCM Lane V/C Ratio	0.26	-	-	0.083	-
HCM Control Delay (s)	17.6	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	593	82	547	441	0	0	0	0	492	10	167
Future Volume (veh/h)	0	593	82	547	441	0	0	0	0	492	10	167
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	605	84	558	450	0				509	0	170
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1549	215	648	2589	0				650	0	270
Arrive On Green	0.00	0.50	0.50	0.31	1.00	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	3214	432	3456	3647	0				3563	0	1478
Grp Volume(v), veh/h	0	344	345	558	450	0				509	0	170
Grp Sat Flow(s),veh/h/ln	0	1777	1775	1728	1777	0				1781	0	1478
Q Serve(g_s), s	0.0	10.9	10.9	13.7	0.0	0.0				12.3	0.0	9.6
Cycle Q Clear(g_c), s	0.0	10.9	10.9	13.7	0.0	0.0				12.3	0.0	9.6
Prop In Lane	0.00		0.24	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	882	882	648	2589	0				650	0	270
V/C Ratio(X)	0.00	0.39	0.39	0.86	0.17	0.00				0.78	0.00	0.63
Avail Cap(c_a), veh/h	0	882	882	845	2589	0				1069	0	444
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.91	0.91	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.1	14.2	29.8	0.0	0.0				35.1	0.0	34.0
Incr Delay (d2), s/veh	0.0	1.3	1.3	6.6	0.1	0.0				2.1	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	4.5	5.4	0.0	0.0				5.4	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.4	15.5	36.4	0.1	0.0				37.2	0.0	36.4
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		689			1008						679	
Approach Delay, s/veh		15.5			20.2						37.0	
Approach LOS		B			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.9	48.7		20.4		69.6
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	22.0	29.0		27.0		55.0
Max Q Clear Time (g_c+I1), s	15.7	12.9		14.3		2.0
Green Ext Time (p_c), s	1.2	3.9		2.2		3.4

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	895	0	0	925	477	74	1	715	0	0	0
Future Volume (veh/h)	157	895	0	0	925	477	74	1	715	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	164	932	0	0	964	497	77	1	745			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	197	2172	0	0	2330	685	528	7	778			
Arrive On Green	0.22	1.00	0.00	0.00	0.46	0.46	0.30	0.30	0.30			
Sat Flow, veh/h	1781	3647	0	0	5274	1500	1760	23	2593			
Grp Volume(v), veh/h	164	932	0	0	964	497	78	0	745			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1500	1782	0	1296			
Q Serve(g_s), s	7.9	0.0	0.0	0.0	11.4	24.2	2.9	0.0	25.4			
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.0	11.4	24.2	2.9	0.0	25.4			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	197	2172	0	0	2330	685	535	0	778			
V/C Ratio(X)	0.83	0.43	0.00	0.00	0.41	0.73	0.15	0.00	0.96			
Avail Cap(c_a), veh/h	297	2172	0	0	2330	685	535	0	778			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.84	0.84	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.3	0.0	0.0	0.0	16.4	19.9	23.1	0.0	30.9			
Incr Delay (d2), s/veh	10.2	0.5	0.0	0.0	0.5	6.6	0.1	0.0	22.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.6	0.2	0.0	0.0	4.4	9.2	1.2	0.0	10.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	0.5	0.0	0.0	16.9	26.5	23.2	0.0	53.4			
LnGrp LOS	D	A	A	A	B	C	C	A	D			
Approach Vol, veh/h		1096			1461			823				
Approach Delay, s/veh		7.1			20.2			50.5				
Approach LOS		A			C			D				

Timer - Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		59.0			13.9	45.1		31.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		55.0			15.0	36.0		27.0
Max Q Clear Time (g_c+I1), s		2.0			9.9	26.2		27.4
Green Ext Time (p_c), s		8.5			0.2	5.8		0.0

Intersection Summary			
HCM 6th Ctrl Delay			23.3
HCM 6th LOS			C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	132	0	0	0	13	508
Future Volume (vph)	132	0	0	0	13	508
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				0.56	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				984	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				984	3539
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	148	0	0	0	15	571
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	148	0	0	0	15	571
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		10		10		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	8.9				0.6	40.6
Effective Green, g (s)	8.9				0.6	40.6
Actuated g/C Ratio	0.14				0.01	0.65
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	488				9	2298
v/s Ratio Prot	c0.04				c0.02	c0.16
v/s Ratio Perm						
v/c Ratio	0.30				1.67	0.25
Uniform Delay, d1	24.0				30.9	4.6
Progression Factor	0.11				1.00	1.00
Incremental Delay, d2	0.4				565.3	0.1
Delay (s)	3.1				596.3	4.6
Level of Service	A				F	A
Approach Delay (s)	3.1		0.0			19.8
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	11	0	0	132	11	0	640	167	0	0	0
Future Volume (vph)	2	11	0	0	132	11	0	640	167	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			1.00			1.00	0.93			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.99			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1850			3480			3539	1466			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1850			3480			3539	1466			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.80	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2	12	0	0	148	14	0	719	188	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	161	0	0	0
Lane Group Flow (vph)	0	14	0	0	153	0	0	719	27	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			10			10			10			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		1.0			8.9			36.0	8.9			
Effective Green, g (s)		1.0			8.9			36.0	8.9			
Actuated g/C Ratio		0.02			0.14			0.58	0.14			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		29			495			2038	208			
v/s Ratio Prot		c0.01			c0.04			c0.20				
v/s Ratio Perm									0.02			
v/c Ratio		0.48			0.31			0.35	0.13			
Uniform Delay, d1		30.5			24.0			7.1	23.4			
Progression Factor		1.58			1.00			1.00	1.00			
Incremental Delay, d2		12.1			0.4			0.5	0.3			
Delay (s)		60.2			24.4			7.5	23.7			
Level of Service		E			C			A	C			
Approach Delay (s)		60.2			24.4			10.9			0.0	
Approach LOS		E			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	226	304	605	235	199	337
Future Volume (veh/h)	226	304	605	235	199	337
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	254	0	680	0	224	379
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	301		2601		597	2601
Arrive On Green	0.17	0.00	0.73	0.00	0.73	0.73
Sat Flow, veh/h	1781	1585	3647	1585	759	3647
Grp Volume(v), veh/h	254	0	680	0	224	379
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	759	1777
Q Serve(g_s), s	11.1	0.0	5.1	0.0	11.2	2.6
Cycle Q Clear(g_c), s	11.1	0.0	5.1	0.0	16.3	2.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	301		2601		597	2601
V/C Ratio(X)	0.84		0.26		0.38	0.15
Avail Cap(c_a), veh/h	508		2601		597	2601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	3.6	0.0	6.3	3.2
Incr Delay (d2), s/veh	6.4	0.0	0.2	0.0	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	1.4	0.0	1.7	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.9	0.0	3.8	0.0	8.1	3.4
LnGrp LOS	D		A		A	A
Approach Vol, veh/h	254	A	680	A		603
Approach Delay, s/veh	38.9		3.8			5.1
Approach LOS	D		A			A

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	63.0	63.0	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0
Max Green Setting (Gmax), s	59.0	59.0	23.0
Max Q Clear Time (g_c+I1), s	7.1	18.3	13.1
Green Ext Time (p_c), s	5.6	4.9	0.5

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	17	17	768	514	26
Future Vol, veh/h	31	17	17	768	514	26
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	19	19	844	565	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1482	317	604	0	-	0
Stage 1	590	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	126	680	972	-	-	-
Stage 1	518	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	121	669	964	-	-	-
Mov Cap-2 Maneuver	256	-	-	-	-	-
Stage 1	503	-	-	-	-	-
Stage 2	396	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.1	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	964	-	328	-	-
HCM Lane V/C Ratio	0.019	-	0.161	-	-
HCM Control Delay (s)	8.8	-	18.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	57	7	747	520	13
Future Vol, veh/h	37	57	7	747	520	13
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	58	7	762	531	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1334	292	554	0	-	0
Stage 1	548	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	157	705	1014	-	-	-
Stage 1	544	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	153	693	1006	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	444	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.2	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1006	-	449	-	-
HCM Lane V/C Ratio	0.007	-	0.214	-	-
HCM Control Delay (s)	8.6	-	15.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	11	6	792	71	495	8
Future Vol, veh/h	0	11	6	792	71	495	8
Conflicting Peds, #/hr	10	10	10	0	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	0	11	6	816	73	510	8

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1508	279	528	0	-	-	0
Stage 1	670	-	-	-	-	-	-
Stage 2	838	-	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-	-
Pot Cap-1 Maneuver	122	719	1037	-	-	-	-
Stage 1	471	-	-	-	-	-	-
Stage 2	423	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	119	707	1028	-	-	-	-
Mov Cap-2 Maneuver	119	-	-	-	-	-	-
Stage 1	462	-	-	-	-	-	-
Stage 2	420	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.1	
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	1028	-	707	-	-	-
HCM Lane V/C Ratio	0.006	-	0.016	-	-	-
HCM Control Delay (s)	8.5	-	10.2	-	-	-
HCM Lane LOS	A	-	B	-	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	18	33	686	472	36
Future Vol, veh/h	13	18	33	686	472	36
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	19	34	715	492	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1314	285	540	0	-	0
Stage 1	521	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	162	713	1027	-	-	-
Stage 1	562	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	154	701	1018	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	441	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1018	-	441	-	-
HCM Lane V/C Ratio	0.034	-	0.073	-	-
HCM Control Delay (s)	8.7	-	13.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	45	13	165	30	178	7	595	168	263	411	3
Future Volume (veh/h)	23	45	13	165	30	178	7	595	168	263	411	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.92	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	48	14	177	32	191	8	640	181	283	442	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	64	19	336	41	244	15	1203	517	336	1878	13
Arrive On Green	0.07	0.07	0.07	0.19	0.19	0.19	0.01	0.34	0.34	0.19	0.52	0.52
Sat Flow, veh/h	509	977	285	1781	217	1296	1781	3554	1527	1781	3616	25
Grp Volume(v), veh/h	87	0	0	177	0	223	8	640	181	283	217	228
Grp Sat Flow(s),veh/h/ln	1771	0	0	1781	0	1513	1781	1777	1527	1781	1777	1864
Q Serve(g_s), s	3.5	0.0	0.0	6.6	0.0	10.3	0.3	10.6	6.5	11.2	4.9	4.9
Cycle Q Clear(g_c), s	3.5	0.0	0.0	6.6	0.0	10.3	0.3	10.6	6.5	11.2	4.9	4.9
Prop In Lane	0.29		0.16	1.00		0.86	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	116	0	0	336	0	285	15	1203	517	336	923	968
V/C Ratio(X)	0.75	0.00	0.00	0.53	0.00	0.78	0.55	0.53	0.35	0.84	0.24	0.24
Avail Cap(c_a), veh/h	387	0	0	390	0	331	97	1203	517	609	923	968
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	26.8	0.0	28.3	36.2	19.5	18.2	28.6	9.6	9.6
Incr Delay (d2), s/veh	9.3	0.0	0.0	1.3	0.0	10.1	28.3	1.7	1.9	5.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	2.8	0.0	4.4	0.3	4.4	2.4	5.1	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.9	0.0	0.0	28.0	0.0	38.3	64.4	21.2	20.0	34.3	10.2	10.2
LnGrp LOS	D	A	A	C	A	D	E	C	C	C	B	B
Approach Vol, veh/h		87			400			829			728	
Approach Delay, s/veh		42.9			33.8			21.4			19.6	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.8	28.8		8.8	4.6	42.0		17.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0				
Max Q Clear Time (g_c+I1), s	13.2	12.6		5.5	2.3	6.9		12.3				
Green Ext Time (p_c), s	0.7	2.0		0.2	0.0	2.8		0.7				

Intersection Summary			
HCM 6th Ctrl Delay			24.1
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	363	70	131	392	1	58	0	155	0	0	0
Future Vol, veh/h	1	363	70	131	392	1	58	0	155	0	0	0
Conflicting Peds, #/hr	5	0	5	5	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	80	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	395	76	142	426	1	63	0	168	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	432	0	0	476	0	0	1151	-	438	1235	1194	432
Stage 1	-	-	-	-	-	-	440	-	-	716	716	-
Stage 2	-	-	-	-	-	-	711	-	-	519	478	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1128	-	-	1086	-	-	175	0	619	153	187	624
Stage 1	-	-	-	-	-	-	596	0	-	421	434	-
Stage 2	-	-	-	-	-	-	424	0	-	540	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1123	-	-	1081	-	-	151	-	616	96	154	621
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	-	-	96	154	-
Stage 1	-	-	-	-	-	-	593	-	-	419	358	-
Stage 2	-	-	-	-	-	-	351	-	-	392	553	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.2	21.7	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	151	616	1123	-	-	1081	-	-	-
HCM Lane V/C Ratio	0.418	0.274	0.001	-	-	0.132	-	-	-
HCM Control Delay (s)	44.9	13	8.2	0	-	8.8	0	-	0
HCM Lane LOS	E	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	1.8	1.1	0	-	-	0.5	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	557	13	63	582	13	50
Future Vol, veh/h	557	13	63	582	13	50
Conflicting Peds, #/hr	0	10	10	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	580	14	66	606	14	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	604	0	1345	607
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	748	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	974	-	167	496
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	468	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	966	-	147	488
Mov Cap-2 Maneuver	-	-	-	-	147	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	417	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	18.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	330	-	-	966	-
HCM Lane V/C Ratio	0.199	-	-	0.068	-
HCM Control Delay (s)	18.6	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	556	88	705	525	0	0	0	0	497	1	158
Future Volume (veh/h)	0	556	88	705	525	0	0	0	0	497	1	158
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00				1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	598	95	758	565	0				535	0	170
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1345	213	817	2563	0				677	0	281
Arrive On Green	0.00	0.44	0.44	0.39	1.00	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3149	484	3456	3647	0				3563	0	1482
Grp Volume(v), veh/h	0	347	346	758	565	0				535	0	170
Grp Sat Flow(s),veh/h/ln	0	1777	1762	1728	1777	0				1781	0	1482
Q Serve(g_s), s	0.0	12.2	12.3	18.9	0.0	0.0				12.9	0.0	9.4
Cycle Q Clear(g_c), s	0.0	12.2	12.3	18.9	0.0	0.0				12.9	0.0	9.4
Prop In Lane	0.00		0.27	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	782	776	817	2563	0				677	0	281
V/C Ratio(X)	0.00	0.44	0.45	0.93	0.22	0.00				0.79	0.00	0.60
Avail Cap(c_a), veh/h	0	782	776	845	2563	0				1069	0	445
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.88	0.88	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	26.5	0.0	0.0				34.7	0.0	33.4
Incr Delay (d2), s/veh	0.0	1.8	1.9	14.5	0.2	0.0				2.1	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.2	5.2	7.8	0.1	0.0				5.7	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.3	19.4	41.0	0.2	0.0				36.9	0.0	35.4
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		693			1323						705	
Approach Delay, s/veh		19.4			23.5						36.5	
Approach LOS		B			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.3	43.6		21.1		68.9
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	22.0	29.0		27.0		55.0
Max Q Clear Time (g_c+I1), s	20.9	14.3		14.9		2.0
Green Ext Time (p_c), s	0.4	3.8		2.2		4.4

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	876	0	0	1097	414	123	1	639	0	0	0
Future Volume (veh/h)	164	876	0	0	1097	414	123	1	639	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	171	912	0	0	1143	431	128	1	666			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	204	2232	0	0	2397	705	500	4	731			
Arrive On Green	0.23	1.00	0.00	0.00	0.47	0.47	0.28	0.28	0.28			
Sat Flow, veh/h	1781	3647	0	0	5274	1502	1768	14	2584			
Grp Volume(v), veh/h	171	912	0	0	1143	431	129	0	666			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1502	1782	0	1292			
Q Serve(g_s), s	8.2	0.0	0.0	0.0	13.8	19.2	5.0	0.0	22.4			
Cycle Q Clear(g_c), s	8.2	0.0	0.0	0.0	13.8	19.2	5.0	0.0	22.4			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	204	2232	0	0	2397	705	504	0	731			
V/C Ratio(X)	0.84	0.41	0.00	0.00	0.48	0.61	0.26	0.00	0.91			
Avail Cap(c_a), veh/h	297	2232	0	0	2397	705	535	0	775			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.79	0.79	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.9	0.0	0.0	0.0	16.3	17.8	24.9	0.0	31.2			
Incr Delay (d2), s/veh	10.7	0.4	0.0	0.0	0.7	3.9	0.3	0.0	14.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.7	0.1	0.0	0.0	5.2	7.0	2.1	0.0	8.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	0.4	0.0	0.0	17.0	21.7	25.2	0.0	45.5			
LnGrp LOS	D	A	A	A	B	C	C	A	D			
Approach Vol, veh/h		1083			1574			795				
Approach Delay, s/veh		7.4			18.3			42.2				
Approach LOS		A			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		60.5			14.3	46.2		29.5				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		55.0			15.0	36.0		27.0				
Max Q Clear Time (g_c+I1), s		2.0			10.2	21.2		24.4				
Green Ext Time (p_c), s		8.3			0.2	8.5		1.1				

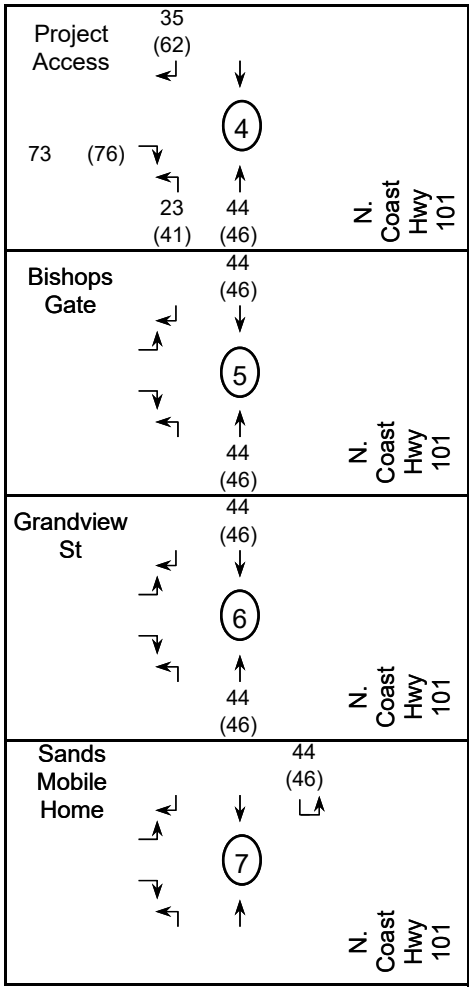
Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Appendix J

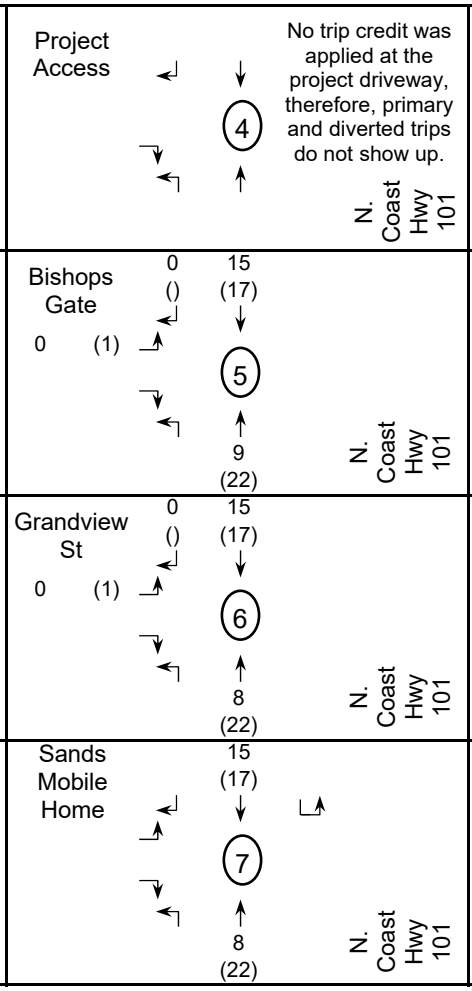
Project Trip Details

Breakdown of Project Driveway trips making a u-turn combined with primary & diverted trips
Before Streetscape

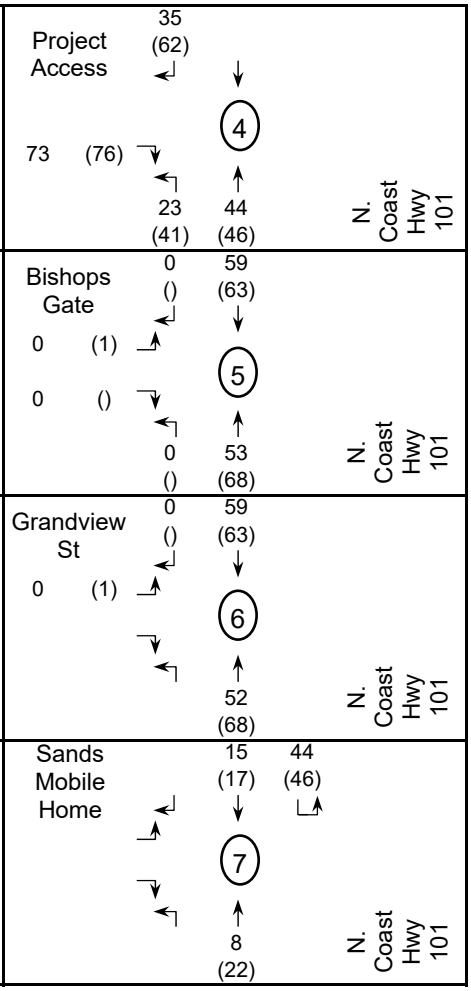
Driveway trips making u-turns to the south at Int #7



Primary & Diverted

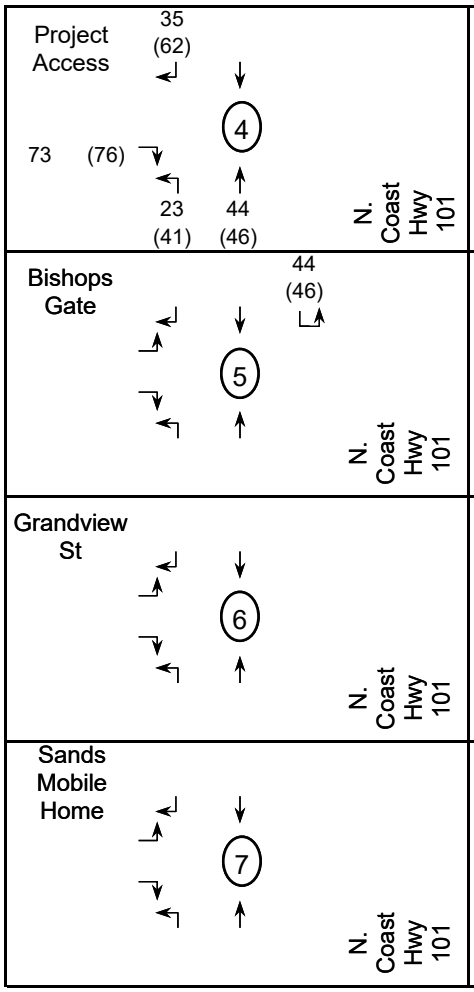


Combined Driveway, Primary & Diverted

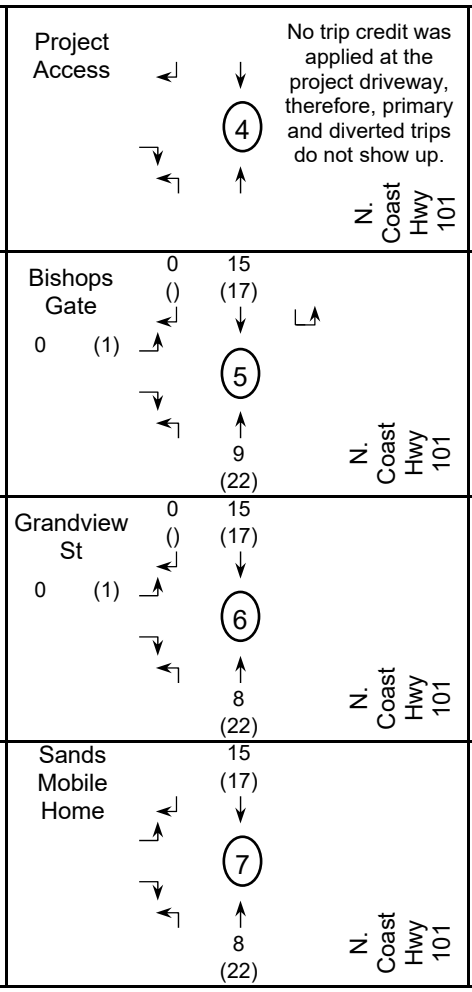


Breakdown of Project Driveway trips making a u-turn combined with primary & diverted trips
After Streetscape

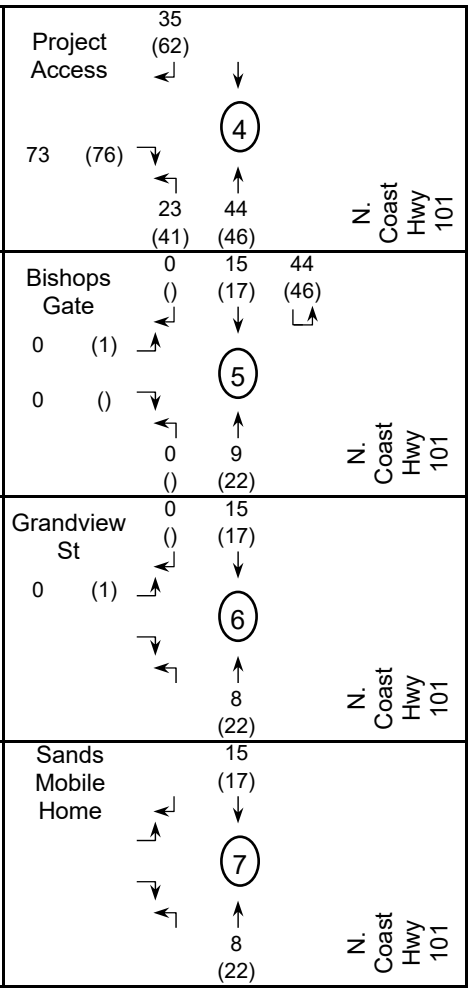
Driveway trips making u-turns to the south at Int #5



Primary & Diverted



Combined Driveway, Primary & Diverted



Appendix K

Existing + Project Intersection LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	174	0	0	0	8	1101
Future Volume (vph)	174	0	0	0	8	1101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				0.53	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				933	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				933	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	187	0	0	0	9	1184
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	187	0	0	0	9	1184
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		30		30		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	9.2				0.5	44.3
Effective Green, g (s)	9.2				0.5	44.3
Actuated g/C Ratio	0.14				0.01	0.67
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	474				7	2357
v/s Ratio Prot	c0.05				0.01	c0.33
v/s Ratio Perm						
v/c Ratio	0.39				1.29	0.50
Uniform Delay, d1	26.1				33.0	5.6
Progression Factor	0.07				1.00	1.00
Incremental Delay, d2	0.5				455.3	0.2
Delay (s)	2.4				488.3	5.7
Level of Service	A				F	A
Approach Delay (s)	2.4		0.0			9.4
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	66.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	7	0	0	174	6	0	202	67	0	0	0
Future Volume (vph)	1	7	0	0	174	6	0	202	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			1.00			1.00	0.87			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			1.00			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1852			3514			3539	1380			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1852			3514			3539	1380			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	8	0	0	187	6	0	217	72	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	62	0	0	0
Lane Group Flow (vph)	0	9	0	0	190	0	0	217	10	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			30			30			30			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		1.0			9.2			39.8	9.2			
Effective Green, g (s)		1.0			9.2			39.8	9.2			
Actuated g/C Ratio		0.02			0.14			0.60	0.14			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		27			486			2118	190			
v/s Ratio Prot		c0.00			c0.05			c0.06				
v/s Ratio Perm									0.01			
v/c Ratio		0.33			0.39			0.10	0.05			
Uniform Delay, d1		32.4			26.1			5.7	24.9			
Progression Factor		1.61			1.00			1.00	1.00			
Incremental Delay, d2		7.2			0.5			0.1	0.1			
Delay (s)		59.4			26.6			5.8	25.0			
Level of Service		E			C			A	C			
Approach Delay (s)		59.4			26.6			10.6			0.0	
Approach LOS		E			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	66.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	250	102	175	205	265	1006
Future Volume (veh/h)	250	102	175	205	265	1006
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	0.99	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	272	0	190	0	288	1093
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	327		2515		915	2515
Arrive On Green	0.18	0.00	0.71	0.00	0.71	0.71
Sat Flow, veh/h	1781	1585	3647	1585	1181	3647
Grp Volume(v), veh/h	272	0	190	0	288	1093
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1181	1777
Q Serve(g_s), s	10.8	0.0	1.2	0.0	7.3	9.5
Cycle Q Clear(g_c), s	10.8	0.0	1.2	0.0	8.5	9.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	327		2515		915	2515
V/C Ratio(X)	0.83		0.08		0.31	0.43
Avail Cap(c_a), veh/h	727		2515		915	2515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	3.3	0.0	4.6	4.5
Incr Delay (d2), s/veh	5.5	0.0	0.1	0.0	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.3	0.0	1.5	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.4	0.0	3.4	0.0	5.5	5.1
LnGrp LOS	C		A		A	A
Approach Vol, veh/h	272	A	190	A		1381
Approach Delay, s/veh	34.4		3.4			5.2
Approach LOS	C		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		56.0				56.0	17.5
Change Period (Y+Rc), s		4.0				4.0	4.0
Max Green Setting (Gmax), s		52.0				52.0	30.0
Max Q Clear Time (g_c+I1), s		3.2				11.5	12.8
Green Ext Time (p_c), s		1.3				12.3	0.7

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	23	884	1243	35
Future Vol, veh/h	0	73	23	884	1243	35
Conflicting Peds, #/hr	20	20	20	0	0	20
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	79	25	961	1351	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	735	1409	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	4.13	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	0	363	482	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	351	474	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.2	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	474	-	351	-	-
HCM Lane V/C Ratio	0.053	-	0.226	-	-
HCM Control Delay (s)	13	-	18.2	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.9	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	28	8	429	1676	26
Future Vol, veh/h	32	28	8	429	1676	26
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	29	8	438	1710	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2198	889	1747	0	-	0
Stage 1	1734	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	43	287	357	-	-	-
Stage 1	128	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	41	282	354	-	-	-
Mov Cap-2 Maneuver	104	-	-	-	-	-
Stage 1	124	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.9	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	354	-	147	-	-
HCM Lane V/C Ratio	0.023	-	0.416	-	-
HCM Control Delay (s)	15.4	-	45.9	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.8	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	34	9	388	1668	26
Future Vol, veh/h	33	34	9	388	1668	26
Conflicting Peds, #/hr	15	15	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	38	10	436	1874	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2375	982	1918	0	-	0
Stage 1	1904	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	~ 33	249	306	-	-	-
Stage 1	103	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 31	243	302	-	-	-
Mov Cap-2 Maneuver	83	-	-	-	-	-
Stage 1	98	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	70.1	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	302	-	125	-	-
HCM Lane V/C Ratio	0.033	-	0.602	-	-
HCM Control Delay (s)	17.3	-	70.1	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	3	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	5	0	336	98	1618	3
Future Vol, veh/h	0	5	0	336	98	1618	3
Conflicting Peds, #/hr	15	15	15	0	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	0	6	0	386	113	1860	3

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2504	962	-	0	-	-	0
Stage 1	2103	-	-	-	-	-	-
Stage 2	401	-	-	-	-	-	-
Critical Hdwy	6.63	6.93	-	-	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-	-
Pot Cap-1 Maneuver	27	257	0	-	-	-	-
Stage 1	80	-	0	-	-	-	-
Stage 2	675	-	0	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	26	251	-	-	-	-	-
Mov Cap-2 Maneuver	26	-	-	-	-	-	-
Stage 1	79	-	-	-	-	-	-
Stage 2	667	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.7	0	
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	-	251	-	-	-
HCM Lane V/C Ratio	-	0.023	-	-	-
HCM Control Delay (s)	-	19.7	-	-	-
HCM Lane LOS	-	C	-	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	27	13	250	1620	10
Future Vol, veh/h	19	27	13	250	1620	10
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	30	14	275	1780	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2109	916	1801	0	-	0
Stage 1	1796	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	50	275	340	-	-	-
Stage 1	118	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	47	270	337	-	-	-
Mov Cap-2 Maneuver	97	-	-	-	-	-
Stage 1	112	-	-	-	-	-
Stage 2	735	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.1	0.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	337	-	155	-	-
HCM Lane V/C Ratio	0.042	-	0.326	-	-
HCM Control Delay (s)	16.2	-	39.1	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	38	9	209	23	100	5	176	57	392	1263	1
Future Volume (veh/h)	11	38	9	209	23	100	5	176	57	392	1263	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.93	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	40	9	174	88	105	5	185	60	413	1329	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	52	12	303	126	151	9	1033	443	469	1999	2
Arrive On Green	0.04	0.04	0.04	0.17	0.17	0.17	0.01	0.29	0.29	0.26	0.55	0.55
Sat Flow, veh/h	351	1169	263	1781	742	886	1781	3554	1523	1781	3644	3
Grp Volume(v), veh/h	61	0	0	174	0	193	5	185	60	413	648	682
Grp Sat Flow(s),veh/h/ln	1782	0	0	1781	0	1628	1781	1777	1523	1781	1777	1870
Q Serve(g_s), s	2.3	0.0	0.0	6.2	0.0	7.7	0.2	2.7	2.0	15.4	18.0	18.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0	6.2	0.0	7.7	0.2	2.7	2.0	15.4	18.0	18.0
Prop In Lane	0.20		0.15	1.00		0.54	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	80	0	0	303	0	277	9	1033	443	469	975	1026
V/C Ratio(X)	0.76	0.00	0.00	0.57	0.00	0.70	0.53	0.18	0.14	0.88	0.66	0.66
Avail Cap(c_a), veh/h	412	0	0	411	0	376	103	1033	443	643	975	1026
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	0.0	0.0	26.4	0.0	27.1	34.4	18.4	18.1	24.5	11.1	11.1
Incr Delay (d2), s/veh	13.9	0.0	0.0	1.7	0.0	3.4	39.2	0.4	0.6	10.4	3.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	2.7	0.0	3.1	0.2	1.1	0.7	7.4	6.9	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	0.0	0.0	28.1	0.0	30.5	73.6	18.8	18.8	34.9	14.7	14.5
LnGrp LOS	D	A	A	C	A	C	E	B	B	C	B	B
Approach Vol, veh/h		61			367			250			1743	
Approach Delay, s/veh		46.6			29.4			19.9			19.4	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	22.2	24.1		7.1	4.4	42.0		15.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	17.4	4.7		4.3	2.2	20.0		9.7
Green Ext Time (p_c), s	0.8	1.0		0.2	0.0	9.0		0.9

Intersection Summary			
HCM 6th Ctrl Delay			21.6
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	325	50	252	370	0	20	0	187	0	1	0
Future Vol, veh/h	0	325	50	252	370	0	20	0	187	0	1	0
Conflicting Peds, #/hr	5	0	5	5	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	353	54	274	402	0	22	0	203	0	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	407	0	0	412	0	0	1336	-	385	1437	1367	407
Stage 1	-	-	-	-	-	-	385	-	-	955	955	-
Stage 2	-	-	-	-	-	-	951	-	-	482	412	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1152	-	-	1147	-	-	130	0	663	111	147	644
Stage 1	-	-	-	-	-	-	638	0	-	310	337	-
Stage 2	-	-	-	-	-	-	312	0	-	565	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1147	-	-	1142	-	-	98	-	660	58	101	641
Mov Cap-2 Maneuver	-	-	-	-	-	-	98	-	-	58	101	-
Stage 1	-	-	-	-	-	-	635	-	-	309	232	-
Stage 2	-	-	-	-	-	-	215	-	-	391	592	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	16.7	41
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	98	660	1147	-	-	1142	-	-	101
HCM Lane V/C Ratio	0.222	0.308	-	-	-	0.24	-	-	0.011
HCM Control Delay (s)	51.9	12.9	0	-	-	9.1	0	-	41
HCM Lane LOS	F	B	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	0.8	1.3	0	-	-	0.9	-	-	0

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	522	14	77	498	13	83
Future Vol, veh/h	522	14	77	498	13	83
Conflicting Peds, #/hr	0	25	25	0	25	25
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	549	15	81	524	14	87

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	589	0	1293	607
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	711	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	986	-	180	496
Stage 1	-	-	-	-	559	-
Stage 2	-	-	-	-	487	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	965	-	152	476
Mov Cap-2 Maneuver	-	-	-	-	152	-
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	421	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	18.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	369	-	-	965	-
HCM Lane V/C Ratio	0.274	-	-	0.084	-
HCM Control Delay (s)	18.4	-	-	9.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	601	87	547	445	0	0	0	0	492	10	171
Future Volume (veh/h)	0	601	87	547	445	0	0	0	0	492	10	171
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	613	89	558	454	0				509	0	174
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1539	223	648	2589	0				651	0	270
Arrive On Green	0.00	0.50	0.50	0.31	1.00	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	3193	449	3456	3647	0				3563	0	1479
Grp Volume(v), veh/h	0	351	351	558	454	0				509	0	174
Grp Sat Flow(s),veh/h/ln	0	1777	1772	1728	1777	0				1781	0	1479
Q Serve(g_s), s	0.0	11.1	11.2	13.7	0.0	0.0				12.3	0.0	9.8
Cycle Q Clear(g_c), s	0.0	11.1	11.2	13.7	0.0	0.0				12.3	0.0	9.8
Prop In Lane	0.00		0.25	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	882	880	648	2589	0				651	0	270
V/C Ratio(X)	0.00	0.40	0.40	0.86	0.18	0.00				0.78	0.00	0.64
Avail Cap(c_a), veh/h	0	882	880	845	2589	0				1069	0	444
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.91	0.91	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.2	14.2	29.8	0.0	0.0				35.1	0.0	34.1
Incr Delay (d2), s/veh	0.0	1.3	1.4	6.6	0.1	0.0				2.1	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.6	4.6	5.4	0.0	0.0				5.4	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.6	15.6	36.4	0.1	0.0				37.2	0.0	36.6
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		702			1012						683	
Approach Delay, s/veh		15.6			20.1						37.0	
Approach LOS		B			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.9	48.7		20.4		69.6
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	22.0	29.0		27.0		55.0
Max Q Clear Time (g_c+I1), s	15.7	13.2		14.3		2.0
Green Ext Time (p_c), s	1.2	4.0		2.2		3.4

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	897	0	0	926	477	77	1	715	0	0	0
Future Volume (veh/h)	163	897	0	0	926	477	77	1	715	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	170	934	0	0	965	497	80	1	745			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	203	2172	0	0	2313	679	528	7	778			
Arrive On Green	0.23	1.00	0.00	0.00	0.45	0.45	0.30	0.30	0.30			
Sat Flow, veh/h	1781	3647	0	0	5274	1500	1760	22	2593			
Grp Volume(v), veh/h	170	934	0	0	965	497	81	0	745			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1500	1782	0	1296			
Q Serve(g_s), s	8.2	0.0	0.0	0.0	11.5	24.4	3.0	0.0	25.4			
Cycle Q Clear(g_c), s	8.2	0.0	0.0	0.0	11.5	24.4	3.0	0.0	25.4			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	203	2172	0	0	2313	679	535	0	778			
V/C Ratio(X)	0.84	0.43	0.00	0.00	0.42	0.73	0.15	0.00	0.96			
Avail Cap(c_a), veh/h	297	2172	0	0	2313	679	535	0	778			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.83	0.83	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.0	0.0	0.0	0.0	16.6	20.1	23.1	0.0	30.9			
Incr Delay (d2), s/veh	11.0	0.5	0.0	0.0	0.6	6.8	0.1	0.0	22.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.7	0.2	0.0	0.0	4.4	9.3	1.3	0.0	10.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	0.5	0.0	0.0	17.2	27.0	23.2	0.0	53.4			
LnGrp LOS	D	A	A	A	B	C	C	A	D			
Approach Vol, veh/h		1104			1462			826				
Approach Delay, s/veh		7.4			20.5			50.4				
Approach LOS		A			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		59.0			14.2	44.8		31.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		55.0			15.0	36.0		27.0				
Max Q Clear Time (g_c+I1), s		2.0			10.2	26.4		27.4				
Green Ext Time (p_c), s		8.5			0.2	5.8		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	135	0	0	0	13	517
Future Volume (vph)	135	0	0	0	13	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				0.55	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				976	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				976	3539
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor (vph)	115%	100%	100%	100%	100%	100%
Adj. Flow (vph)	174	0	0	0	15	581
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	174	0	0	0	15	581
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		10		10		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	9.4				0.6	40.6
Effective Green, g (s)	9.4				0.6	40.6
Actuated g/C Ratio	0.15				0.01	0.64
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	511				9	2277
v/s Ratio Prot	c0.05				c0.02	c0.16
v/s Ratio Perm						
v/c Ratio	0.34				1.67	0.26
Uniform Delay, d1	24.1				31.2	4.8
Progression Factor	0.23				1.00	1.00
Incremental Delay, d2	0.4				565.3	0.1
Delay (s)	5.8				596.6	4.9
Level of Service	A				F	A
Approach Delay (s)	5.8		0.0			19.8
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	63.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	11	0	0	135	11	0	647	169	0	0	0
Future Volume (vph)	2	11	0	0	135	11	0	647	169	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			1.00			1.00	0.93			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.99			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1850			3482			3539	1468			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1850			3482			3539	1468			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.80	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2	12	0	0	152	14	0	727	190	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	162	0	0	0
Lane Group Flow (vph)	0	14	0	0	157	0	0	727	28	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			10			10			10			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		1.1			9.4			36.0	9.4			
Effective Green, g (s)		1.1			9.4			36.0	9.4			
Actuated g/C Ratio		0.02			0.15			0.57	0.15			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		32			518			2019	218			
v/s Ratio Prot		c0.01			c0.05			c0.21				
v/s Ratio Perm									0.02			
v/c Ratio		0.44			0.30			0.36	0.13			
Uniform Delay, d1		30.7			23.9			7.3	23.3			
Progression Factor		1.56			1.00			1.00	1.00			
Incremental Delay, d2		9.3			0.3			0.5	0.3			
Delay (s)		57.3			24.3			7.8	23.6			
Level of Service		E			C			A	C			
Approach Delay (s)		57.3			24.3			11.1			0.0	
Approach LOS		E			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	63.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	32.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	249	304	614	252	199	349
Future Volume (veh/h)	249	304	614	252	199	349
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	280	0	690	0	224	392
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	326		2557		578	2557
Arrive On Green	0.18	0.00	0.72	0.00	0.72	0.72
Sat Flow, veh/h	1781	1585	3647	1585	752	3647
Grp Volume(v), veh/h	280	0	690	0	224	392
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	752	1777
Q Serve(g_s), s	12.5	0.0	5.5	0.0	12.1	2.9
Cycle Q Clear(g_c), s	12.5	0.0	5.5	0.0	17.7	2.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	326		2557		578	2557
V/C Ratio(X)	0.86		0.27		0.39	0.15
Avail Cap(c_a), veh/h	500		2557		578	2557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	4.0	0.0	7.1	3.6
Incr Delay (d2), s/veh	9.1	0.0	0.3	0.0	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	1.6	0.0	1.9	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.6	0.0	4.3	0.0	9.0	3.8
LnGrp LOS	D		A		A	A
Approach Vol, veh/h	280	A	690	A		616
Approach Delay, s/veh	41.6		4.3			5.7
Approach LOS	D		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		63.0				63.0	19.0
Change Period (Y+Rc), s		4.0				4.0	4.0
Max Green Setting (Gmax), s		59.0				59.0	23.0
Max Q Clear Time (g_c+I1), s		7.5				19.7	14.5
Green Ext Time (p_c), s		5.7				5.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	76	41	886	563	62
Future Vol, veh/h	0	76	41	886	563	62
Conflicting Peds, #/hr	20	20	20	0	0	20
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	83	45	963	612	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	380	699	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	4.13	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	0	619	896	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	599	881	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	881	-	599	-	-
HCM Lane V/C Ratio	0.051	-	0.138	-	-
HCM Control Delay (s)	9.3	-	12	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	17	17	836	577	26
Future Vol, veh/h	32	17	17	836	577	26
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	19	19	919	634	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1626	352	673	0	-	0
Stage 1	659	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	102	645	916	-	-	-
Stage 1	477	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	98	634	908	-	-	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	365	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.9	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	908	-	295	-	-
HCM Lane V/C Ratio	0.021	-	0.183	-	-
HCM Control Delay (s)	9	-	19.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	57	7	815	583	13
Future Vol, veh/h	38	57	7	815	583	13
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	58	7	832	595	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1468	324	618	0	-	0
Stage 1	612	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	129	672	960	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	126	661	952	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	497	-	-	-	-	-
Stage 2	412	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	952	-	411	-	-
HCM Lane V/C Ratio	0.008	-	0.236	-	-
HCM Control Delay (s)	8.8	-	16.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	11	6	814	117	512	8
Future Vol, veh/h	0	11	6	814	117	512	8
Conflicting Peds, #/hr	10	10	10	0	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	50	-	-
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	0	11	6	839	121	528	8

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1645	288	546	0	-	-	0
Stage 1	784	-	-	-	-	-	-
Stage 2	861	-	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-	-
Pot Cap-1 Maneuver	99	709	1021	-	-	-	-
Stage 1	411	-	-	-	-	-	-
Stage 2	413	-	-	-	-	-	-
Platoon blocked, %				-		-	-
Mov Cap-1 Maneuver	96	697	1012	-	-	-	-
Mov Cap-2 Maneuver	96	-	-	-	-	-	-
Stage 1	403	-	-	-	-	-	-
Stage 2	410	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.1	
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	1012	-	697	-	-	-
HCM Lane V/C Ratio	0.006	-	0.016	-	-	-
HCM Control Delay (s)	8.6	-	10.3	-	-	-
HCM Lane LOS	A	-	B	-	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	18	33	707	488	36
Future Vol, veh/h	14	18	33	707	488	36
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	19	34	736	508	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1351	293	556	0	-	0
Stage 1	537	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	153	704	1013	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	146	692	1005	-	-	-
Mov Cap-2 Maneuver	283	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.2	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1005	-	424	-	-
HCM Lane V/C Ratio	0.034	-	0.079	-	-
HCM Control Delay (s)	8.7	-	14.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	45	13	165	30	190	7	603	168	272	418	3
Future Volume (veh/h)	24	45	13	165	30	190	7	603	168	272	418	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.93	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	48	14	177	32	204	8	648	181	292	449	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	64	19	344	40	253	15	1172	503	345	1864	12
Arrive On Green	0.07	0.07	0.07	0.19	0.19	0.19	0.01	0.33	0.33	0.19	0.52	0.52
Sat Flow, veh/h	523	966	282	1781	205	1307	1781	3554	1527	1781	3617	24
Grp Volume(v), veh/h	88	0	0	177	0	236	8	648	181	292	220	232
Grp Sat Flow(s),veh/h/ln	1771	0	0	1781	0	1513	1781	1777	1527	1781	1777	1864
Q Serve(g_s), s	3.6	0.0	0.0	6.6	0.0	11.0	0.3	11.0	6.6	11.7	5.1	5.1
Cycle Q Clear(g_c), s	3.6	0.0	0.0	6.6	0.0	11.0	0.3	11.0	6.6	11.7	5.1	5.1
Prop In Lane	0.30		0.16	1.00		0.86	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	117	0	0	344	0	292	15	1172	503	345	916	961
V/C Ratio(X)	0.75	0.00	0.00	0.51	0.00	0.81	0.55	0.55	0.36	0.85	0.24	0.24
Avail Cap(c_a), veh/h	384	0	0	386	0	328	97	1172	503	604	916	961
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	26.6	0.0	28.4	36.4	20.3	18.8	28.7	9.9	9.9
Incr Delay (d2), s/veh	9.2	0.0	0.0	1.2	0.0	12.6	28.3	1.9	2.0	5.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	2.8	0.0	4.8	0.3	4.6	2.5	5.3	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	0.0	27.8	0.0	41.0	64.7	22.1	20.8	34.4	10.5	10.5
LnGrp LOS	D	A	A	C	A	D	E	C	C	C	B	B
Approach Vol, veh/h		88			413			837			744	
Approach Delay, s/veh		43.1			35.4			22.3			19.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.3	28.3		8.9	4.6	42.0		18.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0				
Max Q Clear Time (g_c+I1), s	13.7	13.0		5.6	2.3	7.1		13.0				
Green Ext Time (p_c), s	0.7	1.8		0.2	0.0	2.9		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			24.9									
HCM 6th LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	380	70	131	414	1	59	0	155	0	0	0
Future Vol, veh/h	1	380	70	131	414	1	59	0	155	0	0	0
Conflicting Peds, #/hr	5	0	5	5	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	413	76	142	450	1	64	0	168	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	456	0	0	494	0	0	1193	-	456	1277	1236	456
Stage 1	-	-	-	-	-	-	458	-	-	740	740	-
Stage 2	-	-	-	-	-	-	735	-	-	537	496	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1105	-	-	1070	-	-	164	0	604	143	176	604
Stage 1	-	-	-	-	-	-	583	0	-	409	423	-
Stage 2	-	-	-	-	-	-	411	0	-	528	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1100	-	-	1066	-	-	141	-	601	88	143	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	-	-	88	143	-
Stage 1	-	-	-	-	-	-	580	-	-	407	346	-
Stage 2	-	-	-	-	-	-	338	-	-	380	542	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.1	23.5	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	601	1100	-	-	1066	-	-	-
HCM Lane V/C Ratio	0.455	0.28	0.001	-	-	0.134	-	-	-
HCM Control Delay (s)	50.2	13.3	8.3	0	-	8.9	0	-	0
HCM Lane LOS	F	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	2.1	1.1	0	-	-	0.5	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	572	15	63	602	15	50
Future Vol, veh/h	572	15	63	602	15	50
Conflicting Peds, #/hr	0	10	10	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	596	16	66	627	16	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	622	0	1383	624
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	959	-	158	485
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	457	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	951	-	139	477
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	405	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	20.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	306	-	-	951	-
HCM Lane V/C Ratio	0.221	-	-	0.069	-
HCM Control Delay (s)	20.1	-	-	9.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	565	94	705	537	0	0	0	0	497	1	166
Future Volume (veh/h)	0	565	94	705	537	0	0	0	0	497	1	166
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00				1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	608	101	758	577	0				535	0	178
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1344	223	806	2562	0				678	0	282
Arrive On Green	0.00	0.44	0.44	0.39	1.00	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3126	502	3456	3647	0				3563	0	1482
Grp Volume(v), veh/h	0	356	353	758	577	0				535	0	178
Grp Sat Flow(s),veh/h/ln	0	1777	1758	1728	1777	0				1781	0	1482
Q Serve(g_s), s	0.0	12.5	12.6	19.0	0.0	0.0				12.9	0.0	9.9
Cycle Q Clear(g_c), s	0.0	12.5	12.6	19.0	0.0	0.0				12.9	0.0	9.9
Prop In Lane	0.00		0.29	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	787	779	806	2562	0				678	0	282
V/C Ratio(X)	0.00	0.45	0.45	0.94	0.23	0.00				0.79	0.00	0.63
Avail Cap(c_a), veh/h	0	787	779	806	2562	0				1069	0	445
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.4	17.5	26.9	0.0	0.0				34.7	0.0	33.5
Incr Delay (d2), s/veh	0.0	1.9	1.9	16.9	0.2	0.0				2.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	5.3	8.1	0.1	0.0				5.7	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.3	19.4	43.8	0.2	0.0				36.8	0.0	35.9
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		709			1335						713	
Approach Delay, s/veh		19.3			24.9						36.6	
Approach LOS		B			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	43.9		21.1		68.9
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	21.0	30.0		27.0		55.0
Max Q Clear Time (g_c+I1), s	21.0	14.6		14.9		2.0
Green Ext Time (p_c), s	0.0	4.0		2.2		4.6

Intersection Summary			
HCM 6th Ctrl Delay			26.5
HCM 6th LOS			C

Notes

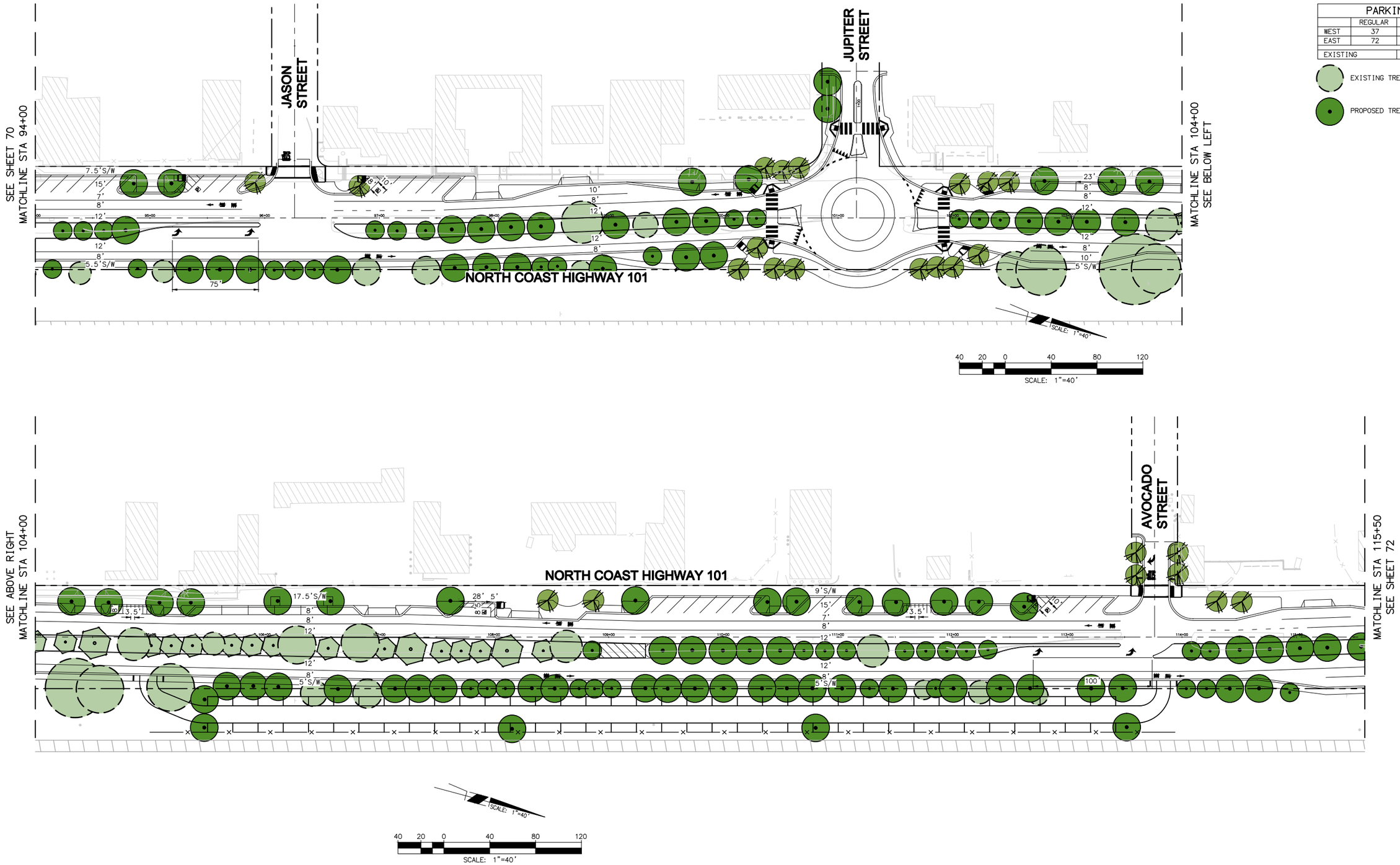
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	878	0	0	1100	414	132	1	639	0	0	0
Future Volume (veh/h)	171	878	0	0	1100	414	132	1	639	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	915	0	0	1146	431	138	1	666			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	211	2232	0	0	2376	699	501	4	732			
Arrive On Green	0.24	1.00	0.00	0.00	0.47	0.47	0.28	0.28	0.28			
Sat Flow, veh/h	1781	3647	0	0	5274	1501	1769	13	2585			
Grp Volume(v), veh/h	178	915	0	0	1146	431	139	0	666			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1501	1782	0	1292			
Q Serve(g_s), s	8.6	0.0	0.0	0.0	13.9	19.4	5.5	0.0	22.4			
Cycle Q Clear(g_c), s	8.6	0.0	0.0	0.0	13.9	19.4	5.5	0.0	22.4			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	211	2232	0	0	2376	699	505	0	732			
V/C Ratio(X)	0.85	0.41	0.00	0.00	0.48	0.62	0.28	0.00	0.91			
Avail Cap(c_a), veh/h	297	2232	0	0	2376	699	535	0	775			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.78	0.78	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.6	0.0	0.0	0.0	16.6	18.0	25.1	0.0	31.2			
Incr Delay (d2), s/veh	11.6	0.4	0.0	0.0	0.7	4.1	0.3	0.0	14.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	0.1	0.0	0.0	5.3	7.1	2.3	0.0	8.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	0.4	0.0	0.0	17.3	22.1	25.4	0.0	45.5			
LnGrp LOS	D	A	A	A	B	C	C	A	D			
Approach Vol, veh/h		1093			1577			805				
Approach Delay, s/veh		7.7			18.6			42.0				
Approach LOS		A			B			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		60.5			14.6	45.9		29.5				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		55.0			15.0	36.0		27.0				
Max Q Clear Time (g_c+I1), s		2.0			10.6	21.4		24.4				
Green Ext Time (p_c), s		8.3			0.2	8.5		1.1				

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Appendix L

Cumulative Project Roadway Changes



PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	37	4	17
EAST	72	0	0
EXISTING	34		

EXISTING TREE

PROPOSED TREE

Michael Baker INTERNATIONAL

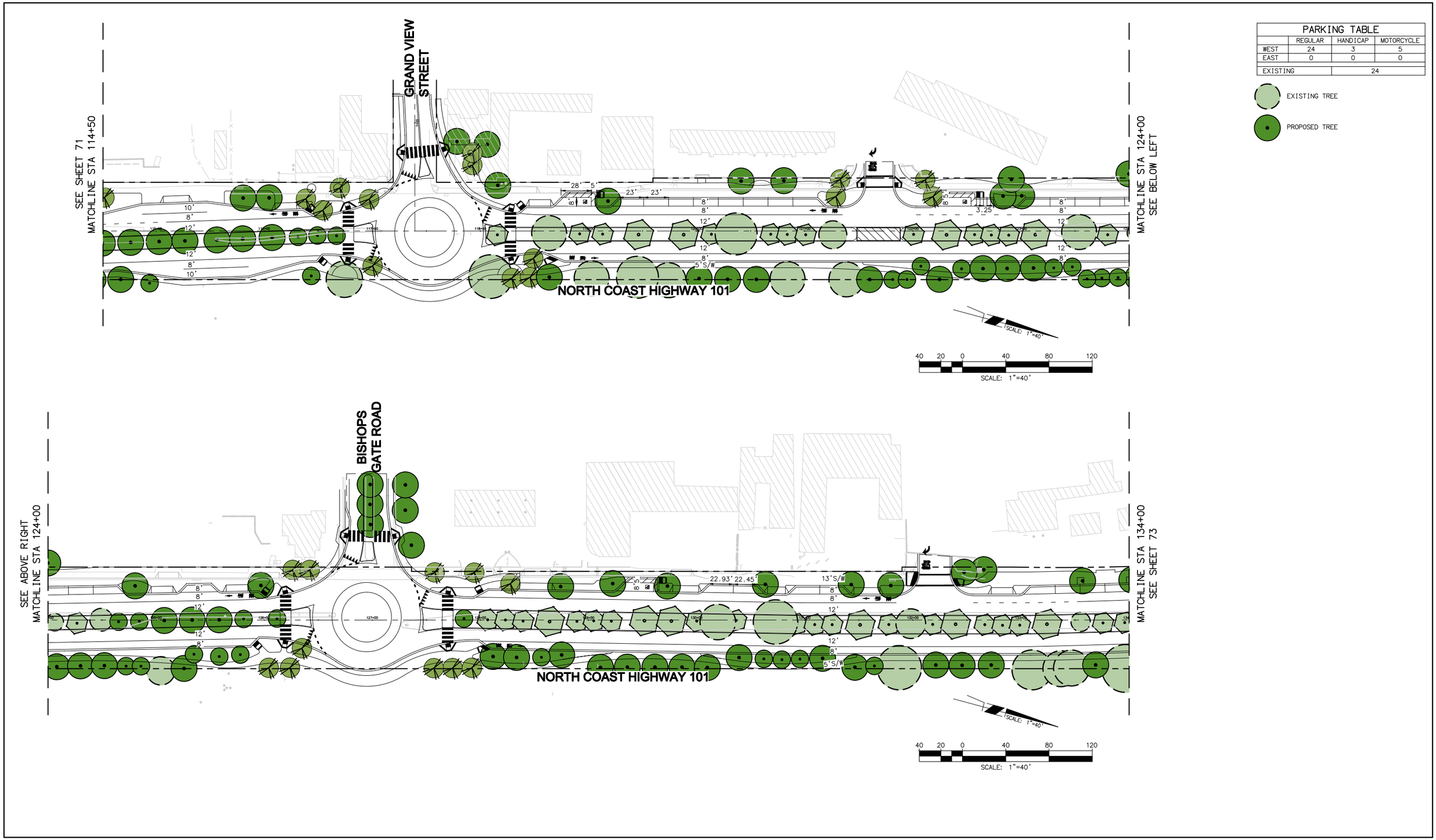
Source: Michael Baker International, November 30, 2016

137350Exhibits.indd

North Coast Highway 101 Streetscape Improvement Project

PROPOSED PROJECT DESIGN

Figure 2-3E



PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	24	3	5
EAST	0	0	0
EXISTING	24		

EXISTING TREE

PROPOSED TREE

Michael Baker INTERNATIONAL

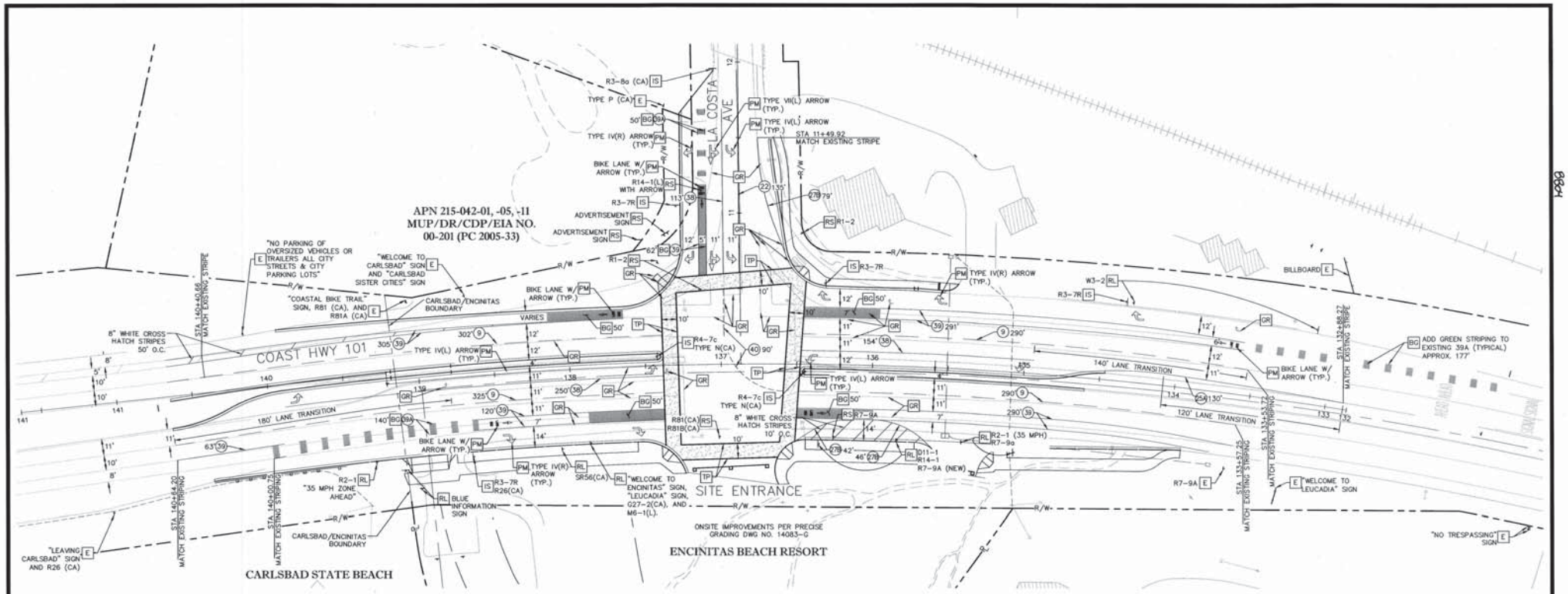
Source: Michael Baker International, November 30, 2016

137350Exhibits.in

North Coast Highway 101 Streetscape Improvement Project

PROPOSED PROJECT DESIGN

Figure 2-3F

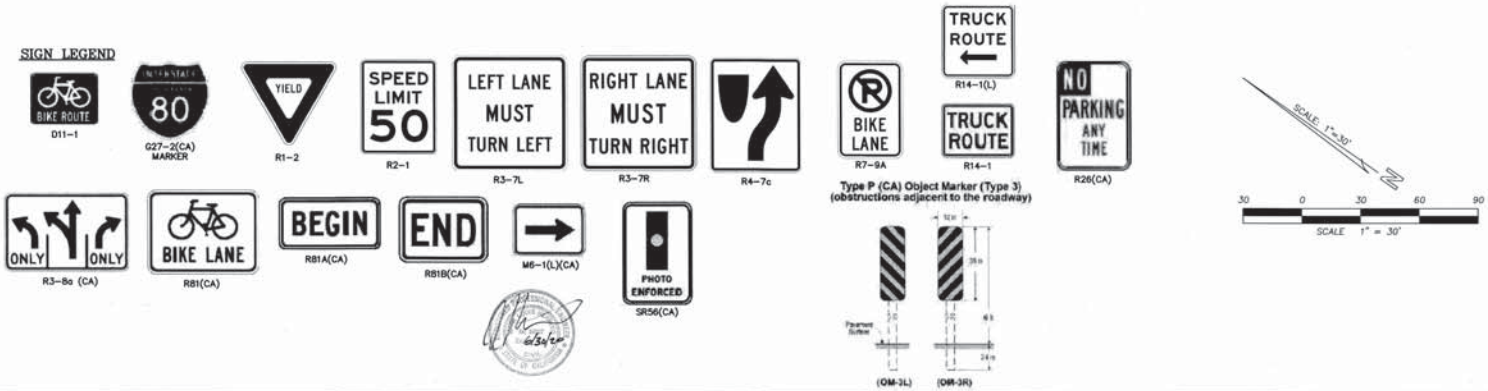


PLAN VIEW
SCALE 1" = 30'

LEGEND

- EXISTING CURB
- EXISTING STRIPING
- PROPOSED STRIPING
- PROPOSED GREEN BIKE LANE TREATMENT (ENNIS-FLINT GREEN FAST DRY TRAFFIC PAINT OR APPROV. EQUIV. AND SWARCO REFLEX GLASS BEADS OR APPROV. EQUIV.) — BG
- EXISTING STRIPING TO REMAIN — (E)
- EXISTING SIGN TO REMAIN — [E]
- INSTALL SIGN – TYPE AS NOTED ON PLAN — [IS]
- INSTALL STRIPING PER CALTRANS STANDARD PLANS. NUMBER REFERS TO DETAIL — (#)
- PAVEMENT MARKING – TYPE AS NOTED ON PLAN — [PM]
- RELOCATE SIGN BEHIND NEW CURB UNLESS OTHERWISE SPECIFIED — [RL]
- REMOVE EXISTING STRIPING BY GRINDING. ALL DEBRIS TO BE REMOVED AT THE END OF EACH WORK DAY. — [GR]
- REMOVE AND SALVAGE — [RS]
- 12" THERMOPLASTIC CROSSWALK LINES (TYPICAL FOR INTERSECTION) — [TP]

SIGN LEGEND



CHANGE NO.	DESCRIPTION	APPROVED	DATE

BENCHMARK
DESCRIPTION: PT NO. 22 STA 0.58-022 PER ROS 17271
LOCATION: FD. 2" IRON PIPE AND DISK IN AC PATH, NORTH SIDE OF LA COSTA AVE. AT VULCAN AVENUE 13' OFF SHOULDER
RECORD FROM: SAN DIEGO COUNTY
ELEVATION: 62.949 DATUM: NAVD 88

SCALE
HORIZONTAL: N/A
VERTICAL: N/A

AS-BUILT
MARK L. HENNING — DATE
REVIEWER | INSPECTOR | SENIOR ENGINEER

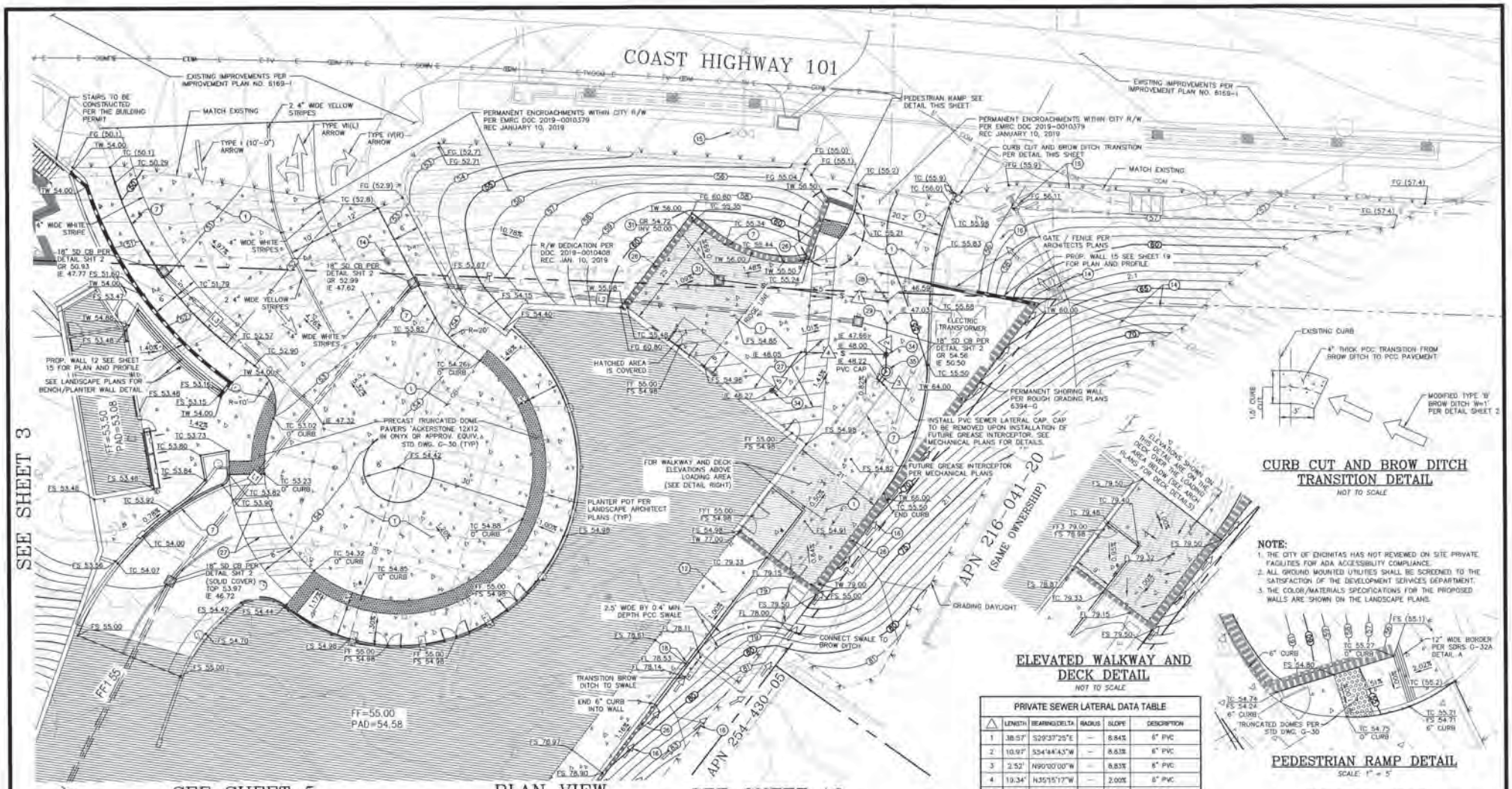
DESIGNED BY: WHM | DRAWN BY: WHM | CHECKED BY: MLH
PLANS PREPARED UNDER SUPERVISION OF
MARK L. HENNING
DATE: 2/8/19
R.C.E. NO.: 58007
EXP.: 06/30/20

ENGINEERING DIVISION APPROVALS
RECOMMENDED: STEVEN NOWAK — DATE
APPROVED: EDWARD ALZIMMER 3/1/2019 — DATE

CITY OF ENCINITAS - DEVELOPMENT SERVICES DEPARTMENT
TRAFFIC STRIPING PLAN FOR:
ENCINITAS BEACH HOTEL
COAST HIGHWAY 101
WIDENING
PLANNING CASE NO: TPM-89-014 APN: 216-041-26

DRAWING NO. 6169-I
SHEET 13 OF 20

HALE ENGINEERING AND SURVEYING, INC.
7910 CONVOY COURT, SAN DIEGO, CA 92111
TEL: (858) 715-1420 FAX: (858) 715-1424



PLAN VIEW

SCALE 1" = 10'

CURB CUT AND BROW DITCH TRANSITION DETAIL

NOT TO SCALE

ELEVATED WALKWAY AND DECK DETAIL

NOT TO SCALE

PEDESTRIAN RAMP DETAIL

SCALE: 1" = 5'

NOTE:

1. THE CITY OF ENCINITAS HAS NOT REVIEWED ON SITE PRIVATE FACILITIES FOR ADA ACCESSIBILITY COMPLIANCE.
2. ALL GROUND MOUNTED UTILITIES SHALL BE SCREENED TO THE SATISFACTION OF THE DEVELOPMENT SERVICES DEPARTMENT.
3. THE COLOR/MATERIALS SPECIFICATIONS FOR THE PROPOSED WALLS ARE SHOWN ON THE LANDSCAPE PLANS.

PRIVATE SEWER LATERAL DATA TABLE

△	LENGTH	BEARING/DELTA	RADIUS	SLOPE	DESCRIPTION
1	38.57'	S29°37'25"E	–	8.84%	6" PVC
2	10.97'	S34°44'43"W	–	8.63%	6" PVC
3	2.52'	N90°00'00"W	–	8.83%	6" PVC
4	19.34'	N35°15'17"W	–	2.00%	8" PVC
5	10.99'	N69°24'04"W	–	2.00%	6" PVC

PRIVATE STORM DRAIN DATA TABLE

	LENGTH	BEARING/DELTA	RADIUS	SLOPE	DESCRIPTION
L1	87.56'	S87°39'14"E	–	1.00%	12" HDPE PVT. SD*
L2	101.41'	S31°53'35"E	–	2.68%	10" HDPE PVT. SD*
L3	45.77'	N57°36'53"E	–	1.00%	10" HDPE PVT SD*

*HDPE PER AASHTO M252 & M294 WITH WATER TIGHT JOINTS

CONSTRUCTION NOTES

1. – INSTALL 8" DECORATIVE P.C.C. OVER 6" CLASS 2 AGGREGATE BASE COMPACTED TO 95% PER ASTM D1557. FINISH PER LANDSCAPE PLANS.
7. – INSTALL 6" CURB PER SDRS DWG G-1.
12. – INSTALL 5' WIDE SIDEWALK PER DETAIL, SHEET 2.
14. – EXISTING UTILITY TO BE REMOVED PER GRADING PLAN NO. 6394-G.
15. – PROTECT IN PLACE EXISTING UTILITIES.
16. – INSTALL MODIFIED TYPE 'B' BROW DITCH PER DETAIL, SHEET 2.
18. – INSTALL ONE FOOT WIDE CURB CUT AND PCC APRON, DIRECT RUNOFF TO BROW DITCH.
26. – RETAINING WALL PER ARCHITECT PLANS.
27. – INSTALL 4" WIDE BLUE STRIPE AT 3' G.C.
28. – CONNECT TO EXISTING SEWER CLEANOUT PER 6169-I.
29. – CONNECT TO EXISTING SEWER STUB PER 6169-I
31. – COVERED TRASH AREA DRAIN TO SEWER. USE 18" CATCH BASIN PER DETAIL SHEET 2 W/ A REM 'TRITON VPF FILTER SERIES', CARTRIDGE 'TR10-CART' WITH FOG MEDIA OR AN APPROVED EQUIVALENT FOR FILTER. FILTER TO BE PROVIDED WITH AN OVERFLOW CAP TO BE SOLVENT WELDED TO THE TOP OF THE FILTER.
34. – INSTALL SEWER CLEANOUT PER LWD STD S-25
35. – INSTALL SEWER SAMPLE BOX, JENSEN PRECAST MODEL EV200 OR APPROVED EQUIVALENT

KEY MAP

CHANGE NO.	DESCRIPTION	APPROVED	DATE

BENCHMARK

DESCRIPTION: PT NO. 22 STA 0+98-322 PER ROS 17277
LOCATION: FD. 2" BRZN PIPE AND DISK IN AC PATH, NORTH SIDE OF LA COSTA AVE. AT VULCAN AVENUE 13' OFF SHOULDER
RECORD FROM: SAN DIEGO COUNTY
ELEVATION: 62.949 DATUM: NAVD 88

SCALE

HORIZONTAL: 1"=10'
VERTICAL: N/A

AS-BUILT

MARK L. HENNING DATE
REVIEWER INSPECTOR SENIOR ENGINEER

DESIGNED BY: WHM DRAWN BY: WHM CHECKED BY: MLH

PLANS PREPARED UNDER SUPERVISION OF
MARK L. HENNING
DATE: 2/27/17
R.C.E. NO.: 58007
EXP.: 06/30/20

ENGINEERING DIVISION APPROVALS

RECOMMENDED: STEVEN NOWAK DATE
APPROVED: EDWARD J. WIMMER DATE

CITY OF ENCINITAS - DEVELOPMENT SERVICES DEPARTMENT

GRADING PLAN FOR:
ENCINITAS BEACH RESORT
PRECISE GRADING
APN: 216-041-28
PLANNING CASE NO: TPM-89-014 18-257 SUBC

DRAWING NO.

14083-G

SHEET 4 OF 25

HALE ENGINEERING AND SURVEYING, INC.
7510 MOKA DRIVE, LA MESA, CA 92011
TEL: (619) 715-1430

Appendix M

Cumulative Project Volumes

1) Carlsbad Blvd SB/Avenida Encinas	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**0**	**0**	**50**	**25**	**0**	**0**	**0**	**0**	**69**	**0**	**0**
Enc 04-268 Hotel 130r	x	x	x		4	x	x	x	x		x	x
Enc multiple (1)	x	x	x		1	x	x	x	x		x	x
Enc 15-222 48du	x	x	x		1	x	x	x	x		x	x
Enc 18-188 Hotel 17r	x	x	x		1	x	x	x	x		x	x
Enc 18-135 108beds	x	x	x		1	x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
Housing AD08 72 du	x	x	x		1	x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
Carlsbad Newage Hotel	x	x	x	46		x	x	x	x	31	x	x
Carlsbad Ponto	x	x	x	3	12	x	x	x	x	37	x	x
Unknown/Distant	x	x	x	1	4	x	x	x	x	1	x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
	x	x	x			x	x	x	x		x	x
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**()**	**()**	**(69)**	**(27)**	**()**	**()**	**()**	**()**	**(68)**	**()**	**()**
Enc 04-268 Hotel 130r	x	x	x		(6)	x	x	x	x		x	x
Enc multiple (1)	x	x	x		(2)	x	x	x	x		x	x
Enc 15-222 48du	x	x	x		(3)	x	x	x	x		x	x
Enc 18-188 Hotel 17r	x	x	x		(1)	x	x	x	x		x	x
Enc 18-135 108beds					(1)							
()												
()												
()												
()												
()	x	x	x			x	x	x	x		x	x
()	x	x	x			x	x	x	x		x	x
Housing AD08 72 du	x	x	x		(2)	x	x	x	x		x	x
()	x	x	x			x	x	x	x		x	x
Carlsbad Newage Hotel	x	x	x	(62)		x	x	x	x	(41)	x	x
Carlsbad Ponto	x	x	x	(6)	(8)	x	x	x	x	(26)	x	x
Unknown/Distant	x	x	x	(1)	(4)	x	x	x	x	(1)	x	x
()	x	x	x			x	x	x	x		x	x
()	x	x	x			x	x	x	x		x	x
()	x	x	x			x	x	x	x		x	x
()	x	x	x			x	x	x	x		x	x
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

2) Caliente/SR905 WB Ramp	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**23**	**68**	**0**	**0**	**0**	**1**	**50**	**0**	**0**	**69**	**35**
Enc 04-268 Hotel 130r	x	3		x	x	x			x	x		
Enc multiple (1)	x	2		x	x	x			x	x		
Enc 15-222 48du	x	2		x	x	x			x	x		
Enc 18-188 Hotel 17r	x	1		x	x	x			x	x		
Enc 18-135 108beds	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
Housing AD08 72 du	x	3		x	x	x			x	x		
0	x			x	x	x			x	x		
Carlsbad Newage Hotel	x		47	x	x	x		46	x	x	31	31
Carlsbad Ponto	x	8	20	x	x	x		3	x	x	37	3
Unknown/Distant	x	4	1	x	x	x	1	1	x	x	1	1
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
0	x			x	x	x			x	x		
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(33)**	**(109)**	**()**	**()**	**()**	**(1)**	**(69)**	**()**	**()**	**(68)**	**(44)**
Enc 04-268 Hotel 130r	x	(4)		x	x	x			x	x		
Enc multiple (1)	x	(1)		x	x	x			x	x		
Enc 15-222 48du	x	(1)		x	x	x			x	x		
Enc 18-188 Hotel 17r	x	(1)		x	x	x			x	x		
Enc 18-135 108beds		(1)										
()												
()												
()												
()												
()	x			x	x	x			x	x		
()	x			x	x	x			x	x		
Housing AD08 72 du	x	(1)		x	x	x			x	x		
()	x			x	x	x			x	x		
Carlsbad Newage Hotel	x		(61)	x	x	x		(62)	x	x	(41)	(41)
Carlsbad Ponto	x	(20)	(47)	x	x	x		(6)	x	x	(26)	(2)
Unknown/Distant	x	(4)	(1)	x	x	x	(1)	(1)	x	x	(1)	(1)
()	x			x	x	x			x	x		
()	x			x	x	x			x	x		
()	x			x	x	x			x	x		
()	x			x	x	x			x	x		
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

3) N. Coast Hwy/La Costa	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**7**	**26**	**7**	**62**	**27**	**4**	**3**	**24**	**4**	**9**	**36**	**63**
Enc 04-268 Hotel 130r	7					4	3	24	4		36	
Enc multiple (1)		1			1							1
Enc 15-222 48du			1	1						2		2
Enc 18-188 Hotel 17r			1	1						1		
Enc 18-135 108beds				1								
0												
0												
0												
0												
0												
0												
Housing AD08 72 du			1	1						3		3
0												
Carlsbad Newage Hotel		12		23	8							35
Carlsbad Ponto		8		34	14							20
Unknown/Distant		5	4	1	4					3		2
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**(9)**	**(39)**	**(10)**	**(65)**	**(25)**	**(6)**	**(4)**	**(32)**	**(6)**	**(6)**	**(47)**	**(101)**
Enc 04-268 Hotel 130r	(9)					(6)	(4)	(32)	(6)		(47)	
Enc multiple (1)		(1)		(1)	(1)							(1)
Enc 15-222 48du			(3)	(3)						(1)		(1)
Enc 18-188 Hotel 17r			(1)	(1)						(1)		
Enc 18-135 108beds				(1)								(1)
()												
()												
()												
()												
()												
()												
Housing AD08 72 du			(2)	(2)						(1)		(1)
()												
Carlsbad Newage Hotel		(15)		(31)	(10)							(46)
Carlsbad Ponto		(18)		(25)	(10)							(49)
Unknown/Distant		(5)	(4)	(1)	(4)					(3)		(2)
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

4) N. Coast Hwy/Project Access	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**40**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Enc 04-268 Hotel 130r		7			4							
Enc multiple (1)		1			1							
Enc 15-222 48du		1			2							
Enc 18-188 Hotel 17r		1			1							
Enc 18-135 108beds												
0												
0												
0												
0												
0												
0												
Housing AD08 72 du		1			3							
0												
Carlsbad Newage Hotel		12			8							
Carlsbad Ponto		8			14							
Unknown/Distant		9			7							
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(58)**	**()**	**()**	**(37)**	**()**	**()**	**()**	**()**	**()**	**()**	**()**
Enc 04-268 Hotel 130r		(9)			(6)							
Enc multiple (1)		(1)			(1)							
Enc 15-222 48du		(3)			(1)							
Enc 18-188 Hotel 17r		(1)			(1)							
Enc 18-135 108beds												
()												
()												
()												
()												
()												
()												
Housing AD08 72 du		(2)			(1)							
()												
Carlsbad Newage Hotel		(15)			(10)							
Carlsbad Ponto		(18)			(10)							
Unknown/Distant		(9)			(7)							
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

5) N. Coast Hwy/Bishops Gate	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**40**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Enc 04-268 Hotel 130r		7			4							
Enc multiple (1)		1			1							
Enc 15-222 48du		1			2							
Enc 18-188 Hotel 17r		1			1							
Enc 18-135 108beds												
0												
0												
0												
0												
0												
0												
Housing AD08 72 du		1			3							
0												
Carlsbad Newage Hotel		12			8							
Carlsbad Ponto		8			14							
Unknown/Distant		9			7							
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(58)**	**()**	**()**	**(37)**	**()**	**()**	**()**	**()**	**()**	**()**	**()**
Enc 04-268 Hotel 130r		(9)			(6)							
Enc multiple (1)		(1)			(1)							
Enc 15-222 48du		(3)			(1)							
Enc 18-188 Hotel 17r		(1)			(1)							
Enc 18-135 108beds												
()												
()												
()												
()												
()												
()												
Housing AD08 72 du		(2)			(1)							
()												
Carlsbad Newage Hotel		(15)			(10)							
Carlsbad Ponto		(18)			(10)							
Unknown/Distant		(9)			(7)							
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

6) N. Coast Hwy/Grandview	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**40**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Enc 04-268 Hotel 130r		7			4							
Enc multiple (1)		1			1							
Enc 15-222 48du		1			2							
Enc 18-188 Hotel 17r		1			1							
Enc 18-135 108beds												
0												
0												
0												
0												
0												
0												
Housing AD08 72 du		1			3							
0												
Carlsbad Newage Hotel		12			8							
Carlsbad Ponto		8			14							
Unknown/Distant		9			7							
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(58)**	**()**	**()**	**(37)**	**()**	**()**	**()**	**()**	**()**	**()**	**()**
Enc 04-268 Hotel 130r		(9)			(6)							
Enc multiple (1)		(1)			(1)							
Enc 15-222 48du		(3)			(1)							
Enc 18-188 Hotel 17r		(1)			(1)							
Enc 18-135 108beds												
()												
()												
()												
()												
()												
()												
Housing AD08 72 du		(2)			(1)							
()												
Carlsbad Newage Hotel		(15)			(10)							
Carlsbad Ponto		(18)			(10)							
Unknown/Distant		(9)			(7)							
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

7) N. Coast Hwy/Sands MHP	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**40**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Enc 04-268 Hotel 130r		7			4							
Enc multiple (1)		1			1							
Enc 15-222 48du		1			2							
Enc 18-188 Hotel 17r		1			1							
Enc 18-135 108beds												
0												
0												
0												
0												
0												
0												
Housing AD08 72 du		1			3							
0												
Carlsbad Newage Hotel		12			8							
Carlsbad Ponto		8			14							
Unknown/Distant		9			7							
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(58)**	**()**	**()**	**(37)**	**()**	**()**	**()**	**()**	**()**	**()**	**()**
Enc 04-268 Hotel 130r		(9)			(6)							
Enc multiple (1)		(1)			(1)							
Enc 15-222 48du		(3)			(1)							
Enc 18-188 Hotel 17r		(1)			(1)							
Enc 18-135 108beds												
()												
()												
()												
()												
()												
()												
Housing AD08 72 du		(2)			(1)							
()												
Carlsbad Newage Hotel		(15)			(10)							
Carlsbad Ponto		(18)			(10)							
Unknown/Distant		(9)			(7)							
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

8) N. Coast Hwy/Jupiter St	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**40**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Enc 04-268 Hotel 130r		7			4							
Enc multiple (1)		1			1							
Enc 15-222 48du		1			2							
Enc 18-188 Hotel 17r		1			1							
Enc 18-135 108beds												
0												
0												
0												
0												
0												
0												
Housing AD08 72 du		1			3							
0												
Carlsbad Newage Hotel		12			8							
Carlsbad Ponto		8			14							
Unknown/Distant		9			7							
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(58)**	**()**	**()**	**(37)**	**()**	**()**	**()**	**()**	**()**	**()**	**()**
Enc 04-268 Hotel 130r		(9)			(6)							
Enc multiple (1)		(1)			(1)							
Enc 15-222 48du		(3)			(1)							
Enc 18-188 Hotel 17r		(1)			(1)							
Enc 18-135 108beds												
()												
()												
()												
()												
()												
()												
Housing AD08 72 du		(2)			(1)							
()												
Carlsbad Newage Hotel		(15)			(10)							
Carlsbad Ponto		(18)			(10)							
Unknown/Distant		(9)			(7)							
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

9) N. Coast Hwy/Leucadia Blvd	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**36**	**6**	**2**	**37**	**0**	**0**	**0**	**0**	**10**	**0**	**4**
Enc 04-268 Hotel 130r		7			4							
Enc multiple (1)		1	1							5		
Enc 15-222 48du		1			2							
Enc 18-188 Hotel 17r		1			1							
Enc 18-135 108beds												
0												
0												
0												
0												
0												
0												
Housing AD08 72 du		1			3							
0												
Carlsbad Newage Hotel		12			8							
Carlsbad Ponto		8			14							
Unknown/Distant		5	5	2	5					5		4
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**(54)**	**(6)**	**(2)**	**(34)**	**()**	**()**	**()**	**()**	**(6)**	**()**	**(4)**
Enc 04-268 Hotel 130r		(9)			(6)							
Enc multiple (1)		(1)	(1)							(1)		
Enc 15-222 48du		(3)			(1)							
Enc 18-188 Hotel 17r		(1)			(1)							
Enc 18-135 108beds												
()												
()												
()												
()												
()												
()												
Housing AD08 72 du		(2)			(1)							
()												
Carlsbad Newage Hotel		(15)			(10)							
Carlsbad Ponto		(18)			(10)							
Unknown/Distant		(5)	(5)	(2)	(5)					(5)		(4)
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

10) La Costa Ave/N. Vulcan	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**6**	**0**	**21**	**0**	**0**	**0**	**0**	**91**	**1**	**6**	**101**	**0**
Enc 04-268 Hotel 130r								24			36	
Enc multiple (1)	1		3							1		
Enc 15-222 48du			0					2		1	4	
Enc 18-188 Hotel 17r								2			1	
Enc 18-135 108beds								1				
0												
0												
0												
0												
0												
0												
Housing AD08 72 du	5		18						1	4		
0												
Carlsbad Newage Hotel								23			35	
Carlsbad Ponto								34			20	
Unknown/Distant								5			5	
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**(4)**	**()**	**(10)**	**()**	**()**	**()**	**()**	**(102)**	**(6)**	**(22)**	**(150)**	**()**
Enc 04-268 Hotel 130r	(1)							(32)			(46)	
Enc multiple (1)	(1)		(2)						(1)	(4)		
Enc 15-222 48du			(1)					(6)		(1)	(2)	
Enc 18-188 Hotel 17r								(2)			(1)	
Enc 18-135 108beds								(1)			(1)	
()												
()												
()												
()												
()												
()												
Housing AD08 72 du	(2)		(7)						(5)	(17)		
()												
Carlsbad Newage Hotel								(31)			(46)	
Carlsbad Ponto								(25)			(49)	
Unknown/Distant								(5)			(5)	
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

11) La Costa/Sheridan Rd	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**112**	**0**	**1**	**107**	**0**
Enc 04-268 Hotel 130r								24			36	
Enc multiple (1)								3			1	
Enc 15-222 48du								2			5	
Enc 18-188 Hotel 17r								2			1	
Enc 18-135 108beds								1				
0												
0												
0												
0												
0												
0												
Housing AD08 72 du								18			4	
0												
Carlsbad Newage Hotel								23			35	
Carlsbad Ponto								34			20	
Unknown/Distant			1					5		1	5	
0												
0												
0												
0												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**()**	**(1)**	**()**	**()**	**()**	**()**	**(112)**	**()**	**(1)**	**(172)**	**()**
Enc 04-268 Hotel 130r								(32)			(46)	
Enc multiple (1)								(2)			(4)	
Enc 15-222 48du								(7)			(3)	
Enc 18-188 Hotel 17r								(2)			(1)	
Enc 18-135 108beds								(1)			(1)	
()												
()												
()												
()												
()												
()												
Housing AD08 72 du								(7)			(17)	
()												
Carlsbad Newage Hotel								(31)			(46)	
Carlsbad Ponto								(25)			(49)	
Unknown/Distant			(1)					(5)		(1)	(5)	
()												
()												
()												
()												
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

12) La Costa/I-5 SB Ramps	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**0**	**0**	**0**	**12**	**0**	**15**	**0**	**50**	**82**	**31**	**101**	**0**
Enc 04-268 Hotel 130r	x	x	x			10	x	12	12		26	x
Enc multiple (1)	x	x	x			1	x	2	1			x
Enc 15-222 48du	x	x	x			1	x	11	10		9	x
Enc 18-188 Hotel 17r	x	x	x			1	x	2	1		4	x
Enc 18-135 108beds	x	x	x	2			x	1		1		x
0	x	x	x				x					x
0	x	x	x				x					x
0	x	x	x				x					x
0	x	x	x				x					x
0	x	x	x				x					x
0	x	x	x				x					x
Housing AD08 72 du	x	x	x			2	x	10	8		2	x
0	x	x	x				x					x
Carlsbad Newage Hotel	x	x	x				x		23		35	x
Carlsbad Ponto	x	x	x				x	9	25		20	x
Unknown/Distant	x	x	x	10			x	3	2	30	5	x
0	x	x	x				x					x
0	x	x	x				x					x
0	x	x	x				x					x
0	x	x	x				x					x
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**()**	**()**	**()**	**(13)**	**()**	**(26)**	**()**	**(39)**	**(78)**	**(33)**	**(175)**	**()**
Enc 04-268 Hotel 130r	x	x	x			(12)	x	(16)	(16)		(34)	x
Enc multiple (1)	x	x	x			(2)	x	(1)	(1)		(2)	x
Enc 15-222 48du	x	x	x			(3)	x	(5)	(5)		(23)	x
Enc 18-188 Hotel 17r	x	x	x			(2)	x	(2)	(2)		(5)	x
Enc 18-135 108beds				(3)				(1)		(3)	(1)	
()												
()												
()												
()												
()	x	x	x				x					x
()	x	x	x				x					x
Housing AD08 72 du	x	x	x			(7)	x	(4)	(3)		(10)	x
()	x	x	x				x					x
Carlsbad Newage Hotel	x	x	x				x		(31)		(46)	x
Carlsbad Ponto	x	x	x				x	(7)	(18)		(49)	x
Unknown/Distant	x	x	x	(10)			x	(3)	(2)	(30)	(5)	x
()	x	x	x				x					x
()	x	x	x				x					x
()	x	x	x				x					x
()	x	x	x				x					x
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

13) La Costa/I-5 NB Ramps	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM Cumulative Total	**75**	**0**	**22**	**0**	**0**	**0**	**21**	**32**	**0**	**0**	**58**	**1**
Enc 04-268 Hotel 130r	16			x	x	x	6	6	x	x	10	
Enc multiple (1)				x	x	x	1	1	x	x		
Enc 15-222 48du	5			x	x	x	3	8	x	x	4	
Enc 18-188 Hotel 17r	2			x	x	x	1	1	x	x	2	
Enc 18-135 108beds			2	x	x	x		3	x	x	1	1
0				x	x	x			x	x		
0				x	x	x			x	x		
0				x	x	x			x	x		
0				x	x	x			x	x		
0				x	x	x			x	x		
0				x	x	x			x	x		
Housing AD08 72 du	2			x	x	x	8	3	x	x	1	
0				x	x	x			x	x		
Carlsbad Newage Hotel	35			x	x	x			x	x		
Carlsbad Ponto	15			x	x	x		9	x	x	5	
Unknown/Distant			20	x	x	x	2	1	x	x	35	
0				x	x	x			x	x		
0				x	x	x			x	x		
0				x	x	x			x	x		
0				x	x	x			x	x		
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												
PM Cumulative Total	**(130)**	**()**	**(38)**	**()**	**()**	**()**	**(16)**	**(26)**	**()**	**()**	**(77)**	**(3)**
Enc 04-268 Hotel 130r	(22)			x	x	x	(8)	(8)	x	x	(12)	
Enc multiple (1)	(2)			x	x	x	(1)		x	x		
Enc 15-222 48du	(13)			x	x	x	(1)	(4)	x	x	(10)	
Enc 18-188 Hotel 17r	(3)			x	x	x	(1)	(1)	x	x	(2)	
Enc 18-135 108beds			(3)					(4)			(4)	(3)
()												
()												
()												
()												
()				x	x	x			x	x		
()				x	x	x			x	x		
Housing AD08 72 du	(7)			x	x	x	(3)	(1)	x	x	(2)	
()				x	x	x			x	x		
Carlsbad Newage Hotel	(46)			x	x	x			x	x		
Carlsbad Ponto	(37)			x	x	x		(7)	x	x	(12)	
Unknown/Distant			(35)	x	x	x	(2)	(1)	x	x	(35)	
()				x	x	x			x	x		
()				x	x	x			x	x		
()				x	x	x			x	x		
()				x	x	x			x	x		
(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.												

		04-268	Encinitas	15-222	18-135	18-188	AD08	Carlsbad	Carlsbad	Distant/
Study	**Cumulative**	130 Rm	Multiple(1)	Weston	108 beds	516 LaCosta	1967 Vulcan	Ponto	Newage Hotel	Unknown
Segment	**TOTAL**	hotel		48 lots	care home	hotel	Redev.	Beach	322 rm	
Carlsbad Blvd										
Avenida Encinas to La Costa Ave	**2,791**	117	10	41	20	20	37	1,158	1,288	100
Coast Highway										
La Costa Ave to 600' S. of La Costa	**1,064**	195	20	37	7	23	37	323	322	100
600' S. of La Costa to Bishops Gate	**1,064**	195	20	37	7	23	37	323	322	100
Bishops Gate to Grandview St	**1,062**	195	20	37	7	21	37	323	322	100
Grandview St to Jupiter St	**1,062**	195	20	37	7	21	37	323	322	100
Jupiter St to Leucadia Blvd	**1,061**	195	20	37	7	20	37	323	322	100
La Costa Avenue										
Coast Hwy to N. Vulcan	**3,241**	988	30	78	27	43	74	835	966	200
N. Vulcan to Sheridan Rd	**3,418**	975	20	92	27	43	260	835	966	200
Sheridan Rd to I-5	**3,779**	975	20	368	27	128	260	835	966	200

(1) includes 13-187, 17-152, 17-197, 17-280, 18-220.

Appendix N

Existing + Cumulative Intersection LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	242	0	0	0	58	1123
Future Volume (vph)	242	0	0	0	58	1123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	263	0	0	0	63	1221
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	263	0	0	0	63	1221
Confl. Peds. (#/hr)		30			30	
Confl. Bikes (#/hr)		30		30		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	12.8				4.5	45.8
Effective Green, g (s)	12.8				4.5	45.8
Actuated g/C Ratio	0.17				0.06	0.59
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	569				103	2099
v/s Ratio Prot	c0.08				0.04	c0.34
v/s Ratio Perm						
v/c Ratio	0.46				0.61	0.58
Uniform Delay, d1	29.1				35.5	9.8
Progression Factor	0.10				1.00	1.00
Incremental Delay, d2	0.6				10.3	0.4
Delay (s)	3.4				45.8	10.2
Level of Service	A				D	B
Approach Delay (s)	3.4		0.0			11.9
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	77.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	57	0	0	242	41	0	219	133	0	0	0
Future Volume (vph)	2	57	0	0	242	41	0	219	133	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			0.99			1.00	0.87			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.98			1.00	0.85			
Flt Protected		1.00			1.00			1.00	1.00			
Satd. Flow (prot)		1860			3422			3539	1376			
Flt Permitted		1.00			1.00			1.00	1.00			
Satd. Flow (perm)		1860			3422			3539	1376			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	62	0	0	263	45	0	238	145	0	0	0
RTOR Reduction (vph)	0	0	0	0	16	0	0	0	91	0	0	0
Lane Group Flow (vph)	0	64	0	0	292	0	0	238	54	0	0	0
Confl. Peds. (#/hr)			20			20			20			
Confl. Bikes (#/hr)			30			30			30			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		6.6			12.8			37.3	12.8			
Effective Green, g (s)		6.6			12.8			37.3	12.8			
Actuated g/C Ratio		0.09			0.17			0.48	0.17			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		159			567			1709	228			
v/s Ratio Prot		c0.03			c0.09			c0.07				
v/s Ratio Perm									0.04			
v/c Ratio		0.40			0.52			0.14	0.24			
Uniform Delay, d1		33.4			29.4			11.1	28.0			
Progression Factor		1.42			1.00			1.00	1.00			
Incremental Delay, d2		1.5			0.8			0.2	0.5			
Delay (s)		49.1			30.2			11.2	28.5			
Level of Service		D			C			B	C			
Approach Delay (s)		49.1			30.2			17.8			0.0	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	77.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	30.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	24	4	250	36	165	7	193	197	327	1029	4
Future Volume (veh/h)	3	24	4	250	36	165	7	193	197	327	1029	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.68	1.00		0.92	1.00		0.91	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	26	4	300	0	179	8	210	214	355	1118	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	105	68	606	0	247	15	1107	451	410	1897	796
Arrive On Green	0.06	0.06	0.06	0.17	0.00	0.17	0.01	0.31	0.31	0.23	0.53	0.53
Sat Flow, veh/h	192	1668	1072	3563	0	1453	1781	3554	1449	1781	3554	1492
Grp Volume(v), veh/h	29	0	4	300	0	179	8	210	214	355	1118	4
Grp Sat Flow(s),veh/h/ln	1861	0	1072	1781	0	1453	1781	1777	1449	1781	1777	1492
Q Serve(g_s), s	1.1	0.0	0.2	5.4	0.0	8.3	0.3	3.1	8.5	13.6	15.2	0.1
Cycle Q Clear(g_c), s	1.1	0.0	0.2	5.4	0.0	8.3	0.3	3.1	8.5	13.6	15.2	0.1
Prop In Lane	0.10		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	0	68	606	0	247	15	1107	451	410	1897	796
V/C Ratio(X)	0.25	0.00	0.06	0.49	0.00	0.72	0.55	0.19	0.47	0.86	0.59	0.01
Avail Cap(c_a), veh/h	418	0	241	801	0	327	100	1107	451	626	1897	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	31.4	26.8	0.0	28.0	35.2	17.9	19.8	26.3	11.3	7.8
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.6	0.0	5.3	28.1	0.4	3.5	8.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.3	0.0	3.1	0.2	1.3	3.1	6.4	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	31.7	27.4	0.0	33.3	63.3	18.3	23.3	34.3	12.6	7.8
LnGrp LOS	C	A	C	C	A	C	E	B	C	C	B	A
Approach Vol, veh/h		33			479			432			1477	
Approach Delay, s/veh		32.7			29.6			21.6			17.8	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.4	26.2		8.5	4.6	42.0		16.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	15.6	10.5		3.1	2.3	17.2		10.3
Green Ext Time (p_c), s	0.8	1.2		0.1	0.0	8.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	47.0
Intersection LOS	E

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	51	357	1417
Demand Flow Rate, veh/h	52	364	1445
Vehicles Circulating, veh/h	1423	28	7
Vehicles Exiting, veh/h	29	1447	385
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	14.3	5.1	58.7
Approach LOS	B	A	F

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	52	364	1445
Cap Entry Lane, veh/h	323	1341	1370
Entry HV Adj Factor	0.981	0.981	0.981
Flow Entry, veh/h	51	357	1417
Cap Entry, veh/h	317	1312	1340
V/C Ratio	0.161	0.272	1.058
Control Delay, s/veh	14.3	5.1	58.7
LOS	B	A	F
95th %tile Queue, veh	1	1	28

Intersection	
Intersection Delay, s/veh	36.2
Intersection LOS	E

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	57	309	1393
Demand Flow Rate, veh/h	59	315	1420
Vehicles Circulating, veh/h	1396	29	8
Vehicles Exiting, veh/h	32	1426	336
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	10.6	4.6	44.2
Approach LOS	B	A	E

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	59	315	1420
Cap Entry Lane, veh/h	433	1386	1410
Entry HV Adj Factor	0.966	0.981	0.981
Flow Entry, veh/h	57	309	1393
Cap Entry, veh/h	419	1355	1380
V/C Ratio	0.136	0.228	1.010
Control Delay, s/veh	10.6	4.6	44.2
LOS	B	A	F
95th %tile Queue, veh	0	1	24

Intersection	
Intersection Delay, s/veh	26.5
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	36	232	1305
Demand Flow Rate, veh/h	36	236	1331
Vehicles Circulating, veh/h	1323	15	10
Vehicles Exiting, veh/h	18	1344	241
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	8.9	4.0	31.0
Approach LOS	A	A	D

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	36	236	1331
Cap Entry Lane, veh/h	461	1402	1408
Entry HV Adj Factor	1.000	0.981	0.981
Flow Entry, veh/h	36	232	1305
Cap Entry, veh/h	461	1372	1377
V/C Ratio	0.078	0.169	0.948
Control Delay, s/veh	8.9	4.0	31.0
LOS	A	A	D
95th %tile Queue, veh	0	1	18

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	38	9	219	23	100	5	208	63	386	1294	1
Future Volume (veh/h)	11	38	9	219	23	100	5	208	63	386	1294	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.92	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	41	10	186	98	109	5	226	68	420	1407	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	55	13	311	135	150	9	1017	433	475	1996	1
Arrive On Green	0.05	0.05	0.05	0.17	0.17	0.17	0.01	0.29	0.29	0.27	0.55	0.55
Sat Flow, veh/h	337	1152	281	1781	772	859	1781	3554	1512	1781	3644	3
Grp Volume(v), veh/h	63	0	0	186	0	207	5	226	68	420	686	722
Grp Sat Flow(s),veh/h/ln	1770	0	0	1781	0	1631	1781	1777	1512	1781	1777	1870
Q Serve(g_s), s	2.5	0.0	0.0	6.9	0.0	8.5	0.2	3.5	2.4	16.1	20.3	20.3
Cycle Q Clear(g_c), s	2.5	0.0	0.0	6.9	0.0	8.5	0.2	3.5	2.4	16.1	20.3	20.3
Prop In Lane	0.19		0.16	1.00		0.53	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	84	0	0	311	0	285	9	1017	433	475	973	1024
V/C Ratio(X)	0.75	0.00	0.00	0.60	0.00	0.73	0.53	0.22	0.16	0.88	0.70	0.70
Avail Cap(c_a), veh/h	621	0	0	400	0	366	100	1017	433	650	973	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	0.0	27.1	0.0	27.8	35.3	19.4	19.0	25.0	11.9	11.9
Incr Delay (d2), s/veh	12.5	0.0	0.0	1.8	0.0	5.1	39.3	0.5	0.8	10.7	4.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	2.9	0.0	3.6	0.2	1.4	0.9	7.8	7.9	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	0.0	0.0	28.9	0.0	32.9	74.7	19.9	19.8	35.7	16.1	15.9
LnGrp LOS	D	A	A	C	A	C	E	B	B	D	B	B
Approach Vol, veh/h		63			393			299			1828	
Approach Delay, s/veh		46.0			31.0			20.8			20.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.0	24.4		7.4	4.4	43.0		16.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	26.0	17.0		25.0	4.0	39.0		16.0
Max Q Clear Time (g_c+I1), s	18.1	5.5		4.5	2.2	22.3		10.5
Green Ext Time (p_c), s	0.9	1.2		0.2	0.0	9.2		0.9

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	401	51	258	462	0	26	0	208	0	1	0
Future Vol, veh/h	0	401	51	258	462	0	26	0	208	0	1	0
Conflicting Peds, #/hr	10	0	10	10	0	10	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	436	55	280	502	0	28	0	226	0	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	512	0	0	501	0	0	1537	-	474	1649	1573	512
Stage 1	-	-	-	-	-	-	474	-	-	1072	1072	-
Stage 2	-	-	-	-	-	-	1063	-	-	577	501	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1053	-	-	1063	-	-	95	0	590	79	110	562
Stage 1	-	-	-	-	-	-	571	0	-	267	297	-
Stage 2	-	-	-	-	-	-	270	0	-	502	543	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1044	-	-	1054	-	-	67	-	585	34	68	557
Mov Cap-2 Maneuver	-	-	-	-	-	-	67	-	-	34	68	-
Stage 1	-	-	-	-	-	-	566	-	-	265	186	-
Stage 2	-	-	-	-	-	-	170	-	-	308	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.5	23.7	58.4
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	67	585	1044	-	-	1054	-	-	68
HCM Lane V/C Ratio	0.422	0.386	-	-	-	0.266	-	-	0.008
HCM Control Delay (s)	93.3	15	0	-	-	9.6	0	-	58.4
HCM Lane LOS	F	C	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.6	1.8	0	-	-	1.1	-	-	0

Intersection						
Int Delay, s/veh	2.1					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	621	12	78	597	12	84
Future Vol, veh/h	621	12	78	597	12	84
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	675	13	85	649	13	91

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	708	0	1541	722
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	839	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	891	-	127	427
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	424	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	876	-	104	413
Mov Cap-2 Maneuver	-	-	-	-	104	-
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	354	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	301	-	-	876	-
HCM Lane V/C Ratio	0.347	-	-	0.097	-
HCM Control Delay (s)	23.2	-	-	9.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.5	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	643	164	578	542	0	0	0	0	504	10	182
Future Volume (veh/h)	0	643	164	578	542	0	0	0	0	504	10	182
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	699	178	628	589	0				556	0	198
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1301	331	706	2545	0				694	0	291
Arrive On Green	0.00	0.47	0.47	0.34	1.00	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	2877	709	3456	3647	0				3563	0	1492
Grp Volume(v), veh/h	0	446	431	628	589	0				556	0	198
Grp Sat Flow(s),veh/h/ln	0	1777	1716	1728	1777	0				1781	0	1492
Q Serve(g_s), s	0.0	16.1	16.1	15.5	0.0	0.0				13.4	0.0	11.1
Cycle Q Clear(g_c), s	0.0	16.1	16.1	15.5	0.0	0.0				13.4	0.0	11.1
Prop In Lane	0.00		0.41	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	831	802	706	2545	0				694	0	291
V/C Ratio(X)	0.00	0.54	0.54	0.89	0.23	0.00				0.80	0.00	0.68
Avail Cap(c_a), veh/h	0	831	802	806	2545	0				990	0	415
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.0	17.0	28.7	0.0	0.0				34.6	0.0	33.6
Incr Delay (d2), s/veh	0.0	2.5	2.6	9.8	0.2	0.0				3.2	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	6.6	6.2	0.1	0.0				6.0	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.5	19.6	38.4	0.2	0.0				37.7	0.0	36.4
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		877			1217						754	
Approach Delay, s/veh		19.6			19.9						37.4	
Approach LOS		B			B						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.4	46.1		21.5		68.5
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	21.0	32.0		25.0		57.0
Max Q Clear Time (g_c+I1), s	17.5	18.1		15.4		2.0
Green Ext Time (p_c), s	0.9	4.9		2.1		4.7

Intersection Summary			
HCM 6th Ctrl Delay			24.4
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	927	0	0	983	478	149	1	737	0	0	0
Future Volume (veh/h)	178	927	0	0	983	478	149	1	737	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	193	1008	0	0	1068	520	162	1	801			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	228	2290	0	0	2410	709	472	3	687			
Arrive On Green	0.26	1.00	0.00	0.00	0.47	0.47	0.27	0.27	0.27			
Sat Flow, veh/h	1781	3647	0	0	5274	1502	1771	11	2575			
Grp Volume(v), veh/h	193	1008	0	0	1068	520	163	0	801			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1502	1782	0	1288			
Q Serve(g_s), s	9.3	0.0	0.0	0.0	12.6	25.2	6.6	0.0	24.0			
Cycle Q Clear(g_c), s	9.3	0.0	0.0	0.0	12.6	25.2	6.6	0.0	24.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	228	2290	0	0	2410	709	475	0	687			
V/C Ratio(X)	0.85	0.44	0.00	0.00	0.44	0.73	0.34	0.00	1.17			
Avail Cap(c_a), veh/h	416	2290	0	0	2410	709	475	0	687			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.72	0.72	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.6	0.0	0.0	0.0	15.9	19.2	26.6	0.0	33.0			
Incr Delay (d2), s/veh	6.2	0.4	0.0	0.0	0.6	6.6	0.4	0.0	90.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.8	0.1	0.0	0.0	4.8	9.5	2.8	0.0	15.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	0.4	0.0	0.0	16.5	25.8	27.1	0.0	123.1			
LnGrp LOS	D	A	A	A	B	C	C	A	F			
Approach Vol, veh/h		1201			1588			964				
Approach Delay, s/veh		6.6			19.5			106.9				
Approach LOS		A			B			F				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.0			15.5	46.5		28.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		58.0			21.0	33.0		24.0				
Max Q Clear Time (g_c+I1), s		2.0			11.3	27.2		26.0				
Green Ext Time (p_c), s		9.6			0.4	4.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			37.8									
HCM 6th LOS			D									

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	200	0	0	0	82	541
Future Volume (vph)	200	0	0	0	82	541
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	0	0	0	89	588
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	217	0	0	0	89	588
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		10		10		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	13.0				7.6	52.4
Effective Green, g (s)	13.0				7.6	52.4
Actuated g/C Ratio	0.15				0.09	0.62
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	523				157	2176
v/s Ratio Prot	c0.06				c0.05	c0.17
v/s Ratio Perm						
v/c Ratio	0.41				0.57	0.27
Uniform Delay, d1	32.7				37.2	7.6
Progression Factor	0.13				1.00	1.00
Incremental Delay, d2	0.5				4.6	0.1
Delay (s)	4.8				41.9	7.6
Level of Service	A				D	A
Approach Delay (s)	4.8		0.0			12.1
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	85.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	80	0	0	200	55	0	679	276	0	0	0
Future Volume (vph)	3	80	0	0	200	55	0	679	276	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			0.99			1.00	0.92			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.97			1.00	0.85			
Flt Protected		1.00			1.00			1.00	1.00			
Satd. Flow (prot)		1860			3388			3539	1453			
Flt Permitted		1.00			1.00			1.00	1.00			
Satd. Flow (perm)		1860			3388			3539	1453			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	87	0	0	217	60	0	738	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	25	0	0	0	254	0	0	0
Lane Group Flow (vph)	0	90	0	0	252	0	0	738	46	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			10			10			10			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		7.8			13.0			40.8	13.0			
Effective Green, g (s)		7.8			13.0			40.8	13.0			
Actuated g/C Ratio		0.09			0.15			0.48	0.15			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		170			516			1694	221			
v/s Ratio Prot		c0.05			c0.07			c0.21				
v/s Ratio Perm									0.03			
v/c Ratio		0.53			0.49			0.44	0.21			
Uniform Delay, d1		36.9			33.1			14.6	31.6			
Progression Factor		1.47			1.00			1.00	1.00			
Incremental Delay, d2		2.8			0.7			0.8	0.5			
Delay (s)		57.2			33.8			15.4	32.1			
Level of Service		E			C			B	C			
Approach Delay (s)		57.2			33.8			20.2			0.0	
Approach LOS		E			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	32	6	232	47	411	9	646	245	269	363	6
Future Volume (veh/h)	4	32	6	232	47	411	9	646	245	269	363	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.77	1.00		0.95	1.00		0.92	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	35	7	288	0	447	10	702	266	292	395	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	14	118	87	898	0	380	18	896	367	309	1475	621
Arrive On Green	0.07	0.07	0.07	0.25	0.00	0.25	0.01	0.25	0.25	0.17	0.42	0.42
Sat Flow, veh/h	191	1670	1227	3563	0	1509	1781	3554	1458	1781	3554	1495
Grp Volume(v), veh/h	39	0	7	288	0	447	10	702	266	292	395	7
Grp Sat Flow(s),veh/h/ln	1861	0	1227	1781	0	1509	1781	1777	1458	1781	1777	1495
Q Serve(g_s), s	1.3	0.0	0.3	4.2	0.0	16.0	0.4	11.7	10.6	10.3	4.6	0.2
Cycle Q Clear(g_c), s	1.3	0.0	0.3	4.2	0.0	16.0	0.4	11.7	10.6	10.3	4.6	0.2
Prop In Lane	0.10		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	0	87	898	0	380	18	896	367	309	1475	621
V/C Ratio(X)	0.30	0.00	0.08	0.32	0.00	1.18	0.55	0.78	0.72	0.95	0.27	0.01
Avail Cap(c_a), veh/h	469	0	309	898	0	380	112	896	367	309	1475	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	27.6	19.3	0.0	23.7	31.3	22.1	21.7	26.0	12.2	10.9
Incr Delay (d2), s/veh	1.2	0.0	0.4	0.2	0.0	103.2	23.6	6.8	11.7	37.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	1.6	0.0	16.1	0.3	5.4	4.5	7.3	1.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	28.0	19.5	0.0	127.0	54.8	28.9	33.5	63.0	12.7	10.9
LnGrp LOS	C	A	C	B	A	F	D	C	C	E	B	B
Approach Vol, veh/h		46			735			978			694	
Approach Delay, s/veh		29.0			84.9			30.4			33.8	
Approach LOS		C			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	20.0		8.5	4.6	30.4		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	16.0		16.0	4.0	23.0		16.0
Max Q Clear Time (g_c+I1), s	12.3	13.7		3.3	2.4	6.6		18.0
Green Ext Time (p_c), s	0.0	1.3		0.1	0.0	2.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	42	744	509
Demand Flow Rate, veh/h	43	759	519
Vehicles Circulating, veh/h	496	28	15
Vehicles Exiting, veh/h	38	511	772
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.4	8.6	6.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	43	759	519
Cap Entry Lane, veh/h	932	1387	1402
Entry HV Adj Factor	0.977	0.981	0.981
Flow Entry, veh/h	42	744	509
Cap Entry, veh/h	909	1358	1374
V/C Ratio	0.046	0.548	0.371
Control Delay, s/veh	4.4	8.6	6.0
LOS	A	A	A
95th %tile Queue, veh	0	3	2

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	86	748	525
Demand Flow Rate, veh/h	88	763	535
Vehicles Circulating, veh/h	523	35	6
Vehicles Exiting, veh/h	18	576	792
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.0	8.7	6.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	88	763	535
Cap Entry Lane, veh/h	910	1378	1413
Entry HV Adj Factor	0.977	0.981	0.981
Flow Entry, veh/h	86	748	525
Cap Entry, veh/h	888	1350	1384
V/C Ratio	0.097	0.554	0.379
Control Delay, s/veh	5.0	8.7	6.1
LOS	A	A	A
95th %tile Queue, veh	0	4	2

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	29	716	502
Demand Flow Rate, veh/h	29	731	512
Vehicles Circulating, veh/h	478	12	31
Vehicles Exiting, veh/h	65	495	712
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.1	8.0	6.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	29	731	512
Cap Entry Lane, veh/h	946	1406	1383
Entry HV Adj Factor	1.000	0.980	0.980
Flow Entry, veh/h	29	716	502
Cap Entry, veh/h	945	1376	1353
V/C Ratio	0.031	0.521	0.371
Control Delay, s/veh	4.1	8.0	6.1
LOS	A	A	A
95th %tile Queue, veh	0	3	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	45	13	171	30	182	7	651	174	265	446	3
Future Volume (veh/h)	23	45	13	171	30	182	7	651	174	265	446	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.93	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	49	14	186	33	198	8	708	189	288	485	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	66	19	349	42	255	15	1193	513	332	1859	11
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.01	0.34	0.34	0.19	0.51	0.51
Sat Flow, veh/h	504	987	282	1781	217	1300	1781	3554	1527	1781	3619	22
Grp Volume(v), veh/h	88	0	0	186	0	231	8	708	189	288	238	250
Grp Sat Flow(s),veh/h/ln	1773	0	0	1781	0	1516	1781	1777	1527	1781	1777	1865
Q Serve(g_s), s	3.6	0.0	0.0	7.0	0.0	10.8	0.3	12.3	7.0	11.7	5.6	5.6
Cycle Q Clear(g_c), s	3.6	0.0	0.0	7.0	0.0	10.8	0.3	12.3	7.0	11.7	5.6	5.6
Prop In Lane	0.28		0.16	1.00		0.86	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	119	0	0	349	0	297	15	1193	513	332	913	958
V/C Ratio(X)	0.74	0.00	0.00	0.53	0.00	0.78	0.55	0.59	0.37	0.87	0.26	0.26
Avail Cap(c_a), veh/h	524	0	0	502	0	428	144	1193	513	383	913	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	0.0	0.0	26.9	0.0	28.4	36.8	20.5	18.7	29.4	10.2	10.2
Incr Delay (d2), s/veh	8.7	0.0	0.0	1.3	0.0	5.6	28.4	2.2	2.0	17.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	3.0	0.0	4.2	0.3	5.2	2.6	6.4	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	0.0	0.0	28.1	0.0	33.9	65.2	22.7	20.8	46.4	10.9	10.8
LnGrp LOS	D	A	A	C	A	C	E	C	C	D	B	B
Approach Vol, veh/h		88			417			905			776	
Approach Delay, s/veh		42.8			31.4			22.7			24.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.9	29.0		9.0	4.6	42.3		18.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	25.0		22.0	6.0	35.0		21.0
Max Q Clear Time (g_c+I1), s	13.7	14.3		5.6	2.3	7.6		12.8
Green Ext Time (p_c), s	0.2	4.1		0.3	0.0	3.1		1.3

Intersection Summary			
HCM 6th Ctrl Delay			25.6
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	465	76	153	542	1	62	0	165	0	0	0
Future Vol, veh/h	1	465	76	153	542	1	62	0	165	0	0	0
Conflicting Peds, #/hr	10	0	10	10	0	10	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	505	83	166	589	1	67	0	179	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	600	0	0	598	0	0	1481	-	557	1570	1532	600
Stage 1	-	-	-	-	-	-	559	-	-	932	932	-
Stage 2	-	-	-	-	-	-	922	-	-	638	600	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	977	-	-	979	-	-	103	0	530	90	117	501
Stage 1	-	-	-	-	-	-	513	0	-	320	345	-
Stage 2	-	-	-	-	-	-	324	0	-	465	490	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	969	-	-	971	-	-	82	-	526	47	86	497
Mov Cap-2 Maneuver	-	-	-	-	-	-	82	-	-	47	86	-
Stage 1	-	-	-	-	-	-	508	-	-	317	255	-
Stage 2	-	-	-	-	-	-	242	-	-	306	485	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.1	50	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	82	526	969	-	-	971	-	-	-
HCM Lane V/C Ratio	0.822	0.341	0.001	-	-	0.171	-	-	-
HCM Control Delay (s)	142.4	15.3	8.7	0	-	9.5	0	-	0
HCM Lane LOS	F	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	4.2	1.5	0	-	-	0.6	-	-	-

Intersection						
Int Delay, s/veh	1.6					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	674	13	64	760	13	51
Future Vol, veh/h	674	13	64	760	13	51
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	733	14	70	826	14	55

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	767	0	1746	780
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	986	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	847	-	95	395
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	361	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	833	-	78	382
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	300	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	29.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	213	-	-	833	-
HCM Lane V/C Ratio	0.327	-	-	0.084	-
HCM Control Delay (s)	29.9	-	-	9.7	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	598	168	738	703	0	0	0	0	510	1	187
Future Volume (veh/h)	0	598	168	738	703	0	0	0	0	510	1	187
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	650	183	802	764	0				555	0	203
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1139	320	899	2573	0				667	0	279
Arrive On Green	0.00	0.42	0.42	0.26	0.72	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	2808	763	3456	3647	0				3563	0	1489
Grp Volume(v), veh/h	0	425	408	802	764	0				555	0	203
Grp Sat Flow(s),veh/h/ln	0	1777	1701	1728	1777	0				1781	0	1489
Q Serve(g_s), s	0.0	16.4	16.5	20.1	6.8	0.0				13.5	0.0	11.5
Cycle Q Clear(g_c), s	0.0	16.4	16.5	20.1	6.8	0.0				13.5	0.0	11.5
Prop In Lane	0.00		0.45	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	745	714	899	2573	0				667	0	279
V/C Ratio(X)	0.00	0.57	0.57	0.89	0.30	0.00				0.83	0.00	0.73
Avail Cap(c_a), veh/h	0	745	714	998	2573	0				792	0	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.63	0.63	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.9	20.0	32.1	4.4	0.0				35.2	0.0	34.4
Incr Delay (d2), s/veh	0.0	3.2	3.3	6.4	0.2	0.0				6.6	0.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.1	6.9	8.9	2.0	0.0				6.3	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.1	23.3	38.4	4.6	0.0				41.8	0.0	40.9
LnGrp LOS	A	C	C	D	A	A				D	A	D
Approach Vol, veh/h		833			1566						758	
Approach Delay, s/veh		23.2			21.9						41.6	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.4	41.7		20.8		69.2
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	26.0	32.0		20.0		62.0
Max Q Clear Time (g_c+I1), s	22.1	18.5		15.5		8.8
Green Ext Time (p_c), s	1.3	4.6		1.3		6.5

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	902	0	0	1174	417	256	1	677	0	0	0
Future Volume (veh/h)	183	902	0	0	1174	417	256	1	677	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.94	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	199	980	0	0	1276	453	278	1	736			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	240	1978	0	0	1862	542	584	2	857			
Arrive On Green	0.13	0.56	0.00	0.00	0.36	0.36	0.33	0.33	0.33			
Sat Flow, veh/h	1781	3647	0	0	5274	1487	1775	6	2605			
Grp Volume(v), veh/h	199	980	0	0	1276	453	279	0	736			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1487	1782	0	1303			
Q Serve(g_s), s	7.6	11.8	0.0	0.0	14.8	19.5	8.7	0.0	18.5			
Cycle Q Clear(g_c), s	7.6	11.8	0.0	0.0	14.8	19.5	8.7	0.0	18.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	240	1978	0	0	1862	542	586	0	857			
V/C Ratio(X)	0.83	0.50	0.00	0.00	0.69	0.84	0.48	0.00	0.86			
Avail Cap(c_a), veh/h	254	1978	0	0	1862	542	662	0	968			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.69	0.69	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.5	9.5	0.0	0.0	18.8	20.3	18.7	0.0	22.0			
Incr Delay (d2), s/veh	13.9	0.6	0.0	0.0	2.1	14.1	0.6	0.0	7.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.1	4.0	0.0	0.0	5.7	8.3	3.5	0.0	6.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	10.1	0.0	0.0	20.9	34.4	19.3	0.0	29.1			
LnGrp LOS	D	B	A	A	C	C	B	A	C			
Approach Vol, veh/h		1179			1729			1015				
Approach Delay, s/veh		15.7			24.5			26.4				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.0			13.4	29.5		27.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		36.0			10.0	22.0		26.0				
Max Q Clear Time (g_c+I1), s		13.8			9.6	21.5		20.5				
Green Ext Time (p_c), s		7.5			0.0	0.4		2.5				
Intersection Summary												
HCM 6th Ctrl Delay			22.3									
HCM 6th LOS			C									

Appendix O

Existing + Cumulative + Project Intersection LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	243	0	0	0	58	1126
Future Volume (vph)	243	0	0	0	58	1126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	264	0	0	0	63	1224
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	264	0	0	0	63	1224
Confl. Peds. (#/hr)		30			30	
Confl. Bikes (#/hr)		30		30		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	13.5				4.5	45.7
Effective Green, g (s)	13.5				4.5	45.7
Actuated g/C Ratio	0.17				0.06	0.59
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	594				102	2073
v/s Ratio Prot	c0.08				0.04	c0.35
v/s Ratio Perm						
v/c Ratio	0.44				0.62	0.59
Uniform Delay, d1	28.9				35.9	10.2
Progression Factor	0.08				1.00	1.00
Incremental Delay, d2	0.5				10.6	0.5
Delay (s)	2.8				46.5	10.7
Level of Service	A				D	B
Approach Delay (s)	2.8		0.0			12.4
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	78.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	57	0	0	243	41	0	225	135	0	0	0
Future Volume (vph)	2	57	0	0	243	41	0	225	135	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			0.99			1.00	0.87			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.98			1.00	0.85			
Flt Protected		1.00			1.00			1.00	1.00			
Satd. Flow (prot)		1860			3423			3539	1380			
Flt Permitted		1.00			1.00			1.00	1.00			
Satd. Flow (perm)		1860			3423			3539	1380			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	62	0	0	264	45	0	245	147	0	0	0
RTOR Reduction (vph)	0	0	0	0	16	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	64	0	0	293	0	0	245	147	0	0	0
Confl. Peds. (#/hr)			20			20			20			
Confl. Bikes (#/hr)			30			30			30			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		6.5			13.3			35.4	13.3			
Effective Green, g (s)		6.5			13.3			35.4	13.3			
Actuated g/C Ratio		0.08			0.17			0.46	0.17			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		157			592			1629	238			
v/s Ratio Prot		c0.03			0.09			c0.07				
v/s Ratio Perm									c0.11			
v/c Ratio		0.41			0.50			0.15	0.62			
Uniform Delay, d1		33.4			28.8			12.0	29.4			
Progression Factor		1.41			1.00			1.00	1.00			
Incremental Delay, d2		1.7			0.7			0.2	4.7			
Delay (s)		48.7			29.4			12.2	34.2			
Level of Service		D			C			B	C			
Approach Delay (s)		48.7			29.4			20.4			0.0	
Approach LOS		D			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	76.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	30.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	24	4	259	36	165	7	201	212	327	1033	4
Future Volume (veh/h)	3	24	4	259	36	165	7	201	212	327	1033	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.68	1.00		0.92	1.00		0.91	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	26	4	310	0	179	8	218	230	355	1123	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	105	68	607	0	248	15	1107	451	410	1896	796
Arrive On Green	0.06	0.06	0.06	0.17	0.00	0.17	0.01	0.31	0.31	0.23	0.53	0.53
Sat Flow, veh/h	192	1668	1072	3563	0	1453	1781	3554	1449	1781	3554	1492
Grp Volume(v), veh/h	29	0	4	310	0	179	8	218	230	355	1123	4
Grp Sat Flow(s),veh/h/ln	1861	0	1072	1781	0	1453	1781	1777	1449	1781	1777	1492
Q Serve(g_s), s	1.1	0.0	0.2	5.6	0.0	8.3	0.3	3.2	9.3	13.6	15.3	0.1
Cycle Q Clear(g_c), s	1.1	0.0	0.2	5.6	0.0	8.3	0.3	3.2	9.3	13.6	15.3	0.1
Prop In Lane	0.10		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	0	68	607	0	248	15	1107	451	410	1896	796
V/C Ratio(X)	0.25	0.00	0.06	0.51	0.00	0.72	0.55	0.20	0.51	0.86	0.59	0.01
Avail Cap(c_a), veh/h	418	0	241	801	0	326	100	1107	451	625	1896	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	31.4	26.8	0.0	27.9	35.2	18.0	20.1	26.3	11.3	7.8
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.7	0.0	5.3	28.1	0.4	4.1	8.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	2.4	0.0	3.1	0.2	1.3	3.4	6.4	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	31.7	27.5	0.0	33.3	63.3	18.4	24.1	34.3	12.7	7.8
LnGrp LOS	C	A	C	C	A	C	E	B	C	C	B	A
Approach Vol, veh/h		33			489			456			1482	
Approach Delay, s/veh		32.7			29.6			22.1			17.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.4	26.2		8.5	4.6	42.0		16.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	15.6	11.3		3.1	2.3	17.3		10.3
Green Ext Time (p_c), s	0.8	1.1		0.1	0.0	8.5		1.0

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	23	924	1283	35
Future Vol, veh/h	0	73	23	924	1283	35
Conflicting Peds, #/hr	0	20	20	0	0	20
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	2	2	2
Mvmt Flow	0	79	25	1004	1395	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1454	1453	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	0	161	466	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	156	458	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	49.8	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	458	-	156	-	-
HCM Lane V/C Ratio	0.055	-	0.509	-	-
HCM Control Delay (s)	13.3	-	49.8	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	2.5	-	-

Intersection	
Intersection Delay, s/veh	49.3
Intersection LOS	E

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	51	365	1430
Demand Flow Rate, veh/h	52	372	1458
Vehicles Circulating, veh/h	1436	28	7
Vehicles Exiting, veh/h	29	1460	393
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	14.5	5.2	61.8
Approach LOS	B	A	F

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	52	372	1458
Cap Entry Lane, veh/h	319	1341	1370
Entry HV Adj Factor	0.981	0.981	0.981
Flow Entry, veh/h	51	365	1430
Cap Entry, veh/h	313	1312	1340
V/C Ratio	0.163	0.278	1.067
Control Delay, s/veh	14.5	5.2	61.8
LOS	B	A	F
95th %tile Queue, veh	1	1	29

Intersection	
Intersection Delay, s/veh	37.4
Intersection LOS	E

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	57	334	1403
Demand Flow Rate, veh/h	59	341	1431
Vehicles Circulating, veh/h	1409	29	8
Vehicles Exiting, veh/h	30	1439	362
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	10.8	4.8	46.3
Approach LOS	B	A	E

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	59	341	1431
Cap Entry Lane, veh/h	429	1386	1410
Entry HV Adj Factor	0.966	0.981	0.981
Flow Entry, veh/h	57	334	1403
Cap Entry, veh/h	414	1355	1379
V/C Ratio	0.138	0.247	1.017
Control Delay, s/veh	10.8	4.8	46.3
LOS	B	A	F
95th %tile Queue, veh	0	1	24

Intersection	
Intersection Delay, s/veh	27.6
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	36	238	1316
Demand Flow Rate, veh/h	36	243	1342
Vehicles Circulating, veh/h	1334	15	10
Vehicles Exiting, veh/h	18	1355	248
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	8.9	4.0	32.4
Approach LOS	A	A	D

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	36	243	1342
Cap Entry Lane, veh/h	457	1402	1408
Entry HV Adj Factor	1.000	0.981	0.981
Flow Entry, veh/h	36	238	1316
Cap Entry, veh/h	457	1372	1377
V/C Ratio	0.079	0.174	0.956
Control Delay, s/veh	8.9	4.0	32.4
LOS	A	A	D
95th %tile Queue, veh	0	1	19

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	38	9	219	23	104	5	212	63	394	1300	1
Future Volume (veh/h)	11	38	9	219	23	104	5	212	63	394	1300	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.92	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	41	10	188	95	113	5	230	68	428	1413	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	55	13	313	130	155	9	1000	426	483	1994	1
Arrive On Green	0.05	0.05	0.05	0.18	0.18	0.18	0.01	0.28	0.28	0.27	0.55	0.55
Sat Flow, veh/h	337	1152	281	1781	742	882	1781	3554	1512	1781	3644	3
Grp Volume(v), veh/h	63	0	0	188	0	208	5	230	68	428	689	725
Grp Sat Flow(s),veh/h/ln	1770	0	0	1781	0	1624	1781	1777	1512	1781	1777	1870
Q Serve(g_s), s	2.5	0.0	0.0	6.9	0.0	8.6	0.2	3.5	2.4	16.4	20.4	20.4
Cycle Q Clear(g_c), s	2.5	0.0	0.0	6.9	0.0	8.6	0.2	3.5	2.4	16.4	20.4	20.4
Prop In Lane	0.19		0.16	1.00		0.54	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	84	0	0	313	0	285	9	1000	426	483	972	1023
V/C Ratio(X)	0.75	0.00	0.00	0.60	0.00	0.73	0.53	0.23	0.16	0.89	0.71	0.71
Avail Cap(c_a), veh/h	621	0	0	400	0	365	100	1000	426	650	972	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	0.0	27.1	0.0	27.8	35.4	19.7	19.3	24.9	11.9	11.9
Incr Delay (d2), s/veh	12.5	0.0	0.0	1.9	0.0	5.3	39.3	0.5	0.8	11.1	4.4	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	3.0	0.0	3.6	0.2	1.5	0.9	8.0	8.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	0.0	0.0	28.9	0.0	33.1	74.7	20.2	20.1	36.1	16.3	16.1
LnGrp LOS	D	A	A	C	A	C	E	C	C	D	B	B
Approach Vol, veh/h		63			396			303			1842	
Approach Delay, s/veh		46.0			31.1			21.1			20.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.3	24.1		7.4	4.4	43.0		16.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	26.0	17.0		25.0	4.0	39.0		16.0
Max Q Clear Time (g_c+I1), s	18.4	5.5		4.5	2.2	22.4		10.6
Green Ext Time (p_c), s	0.9	1.2		0.2	0.0	9.2		0.9

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	416	51	258	471	0	26	0	208	0	1	0
Future Vol, veh/h	0	416	51	258	471	0	26	0	208	0	1	0
Conflicting Peds, #/hr	10	0	10	10	0	10	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	452	55	280	512	0	28	0	226	0	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	522	0	0	517	0	0	1563	-	490	1675	1599	522
Stage 1	-	-	-	-	-	-	490	-	-	1082	1082	-
Stage 2	-	-	-	-	-	-	1073	-	-	593	517	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1044	-	-	1049	-	-	91	0	578	76	106	555
Stage 1	-	-	-	-	-	-	560	0	-	263	294	-
Stage 2	-	-	-	-	-	-	267	0	-	492	534	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1035	-	-	1040	-	-	63	-	573	32	65	550
Mov Cap-2 Maneuver	-	-	-	-	-	-	63	-	-	32	65	-
Stage 1	-	-	-	-	-	-	556	-	-	261	182	-
Stage 2	-	-	-	-	-	-	166	-	-	298	530	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	25	60.9
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	63	573	1035	-	-	1040	-	-	65
HCM Lane V/C Ratio	0.449	0.395	-	-	-	0.27	-	-	0.008
HCM Control Delay (s)	102.2	15.3	0	-	-	9.7	0	-	60.9
HCM Lane LOS	F	C	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.7	1.9	0	-	-	1.1	-	-	0

Intersection						
Int Delay, s/veh	2.2					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	634	14	78	605	13	84
Future Vol, veh/h	634	14	78	605	13	84
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	689	15	85	658	14	91

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	724	0	1565	737
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	848	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	879	-	123	418
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	420	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	864	-	100	404
Mov Cap-2 Maneuver	-	-	-	-	100	-
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	349	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	24.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	287	-	-	864	-
HCM Lane V/C Ratio	0.367	-	-	0.098	-
HCM Control Delay (s)	24.7	-	-	9.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.6	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	651	169	578	546	0	0	0	0	504	10	186
Future Volume (veh/h)	0	651	169	578	546	0	0	0	0	504	10	186
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	708	184	628	593	0				556	0	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1295	336	706	2545	0				695	0	291
Arrive On Green	0.00	0.47	0.47	0.34	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	2864	720	3456	3647	0				3563	0	1493
Grp Volume(v), veh/h	0	454	438	628	593	0				556	0	202
Grp Sat Flow(s),veh/h/ln	0	1777	1713	1728	1777	0				1781	0	1493
Q Serve(g_s), s	0.0	16.5	16.5	15.5	0.0	0.0				13.4	0.0	11.3
Cycle Q Clear(g_c), s	0.0	16.5	16.5	15.5	0.0	0.0				13.4	0.0	11.3
Prop In Lane	0.00		0.42	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	830	801	706	2545	0				695	0	291
V/C Ratio(X)	0.00	0.55	0.55	0.89	0.23	0.00				0.80	0.00	0.69
Avail Cap(c_a), veh/h	0	830	801	806	2545	0				990	0	415
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.1	17.2	28.7	0.0	0.0				34.6	0.0	33.7
Incr Delay (d2), s/veh	0.0	2.6	2.7	9.8	0.2	0.0				3.1	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.0	6.7	6.2	0.1	0.0				6.0	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.7	19.8	38.4	0.2	0.0				37.7	0.0	36.7
LnGrp LOS	A	B	B	D	A	A				D	A	D
Approach Vol, veh/h		892			1221						758	
Approach Delay, s/veh		19.8			19.9						37.4	
Approach LOS		B			B						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.4	46.1		21.6		68.4
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	21.0	32.0		25.0		57.0
Max Q Clear Time (g_c+I1), s	17.5	18.5		15.4		2.0
Green Ext Time (p_c), s	0.9	4.9		2.2		4.7

Intersection Summary			
HCM 6th Ctrl Delay			24.5
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	929	0	0	984	478	152	1	737	0	0	0
Future Volume (veh/h)	184	929	0	0	984	478	152	1	737	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	200	1010	0	0	1070	520	165	1	801			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	235	2290	0	0	2390	703	472	3	687			
Arrive On Green	0.26	1.00	0.00	0.00	0.47	0.47	0.27	0.27	0.27			
Sat Flow, veh/h	1781	3647	0	0	5274	1502	1771	11	2575			
Grp Volume(v), veh/h	200	1010	0	0	1070	520	166	0	801			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1502	1782	0	1288			
Q Serve(g_s), s	9.6	0.0	0.0	0.0	12.7	25.4	6.8	0.0	24.0			
Cycle Q Clear(g_c), s	9.6	0.0	0.0	0.0	12.7	25.4	6.8	0.0	24.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	235	2290	0	0	2390	703	475	0	687			
V/C Ratio(X)	0.85	0.44	0.00	0.00	0.45	0.74	0.35	0.00	1.17			
Avail Cap(c_a), veh/h	416	2290	0	0	2390	703	475	0	687			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.71	0.71	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.3	0.0	0.0	0.0	16.1	19.5	26.7	0.0	33.0			
Incr Delay (d2), s/veh	6.1	0.4	0.0	0.0	0.6	6.9	0.4	0.0	90.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	0.1	0.0	0.0	4.8	9.6	2.9	0.0	15.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.4	0.0	0.0	16.7	26.4	27.1	0.0	123.1			
LnGrp LOS	D	A	A	A	B	C	C	A	F			
Approach Vol, veh/h		1210			1590			967				
Approach Delay, s/veh		6.7			19.9			106.6				
Approach LOS		A			B			F				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.0			15.9	46.1		28.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		58.0			21.0	33.0		24.0				
Max Q Clear Time (g_c+I1), s		2.0			11.6	27.4		26.0				
Green Ext Time (p_c), s		9.6			0.4	4.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			37.9									
HCM 6th LOS			D									

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	0	0	0	82	550
Future Volume (vph)	203	0	0	0	82	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	0	0	0	89	598
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	221	0	0	0	89	598
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		10		10		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	13.1				7.6	53.4
Effective Green, g (s)	13.1				7.6	53.4
Actuated g/C Ratio	0.15				0.09	0.62
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	520				155	2187
v/s Ratio Prot	c0.06				c0.05	c0.17
v/s Ratio Perm						
v/c Ratio	0.42				0.57	0.27
Uniform Delay, d1	33.2				37.8	7.6
Progression Factor	0.13				1.00	1.00
Incremental Delay, d2	0.5				5.1	0.1
Delay (s)	4.8				42.9	7.7
Level of Service	A				D	A
Approach Delay (s)	4.8		0.0			12.2
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	30.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	80	0	0	203	55	0	686	278	0	0	0
Future Volume (vph)	3	80	0	0	203	55	0	686	278	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			0.99			1.00	0.92			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.97			1.00	0.85			
Flt Protected		1.00			1.00			1.00	1.00			
Satd. Flow (prot)		1860			3389			3539	1452			
Flt Permitted		1.00			1.00			1.00	1.00			
Satd. Flow (perm)		1860			3389			3539	1452			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	87	0	0	221	60	0	746	302	0	0	0
RTOR Reduction (vph)	0	0	0	0	25	0	0	0	256	0	0	0
Lane Group Flow (vph)	0	90	0	0	256	0	0	746	46	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			10			10			10			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		7.9			13.1			41.8	13.1			
Effective Green, g (s)		7.9			13.1			41.8	13.1			
Actuated g/C Ratio		0.09			0.15			0.48	0.15			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		170			513			1712	220			
v/s Ratio Prot		c0.05			c0.08			c0.21				
v/s Ratio Perm									0.03			
v/c Ratio		0.53			0.50			0.44	0.21			
Uniform Delay, d1		37.5			33.6			14.6	32.1			
Progression Factor		1.48			1.00			1.00	1.00			
Incremental Delay, d2		2.8			0.8			0.8	0.5			
Delay (s)		58.4			34.4			15.4	32.6			
Level of Service		E			C			B	C			
Approach Delay (s)		58.4			34.4			20.3			0.0	
Approach LOS		E			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	32	6	255	47	411	9	655	262	269	375	6
Future Volume (veh/h)	4	32	6	255	47	411	9	655	262	269	375	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.77	1.00		0.95	1.00		0.92	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	35	7	313	0	447	10	712	285	292	408	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	14	118	87	898	0	380	18	952	392	281	1475	621
Arrive On Green	0.07	0.07	0.07	0.25	0.00	0.25	0.01	0.27	0.27	0.16	0.42	0.42
Sat Flow, veh/h	191	1670	1227	3563	0	1509	1781	3554	1464	1781	3554	1495
Grp Volume(v), veh/h	39	0	7	313	0	447	10	712	285	292	408	7
Grp Sat Flow(s),veh/h/ln	1861	0	1227	1781	0	1509	1781	1777	1464	1781	1777	1495
Q Serve(g_s), s	1.3	0.0	0.3	4.6	0.0	16.0	0.4	11.6	11.2	10.0	4.8	0.2
Cycle Q Clear(g_c), s	1.3	0.0	0.3	4.6	0.0	16.0	0.4	11.6	11.2	10.0	4.8	0.2
Prop In Lane	0.10		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	0	87	898	0	380	18	952	392	281	1475	621
V/C Ratio(X)	0.30	0.00	0.08	0.35	0.00	1.18	0.55	0.75	0.73	1.04	0.28	0.01
Avail Cap(c_a), veh/h	469	0	309	898	0	380	140	952	392	281	1475	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	27.6	19.5	0.0	23.7	31.3	21.3	21.1	26.7	12.3	10.9
Incr Delay (d2), s/veh	1.2	0.0	0.4	0.2	0.0	103.2	23.6	5.4	11.2	64.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	1.8	0.0	16.1	0.3	5.2	4.8	9.0	1.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	28.0	19.7	0.0	127.0	54.8	26.7	32.4	91.5	12.7	10.9
LnGrp LOS	C	A	C	B	A	F	D	C	C	F	B	B
Approach Vol, veh/h		46			760			1007			707	
Approach Delay, s/veh		29.0			82.8			28.5			45.2	
Approach LOS		C			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	21.0		8.5	4.6	30.4		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	17.0		16.0	5.0	22.0		16.0
Max Q Clear Time (g_c+I1), s	12.0	13.6		3.3	2.4	6.8		18.0
Green Ext Time (p_c), s	0.0	1.8		0.1	0.0	2.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	76	41	946	601	62
Future Vol, veh/h	0	76	41	946	601	62
Conflicting Peds, #/hr	20	20	0	0	0	20
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	83	45	1028	653	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	727	740	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	424	867	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	410	853	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	853	-	410	-	-
HCM Lane V/C Ratio	0.052	-	0.201	-	-
HCM Control Delay (s)	9.5	-	16	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	43	763	524
Demand Flow Rate, veh/h	44	778	534
Vehicles Circulating, veh/h	511	29	15
Vehicles Exiting, veh/h	38	526	792
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.5	8.8	6.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	44	778	534
Cap Entry Lane, veh/h	920	1386	1402
Entry HV Adj Factor	0.977	0.981	0.981
Flow Entry, veh/h	43	763	524
Cap Entry, veh/h	898	1357	1374
V/C Ratio	0.048	0.562	0.381
Control Delay, s/veh	4.5	8.8	6.1
LOS	A	A	A
95th %tile Queue, veh	0	4	2

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	87	769	541
Demand Flow Rate, veh/h	89	784	552
Vehicles Circulating, veh/h	540	36	6
Vehicles Exiting, veh/h	18	593	814
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.1	9.0	6.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	89	784	552
Cap Entry Lane, veh/h	897	1377	1413
Entry HV Adj Factor	0.978	0.981	0.981
Flow Entry, veh/h	87	769	541
Cap Entry, veh/h	876	1349	1384
V/C Ratio	0.099	0.570	0.391
Control Delay, s/veh	5.1	9.0	6.2
LOS	A	A	A
95th %tile Queue, veh	0	4	2

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	30	736	517
Demand Flow Rate, veh/h	30	751	528
Vehicles Circulating, veh/h	494	13	31
Vehicles Exiting, veh/h	65	511	733
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.2	8.3	6.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	30	751	528
Cap Entry Lane, veh/h	933	1405	1383
Entry HV Adj Factor	1.000	0.980	0.980
Flow Entry, veh/h	30	736	517
Cap Entry, veh/h	932	1374	1353
V/C Ratio	0.032	0.535	0.382
Control Delay, s/veh	4.2	8.3	6.2
LOS	A	A	A
95th %tile Queue, veh	0	3	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	45	13	171	30	194	7	659	174	274	453	3
Future Volume (veh/h)	24	45	13	171	30	194	7	659	174	274	453	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.93	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	49	14	186	33	211	8	716	189	298	492	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	66	19	358	41	263	15	1172	503	340	1854	11
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.01	0.33	0.33	0.19	0.51	0.51
Sat Flow, veh/h	518	976	279	1781	205	1311	1781	3554	1527	1781	3620	22
Grp Volume(v), veh/h	89	0	0	186	0	244	8	716	189	298	241	254
Grp Sat Flow(s),veh/h/ln	1773	0	0	1781	0	1516	1781	1777	1527	1781	1777	1865
Q Serve(g_s), s	3.7	0.0	0.0	7.1	0.0	11.6	0.3	12.8	7.2	12.3	5.8	5.8
Cycle Q Clear(g_c), s	3.7	0.0	0.0	7.1	0.0	11.6	0.3	12.8	7.2	12.3	5.8	5.8
Prop In Lane	0.29		0.16	1.00		0.86	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	120	0	0	358	0	304	15	1172	503	340	910	955
V/C Ratio(X)	0.74	0.00	0.00	0.52	0.00	0.80	0.55	0.61	0.38	0.88	0.27	0.27
Avail Cap(c_a), veh/h	514	0	0	493	0	420	141	1172	503	376	910	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	0.0	27.0	0.0	28.9	37.5	21.3	19.4	29.8	10.4	10.4
Incr Delay (d2), s/veh	8.6	0.0	0.0	1.2	0.0	7.6	28.5	2.4	2.1	19.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	3.0	0.0	4.7	0.3	5.4	2.7	6.9	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	0.0	0.0	28.2	0.0	36.5	66.0	23.7	21.6	48.8	11.1	11.1
LnGrp LOS	D	A	A	C	A	D	E	C	C	D	B	B
Approach Vol, veh/h		89			430			913			793	
Approach Delay, s/veh		43.3			32.9			23.6			25.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.5	29.0		9.1	4.6	42.8		19.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	25.0		22.0	6.0	35.0		21.0
Max Q Clear Time (g_c+I1), s	14.3	14.8		5.7	2.3	7.8		13.6
Green Ext Time (p_c), s	0.2	4.0		0.3	0.0	3.1		1.3

Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	482	76	153	564	1	63	0	165	0	0	0
Future Vol, veh/h	1	482	76	153	564	1	63	0	165	0	0	0
Conflicting Peds, #/hr	10	0	10	10	0	10	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	524	83	166	613	1	68	0	179	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	624	0	0	617	0	0	1524	-	576	1613	1575	624
Stage 1	-	-	-	-	-	-	578	-	-	956	956	-
Stage 2	-	-	-	-	-	-	946	-	-	657	619	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	-	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	-	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	957	-	-	963	-	-	97	0	517	84	110	485
Stage 1	-	-	-	-	-	-	501	0	-	310	336	-
Stage 2	-	-	-	-	-	-	314	0	-	454	480	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	949	-	-	955	-	-	76	-	513	43	80	481
Mov Cap-2 Maneuver	-	-	-	-	-	-	76	-	-	43	80	-
Stage 1	-	-	-	-	-	-	496	-	-	307	245	-
Stage 2	-	-	-	-	-	-	231	-	-	295	475	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2	58.5	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	76	513	949	-	-	955	-	-	-
HCM Lane V/C Ratio	0.901	0.35	0.001	-	-	0.174	-	-	-
HCM Control Delay (s)	170.5	15.7	8.8	0	-	9.6	0	-	0
HCM Lane LOS	F	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	4.6	1.6	0	-	-	0.6	-	-	-

Intersection						
Int Delay, s/veh	1.8					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	689	15	64	780	15	51
Future Vol, veh/h	689	15	64	780	15	51
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	749	16	70	848	16	55

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	785	0	1785	797
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	1008	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	834	-	90	387
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	353	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	820	-	73	374
Mov Cap-2 Maneuver	-	-	-	-	73	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	291	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	34.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	193	-	-	820	-
HCM Lane V/C Ratio	0.372	-	-	0.085	-
HCM Control Delay (s)	34.3	-	-	9.8	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.6	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	607	174	738	715	0	0	0	0	510	1	195
Future Volume (veh/h)	0	607	174	738	715	0	0	0	0	510	1	195
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	660	189	802	777	0				555	0	212
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1133	324	899	2572	0				667	0	279
Arrive On Green	0.00	0.42	0.42	0.26	0.72	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	2796	773	3456	3647	0				3563	0	1490
Grp Volume(v), veh/h	0	434	415	802	777	0				555	0	212
Grp Sat Flow(s),veh/h/ln	0	1777	1699	1728	1777	0				1781	0	1490
Q Serve(g_s), s	0.0	16.9	16.9	20.1	7.0	0.0				13.5	0.0	12.1
Cycle Q Clear(g_c), s	0.0	16.9	16.9	20.1	7.0	0.0				13.5	0.0	12.1
Prop In Lane	0.00		0.46	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	745	712	899	2572	0				667	0	279
V/C Ratio(X)	0.00	0.58	0.58	0.89	0.30	0.00				0.83	0.00	0.76
Avail Cap(c_a), veh/h	0	745	712	998	2572	0				792	0	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.62	0.62	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.1	20.1	32.1	4.4	0.0				35.2	0.0	34.7
Incr Delay (d2), s/veh	0.0	3.3	3.5	6.3	0.2	0.0				6.5	0.0	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.4	7.1	8.9	2.1	0.0				6.3	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.4	23.6	38.3	4.6	0.0				41.7	0.0	42.9
LnGrp LOS	A	C	C	D	A	A				D	A	D
Approach Vol, veh/h		849			1579						767	
Approach Delay, s/veh		23.5			21.7						42.1	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.4	41.7		20.9		69.1
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	26.0	32.0		20.0		62.0
Max Q Clear Time (g_c+I1), s	22.1	18.9		15.5		9.0
Green Ext Time (p_c), s	1.3	4.6		1.4		6.6

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	904	0	0	1177	417	265	1	677	0	0	0
Future Volume (veh/h)	190	904	0	0	1177	417	265	1	677	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.94	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	207	983	0	0	1279	453	288	1	736			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	248	1977	0	0	1838	535	585	2	858			
Arrive On Green	0.14	0.56	0.00	0.00	0.36	0.36	0.33	0.33	0.33			
Sat Flow, veh/h	1781	3647	0	0	5274	1486	1775	6	2605			
Grp Volume(v), veh/h	207	983	0	0	1279	453	289	0	736			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1486	1782	0	1303			
Q Serve(g_s), s	7.9	11.9	0.0	0.0	15.0	19.6	9.1	0.0	18.5			
Cycle Q Clear(g_c), s	7.9	11.9	0.0	0.0	15.0	19.6	9.1	0.0	18.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	248	1977	0	0	1838	535	587	0	858			
V/C Ratio(X)	0.83	0.50	0.00	0.00	0.70	0.85	0.49	0.00	0.86			
Avail Cap(c_a), veh/h	254	1977	0	0	1838	535	662	0	968			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.67	0.67	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.3	9.5	0.0	0.0	19.1	20.6	18.8	0.0	21.9			
Incr Delay (d2), s/veh	14.5	0.6	0.0	0.0	2.2	15.2	0.6	0.0	7.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.2	4.1	0.0	0.0	5.8	8.5	3.6	0.0	6.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	10.1	0.0	0.0	21.3	35.9	19.4	0.0	29.0			
LnGrp LOS	D	B	A	A	C	D	B	A	C			
Approach Vol, veh/h		1190			1732			1025				
Approach Delay, s/veh		16.0			25.1			26.3				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.9			13.7	29.2		27.1				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		36.0			10.0	22.0		26.0				
Max Q Clear Time (g_c+I1), s		13.9			9.9	21.6		20.5				
Green Ext Time (p_c), s		7.5			0.0	0.3		2.6				

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Appendix P

Excerpts from Ponto and Streetscape EIRs for Horizon Year Volumes

PONTO BEACHFRONT VILLAGE VISION PLAN
FINAL
ENVIRONMENTAL IMPACT REPORT

SCH#2007031141
EIR 05-05/GPA 05-04/LCPA 05-01/DI 05-01

APPENDIX VOLUME V
(APPENDIX G-1 OF 2 WITH TRAFFIC APPENDICES A-G)

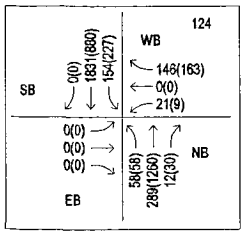
Prepared For:

City of Carlsbad
Planning Department
1635 Faraday Avenue
Carlsbad, California 92008
Contact: Christer Westman, Project Manager
(760) 602-4614

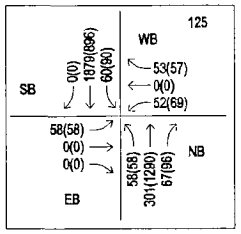
Prepared By:

RBF Consulting
9755 Clairemont Mesa Boulevard, Suite 100
San Diego, California 92124
(858) 614-5000
FAX (858) 614-5001
RBF JN 25-101951.001

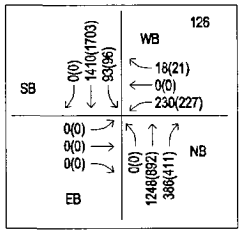
August 2007



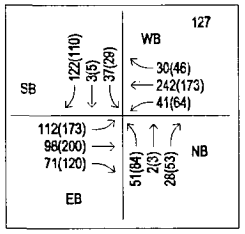
#24 Ponto Drive/
Carlsbad Blvd.



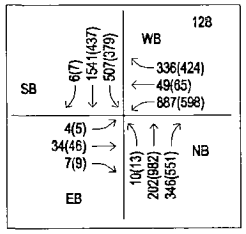
#25 Beach Way/
Carlsbad Blvd.



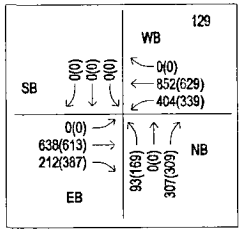
#26 Avenida Encinas/
Carlsbad Blvd.



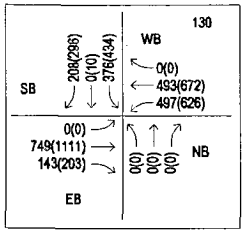
#27 Ponto Drive/
Avenida Encinas



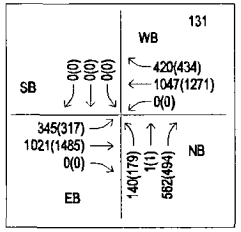
#28 La Costa Ave./
N. Coast Highway 101



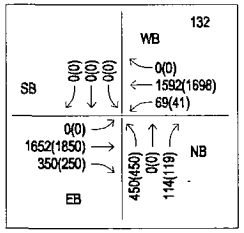
#29 La Costa Ave./
Vulcan Ave.



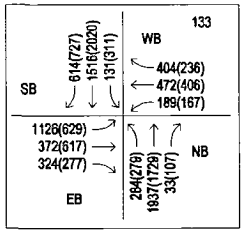
#30 La Costa Ave./
I-5 SB Ramps



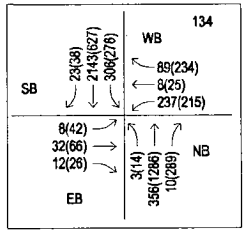
#31 La Costa Ave./
I-5 NB Ramps



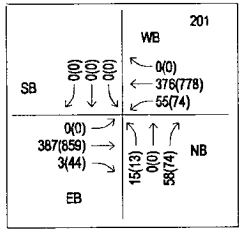
#32 La Costa Ave./
Pireaus St.



#33 La Costa Ave./
El Camino Real



#34 Leucadia Blvd./
N. Coast Highway 101



#35 La Costa Ave. /
Sheridan Rd.

NOT TO SCALE

RBF

25101951.001

Horizon Year 2030 With Vision Plan Peak Hour Volumes

EXHIBIT 20

VOLUME 1
FINAL ENVIRONMENTAL IMPACT REPORT

North Coast Highway 101 Streetscape Improvement Project
Case No.: 10-035 DR/CDP/EIR and 10-036 GPA/SPA/LCPA
State Clearinghouse (SCH) No. 2015091084

Lead Agency/Project Applicant:

City of Encinitas
Development Services Department
Contact: Stephanie Kellar, Project Manager
505 South Vulcan Avenue
Encinitas, California 92024

Preparer:

Michael Baker International
9755 Clairemont Mesa Boulevard, Suite 100
San Diego, California 92124

February 2018

Highway 101 Streetscape Project

TRAFFIC IMPACT ANALYSIS REPORT

Prepared for

City of Encinitas

505 S. Vulcan Avenue,
Encinitas, CA 92024

Prepared by

Michael Baker
INTERNATIONAL

5050 Avenida Encinas, Suite 260, Carlsbad, CA 92008
CONTACT: Robert Davis 760.603.6244 ROBERTDAVIS@mbakerintl.com

November 29, 2016

JN 137350

Table 11
Year 2035 Intersection Conditions - AM Peak Hour

ID	Intersection	Year 2035 No Build			Control (With Project)	Year 2035 Alternative 1				Year 2035 Alternative 2				Year 2035 Alternative 1 With SMUP			
		Control	Delay	LOS		Delay	LOS	Δ Delay (sec)	Significant?	Delay	LOS	Δ Delay (sec)	Significant?	Delay	LOS	Δ Delay (sec)	Significant?
1	Hwy 101 / La Costa Ave.	Signal	25.8	C	R	5.3	A	-20.5	No	2.8	A	-23.0	No	5.6	A	-20.2	No
					Signal [1]	24.5	C	-1.3	No	24.4	C	-1.4	No	24.8	C	-1.0	No
2	Hwy 101 / New Road	SSS	6.3	A	R	34.8	D	28.5	No	28.3	D	22.0	No	34.9	D	28.6	No
3	Hwy 101 / Bishops Gate Rd.	SSS	6.1	A	R	33.8	D	27.7	No	27.5	D	21.4	No	34.2	D	28.1	No
4	Hwy 101 / Grandview St.	SSS	5.8	A	R	21.4	C	15.6	No	15.6	C	9.8	No	26.4	D	20.6	No
5	Hwy 101 / Jupiter St.	SSS	1.7	A	R	18.0	C	16.3	No	11.5	B	9.8	No	20.7	C	19.0	No
6	Hwy 101 / Leucadia Blvd.	Signal	69.5	E	Signal	70.8	E	1.3	No	68.3	E	-1.2	No	71.3	E	1.8	No
7	Hwy 101 / El Portal St.	SSS	1.6	A	R	18.9	C	17.3	No	14.7	B	13.1	No	26.2	D	24.6	No
8	Hwy 101 / Marcheta St.	AWS	158.5	F	SSS	17.9	C	-140.6	No	16.6	C	-141.9	No	23.1	C	-135.4	No
9	Hwy 101 / Encinitas Blvd.	Signal	35.6	D	Signal	35.4	D	-0.2	No	35.3	D	-0.3	No	36.2	D	0.6	No
10	Neptune Ave. / Grandview St.	SSS	3.9	A	SSS	3.9	A	0.0	No	3.9	A	0.0	No	3.9	A	0.0	No
11	Neptune Ave. / Jupiter St.	SSS	1.6	A	SSS	1.6	A	0.0	No	1.6	A	0.0	No	1.6	A	0.0	No
12	Neptune Ave. / Leucadia Blvd.	SSS	5.1	A	SSS	5.1	A	0.0	No	5.1	A	0.0	No	5.3	A	0.2	No
13	Neptune Ave. / N El Portal St.	SSS	2.7	A	SSS	2.7	A	0.0	No	2.7	A	0.0	No	2.7	A	0.0	No
14	La Costa Ave. / Vulcan Ave.	SSS	6.7	A	SSS	8.0	A	1.3	No	7.5	A	0.8	No	15.5	C	8.8	No
15	La Costa Ave. / Sheridan Rd.	SSS	2.0	A	SSS	2.1	A	0.1	No	2.1	A	0.1	No	2.2	A	0.2	No
16	La Costa Ave. / I-5 SB Ramps	Signal	52.3	D	Signal	54.4	D	2.1	No	54.3	D	2.0	No	54.7	D	2.4	No
17	La Costa Ave. / I-5 NB Ramps	Signal	29.1	C	Signal	30.1	C	1.0	No	30.7	C	1.6	No	30.7	C	1.6	No
18	Leucadia Blvd. / Vulcan Ave.	Signal	68.8	E	Signal	70.5	E	1.7	No	70.6	E	1.8	No	70.7	E	1.9	No
19	Leucadia Blvd. / Hygeia Ave.	AWS	24.4	C	AWS	25.0	C	0.6	No	25.0	C	0.6	No	25.7	D	1.3	No
20	Leucadia Blvd. / Hymettus Ave.	R	11.7	B	R	11.7	B	0.0	No	11.7	B	0.0	No	11.5	B	-0.2	No
21	Leucadia Blvd. / Orpheus Ave.	Signal	27.3	C	Signal	28.0	C	0.7	No	28.0	C	0.7	No	28.8	C	1.5	No
22	Leucadia Blvd. / I-5 SB Ramps	Signal	48.6	D	Signal	47.9	D	-0.7	No	49.0	D	0.4	No	42.6	D	-6.0	No
23	Leucadia Blvd. / I-5 NB Ramps	Signal	20.7	C	Signal	20.7	C	0.0	No	20.8	C	0.1	No	20.6	C	-0.1	No
24	Encinitas Blvd. / Vulcan Ave.	Signal	33.4	C	Signal	35.8	D	2.4	No	36.0	D	2.6	No	38.0	D	4.6	No
25	Encinitas Blvd. / I-5 SB Ramps	Signal	17.0	B	Signal	17.6	B	0.6	No	17.5	B	0.5	No	17.6	B	0.6	No
26	Encinitas Blvd. / I-5 NB Ramps	Signal	34.5	C	Signal	38.6	D	4.1	No	39.6	D	5.1	No	38.0	D	3.5	No
27	Vulcan Ave. / Orpheus Ave.	SSS	10.9	B	SSS	18.5	C	7.6	No	18.5	C	7.6	No	18.5	C	7.6	No

Note: Alternative 1 is 4-Lanes on Carlsbad Blvd north of La Costa Ave. Alternative 2 is 2-Lanes on Carlsbad Blvd north of La Costa Ave.

[1] - 4 Leg Intersection with Signal instead of roundabout (see Exhibit 35)

SSS - Side Street Stop

AWS - All-Way Stop

R- Roundabout

SMUP - Sustainable Mixed Use Places

Table 12
Year 2035 Intersection Conditions - PM Peak Hour

ID	Intersection	Year 2035 No Build			Control (With Project)	Year 2035 Alternative 1				Year 2035 Alternative 2				Year 2035 Alternative 1 With SMUP			
		Control	Delay	LOS		Delay	LOS	Δ Delay (sec)	Significant?	Delay	LOS	Δ Delay (sec)	Significant?	Delay	LOS	Δ Delay (sec)	Significant?
1	Hwy 101 / La Costa Ave.	Signal	28.4	C	R	10.4	B	-18.0	No	3.9	A	-24.5	No	12.1	B	-16.3	No
					Signal [1]	40.3	D	11.9	No	37.8	D	9.4	No	43.0	D	14.6	No
2	Hwy 101 / New Road	SSS	46.8	E	R	3.6	A	-43.2	No	3.6	A	-43.2	No	3.8	A	-43.0	No
3	Hwy 101 / Bishops Gate Rd.	SSS	2.1	A	R	2.8	A	0.7	No	2.8	A	0.7	No	2.9	A	0.8	No
4	Hwy 101 / Grandview St.	SSS	3.4	A	R	2.7	A	-0.7	No	2.7	A	-0.7	No	2.8	A	-0.6	No
5	Hwy 101 / Jupiter St.	SSS	1.1	A	R	2.6	A	1.5	No	2.6	A	1.5	No	2.7	A	1.6	No
6	Hwy 101 / Leucadia Blvd.	Signal	36.8	D	Signal	40.0	D	3.2	No	39.7	D	2.9	No	41.7	D	4.9	No
7	Hwy 101 / El Portal St.	SSS	1.1	A	R	3.1	A	2.0	No	3.1	A	2.0	No	3.1	A	2.0	No
8	Hwy 101 / Marcheta St.	AWS	46.4	E	SSS	22.8	C	-23.6	No	21.4	C	-25.0	No	22.0	C	-24.4	No
9	Hwy 101 / Encinitas Blvd.	Signal	38.4	D	Signal	38.1	D	-0.3	No	38.1	D	-0.3	No	38.6	D	0.2	No
10	Neptune Ave. / Grandview St.	SSS	4.9	A	SSS	4.9	A	0.0	No	4.9	A	0.0	No	4.7	A	-0.2	No
11	Neptune Ave. / Jupiter St.	SSS	1.7	A	SSS	1.7	A	0.0	No	1.7	A	0.0	No	1.9	A	0.2	No
12	Neptune Ave. / Leucadia Blvd.	SSS	4.0	A	SSS	4.0	A	0.0	No	4.0	A	0.0	No	4.6	A	0.6	No
13	Neptune Ave. / N El Portal St.	SSS	2.8	A	SSS	2.8	A	0.0	No	2.8	A	0.0	No	2.8	A	0.0	No
14	La Costa Ave. / Vulcan Ave.	SSS	5.6	A	SSS	6.5	A	0.9	No	6.4	A	0.8	No	3.9	A	-1.7	No
15	La Costa Ave. / Sheridan Rd.	SSS	1.3	A	SSS	1.4	A	0.1	No	1.4	A	0.1	No	0.9	A	-0.4	No
16	La Costa Ave. / I-5 SB Ramps	Signal	35.9	D	Signal	39.6	D	3.7	No	42.3	D	6.4	No	29.6	C	-6.3	No
17	La Costa Ave. / I-5 NB Ramps	Signal	43.7	D	Signal	52.4	D	8.7	No	53.7	D	10.0	No	22.1	C	-21.6	No
18	Leucadia Blvd. / Vulcan Ave.	Signal	47.9	D	Signal	54.1	D	6.2	No	54.0	D	6.1	No	54.6	D	6.7	No
19	Leucadia Blvd. / Hygeia Ave.	AWS	32.2	D	AWS	31.6	D	-0.6	No	31.6	D	-0.6	No	32.7	D	0.5	No
20	Leucadia Blvd. / Hymettus Ave.	R	12.9	B	R	14.7	B	1.8	No	14.7	B	1.8	No	14.0	B	1.1	No
21	Leucadia Blvd. / Orpheus Ave.	Signal	27.6	C	Signal	28.1	C	0.5	No	28.1	C	0.5	No	29.3	C	1.7	No
22	Leucadia Blvd. / I-5 SB Ramps	Signal	38.3	D	Signal	42.7	D	4.4	No	43.8	D	5.5	No	37.8	D	-0.5	No
23	Leucadia Blvd. / I-5 NB Ramps	Signal	30.9	C	Signal	30.6	C	-0.3	No	30.9	C	0.0	No	31.1	C	0.2	No
24	Encinitas Blvd. / Vulcan Ave.	Signal	37.1	D	Signal	39.6	D	2.5	No	39.6	D	2.5	No	40.0	D	2.9	No
25	Encinitas Blvd. / I-5 SB Ramps	Signal	38.5	D	Signal	39.2	D	0.7	No	39.2	D	0.7	No	30.0	C	-8.5	No
26	Encinitas Blvd. / I-5 NB Ramps	Signal	38.7	D	Signal	44.2	D	5.5	No	43.1	D	4.4	No	47.8	D	9.1	No
27	Vulcan Ave. / Orpheus Ave.	SSS	1.3	A	SSS	1.3	A	0.0	No	1.3	A	0.0	No	1.3	A	0.0	No

Note: Alternative 1is 4-Lanes on Carlsbad Blvd north of La Costa Ave. Alternative 2 is 2-Lanes on Carlsbad Blvd north of La Costa Ave.
[1] - 4 Leg Intersection with Signal instead of roundabout (see Exhibit 35)
SSS - Side Street Stop
AWS - All-Way Stop
R- Roundabout
SMUP - Sustainable Mixed Use Places

Table 4
Existing Peak Hour Directional Roadway Segment Conditions

Roadway Segment	Direction	Lanes	Segment Capacity [1]	AM Peak Hour			PM Peak Hour		
				Peak Hour Volume	V/C	LOS	Peak Hour Volume	V/C	LOS
Highway 101									
Between La Costa Ave. and Grandview St.	Northbound	1-Lane	2,000	398	0.199	A	828	0.414	B
	Southbound	2-Lane	2,800	1,311	0.468	B	629	0.225	A
Between Grandview St. and Jupiter St.	Northbound	1-Lane	1,800	340	0.189	A	848	0.471	B
	Southbound	2-Lane	2,800	1,465	0.523	B	680	0.243	A
Between Jupiter St. and Leucadia Blvd.	Northbound	1-Lane	1,800	354	0.197	A	853	0.474	B
	Southbound	2-Lane	2,800	1,406	0.502	B	645	0.230	A
Between Leucadia Blvd. and El Portal St.	Northbound	2-Lane	3,600	296	0.082	A	864	0.240	A
	Southbound	2-Lane	2,800	1,392	0.497	B	630	0.225	A
Between El Portal St. and Marcheta St.	Northbound	2-Lane	3,600	274	0.076	A	925	0.257	A
	Southbound	2-Lane	2,800	1,266	0.452	B	614	0.219	A
Between Marcheta St. and Encinitas Blvd.	Northbound	2-Lane	3,600	371	0.103	A	978	0.272	A
	Southbound	2-Lane	2,800	1,286	0.459	B	667	0.238	A
La Costa Avenue									
Between Hwy 101 and Vulcan Ave.	Eastbound	1-Lane	1,800	496	0.276	A	459	0.255	A
	Westbound	1-Lane	1,800	512	0.284	A	521	0.289	A
Between Vulcan Ave. and Sheridan Rd.	Eastbound	1-Lane	1,800	600	0.333	A	603	0.335	A
	Westbound	1-Lane	1,800	733	0.407	A	600	0.333	A
Between Sheridan Rd. and I-5 Southbound Ramps	Eastbound	1-Lane	1,800	688	0.382	A	588	0.327	A
	Westbound	1-Lane	1,800	738	0.410	A	655	0.364	A

[1] - For Highway 101 Northbound; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction
- For Highway 101 Southbound; Base Saturation Flow = 2,000 v/h/l; 20% Parking Friction Reduction; 10% Turning Vehicle Friction Reduction
- For La Costa Ave.; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction

Table 5
Existing Ramp Meter Conditions

Location	Peak Hour	Meter Rate (veh/hr/ln)	Demand (veh/hr/ln)	Excess Demand (veh/hr/ln)	Delay (min/ln)	Queue (ft/ln)
La Costa Avenue / I-5 Ramp						
La Costa Ave. / I-5 NB On-Ramp	PM	744	481	0	0.0	0
La Costa Ave. / I-5 SB On-Ramp	AM	455	294	0	0.0	0
La Costa Ave. / I-5 SB On-Ramp	PM	455	318	0	0.0	0
Leucadia Boulevard / I-5 Ramp						
Leucadia Blvd. / I-5 NB On-Ramp	PM	453	595	142	19	3,550
Leucadia Blvd. / I-5 SB On-Ramp	AM	255	317	62	14.6	1,550
Leucadia Blvd. / I-5 SB On-Ramp	PM	257	252	0	0.0	0
Encinitas Boulevard / I-5 Ramp						
Encinitas Blvd. / I-5 NB On-Ramp	PM	414	574	160	23.2	4,000
Encinitas Blvd. / I-5 SB On-Ramp	AM	744	617	0	0.0	0
Encinitas Blvd. / I-5 SB On-Ramp	PM	744	495	0	0.0	0

Ramp meter delay greater than 15 minutes/lane is considered unacceptable

Table 13
Year 2035 Peak Hour Directional Roadway Segment Conditions - AM Peak Hour

Roadway Segment	Direction	Year 2035 No Build					Lanes (With Project)	Segment Capacity [2] (With Project)	Year 2035 Alternative 1			Year 2035 Alternative 2			Year 2035 Alternative 1 With SMUP		
		Lanes	Segment Capacity [1]	Peak Hour Volume	V/C	LOS			Peak Hour Volume	V/C	LOS	Peak Hour Volume	V/C	LOS	Peak Hour Volume	V/C	LOS
Highway 101																	
Between La Costa Ave. and Grandview St	Northbound	1-Lane	2,000	440	0.220	A	1-Lane	1,900	390	0.205	A	380	0.200	A	420	0.221	A
	Southbound	2-Lane	2,800	1,700	0.607	B	1-Lane	1,800	1,580	0.878	D	1,550	0.861	D	1,580	0.878	D
Between Grandview St and Jupiter St	Northbound	1-Lane	1,800	400	0.222	A	1-Lane	1,800	340	0.189	A	330	0.183	A	320	0.178	A
	Southbound	2-Lane	2,800	1,710	0.611	B	1-Lane	1,800	1,590	0.883	D	1,550	0.861	D	1,590	0.883	D
Between Jupiter St and Leucadia Blvd.	Northbound	1-Lane	1,800	330	0.183	A	1-Lane	1,800	320	0.178	A	310	0.172	A	320	0.178	A
	Southbound	2-Lane	2,800	1,830	0.654	C	2-Lane	3,400	1,700	0.500	B	1,680	0.494	B	1,830	0.538	B
Between Leucadia Blvd. and El Portal St	Northbound	2-Lane	3,600	360	0.100	A	1-Lane	1,800	340	0.189	A	340	0.189	A	350	0.194	A
	Southbound	2-Lane	2,800	1,700	0.607	B	1-Lane	1,700	1,560	0.918	D	1,540	0.906	D	1,640	0.965	E
Between El Portal St and Marcheta St	Northbound	2-Lane	3,600	350	0.097	A	1-Lane	1,900	320	0.168	A	320	0.168	A	340	0.179	A
	Southbound	2-Lane	2,800	1,560	0.557	B	1-Lane	1,800	1,510	0.839	D	1,490	0.828	D	1,640	0.911	D
Between Marcheta St and Encinitas Blvd.	Northbound	2-Lane	3,600	410	0.114	A	2-Lane	3,800	440	0.116	A	440	0.116	A	360	0.095	A
	Southbound	2-Lane	2,800	1,550	0.554	B	1-Lane	1,700	1,490	0.876	D	1,470	0.865	D	1,400	0.824	D
La Costa Avenue																	
Between Hwy 101 and Vulcan Ave.	Eastbound	2-Lane	3,600	590	0.164	A	2-Lane	3,600	660	0.183	A	650	0.181	A	700	0.194	A
	Westbound	2-Lane	3,600	590	0.164	A	2-Lane	3,600	650	0.181	A	650	0.181	A	680	0.189	A
Between Vulcan Ave. and Sheridan Rd.	Eastbound	2-Lane	3,600	700	0.194	A	2-Lane	3,600	770	0.214	A	760	0.211	A	790	0.219	A
	Westbound	2-Lane	3,600	820	0.228	A	2-Lane	3,600	870	0.242	A	860	0.239	A	850	0.236	A
Between Sheridan Rd. and I-5 Southbound Ramps	Eastbound	2-Lane	3,600	770	0.214	A	2-Lane	3,600	840	0.233	A	830	0.231	A	850	0.236	A
	Westbound	2-Lane	3,600	920	0.256	A	2-Lane	3,600	940	0.261	A	930	0.258	A	970	0.269	A

Note: Alternative 1is 4-Lanes on Carlsbad Blvd north of La Costa Ave. Alternative 2 is 2-Lanes on Carlsbad Blvd north of La Costa Ave.

[1] - For Highway 101Northbound; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction
- For Highway 101Southbound; Base Saturation Flow = 2,000 v/h/l; 20% Parking Friction Reduction; 10% Turning Vehicle Friction Reduction
- For La Costa Ave.; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction

[2] - For Highway 101Northbound; Base Saturation Flow = 2,000 v/h/l; 5% Turning Vehicle Friction Reduction; Additional 5% Turning Vehicle Friction Reduction at Proposed Parking Areas
- For Highway 101Southbound; Base Saturation Flow = 2,000 v/h/l; 10% Parking Friction Reduction; 5% Turning Vehicle Friction Reduction
- For La Costa Ave.; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction

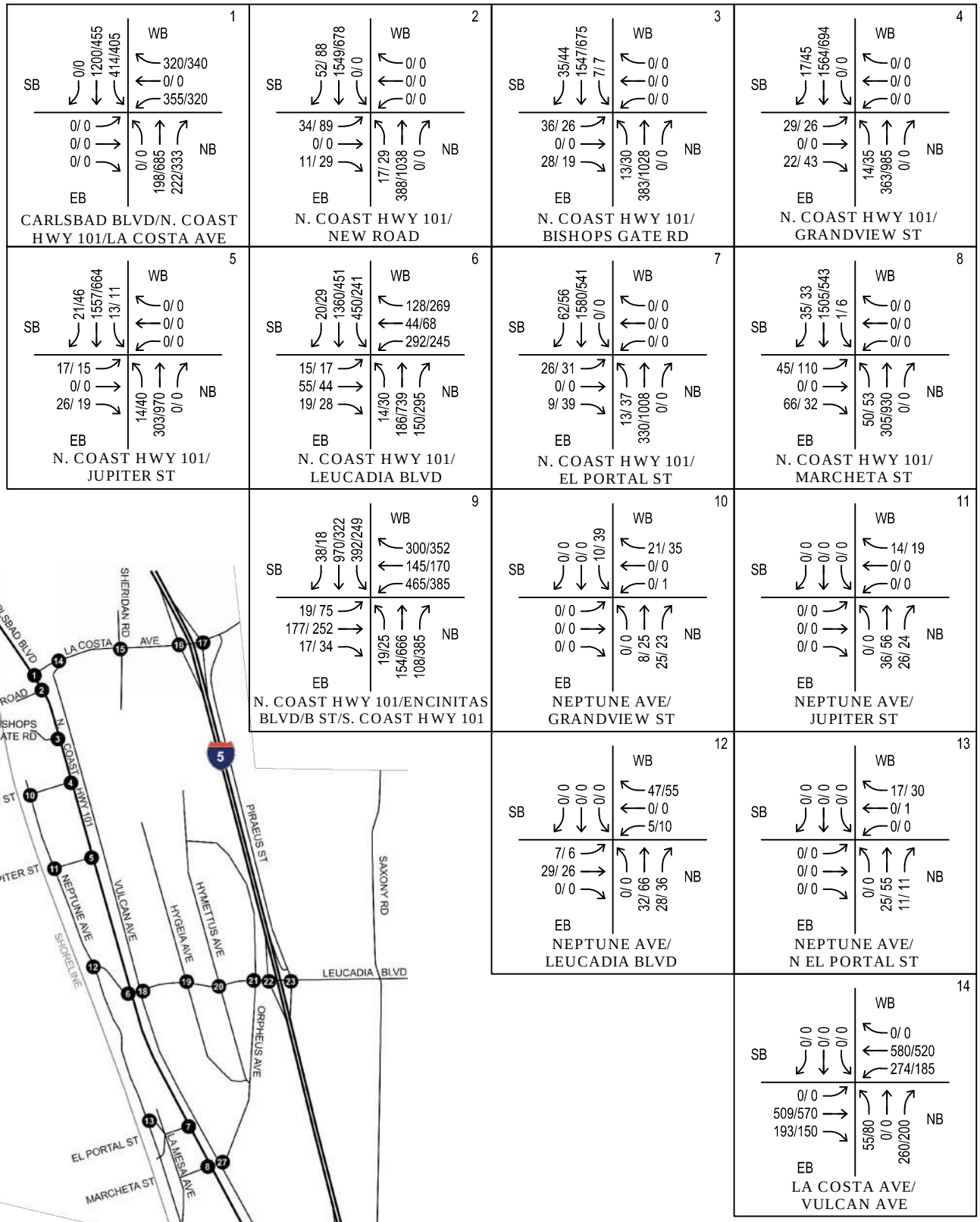
Table 14
Year 2035 Peak Hour Directional Roadway Segment Conditions - PM Peak Hour

Roadway Segment	Direction	Year 2035 No Build					Lanes (With Project)	Segment Capacity [2] (With Project)	Year 2035 Alternative 1			Year 2035 Alternative 2			Year 2035 Alternative 1 With SMUP		
		Lanes	Segment Capacity [1]	Peak Hour Volume	V/C	LOS			Peak Hour Volume	V/C	LOS	Peak Hour Volume	V/C	LOS	Peak Hour Volume	V/C	LOS
Highway 101																	
Between La Costa Ave. and Grandview St	Northbound	1-Lane	2,000	1,100	0.550	B	1-Lane	1,900	980	0.516	B	970	0.511	B	1,020	0.537	B
	Southbound	2-Lane	2,800	900	0.321	A	1-Lane	1,800	750	0.417	B	740	0.411	B	740	0.411	B
Between Grandview St and Jupiter St	Northbound	1-Lane	1,800	1,090	0.606	B	1-Lane	1,800	950	0.528	B	940	0.522	B	990	0.550	B
	Southbound	2-Lane	2,800	810	0.289	A	1-Lane	1,800	720	0.400	A	700	0.389	A	720	0.400	A
Between Jupiter St and Leucadia Blvd.	Northbound	1-Lane	1,800	1,020	0.567	B	1-Lane	1,800	1,000	0.556	B	990	0.550	B	1,010	0.561	B
	Southbound	2-Lane	2,800	770	0.275	A	2-Lane	3,400	670	0.197	A	650	0.191	A	720	0.212	A
Between Leucadia Blvd. and El Portal St	Northbound	2-Lane	3,600	1,030	0.286	A	1-Lane	1,800	1,010	0.561	B	1,000	0.556	B	1,060	0.589	B
	Southbound	2-Lane	2,800	730	0.261	A	1-Lane	1,700	680	0.400	A	660	0.388	A	600	0.353	A
Between El Portal St and Marcheta St	Northbound	2-Lane	3,600	1,040	0.289	A	1-Lane	1,900	1,020	0.537	B	1,000	0.526	B	1,050	0.553	B
	Southbound	2-Lane	2,800	640	0.229	A	1-Lane	1,800	580	0.322	A	570	0.317	A	600	0.333	A
Between Marcheta St and Encinitas Blvd.	Northbound	2-Lane	3,600	1,080	0.300	A	2-Lane	3,800	1,060	0.279	A	1,050	0.276	A	980	0.258	A
	Southbound	2-Lane	2,800	660	0.236	A	1-Lane	1,700	630	0.371	A	630	0.371	A	590	0.347	A
La Costa Avenue																	
Between Hwy 101 and Vulcan Ave.	Eastbound	2-Lane	3,600	650	0.181	A	2-Lane	3,600	690	0.192	A	680	0.189	A	720	0.200	A
	Westbound	2-Lane	3,600	590	0.164	A	2-Lane	3,600	630	0.175	A	620	0.172	A	660	0.183	A
Between Vulcan Ave. and Sheridan Rd.	Eastbound	2-Lane	3,600	730	0.203	A	2-Lane	3,600	760	0.211	A	760	0.211	A	780	0.217	A
	Westbound	2-Lane	3,600	700	0.194	A	2-Lane	3,600	700	0.194	A	690	0.192	A	710	0.197	A
Between Sheridan Rd. and I-5 Southbound Ramps	Eastbound	2-Lane	3,600	740	0.206	A	2-Lane	3,600	770	0.214	A	770	0.214	A	790	0.219	A
	Westbound	2-Lane	3,600	780	0.217	A	2-Lane	3,600	780	0.217	A	790	0.219	A	780	0.217	A

Note: Alternative 1is 4-Lanes on Carlsbad Blvd north of La Costa Ave. Alternative 2 is 2-Lanes on Carlsbad Blvd north of La Costa Ave.

[1] - For Highway 101Northbound; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction
- For Highway 101Southbound; Base Saturation Flow = 2,000 v/h/l; 20% Parking Friction Reduction; 10% Turning Vehicle Friction Reduction
- For La Costa Ave.; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction

[2] - For Highway 101Northbound; Base Saturation Flow = 2,000 v/h/l; 5% Turning Vehicle Friction Reduction; Additional 5% Turning Vehicle Friction Reduction at Proposed Parking Areas
- For Highway 101Southbound; Base Saturation Flow = 2,000 v/h/l; 10% Parking Friction Reduction; 5% Turning Vehicle Friction Reduction
- For La Costa Ave.; Base Saturation Flow = 2,000 v/h/l; 10% Turning Vehicle Friction Reduction

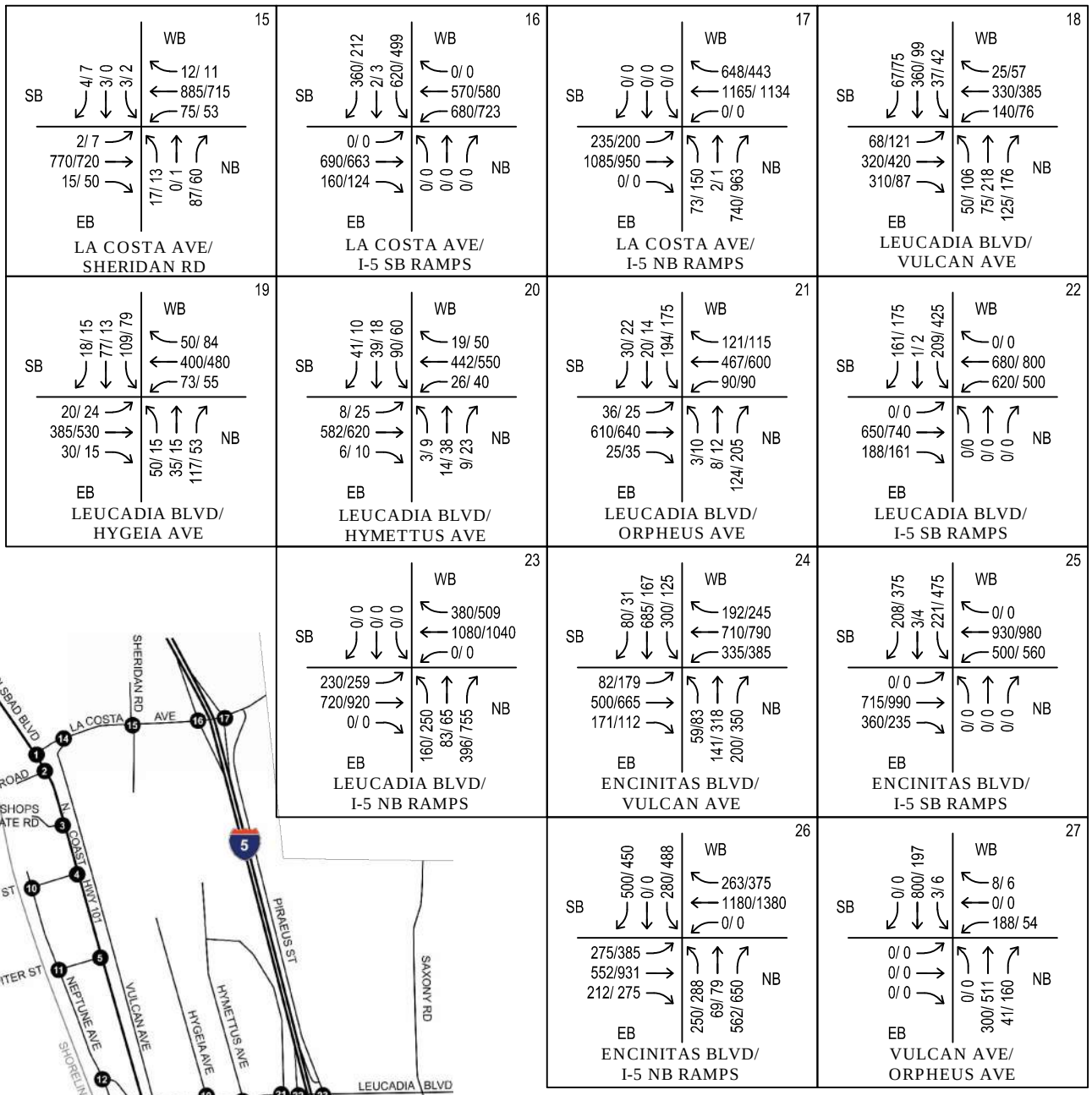


Michael Baker INTERNATIONAL

Year 2035 Alternative 1 With SMUP Peak Hour Intersection Volumes - Area 1

JN 137350

Exhibit 32



Michael Baker INTERNATIONAL

Year 2035 Alternative 1 With SMUP Peak Hour Intersection Volumes - Area 2

Exhibit 33

Year 2035 Alternative 1
With SMUP Roadway Segment Daily Traffic

Exhibit 34

Appendix Q

Horizon Year 2035 Intersection LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	242	0	0	0	98	1482
Future Volume (vph)	242	0	0	0	98	1482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	263	0	0	0	107	1611
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	263	0	0	0	107	1611
Confl. Peds. (#/hr)		30			30	
Confl. Bikes (#/hr)		30		30		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	14.6				6.1	46.6
Effective Green, g (s)	14.6				6.1	46.6
Actuated g/C Ratio	0.18				0.07	0.57
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	613				132	2018
v/s Ratio Prot	c0.08				0.06	c0.46
v/s Ratio Perm						
v/c Ratio	0.43				0.81	0.80
Uniform Delay, d1	29.8				37.2	13.8
Progression Factor	0.07				1.00	1.00
Incremental Delay, d2	0.5				30.0	2.3
Delay (s)	2.4				67.3	16.1
Level of Service	A				E	B
Approach Delay (s)	2.4		0.0			19.3
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	87	0	0	242	19	0	1312	406	0	0	0
Future Volume (vph)	11	87	0	0	242	19	0	1312	406	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			0.99			1.00	0.87			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.99			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1852			3480			3539	1379			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1852			3480			3539	1379			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	95	0	0	263	21	0	1426	441	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	258	0	0	0
Lane Group Flow (vph)	0	107	0	0	277	0	0	1426	183	0	0	0
Confl. Peds. (#/hr)			20			20			20			
Confl. Bikes (#/hr)			30			30			30			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		8.5			14.6			36.5	14.6			
Effective Green, g (s)		8.5			14.6			36.5	14.6			
Actuated g/C Ratio		0.10			0.18			0.45	0.18			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		192			621			1581	246			
v/s Ratio Prot		c0.06			0.08			c0.40				
v/s Ratio Perm									c0.13			
v/c Ratio		0.56			0.45			0.90	0.74			
Uniform Delay, d1		34.8			29.9			20.9	31.8			
Progression Factor		1.43			1.00			1.00	1.00			
Incremental Delay, d2		1.9			0.5			8.7	11.5			
Delay (s)		51.8			30.5			29.7	43.3			
Level of Service		D			C			C	D			
Approach Delay (s)		51.8			30.5			32.9			0.0	
Approach LOS		D			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	34	7	355	49	320	10	198	222	414	1200	6
Future Volume (veh/h)	4	34	7	355	49	320	10	198	222	414	1200	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.82	1.00		0.93	1.00		0.89	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	37	8	424	0	348	11	215	241	450	1304	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	114	88	750	0	310	19	825	328	497	1777	744
Arrive On Green	0.07	0.07	0.07	0.21	0.00	0.21	0.01	0.23	0.23	0.28	0.50	0.50
Sat Flow, veh/h	182	1680	1297	3563	0	1474	1781	3554	1414	1781	3554	1488
Grp Volume(v), veh/h	41	0	8	424	0	348	11	215	241	450	1304	7
Grp Sat Flow(s),veh/h/ln	1861	0	1297	1781	0	1474	1781	1777	1414	1781	1777	1488
Q Serve(g_s), s	1.6	0.0	0.4	8.1	0.0	16.0	0.5	3.8	12.0	18.5	22.0	0.2
Cycle Q Clear(g_c), s	1.6	0.0	0.4	8.1	0.0	16.0	0.5	3.8	12.0	18.5	22.0	0.2
Prop In Lane	0.10		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	0	88	750	0	310	19	825	328	497	1777	744
V/C Ratio(X)	0.32	0.00	0.09	0.57	0.00	1.12	0.57	0.26	0.73	0.91	0.73	0.01
Avail Cap(c_a), veh/h	392	0	273	750	0	310	94	825	328	586	1777	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	33.2	26.9	0.0	30.0	37.4	23.9	27.0	26.4	15.0	9.5
Incr Delay (d2), s/veh	1.5	0.0	0.4	1.0	0.0	88.0	23.3	0.8	13.6	16.1	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	3.4	0.0	13.0	0.3	1.6	5.1	9.7	8.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	33.6	27.9	0.0	118.0	60.7	24.6	40.7	42.5	17.7	9.6
LnGrp LOS	D	A	C	C	A	F	E	C	D	D	B	A
Approach Vol, veh/h		49			772			467			1761	
Approach Delay, s/veh		34.9			68.5			33.8			24.0	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.2	21.6		9.2	4.8	42.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	20.5	14.0		3.6	2.5	24.0		18.0
Green Ext Time (p_c), s	0.7	0.7		0.1	0.0	8.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	34.1
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	54	334	1332
Demand Flow Rate, veh/h	55	340	1359
Vehicles Circulating, veh/h	1329	31	11
Vehicles Exiting, veh/h	41	1353	360
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	13.0	5.0	42.2
Approach LOS	B	A	E

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	55	340	1359
Cap Entry Lane, veh/h	356	1337	1364
Entry HV Adj Factor	0.982	0.981	0.980
Flow Entry, veh/h	54	334	1332
Cap Entry, veh/h	349	1308	1334
V/C Ratio	0.155	0.255	0.999
Control Delay, s/veh	13.0	5.0	42.2
LOS	B	A	E
95th %tile Queue, veh	1	1	22

Intersection	
Intersection Delay, s/veh	26.3
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	44	321	1312
Demand Flow Rate, veh/h	45	327	1338
Vehicles Circulating, veh/h	1324	25	12
Vehicles Exiting, veh/h	26	1343	340
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	9.3	4.6	32.2
Approach LOS	A	A	D

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	45	327	1338
Cap Entry Lane, veh/h	461	1390	1406
Entry HV Adj Factor	0.978	0.981	0.981
Flow Entry, veh/h	44	321	1312
Cap Entry, veh/h	451	1360	1375
V/C Ratio	0.098	0.236	0.954
Control Delay, s/veh	9.3	4.6	32.2
LOS	A	A	D
95th %tile Queue, veh	0	1	19

Intersection	
Intersection Delay, s/veh	21.0
Intersection LOS	C

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	33	250	1244
Demand Flow Rate, veh/h	33	255	1269
Vehicles Circulating, veh/h	1252	13	11
Vehicles Exiting, veh/h	28	1272	257
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	8.2	4.1	24.7
Approach LOS	A	A	C

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	33	255	1269
Cap Entry Lane, veh/h	490	1405	1407
Entry HV Adj Factor	1.000	0.981	0.981
Flow Entry, veh/h	33	250	1244
Cap Entry, veh/h	490	1374	1376
V/C Ratio	0.067	0.182	0.904
Control Delay, s/veh	8.2	4.1	24.7
LOS	A	A	C
95th %tile Queue, veh	0	1	15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	55	19	292	44	128	14	186	150	450	1360	20
Future Volume (veh/h)	15	55	19	292	44	128	14	186	150	450	1360	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.93	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	60	21	252	139	139	15	202	163	489	1478	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	81	28	352	163	163	25	785	332	533	1812	27
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.01	0.22	0.22	0.30	0.51	0.51
Sat Flow, veh/h	289	1084	380	1781	824	824	1781	3554	1500	1781	3580	53
Grp Volume(v), veh/h	97	0	0	252	0	278	15	202	163	489	733	767
Grp Sat Flow(s),veh/h/ln	1753	0	0	1781	0	1648	1781	1777	1500	1781	1777	1857
Q Serve(g_s), s	4.2	0.0	0.0	10.2	0.0	12.5	0.6	3.6	7.3	20.4	26.7	26.8
Cycle Q Clear(g_c), s	4.2	0.0	0.0	10.2	0.0	12.5	0.6	3.6	7.3	20.4	26.7	26.8
Prop In Lane	0.16		0.22	1.00		0.50	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	131	0	0	352	0	325	25	785	332	533	899	940
V/C Ratio(X)	0.74	0.00	0.00	0.72	0.00	0.85	0.59	0.26	0.49	0.92	0.81	0.82
Avail Cap(c_a), veh/h	569	0	0	370	0	342	92	785	332	601	899	940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	28.9	0.0	29.9	37.8	24.8	26.2	26.1	16.0	16.0
Incr Delay (d2), s/veh	7.9	0.0	0.0	6.2	0.0	18.0	19.9	0.8	5.1	17.9	8.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	4.8	0.0	6.4	0.4	1.6	3.0	10.8	11.6	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	0.0	0.0	35.1	0.0	47.9	57.7	25.6	31.4	44.0	24.0	23.8
LnGrp LOS	D	A	A	D	A	D	E	C	C	D	C	C
Approach Vol, veh/h		97			530			380			1989	
Approach Delay, s/veh		42.8			41.8			29.3			28.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.1	21.0		9.8	5.1	43.0		19.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	26.0	17.0		25.0	4.0	39.0		16.0
Max Q Clear Time (g_c+I1), s	22.4	9.3		6.2	2.6	28.8		14.5
Green Ext Time (p_c), s	0.6	1.1		0.4	0.0	6.9		0.4

Intersection Summary	
HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	26.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	193	274	580	55	260
Future Vol, veh/h	509	193	274	580	55	260
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	553	210	298	630	60	283

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	783	0	1924	698
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	1246	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	835	-	73	440
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	821	-	~ 31	425
Mov Cap-2 Maneuver	-	-	-	-	~ 31	-
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	118	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	147.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	31	425	-	-	821	-
HCM Lane V/C Ratio	1.928	0.665	-	-	0.363	-
HCM Control Delay (s)	$ 710.1	28.7	-	-	11.9	0
HCM Lane LOS	F	D	-	-	B	A
HCM 95th %tile Q(veh)	6.9	4.7	-	-	1.7	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	770	15	75	885	17	87
Future Vol, veh/h	770	15	75	885	17	87
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	837	16	82	962	18	95

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	873	0	2011	885
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	1146	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	773	-	65	344
Stage 1	-	-	-	-	412	-
Stage 2	-	-	-	-	303	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	760	-	48	333
Mov Cap-2 Maneuver	-	-	-	-	48	-
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	229	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	61.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	169	-	-	760	-
HCM Lane V/C Ratio	0.669	-	-	0.107	-
HCM Control Delay (s)	61.2	-	-	10.3	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	3.9	-	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	690	160	680	570	0	0	0	0	620	2	360
Future Volume (veh/h)	0	690	160	680	570	0	0	0	0	620	2	360
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00				1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	750	174	739	620	0				675	0	391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1025	238	793	2256	0				984	0	418
Arrive On Green	0.00	0.36	0.36	0.38	1.00	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	2933	659	3456	3647	0				3563	0	1514
Grp Volume(v), veh/h	0	469	455	739	620	0				675	0	391
Grp Sat Flow(s),veh/h/ln	0	1777	1722	1728	1777	0				1781	0	1514
Q Serve(g_s), s	0.0	20.6	20.6	18.5	0.0	0.0				15.2	0.0	22.7
Cycle Q Clear(g_c), s	0.0	20.6	20.6	18.5	0.0	0.0				15.2	0.0	22.7
Prop In Lane	0.00		0.38	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	641	621	793	2256	0				984	0	418
V/C Ratio(X)	0.00	0.73	0.73	0.93	0.27	0.00				0.69	0.00	0.94
Avail Cap(c_a), veh/h	0	641	621	806	2256	0				990	0	421
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.76	0.76	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.0	25.0	27.1	0.0	0.0				29.1	0.0	31.8
Incr Delay (d2), s/veh	0.0	7.2	7.4	14.0	0.2	0.0				2.0	0.0	28.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.6	9.4	7.6	0.1	0.0				6.6	0.0	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.2	32.4	41.1	0.2	0.0				31.1	0.0	59.9
LnGrp LOS	A	C	C	D	A	A				C	A	E
Approach Vol, veh/h		924			1359						1066	
Approach Delay, s/veh		32.3			22.4						41.7	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.7	36.5		28.9		61.1
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	21.0	32.0		25.0		57.0
Max Q Clear Time (g_c+I1), s	20.5	22.6		24.7		2.0
Green Ext Time (p_c), s	0.2	4.1		0.2		5.0

Intersection Summary	
HCM 6th Ctrl Delay	31.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	1085	0	0	1165	648	73	2	740	0	0	0
Future Volume (veh/h)	235	1085	0	0	1165	648	73	2	740	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	255	1179	0	0	1266	704	79	2	804			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	289	2290	0	0	2236	656	464	12	687			
Arrive On Green	0.32	1.00	0.00	0.00	0.44	0.44	0.27	0.27	0.27			
Sat Flow, veh/h	1781	3647	0	0	5274	1498	1739	44	2575			
Grp Volume(v), veh/h	255	1179	0	0	1266	704	81	0	804			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1498	1783	0	1288			
Q Serve(g_s), s	12.2	0.0	0.0	0.0	16.7	39.4	3.1	0.0	24.0			
Cycle Q Clear(g_c), s	12.2	0.0	0.0	0.0	16.7	39.4	3.1	0.0	24.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.98		1.00			
Lane Grp Cap(c), veh/h	289	2290	0	0	2236	656	476	0	687			
V/C Ratio(X)	0.88	0.51	0.00	0.00	0.57	1.07	0.17	0.00	1.17			
Avail Cap(c_a), veh/h	416	2290	0	0	2236	656	476	0	687			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.6	0.0	0.0	0.0	18.9	25.3	25.4	0.0	33.0			
Incr Delay (d2), s/veh	9.4	0.5	0.0	0.0	1.0	56.4	0.2	0.0	91.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.0	0.2	0.0	0.0	6.5	23.3	1.3	0.0	16.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.5	0.0	0.0	20.0	81.7	25.5	0.0	124.8			
LnGrp LOS	D	A	A	A	B	F	C	A	F			
Approach Vol, veh/h		1434			1970			885				
Approach Delay, s/veh		7.4			42.0			115.7				
Approach LOS		A			D			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.0			18.6	43.4		28.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		58.0			21.0	33.0		24.0				
Max Q Clear Time (g_c+I1), s		2.0			14.2	41.4		26.0				
Green Ext Time (p_c), s		12.3			0.4	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	239	0	0	0	101	1790
Future Volume (vph)	239	0	0	0	101	1790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	260	0	0	0	110	1946
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	260	0	0	0	110	1946
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		10		10		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	14.2				8.5	57.6
Effective Green, g (s)	14.2				8.5	57.6
Actuated g/C Ratio	0.15				0.09	0.62
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	524				161	2194
v/s Ratio Prot	c0.08				0.06	c0.55
v/s Ratio Perm						
v/c Ratio	0.50				0.68	0.89
Uniform Delay, d1	36.1				40.9	14.9
Progression Factor	0.06				1.00	1.00
Incremental Delay, d2	0.7				11.3	4.8
Delay (s)	2.9				52.2	19.7
Level of Service	A				D	B
Approach Delay (s)	2.9		0.0			21.4
Approach LOS	A		A			C

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	92.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	90	0	0	239	22	0	938	432	0	0	0
Future Volume (vph)	11	90	0	0	239	22	0	938	432	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			1.00			1.00	0.91			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.99			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1853			3479			3539	1447			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1853			3479			3539	1447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	98	0	0	260	24	0	1020	470	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	350	0	0	0
Lane Group Flow (vph)	0	110	0	0	277	0	0	1020	120	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			10			10			10			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		9.1			14.2			45.1	14.2			
Effective Green, g (s)		9.1			14.2			45.1	14.2			
Actuated g/C Ratio		0.10			0.15			0.49	0.15			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		181			531			1718	221			
v/s Ratio Prot		c0.06			0.08			c0.29				
v/s Ratio Perm									c0.08			
v/c Ratio		0.61			0.52			0.59	0.54			
Uniform Delay, d1		40.2			36.2			17.3	36.4			
Progression Factor		1.50			1.00			1.00	1.00			
Incremental Delay, d2		5.1			0.9			1.5	2.7			
Delay (s)		65.2			37.2			18.8	39.1			
Level of Service		E			D			B	D			
Approach Delay (s)		65.2			37.2			25.2			0.0	
Approach LOS		E			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	92.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	46	9	320	65	340	13	685	333	405	455	7
Future Volume (veh/h)	5	46	9	320	65	340	13	685	333	405	455	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.78	1.00		0.94	1.00		0.92	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	50	10	399	0	370	14	745	362	440	495	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	126	93	732	0	308	24	868	355	481	1780	754
Arrive On Green	0.07	0.07	0.07	0.21	0.00	0.21	0.01	0.24	0.24	0.27	0.50	0.50
Sat Flow, veh/h	169	1693	1243	3563	0	1496	1781	3554	1455	1781	3554	1505
Grp Volume(v), veh/h	55	0	10	399	0	370	14	745	362	440	495	8
Grp Sat Flow(s),veh/h/ln	1862	0	1243	1781	0	1496	1781	1777	1455	1781	1777	1505
Q Serve(g_s), s	2.2	0.0	0.6	7.8	0.0	16.0	0.6	15.6	19.0	18.6	6.3	0.2
Cycle Q Clear(g_c), s	2.2	0.0	0.6	7.8	0.0	16.0	0.6	15.6	19.0	18.6	6.3	0.2
Prop In Lane	0.09		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	0	93	732	0	308	24	868	355	481	1780	754
V/C Ratio(X)	0.40	0.00	0.11	0.54	0.00	1.20	0.59	0.86	1.02	0.91	0.28	0.01
Avail Cap(c_a), veh/h	383	0	255	732	0	308	92	868	355	526	1780	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	0.0	33.6	27.7	0.0	30.9	38.2	28.1	29.4	27.5	11.3	9.7
Incr Delay (d2), s/veh	1.8	0.0	0.5	0.8	0.0	118.1	20.7	10.8	52.6	19.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.2	3.3	0.0	15.6	0.4	7.6	11.5	10.2	2.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	0.0	34.1	28.5	0.0	149.0	58.9	38.9	82.1	47.2	11.7	9.8
LnGrp LOS	D	A	C	C	A	F	E	D	F	D	B	A
Approach Vol, veh/h		65			769			1121			943	
Approach Delay, s/veh		35.9			86.5			53.1			28.2	
Approach LOS		D			F			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.0	23.0		9.8	5.0	43.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	19.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	20.6	21.0		4.2	2.6	8.3		18.0
Green Ext Time (p_c), s	0.4	0.0		0.2	0.0	3.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	40	931	633
Demand Flow Rate, veh/h	40	950	646
Vehicles Circulating, veh/h	606	23	27
Vehicles Exiting, veh/h	67	623	946
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.7	11.5	7.3
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	40	950	646
Cap Entry Lane, veh/h	848	1393	1388
Entry HV Adj Factor	1.000	0.980	0.980
Flow Entry, veh/h	40	931	633
Cap Entry, veh/h	847	1363	1358
V/C Ratio	0.047	0.683	0.466
Control Delay, s/veh	4.7	11.5	7.3
LOS	A	B	A
95th %tile Queue, veh	0	6	3

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	64	938	679
Demand Flow Rate, veh/h	65	957	693
Vehicles Circulating, veh/h	651	24	33
Vehicles Exiting, veh/h	75	692	948
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.3	11.7	7.8
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	65	957	693
Cap Entry Lane, veh/h	817	1391	1381
Entry HV Adj Factor	0.985	0.980	0.980
Flow Entry, veh/h	64	938	679
Cap Entry, veh/h	803	1362	1352
V/C Ratio	0.080	0.689	0.503
Control Delay, s/veh	5.3	11.7	7.8
LOS	A	B	A
95th %tile Queue, veh	0	6	3

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	31	929	653
Demand Flow Rate, veh/h	31	948	666
Vehicles Circulating, veh/h	623	14	38
Vehicles Exiting, veh/h	81	640	924
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.7	11.3	7.6
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	31	948	666
Cap Entry Lane, veh/h	836	1403	1375
Entry HV Adj Factor	1.000	0.980	0.980
Flow Entry, veh/h	31	929	653
Cap Entry, veh/h	835	1374	1346
V/C Ratio	0.037	0.676	0.485
Control Delay, s/veh	4.7	11.3	7.6
LOS	A	B	A
95th %tile Queue, veh	0	6	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	44	28	245	68	269	30	739	295	241	451	29
Future Volume (veh/h)	17	44	28	245	68	269	30	739	295	241	451	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	48	30	266	74	292	33	803	321	262	490	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	24	64	40	454	80	316	46	1086	466	302	1515	99
Arrive On Green	0.07	0.07	0.07	0.25	0.25	0.25	0.03	0.31	0.31	0.17	0.45	0.45
Sat Flow, veh/h	322	860	537	1781	314	1241	1781	3554	1525	1781	3370	219
Grp Volume(v), veh/h	96	0	0	266	0	366	33	803	321	262	258	264
Grp Sat Flow(s),veh/h/ln	1719	0	0	1781	0	1555	1781	1777	1525	1781	1777	1813
Q Serve(g_s), s	4.5	0.0	0.0	10.7	0.0	18.8	1.5	16.6	15.1	11.7	7.6	7.7
Cycle Q Clear(g_c), s	4.5	0.0	0.0	10.7	0.0	18.8	1.5	16.6	15.1	11.7	7.6	7.7
Prop In Lane	0.19		0.31	1.00		0.80	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	128	0	0	454	0	397	46	1086	466	302	798	815
V/C Ratio(X)	0.75	0.00	0.00	0.59	0.00	0.92	0.72	0.74	0.69	0.87	0.32	0.32
Avail Cap(c_a), veh/h	463	0	0	457	0	399	131	1086	466	349	798	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	0.0	0.0	26.7	0.0	29.7	39.5	25.5	25.0	33.1	14.5	14.5
Incr Delay (d2), s/veh	8.6	0.0	0.0	1.9	0.0	26.7	18.8	4.5	8.1	18.3	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	4.6	0.0	9.7	0.9	7.4	6.3	6.4	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	0.0	0.0	28.6	0.0	56.4	58.3	30.0	33.1	51.4	15.6	15.6
LnGrp LOS	D	A	A	C	A	E	E	C	C	D	B	B
Approach Vol, veh/h		96			632			1157			784	
Approach Delay, s/veh		45.7			44.7			31.6			27.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.9	29.0		10.1	6.1	40.7		24.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	25.0		22.0	6.0	35.0		21.0
Max Q Clear Time (g_c+I1), s	13.7	18.6		6.5	3.5	9.7		20.8
Green Ext Time (p_c), s	0.2	3.5		0.4	0.0	3.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	21.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	570	150	185	520	80	200
Future Vol, veh/h	570	150	185	520	80	200
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	620	163	201	565	87	217

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	803	0	1709	742
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	987	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	821	-	100	416
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	361	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	807	-	~ 62	402
Mov Cap-2 Maneuver	-	-	-	-	~ 62	-
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	226	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.9	121.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	62	402	-	-	807	-
HCM Lane V/C Ratio	1.403	0.541	-	-	0.249	-
HCM Control Delay (s)	$ 365.4	24	-	-	10.9	0
HCM Lane LOS	F	C	-	-	B	A
HCM 95th %tile Q(veh)	7.5	3.1	-	-	1	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	720	50	53	715	13	60
Future Vol, veh/h	720	50	53	715	13	60
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	783	54	58	777	14	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	857	0	1743	850
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	913	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	783	-	95	360
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	391	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	770	-	80	348
Mov Cap-2 Maneuver	-	-	-	-	80	-
Stage 1	-	-	-	-	421	-
Stage 2	-	-	-	-	334	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	30.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	218	-	-	770	-
HCM Lane V/C Ratio	0.364	-	-	0.075	-
HCM Control Delay (s)	30.7	-	-	10.1	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	1.6	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	663	124	723	580	0	0	0	0	499	3	212
Future Volume (veh/h)	0	663	124	723	580	0	0	0	0	499	3	212
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	721	135	786	630	0				544	0	230
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1259	236	886	2576	0				664	0	278
Arrive On Green	0.00	0.42	0.42	0.26	0.72	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3062	556	3456	3647	0				3563	0	1489
Grp Volume(v), veh/h	0	431	425	786	630	0				544	0	230
Grp Sat Flow(s),veh/h/ln	0	1777	1748	1728	1777	0				1781	0	1489
Q Serve(g_s), s	0.0	16.6	16.6	19.7	5.3	0.0				13.2	0.0	13.4
Cycle Q Clear(g_c), s	0.0	16.6	16.6	19.7	5.3	0.0				13.2	0.0	13.4
Prop In Lane	0.00		0.32	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	753	741	886	2576	0				664	0	278
V/C Ratio(X)	0.00	0.57	0.57	0.89	0.24	0.00				0.82	0.00	0.83
Avail Cap(c_a), veh/h	0	753	741	998	2576	0				792	0	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.55	0.55	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.7	19.7	32.2	4.1	0.0				35.2	0.0	35.2
Incr Delay (d2), s/veh	0.0	3.2	3.2	5.3	0.1	0.0				5.8	0.0	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.2	7.1	8.6	1.6	0.0				6.1	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.9	22.9	37.5	4.3	0.0				41.0	0.0	49.1
LnGrp LOS	A	C	C	D	A	A				D	A	D
Approach Vol, veh/h		856			1416						774	
Approach Delay, s/veh		22.9			22.7						43.4	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.1	42.2		20.8		69.2
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	26.0	32.0		20.0		62.0
Max Q Clear Time (g_c+I1), s	21.7	18.6		15.4		7.3
Green Ext Time (p_c), s	1.4	4.7		1.4		5.1

Intersection Summary			
HCM 6th Ctrl Delay			28.0
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	950	0	0	1134	443	150	1	963	0	0	0
Future Volume (veh/h)	200	950	0	0	1134	443	150	1	963	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.93	1.00		0.94			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	217	1033	0	0	1233	482	163	1	1047			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	254	1828	0	0	1605	464	658	4	973			
Arrive On Green	0.14	0.51	0.00	0.00	0.31	0.31	0.37	0.37	0.37			
Sat Flow, veh/h	1781	3647	0	0	5274	1477	1771	11	2620			
Grp Volume(v), veh/h	217	1033	0	0	1233	482	164	0	1047			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1477	1782	0	1310			
Q Serve(g_s), s	8.3	13.9	0.0	0.0	15.3	22.0	4.5	0.0	26.0			
Cycle Q Clear(g_c), s	8.3	13.9	0.0	0.0	15.3	22.0	4.5	0.0	26.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	254	1828	0	0	1605	464	662	0	973			
V/C Ratio(X)	0.85	0.57	0.00	0.00	0.77	1.04	0.25	0.00	1.08			
Avail Cap(c_a), veh/h	254	1828	0	0	1605	464	662	0	973			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.68	0.68	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.3	11.6	0.0	0.0	21.7	24.0	15.2	0.0	22.0			
Incr Delay (d2), s/veh	17.0	0.9	0.0	0.0	3.6	52.1	0.2	0.0	51.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.6	5.0	0.0	0.0	6.2	13.8	1.7	0.0	14.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	12.5	0.0	0.0	25.3	76.1	15.4	0.0	73.6			
LnGrp LOS	D	B	A	A	C	F	B	A	F			
Approach Vol, veh/h		1250			1715			1211				
Approach Delay, s/veh		18.4			39.6			65.7				
Approach LOS		B			D			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.0			14.0	26.0		30.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		36.0			10.0	22.0		26.0				
Max Q Clear Time (g_c+I1), s		15.9			10.3	24.0		28.0				
Green Ext Time (p_c), s		7.6			0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	40.8
HCM 6th LOS	D

Appendix R

Horizon Year 2035 + Project Intersection LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	243	0	0	0	98	1485
Future Volume (vph)	243	0	0	0	98	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	264	0	0	0	107	1614
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	264	0	0	0	107	1614
Confl. Peds. (#/hr)		30			30	
Confl. Bikes (#/hr)		30		30		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	14.7				6.1	46.6
Effective Green, g (s)	14.7				6.1	46.6
Actuated g/C Ratio	0.18				0.07	0.57
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	616				131	2016
v/s Ratio Prot	c0.08				0.06	c0.46
v/s Ratio Perm						
v/c Ratio	0.43				0.82	0.80
Uniform Delay, d1	29.8				37.3	13.9
Progression Factor	0.07				1.00	1.00
Incremental Delay, d2	0.4				31.0	2.4
Delay (s)	2.4				68.3	16.3
Level of Service	A				E	B
Approach Delay (s)	2.4		0.0			19.5
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	81.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	87	0	0	243	19	0	1318	408	0	0	0
Future Volume (vph)	11	87	0	0	243	19	0	1318	408	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			0.99			1.00	0.87			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.99			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1852			3480			3539	1379			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1852			3480			3539	1379			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	95	0	0	264	21	0	1433	443	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	258	0	0	0
Lane Group Flow (vph)	0	107	0	0	278	0	0	1433	185	0	0	0
Confl. Peds. (#/hr)			20			20			20			
Confl. Bikes (#/hr)			30			30			30			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		8.5			14.7			36.5	14.7			
Effective Green, g (s)		8.5			14.7			36.5	14.7			
Actuated g/C Ratio		0.10			0.18			0.45	0.18			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		192			625			1579	247			
v/s Ratio Prot		c0.06			0.08			c0.40				
v/s Ratio Perm									c0.13			
v/c Ratio		0.56			0.45			0.91	0.75			
Uniform Delay, d1		34.9			29.9			21.1	31.8			
Progression Factor		1.43			1.00			1.00	1.00			
Incremental Delay, d2		1.9			0.5			9.2	12.1			
Delay (s)		51.9			30.4			30.2	43.9			
Level of Service		D			C			C	D			
Approach Delay (s)		51.9			30.4			33.5			0.0	
Approach LOS		D			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	34	7	364	49	320	10	206	237	414	1204	6
Future Volume (veh/h)	4	34	7	364	49	320	10	206	237	414	1204	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.70	1.00		0.93	1.00		0.89	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	37	8	434	0	348	11	224	258	450	1309	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	114	75	750	0	310	19	825	328	497	1777	744
Arrive On Green	0.07	0.07	0.07	0.21	0.00	0.21	0.01	0.23	0.23	0.28	0.50	0.50
Sat Flow, veh/h	182	1680	1105	3563	0	1474	1781	3554	1414	1781	3554	1488
Grp Volume(v), veh/h	41	0	8	434	0	348	11	224	258	450	1309	7
Grp Sat Flow(s),veh/h/ln	1861	0	1105	1781	0	1474	1781	1777	1414	1781	1777	1488
Q Serve(g_s), s	1.6	0.0	0.5	8.3	0.0	16.0	0.5	3.9	13.0	18.5	22.2	0.2
Cycle Q Clear(g_c), s	1.6	0.0	0.5	8.3	0.0	16.0	0.5	3.9	13.0	18.5	22.2	0.2
Prop In Lane	0.10		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	0	75	750	0	310	19	825	328	497	1777	744
V/C Ratio(X)	0.32	0.00	0.11	0.58	0.00	1.12	0.57	0.27	0.79	0.91	0.74	0.01
Avail Cap(c_a), veh/h	392	0	233	750	0	310	94	825	328	586	1777	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	33.2	27.0	0.0	30.0	37.4	23.9	27.4	26.4	15.0	9.5
Incr Delay (d2), s/veh	1.5	0.0	0.6	1.1	0.0	88.0	23.3	0.8	17.2	16.1	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	3.5	0.0	13.0	0.3	1.7	5.8	9.7	8.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	33.9	28.1	0.0	118.0	60.7	24.7	44.6	42.5	17.8	9.6
LnGrp LOS	D	A	C	C	A	F	E	C	D	D	B	A
Approach Vol, veh/h		49			782			493			1766	
Approach Delay, s/veh		35.0			68.1			35.9			24.1	
Approach LOS		C			E			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.2	21.6		9.2	4.8	42.0		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	17.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	20.5	15.0		3.6	2.5	24.2		18.0
Green Ext Time (p_c), s	0.7	0.5		0.1	0.0	8.0		0.0

Intersection Summary			
HCM 6th Ctrl Delay			37.3
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	23	474	1562	35
Future Vol, veh/h	0	73	23	474	1562	35
Conflicting Peds, #/hr	20	20	20	0	0	20
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	79	25	515	1698	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1757	1756	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	105	356	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	102	350	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	112.2	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	350	-	102	-	-
HCM Lane V/C Ratio	0.071	-	0.778	-	-
HCM Control Delay (s)	16.1	-	112.2	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	4.2	-	-

Intersection	
Intersection Delay, s/veh	35.7
Intersection LOS	E

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	54	341	1344
Demand Flow Rate, veh/h	55	348	1371
Vehicles Circulating, veh/h	1341	31	11
Vehicles Exiting, veh/h	41	1365	368
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	13.1	5.0	44.4
Approach LOS	B	A	E

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	55	348	1371
Cap Entry Lane, veh/h	351	1337	1364
Entry HV Adj Factor	0.982	0.981	0.980
Flow Entry, veh/h	54	341	1344
Cap Entry, veh/h	345	1308	1334
V/C Ratio	0.156	0.261	1.008
Control Delay, s/veh	13.1	5.0	44.4
LOS	B	A	F
95th %tile Queue, veh	1	1	23

Intersection	
Intersection Delay, s/veh	27.7
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	44	327	1325
Demand Flow Rate, veh/h	45	333	1351
Vehicles Circulating, veh/h	1337	25	12
Vehicles Exiting, veh/h	26	1356	346
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	9.5	4.7	34.0
Approach LOS	A	A	D

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	45	333	1351
Cap Entry Lane, veh/h	456	1390	1406
Entry HV Adj Factor	0.978	0.981	0.981
Flow Entry, veh/h	44	327	1325
Cap Entry, veh/h	446	1360	1375
V/C Ratio	0.099	0.240	0.964
Control Delay, s/veh	9.5	4.7	34.0
LOS	A	A	D
95th %tile Queue, veh	0	1	19

Intersection	
Intersection Delay, s/veh	21.8
Intersection LOS	C

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	33	256	1255
Demand Flow Rate, veh/h	33	261	1280
Vehicles Circulating, veh/h	1263	13	11
Vehicles Exiting, veh/h	28	1283	263
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	8.3	4.2	25.7
Approach LOS	A	A	D

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	33	261	1280
Cap Entry Lane, veh/h	485	1405	1407
Entry HV Adj Factor	1.000	0.981	0.981
Flow Entry, veh/h	33	256	1255
Cap Entry, veh/h	485	1374	1376
V/C Ratio	0.068	0.186	0.912
Control Delay, s/veh	8.3	4.2	25.7
LOS	A	A	D
95th %tile Queue, veh	0	1	15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	55	19	292	44	132	14	190	150	458	1366	20
Future Volume (veh/h)	15	55	19	292	44	132	14	190	150	458	1366	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.93	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	60	21	254	136	143	15	207	163	498	1485	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	81	28	351	158	166	25	777	328	540	1818	27
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.01	0.22	0.22	0.30	0.51	0.51
Sat Flow, veh/h	289	1084	380	1781	801	842	1781	3554	1500	1781	3581	53
Grp Volume(v), veh/h	97	0	0	254	0	279	15	207	163	498	736	771
Grp Sat Flow(s),veh/h/ln	1753	0	0	1781	0	1644	1781	1777	1500	1781	1777	1857
Q Serve(g_s), s	4.2	0.0	0.0	10.4	0.0	12.8	0.7	3.8	7.4	21.0	27.0	27.1
Cycle Q Clear(g_c), s	4.2	0.0	0.0	10.4	0.0	12.8	0.7	3.8	7.4	21.0	27.0	27.1
Prop In Lane	0.16		0.22	1.00		0.51	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	131	0	0	351	0	324	25	777	328	540	902	943
V/C Ratio(X)	0.74	0.00	0.00	0.72	0.00	0.86	0.59	0.27	0.50	0.92	0.82	0.82
Avail Cap(c_a), veh/h	564	0	0	367	0	338	92	777	328	596	902	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	0.0	29.2	0.0	30.2	38.1	25.2	26.6	26.2	16.1	16.1
Incr Delay (d2), s/veh	7.9	0.0	0.0	6.6	0.0	19.0	20.0	0.8	5.3	18.9	8.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	4.9	0.0	6.6	0.4	1.6	3.0	11.2	11.8	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	0.0	35.8	0.0	49.2	58.1	26.0	31.9	45.1	24.1	23.9
LnGrp LOS	D	A	A	D	A	D	E	C	C	D	C	C
Approach Vol, veh/h		97			533			385			2005	
Approach Delay, s/veh		43.1			42.8			29.8			29.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.6	21.0		9.8	5.1	43.5		19.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	26.0	17.0		25.0	4.0	39.0		16.0
Max Q Clear Time (g_c+I1), s	23.0	9.4		6.2	2.7	29.1		14.8
Green Ext Time (p_c), s	0.6	1.1		0.4	0.0	6.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	28.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	524	193	274	589	55	260
Future Vol, veh/h	524	193	274	589	55	260
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	570	210	298	640	60	283

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	800	0	1951	715
Stage 1	-	-	-	-	695	-
Stage 2	-	-	-	-	1256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	823	-	71	431
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	268	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	809	-	~ 29	417
Mov Cap-2 Maneuver	-	-	-	-	~ 29	-
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	113	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	161.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	29	417	-	-	809	-
HCM Lane V/C Ratio	2.061	0.678	-	-	0.368	-
HCM Control Delay (s)	$ 782.9	30	-	-	12	0
HCM Lane LOS	F	D	-	-	B	A
HCM 95th %tile Q(veh)	7	4.9	-	-	1.7	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	4.3					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	783	17	75	893	18	87
Future Vol, veh/h	783	17	75	893	18	87
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	851	18	82	971	20	95

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	889	0	2035	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	1155	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	762	-	63	337
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	300	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	749	-	46	326
Mov Cap-2 Maneuver	-	-	-	-	46	-
Stage 1	-	-	-	-	399	-
Stage 2	-	-	-	-	225	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	69.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	160	-	-	749	-
HCM Lane V/C Ratio	0.713	-	-	0.109	-
HCM Control Delay (s)	69.7	-	-	10.4	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	4.3	-	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	698	165	680	574	0	0	0	0	620	2	364
Future Volume (veh/h)	0	698	165	680	574	0	0	0	0	620	2	364
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00				1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	759	179	739	624	0				675	0	396
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1017	240	793	2251	0				990	0	421
Arrive On Green	0.00	0.36	0.36	0.38	1.00	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	2923	667	3456	3647	0				3563	0	1514
Grp Volume(v), veh/h	0	477	461	739	624	0				675	0	396
Grp Sat Flow(s),veh/h/ln	0	1777	1720	1728	1777	0				1781	0	1514
Q Serve(g_s), s	0.0	21.1	21.1	18.5	0.0	0.0				15.2	0.0	23.0
Cycle Q Clear(g_c), s	0.0	21.1	21.1	18.5	0.0	0.0				15.2	0.0	23.0
Prop In Lane	0.00		0.39	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	638	618	793	2251	0				990	0	421
V/C Ratio(X)	0.00	0.75	0.75	0.93	0.28	0.00				0.68	0.00	0.94
Avail Cap(c_a), veh/h	0	638	618	806	2251	0				990	0	421
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.75	0.75	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.2	25.2	27.1	0.0	0.0				29.0	0.0	31.8
Incr Delay (d2), s/veh	0.0	7.8	8.0	13.9	0.2	0.0				1.9	0.0	29.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.9	9.7	7.6	0.1	0.0				6.6	0.0	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	33.0	33.3	40.9	0.2	0.0				30.9	0.0	61.3
LnGrp LOS	A	C	C	D	A	A				C	A	E
Approach Vol, veh/h		938			1363						1071	
Approach Delay, s/veh		33.1			22.3						42.1	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.7	36.3		29.0		61.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	21.0	32.0		25.0		57.0
Max Q Clear Time (g_c+I1), s	20.5	23.1		25.0		2.0
Green Ext Time (p_c), s	0.2	4.0		0.0		5.0

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	1087	0	0	1166	648	76	2	740	0	0	0
Future Volume (veh/h)	241	1087	0	0	1166	648	76	2	740	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.94	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	262	1182	0	0	1267	704	83	2	804			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	295	2290	0	0	2217	650	464	11	687			
Arrive On Green	0.33	1.00	0.00	0.00	0.43	0.43	0.27	0.27	0.27			
Sat Flow, veh/h	1781	3647	0	0	5274	1498	1741	42	2575			
Grp Volume(v), veh/h	262	1182	0	0	1267	704	85	0	804			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1498	1783	0	1288			
Q Serve(g_s), s	12.5	0.0	0.0	0.0	16.8	39.1	3.3	0.0	24.0			
Cycle Q Clear(g_c), s	12.5	0.0	0.0	0.0	16.8	39.1	3.3	0.0	24.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.98		1.00			
Lane Grp Cap(c), veh/h	295	2290	0	0	2217	650	476	0	687			
V/C Ratio(X)	0.89	0.52	0.00	0.00	0.57	1.08	0.18	0.00	1.17			
Avail Cap(c_a), veh/h	416	2290	0	0	2217	650	476	0	687			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.58	0.58	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.3	0.0	0.0	0.0	19.2	25.5	25.4	0.0	33.0			
Incr Delay (d2), s/veh	9.8	0.5	0.0	0.0	1.1	59.8	0.2	0.0	91.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.1	0.2	0.0	0.0	6.5	23.7	1.4	0.0	16.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.5	0.0	0.0	20.2	85.2	25.6	0.0	124.8			
LnGrp LOS	D	A	A	A	C	F	C	A	F			
Approach Vol, veh/h		1444			1971			889				
Approach Delay, s/veh		7.5			43.5			115.3				
Approach LOS		A			D			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.0			18.9	43.1		28.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		58.0			21.0	33.0		24.0				
Max Q Clear Time (g_c+I1), s		2.0			14.5	41.1		26.0				
Green Ext Time (p_c), s		12.3			0.4	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			46.2									
HCM 6th LOS			D									

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	242	0	0	0	101	1799
Future Volume (vph)	242	0	0	0	101	1799
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0				4.0	4.0
Lane Util. Factor	0.97				1.00	0.95
Frpb, ped/bikes	1.00				1.00	1.00
Flpb, ped/bikes	1.00				1.00	1.00
Frt	1.00				1.00	1.00
Flt Protected	0.95				0.95	1.00
Satd. Flow (prot)	3433				1770	3539
Flt Permitted	0.95				0.95	1.00
Satd. Flow (perm)	3433				1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	263	0	0	0	110	1955
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	263	0	0	0	110	1955
Confl. Peds. (#/hr)		15			15	
Confl. Bikes (#/hr)		10		10		
Turn Type	Prot				Prot	NA
Protected Phases	8				1	6
Permitted Phases						
Actuated Green, G (s)	14.3				8.5	57.6
Effective Green, g (s)	14.3				8.5	57.6
Actuated g/C Ratio	0.15				0.09	0.62
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	527				161	2191
v/s Ratio Prot	c0.08				0.06	c0.55
v/s Ratio Perm						
v/c Ratio	0.50				0.68	0.89
Uniform Delay, d1	36.1				40.9	15.1
Progression Factor	0.06				1.00	1.00
Incremental Delay, d2	0.7				11.3	5.1
Delay (s)	2.8				52.3	20.1
Level of Service	A				D	C
Approach Delay (s)	2.8		0.0			21.8
Approach LOS	A		A			C

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	93.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	90	0	0	242	22	0	945	434	0	0	0
Future Volume (vph)	11	90	0	0	242	22	0	945	434	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0	4.0			
Lane Util. Factor		1.00			0.95			0.95	1.00			
Frpb, ped/bikes		1.00			1.00			1.00	0.91			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		1.00			0.99			1.00	0.85			
Flt Protected		0.99			1.00			1.00	1.00			
Satd. Flow (prot)		1853			3480			3539	1448			
Flt Permitted		0.99			1.00			1.00	1.00			
Satd. Flow (perm)		1853			3480			3539	1448			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	98	0	0	263	24	0	1027	472	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	348	0	0	0
Lane Group Flow (vph)	0	110	0	0	280	0	0	1027	124	0	0	0
Confl. Peds. (#/hr)			15			15			15			
Confl. Bikes (#/hr)			10			10			10			
Turn Type	Split	NA			NA			NA	custom			
Protected Phases	7	7			8			2				
Permitted Phases									8			
Actuated Green, G (s)		9.1			14.3			45.1	14.3			
Effective Green, g (s)		9.1			14.3			45.1	14.3			
Actuated g/C Ratio		0.10			0.15			0.48	0.15			
Clearance Time (s)		4.0			4.0			4.0	4.0			
Vehicle Extension (s)		3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)		181			535			1716	222			
v/s Ratio Prot		c0.06			0.08			c0.29				
v/s Ratio Perm									c0.09			
v/c Ratio		0.61			0.52			0.60	0.56			
Uniform Delay, d1		40.2			36.2			17.4	36.4			
Progression Factor		1.50			1.00			1.00	1.00			
Incremental Delay, d2		5.1			0.9			1.6	3.0			
Delay (s)		65.3			37.1			18.9	39.5			
Level of Service		E			D			B	D			
Approach Delay (s)		65.3			37.1			25.4			0.0	
Approach LOS		E			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	29.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	93.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	46	9	343	65	340	13	694	350	405	467	7
Future Volume (veh/h)	5	46	9	343	65	340	13	694	350	405	467	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.78	1.00		0.94	1.00		0.92	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	50	10	424	0	370	14	754	380	440	508	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	126	92	713	0	299	24	978	404	446	1820	771
Arrive On Green	0.07	0.07	0.07	0.20	0.00	0.20	0.01	0.28	0.28	0.25	0.51	0.51
Sat Flow, veh/h	169	1693	1241	3563	0	1494	1781	3554	1466	1781	3554	1506
Grp Volume(v), veh/h	55	0	10	424	0	370	14	754	380	440	508	8
Grp Sat Flow(s),veh/h/ln	1862	0	1241	1781	0	1494	1781	1777	1466	1781	1777	1506
Q Serve(g_s), s	2.3	0.0	0.6	8.6	0.0	16.0	0.6	15.6	20.3	19.7	6.5	0.2
Cycle Q Clear(g_c), s	2.3	0.0	0.6	8.6	0.0	16.0	0.6	15.6	20.3	19.7	6.5	0.2
Prop In Lane	0.09		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	92	713	0	299	24	978	404	446	1820	771
V/C Ratio(X)	0.40	0.00	0.11	0.59	0.00	1.24	0.59	0.77	0.94	0.99	0.28	0.01
Avail Cap(c_a), veh/h	373	0	248	713	0	299	89	978	404	446	1820	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	34.5	29.0	0.0	32.0	39.2	26.6	28.3	29.8	11.1	9.6
Incr Delay (d2), s/veh	1.9	0.0	0.5	1.3	0.0	132.0	20.9	5.9	32.3	39.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.2	3.7	0.0	16.5	0.4	7.1	10.4	12.9	2.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	0.0	35.0	30.4	0.0	163.9	60.1	32.5	60.6	69.0	11.5	9.6
LnGrp LOS	D	A	D	C	A	F	E	C	E	E	B	A
Approach Vol, veh/h		65			794			1148			956	
Approach Delay, s/veh		36.8			92.6			42.2			37.9	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.0	26.0		9.9	5.1	44.9		20.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	22.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	21.7	22.3		4.3	2.6	8.5		18.0
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	3.7		0.0

Intersection Summary			
HCM 6th Ctrl Delay			54.2
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	76	41	1077	784	62
Future Vol, veh/h	0	76	41	1077	784	62
Conflicting Peds, #/hr	20	20	0	0	0	20
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	83	45	1171	852	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	926	939	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	326	730	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	315	718	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	718	-	315	-	-
HCM Lane V/C Ratio	0.062	-	0.262	-	-
HCM Control Delay (s)	10.3	-	20.4	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1	-	-

Intersection	
Intersection Delay, s/veh	10.0
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	41	950	648
Demand Flow Rate, veh/h	41	969	661
Vehicles Circulating, veh/h	621	24	27
Vehicles Exiting, veh/h	67	638	966
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.8	12.0	7.4
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	41	969	661
Cap Entry Lane, veh/h	838	1391	1388
Entry HV Adj Factor	1.000	0.980	0.980
Flow Entry, veh/h	41	950	648
Cap Entry, veh/h	836	1362	1358
V/C Ratio	0.049	0.697	0.477
Control Delay, s/veh	4.8	12.0	7.4
LOS	A	B	A
95th %tile Queue, veh	0	6	3

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	65	958	695
Demand Flow Rate, veh/h	67	978	709
Vehicles Circulating, veh/h	667	25	33
Vehicles Exiting, veh/h	75	708	970
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	5.4	12.2	8.0
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	67	978	709
Cap Entry Lane, veh/h	805	1390	1381
Entry HV Adj Factor	0.970	0.980	0.980
Flow Entry, veh/h	65	958	695
Cap Entry, veh/h	780	1361	1352
V/C Ratio	0.083	0.704	0.514
Control Delay, s/veh	5.4	12.2	8.0
LOS	A	B	A
95th %tile Queue, veh	0	6	3

Intersection	
Intersection Delay, s/veh	10.0
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	32	949	668
Demand Flow Rate, veh/h	32	968	682
Vehicles Circulating, veh/h	639	15	38
Vehicles Exiting, veh/h	81	656	945
Ped Vol Crossing Leg, #/h	10	10	10
Ped Cap Adj	0.999	0.999	0.999
Approach Delay, s/veh	4.7	11.7	7.8
Approach LOS	A	B	A

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	32	968	682
Cap Entry Lane, veh/h	825	1402	1375
Entry HV Adj Factor	1.000	0.980	0.980
Flow Entry, veh/h	32	949	668
Cap Entry, veh/h	824	1372	1346
V/C Ratio	0.039	0.691	0.497
Control Delay, s/veh	4.7	11.7	7.8
LOS	A	B	A
95th %tile Queue, veh	0	6	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	44	28	245	68	281	30	747	295	250	458	29
Future Volume (veh/h)	18	44	28	245	68	281	30	747	295	250	458	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	48	30	266	74	305	33	812	321	272	498	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	64	40	452	77	317	46	1075	461	311	1522	97
Arrive On Green	0.08	0.08	0.08	0.25	0.25	0.25	0.03	0.30	0.30	0.17	0.45	0.45
Sat Flow, veh/h	351	843	527	1781	303	1250	1781	3554	1524	1781	3375	216
Grp Volume(v), veh/h	98	0	0	266	0	379	33	812	321	272	261	269
Grp Sat Flow(s),veh/h/ln	1721	0	0	1781	0	1553	1781	1777	1524	1781	1777	1814
Q Serve(g_s), s	4.6	0.0	0.0	10.8	0.0	19.9	1.5	17.1	15.4	12.3	7.8	7.9
Cycle Q Clear(g_c), s	4.6	0.0	0.0	10.8	0.0	19.9	1.5	17.1	15.4	12.3	7.8	7.9
Prop In Lane	0.20		0.31	1.00		0.80	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	130	0	0	452	0	394	46	1075	461	311	802	818
V/C Ratio(X)	0.75	0.00	0.00	0.59	0.00	0.96	0.72	0.76	0.70	0.88	0.33	0.33
Avail Cap(c_a), veh/h	458	0	0	452	0	394	129	1075	461	345	802	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	0.0	27.0	0.0	30.4	40.0	26.1	25.5	33.3	14.6	14.6
Incr Delay (d2), s/veh	8.4	0.0	0.0	2.0	0.0	35.1	19.0	5.0	8.4	20.1	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	4.7	0.0	11.0	0.9	7.7	6.4	6.9	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	0.0	0.0	29.0	0.0	65.6	59.0	31.0	33.9	53.3	15.7	15.7
LnGrp LOS	D	A	A	C	A	E	E	C	C	D	B	B
Approach Vol, veh/h		98			645			1166			802	
Approach Delay, s/veh		45.9			50.5			32.6			28.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.4	29.0		10.3	6.1	41.3		25.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	25.0		22.0	6.0	35.0		21.0
Max Q Clear Time (g_c+I1), s	14.3	19.1		6.6	3.5	9.9		21.9
Green Ext Time (p_c), s	0.1	3.3		0.4	0.0	3.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

LOS Engineering, Inc.

Intersection	
Int Delay, s/veh	24.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	587	150	185	542	81	200
Future Vol, veh/h	587	150	185	542	81	200
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	638	163	201	589	88	217

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	821	0	1751	760
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	1011	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	808	-	94	406
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	795	-	~ 57	393
Mov Cap-2 Maneuver	-	-	-	-	~ 57	-
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	216	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	142.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	57	393	-	-	795	-
HCM Lane V/C Ratio	1.545	0.553	-	-	0.253	-
HCM Control Delay (s)	$ 433.4	24.9	-	-	11.1	0
HCM Lane LOS	F	C	-	-	B	A
HCM 95th %tile Q(veh)	8	3.2	-	-	1	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	1.9					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	735	52	53	735	15	60
Future Vol, veh/h	735	52	53	735	15	60
Conflicting Peds, #/hr	0	20	20	0	20	20
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	799	57	58	799	16	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	876	0	1783	868
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	935	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	771	-	90	352
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	382	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	758	-	75	340
Mov Cap-2 Maneuver	-	-	-	-	75	-
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	324	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	35.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	199	-	-	758	-
HCM Lane V/C Ratio	0.41	-	-	0.076	-
HCM Control Delay (s)	35.1	-	-	10.1	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	1.8	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	672	130	723	592	0	0	0	0	499	3	220
Future Volume (veh/h)	0	672	130	723	592	0	0	0	0	499	3	220
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	730	141	786	643	0				544	0	239
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1237	239	886	2559	0				680	0	285
Arrive On Green	0.00	0.42	0.42	0.26	0.72	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3045	570	3456	3647	0				3563	0	1491
Grp Volume(v), veh/h	0	439	432	786	643	0				544	0	239
Grp Sat Flow(s),veh/h/ln	0	1777	1744	1728	1777	0				1781	0	1491
Q Serve(g_s), s	0.0	17.2	17.2	19.7	5.6	0.0				13.1	0.0	13.9
Cycle Q Clear(g_c), s	0.0	17.2	17.2	19.7	5.6	0.0				13.1	0.0	13.9
Prop In Lane	0.00		0.33	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	745	731	886	2559	0				680	0	285
V/C Ratio(X)	0.00	0.59	0.59	0.89	0.25	0.00				0.80	0.00	0.84
Avail Cap(c_a), veh/h	0	745	731	998	2559	0				792	0	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.54	0.54	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.2	20.2	32.2	4.3	0.0				34.8	0.0	35.1
Incr Delay (d2), s/veh	0.0	3.4	3.5	5.2	0.1	0.0				5.1	0.0	15.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.5	7.4	8.6	1.7	0.0				6.0	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.6	23.6	37.4	4.4	0.0				39.8	0.0	50.4
LnGrp LOS	A	C	C	D	A	A				D	A	D
Approach Vol, veh/h		871			1429						783	
Approach Delay, s/veh		23.6			22.6						43.1	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.1	41.7		21.2		68.8
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	26.0	32.0		20.0		62.0
Max Q Clear Time (g_c+I1), s	21.7	19.2		15.9		7.6
Green Ext Time (p_c), s	1.4	4.6		1.3		5.2

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	952	0	0	1137	443	159	1	963	0	0	0
Future Volume (veh/h)	207	952	0	0	1137	443	159	1	963	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.93	1.00		0.94			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	225	1035	0	0	1236	482	173	1	1047			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	254	1828	0	0	1605	464	658	4	973			
Arrive On Green	0.14	0.51	0.00	0.00	0.31	0.31	0.37	0.37	0.37			
Sat Flow, veh/h	1781	3647	0	0	5274	1477	1772	10	2620			
Grp Volume(v), veh/h	225	1035	0	0	1236	482	174	0	1047			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1477	1782	0	1310			
Q Serve(g_s), s	8.7	14.0	0.0	0.0	15.3	22.0	4.8	0.0	26.0			
Cycle Q Clear(g_c), s	8.7	14.0	0.0	0.0	15.3	22.0	4.8	0.0	26.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	254	1828	0	0	1605	464	662	0	973			
V/C Ratio(X)	0.88	0.57	0.00	0.00	0.77	1.04	0.26	0.00	1.08			
Avail Cap(c_a), veh/h	254	1828	0	0	1605	464	662	0	973			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.67	0.67	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	29.4	11.7	0.0	0.0	21.7	24.0	15.3	0.0	22.0			
Incr Delay (d2), s/veh	21.1	0.9	0.0	0.0	3.6	52.1	0.2	0.0	51.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.0	5.0	0.0	0.0	6.2	13.8	1.8	0.0	14.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.5	12.5	0.0	0.0	25.3	76.1	15.5	0.0	73.6			
LnGrp LOS	D	B	A	A	C	F	B	A	F			
Approach Vol, veh/h		1260			1718			1221				
Approach Delay, s/veh		19.3			39.6			65.3				
Approach LOS		B			D			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.0			14.0	26.0		30.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		36.0			10.0	22.0		26.0				
Max Q Clear Time (g_c+I1), s		16.0			10.7	24.0		28.0				
Green Ext Time (p_c), s		7.6			0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			41.0									
HCM 6th LOS			D									

Appendix S

N. Coast Hwy/Grandview Int. LOS Calculations with Mitigation

Intersection	
Intersection Delay, s/veh	35.0
Intersection LOS	D

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	57	330	1387
Demand Flow Rate, veh/h	59	336	1414
Vehicles Circulating, veh/h	1392	29	8
Vehicles Exiting, veh/h	30	1422	357
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	10.6	4.7	43.2
Approach LOS	B	A	E

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	59	336	1414
Cap Entry Lane, veh/h	435	1386	1410
Entry HV Adj Factor	0.966	0.981	0.981
Flow Entry, veh/h	57	330	1387
Cap Entry, veh/h	420	1355	1379
V/C Ratio	0.136	0.243	1.005
Control Delay, s/veh	10.6	4.7	43.2
LOS	B	A	F
95th %tile Queue, veh	0	1	23

Intersection	
Intersection Delay, s/veh	35.6
Intersection LOS	E

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	57	318	1390
Demand Flow Rate, veh/h	59	324	1417
Vehicles Circulating, veh/h	1395	29	8
Vehicles Exiting, veh/h	30	1425	345
Ped Vol Crossing Leg, #/h	20	20	20
Ped Cap Adj	1.000	0.997	0.997
Approach Delay, s/veh	10.6	4.6	43.7
Approach LOS	B	A	E

Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535
Critical Headway, s	4.328	4.328	4.328
Entry Flow, veh/h	59	324	1417
Cap Entry Lane, veh/h	434	1386	1410
Entry HV Adj Factor	0.966	0.981	0.981
Flow Entry, veh/h	57	318	1390
Cap Entry, veh/h	419	1355	1379
V/C Ratio	0.136	0.234	1.007
Control Delay, s/veh	10.6	4.6	43.7
LOS	B	A	F
95th %tile Queue, veh	0	1	23

Appendix T

La Costa / N. Vulcan Int. LOS Calculations with Mitigation and Signal Warrant

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	416	51	258	471	0	26	0	208	0	1	0
Future Volume (vph)	0	416	51	258	471	0	26	0	208	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0		4.0		4.0	
Lane Util. Factor		1.00			1.00		1.00		1.00		1.00	
Frpb, ped/bikes		0.99			1.00		1.00		0.89		1.00	
Flpb, ped/bikes		1.00			0.99		0.96		1.00		1.00	
Frt		0.99			1.00		1.00		0.85		1.00	
Flt Protected		1.00			0.98		0.95		1.00		1.00	
Satd. Flow (prot)		1821			1817		1691		1410		1863	
Flt Permitted		1.00			0.66		0.76		1.00		1.00	
Satd. Flow (perm)		1821			1222		1348		1410		1863	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	50%	100%	100%	100%	100%	50%	100%	50%	100%	50%	50%	50%
Adj. Flow (vph)	0	452	55	280	512	0	28	0	226	0	1	0
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	200	0	0	0
Lane Group Flow (vph)	0	503	0	0	792	0	28	0	26	0	1	0
Confl. Peds. (#/hr)			20	20			20		20			
Confl. Bikes (#/hr)			15						15			
Turn Type		NA		Perm	NA		Perm		Perm		NA	
Protected Phases		2			6						4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)		54.8			54.8		8.2		8.2		8.2	
Effective Green, g (s)		54.8			54.8		8.2		8.2		8.2	
Actuated g/C Ratio		0.77			0.77		0.12		0.12		0.12	
Clearance Time (s)		4.0			4.0		4.0		4.0		4.0	
Vehicle Extension (s)		3.0			3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)		1405			943		155		162		215	
v/s Ratio Prot		0.28									0.00	
v/s Ratio Perm					c0.65		c0.02		0.02			
v/c Ratio		0.36			0.84		0.18		0.16		0.00	
Uniform Delay, d1		2.6			5.3		28.4		28.3		27.8	
Progression Factor		1.00			1.00		1.00		1.00		1.00	
Incremental Delay, d2		0.2			6.7		0.6		0.5		0.0	
Delay (s)		2.7			11.9		28.9		28.8		27.8	
Level of Service		A			B		C		C		C	
Approach Delay (s)		2.7			11.9			28.8			27.8	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	71.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	482	76	153	564	1	63	0	165	0	0	0
Future Volume (vph)	1	482	76	153	564	1	63	0	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0		4.0			
Lane Util. Factor		1.00			1.00		1.00		1.00			
Frpb, ped/bikes		0.99			1.00		1.00		0.92			
Flpb, ped/bikes		1.00			1.00		0.97		1.00			
Frt		0.98			1.00		1.00		0.85			
Flt Protected		1.00			0.99		0.95		1.00			
Satd. Flow (prot)		1814			1838		1718		1457			
Flt Permitted		1.00			0.78		0.76		1.00			
Satd. Flow (perm)		1813			1451		1369		1457			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	524	83	166	613	1	68	0	179	0	0	0
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	148	0	0	0
Lane Group Flow (vph)	0	600	0	0	780	0	68	0	31	0	0	0
Confl. Peds. (#/hr)			20	20			20		20			
Confl. Bikes (#/hr)			15						15			
Turn Type	Perm	NA		Perm	NA		Perm		Perm			
Protected Phases		4			8						6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		30.7			30.7		8.0		8.0			
Effective Green, g (s)		30.7			30.7		8.0		8.0			
Actuated g/C Ratio		0.66			0.66		0.17		0.17			
Clearance Time (s)		4.0			4.0		4.0		4.0			
Vehicle Extension (s)		3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)		1191			953		234		249			
v/s Ratio Prot												
v/s Ratio Perm		0.33			c0.54		c0.05		0.02			
v/c Ratio		0.50			0.82		0.29		0.12			
Uniform Delay, d1		4.1			5.9		16.9		16.4			
Progression Factor		1.00			1.00		1.00		1.00			
Incremental Delay, d2		0.3			5.5		0.7		0.2			
Delay (s)		4.4			11.5		17.6		16.6			
Level of Service		A			B		B		B			
Approach Delay (s)		4.4			11.5			16.9			0.0	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	46.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	524	193	274	589	55	260
Future Volume (veh/h)	524	193	274	589	55	260
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	570	210	298	640	60	283
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	607	223	334	1323	355	316
Arrive On Green	0.47	0.47	0.19	0.71	0.20	0.20
Sat Flow, veh/h	1282	472	1781	1870	1781	1585
Grp Volume(v), veh/h	0	780	298	640	60	283
Grp Sat Flow(s),veh/h/ln	0	1755	1781	1870	1781	1585
Q Serve(g_s), s	0.0	36.1	14.0	13.0	2.4	14.9
Cycle Q Clear(g_c), s	0.0	36.1	14.0	13.0	2.4	14.9
Prop In Lane		0.27	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	0	830	334	1323	355	316
V/C Ratio(X)	0.00	0.94	0.89	0.48	0.17	0.90
Avail Cap(c_a), veh/h	0	881	354	1397	374	333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	33.9	5.6	28.4	33.4
Incr Delay (d2), s/veh	0.0	17.1	22.7	0.3	0.2	24.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	17.5	8.0	4.1	1.0	7.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	38.5	56.6	5.8	28.7	58.1
LnGrp LOS	A	D	E	A	C	E
Approach Vol, veh/h	780			938	343	
Approach Delay, s/veh	38.5			22.0	53.0	
Approach LOS	D			C	D	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		21.1	20.1	44.5			64.6
Change Period (Y+Rc), s		4.0	4.0	4.0			4.0
Max Green Setting (Gmax), s		18.0	17.0	43.0			64.0
Max Q Clear Time (g_c+I1), s		16.9	16.0	38.1			15.0
Green Ext Time (p_c), s		0.1	0.1	2.4			5.2

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	587	150	185	542	81	200
Future Volume (veh/h)	587	150	185	542	81	200
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	638	163	201	589	88	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	705	180	246	1307	308	274
Arrive On Green	0.50	0.50	0.14	0.70	0.17	0.17
Sat Flow, veh/h	1420	363	1781	1870	1781	1585
Grp Volume(v), veh/h	0	801	201	589	88	217
Grp Sat Flow(s),veh/h/ln	0	1782	1781	1870	1781	1585
Q Serve(g_s), s	0.0	25.7	6.9	8.6	2.7	8.2
Cycle Q Clear(g_c), s	0.0	25.7	6.9	8.6	2.7	8.2
Prop In Lane		0.20	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	0	885	246	1307	308	274
V/C Ratio(X)	0.00	0.90	0.82	0.45	0.29	0.79
Avail Cap(c_a), veh/h	0	998	285	1466	513	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.4	26.2	4.1	22.5	24.8
Incr Delay (d2), s/veh	0.0	10.7	14.8	0.2	0.5	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.1	3.7	2.1	1.1	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	25.1	40.9	4.4	23.0	29.9
LnGrp LOS	A	C	D	A	C	C
Approach Vol, veh/h	801			790	305	
Approach Delay, s/veh	25.1			13.7	27.9	
Approach LOS	C			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.8	12.6	35.1		47.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		18.0	10.0	35.0		49.0
Max Q Clear Time (g_c+I1), s		10.2	8.9	27.7		10.6
Green Ext Time (p_c), s		0.6	0.1	3.4		4.5

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

LA COSTA AVE / N. VULCAN AVE

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ■ NO ☐**

Record hourly vehicular volumes for any four hours of an average day

APPROACH LANES	One	2 or More	7AM	8AM	3PM	5PM	Hour
Both Approaches - Major Street	✓		934	1052	1067	1025	
Higher Approach - Minor Street		✓	195	192	200	208	

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ■	No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐	No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☐ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**
(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐	No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐	No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐	No ☐

PART B **SATISFIED YES ☐ NO ■**

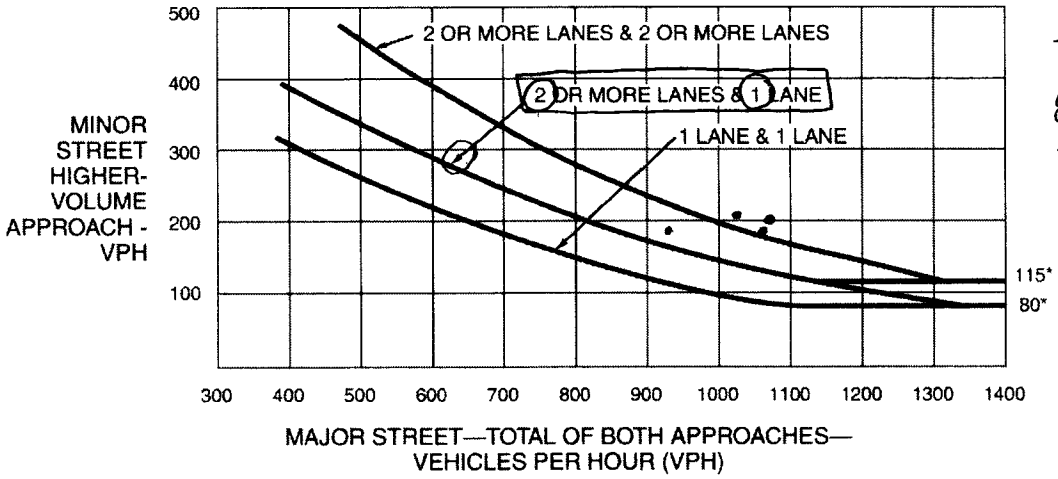
APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street			
Higher Approach - Minor Street			

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐	No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

LA COSTA AVE / N. VULCAN AVE

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



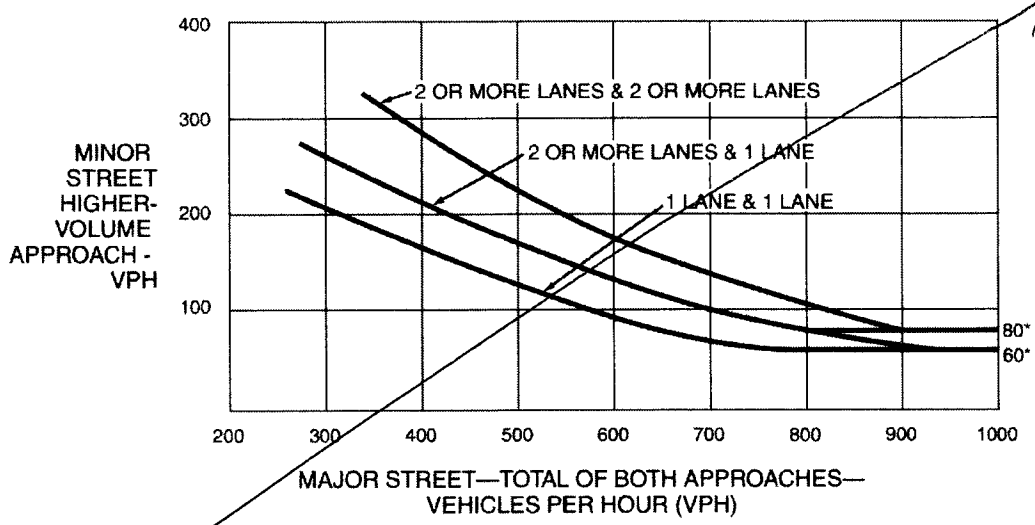
	X	Y
7AM	934,	195
8AM	1052,	192
3PM	1067,	200
5PM	1025,	208

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

NA.



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Prepared by National Data & Surveying Services

VOLUME

N Vulcan Ave Bet. La Costa Ave & Andrew Ave

Day: Tuesday
Date: 2/4/2020

City: Encinitas
Project #: CA20_4031_001

DAILY TOTALS	NB	SB	EB	WB	Total
	2,463	2,613	0	0	5,076

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	4		3						7		12:00	37		27						64	
0:15	3		4						7		12:15	37		46						83	
0:30	3		2						5		12:30	37		27						64	
0:45	1	11	0	9					1	20	12:45	33	144	35	135					68	279
1:00	2		1						3		13:00	40		33						73	
1:15	0		2						2		13:15	32		23						55	
1:30	1		0						1		13:30	31		33						64	
1:45	3	6	0	3					3	9	13:45	43	146	43	132					86	278
2:00	2		1						3		14:00	56		31						87	
2:15	0		0						0		14:15	47		30						77	
2:30	1		0						1		14:30	51		27						78	
2:45	0	3	1	2					1	5	14:45	42	196	38	126					80	322
3:00	0		0						0		15:00	54		40						94	
3:15	1		0						1		15:15	43		52						95	
3:30	1		0						1		15:30	52		45						97	
3:45	3	5	2	2					5	7	15:45	51	200	47	184					98	384
4:00	3		1						4		16:00	60		55						115	
4:15	1		0						1		16:15	53		44						97	
4:30	4		1						5		16:30	41		60						101	
4:45	6	14	0	2					6	16	16:45	57	211	46	205					103	416
5:00	3		0						3		17:00	61		51						112	
5:15	13		2						15		17:15	50		43						93	
5:30	14		1						15		17:30	46		52						98	
5:45	10	40	4	7					14	47	17:45	51	208	58	204					109	412
6:00	15		7						22		18:00	27		44						71	
6:15	23		11						34		18:15	37		47						84	
6:30	26		20						46		18:30	42		43						85	
6:45	35	99	32	70					67	169	18:45	27	133	34	168					61	301
7:00	43		29						72		19:00	32		38						70	
7:15	39		45						84		19:15	26		32						58	
7:30	65		78						143		19:30	15		40						55	
7:45	48	195	85	237					133	432	19:45	11	84	26	136					37	220
8:00	42		66						108		20:00	16		27						43	
8:15	53		77						130		20:15	17		17						34	
8:30	52		85						137		20:30	11		24						35	
8:45	45	192	82	310					127	502	20:45	8	52	20	88					28	140
9:00	32		45						77		21:00	16		22						38	
9:15	27		58						85		21:15	8		19						27	
9:30	36		44						80		21:30	14		15						29	
9:45	38	133	48	195					86	328	21:45	7	45	19	75					26	120
10:00	38		26						64		22:00	11		16						27	
10:15	40		43						83		22:15	11		12						23	
10:30	25		27						52		22:30	8		10						18	
10:45	39	142	31	127					70	269	22:45	6	36	8	46					14	82
11:00	37		28						65		23:00	8		5						13	
11:15	36		41						77		23:15	3		7						10	
11:30	36		25						61		23:30	3		7						10	
11:45	40	149	34	128					74	277	23:45	5	19	3	22					8	41
TOTALS		989		1092						**2081**	**TOTALS**		1474		1521						**2995**
SPLIT %		47.5%		52.5%						**41.0%**	**SPLIT %**		49.2%		50.8%						**59.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	2,463	2,613	0	0	5,076

AM Peak Hour	7:30	7:45			**7:30**	**PM Peak Hour**	15:30	15:45			**16:00**
AM Pk Volume	208	313			**514**	**PM Pk Volume**	216	206			**416**
Pk Hr Factor	0.800	0.921			**0.899**	**Pk Hr Factor**	0.900	0.858			**0.904**
7 - 9 Volume	387	547	0	0	**934**	**4 - 6 Volume**	419	409	0	0	**828**
7 - 9 Peak Hour	7:30	7:45			**7:30**	**4 - 6 Peak Hour**	16:45	16:00			**16:00**
7 - 9 Pk Volume	208	313	0	0	**514**	**4 - 6 Pk Volume**	214	205	0	0	**416**
Pk Hr Factor	0.800	0.921	0.000	0.000	**0.899**	**Pk Hr Factor**	0.877	0.854	0.000	0.000	**0.904**

Prepared by National Data & Surveying Services

VOLUME

La Costa Ave Bet. N Coast Hwy 101 & N Vulcan Ave

Day: Tuesday
Date: 2/4/2020

City: Encinitas
Project #: CA20_4031_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,202	5,457	10,659

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			8		4		12		12:00			71		96		167	
0:15			1		3		4		12:15			90		101		191	
0:30			0		4		4		12:30			90		88		178	
0:45			4	13	2	13	6	26	12:45			82	333	77	362	159	695
1:00			4		4		8		13:00			96		93		189	
1:15			2		0		2		13:15			81		90		171	
1:30			1		0		1		13:30			97		79		176	
1:45			1	8	2	6	3	14	13:45			93	367	100	362	193	729
2:00			3		1		4		14:00			86		102		188	
2:15			3		3		6		14:15			86		82		168	
2:30			1		1		2		14:30			96		99		195	
2:45			1	8	1	6	2	14	14:45			80	348	78	361	158	709
3:00			0		1		1		15:00			131		107		238	
3:15			1		2		3		15:15			97		117		214	
3:30			2		1		3		15:30			128		93		221	
3:45			0	3	3	7	3	10	15:45			108	464	120	437	228	901
4:00			4		2		6		16:00			97		106		203	
4:15			1		1		2		16:15			122		102		224	
4:30			9		3		12		16:30			87		112		199	
4:45			4	18	12	18	16	36	16:45			87	393	93	413	180	806
5:00			4		8		12		17:00			99		110		209	
5:15			14		9		23		17:15			78		101		179	
5:30			15		13		28		17:30			130		115		245	
5:45			25	58	31	61	56	119	17:45			122	429	117	443	239	872
6:00			38		48		86		18:00			79		91		170	
6:15			32		48		80		18:15			56		99		155	
6:30			57		64		121		18:30			62		74		136	
6:45			66	193	63	223	129	416	18:45			74	271	69	333	143	604
7:00			85		57		142		19:00			61		76		137	
7:15			73		66		139		19:15			43		49		92	
7:30			84		84		168		19:30			51		55		106	
7:45			87	329	106	313	193	642	19:45			43	198	50	230	93	428
8:00			88		96		184		20:00			46		44		90	
8:15			97		90		187		20:15			33		46		79	
8:30			92		93		185		20:30			32		31		63	
8:45			89	366	90	369	179	735	20:45			44	155	38	159	82	314
9:00			71		117		188		21:00			42		42		84	
9:15			81		94		175		21:15			39		32		71	
9:30			90		113		203		21:30			27		31		58	
9:45			114	356	86	410	200	766	21:45			28	136	26	131	54	267
10:00			92		92		184		22:00			15		29		44	
10:15			73		68		141		22:15			22		24		46	
10:30			71		76		147		22:30			17		12		29	
10:45			67	303	93	329	160	632	22:45			8	62	10	75	18	137
11:00			107		84		191		23:00			12		6		18	
11:15			91		88		179		23:15			5		8		13	
11:30			86		99		185		23:30			13		5		18	
11:45			69	353	102	373	171	726	23:45			8	38	4	23	12	61
TOTALS				2008		2128		4136	TOTALS				3194		3329		6523
SPLIT %				48.5%		51.5%		38.8%	SPLIT %				49.0%		51.0%		61.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,202	5,457	10,659

AM Peak Hour			9:15	8:45	9:00	PM Peak Hour			15:00	17:00	15:00
AM Pk Volume			377	414	766	PM Pk Volume			464	443	901
Pk Hr Factor			0.827	0.885	0.943	Pk Hr Factor			0.885	0.947	0.946
7 - 9 Volume	0	0	695	682	1377	4 - 6 Volume	0	0	822	856	1678
7 - 9 Peak Hour			8:00	7:45	7:45	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	366	385	749	4 - 6 Pk Volume	0	0	429	443	872
Pk Hr Factor	0.000	0.000	0.943	0.908	0.970	Pk Hr Factor	0.000	0.000	0.825	0.947	0.890

Prepared by National Data & Surveying Services

VOLUME

La Costa Ave Bet. N Vulcan Ave & I-5 SB Ramps

Day: Tuesday
Date: 2/4/2020

City: Encinitas
Project #: CA20_4031_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,273	7,607	14,880

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			14		7		21		12:00			102		125		227	
0:15			2		7		9		12:15			111		123		234	
0:30			3		5		8		12:30			109		105		214	
0:45			4	23	1	20	5	43	12:45			131	453	105	458	236	911
1:00			4		5		9		13:00			126		119		245	
1:15			3		3		6		13:15			110		105		215	
1:30			2		0		2		13:30			109		97		206	
1:45			3	12	2	10	5	22	13:45			123	468	133	454	256	922
2:00			4		0		4		14:00			149		115		264	
2:15			3		3		6		14:15			121		100		221	
2:30			2		2		4		14:30			145		123		268	
2:45			0	9	0	5	0	14	14:45			113	528	110	448	223	976
3:00			0		1		1		15:00			169		134		303	
3:15			1		1		2		15:15			134		154		288	
3:30			3		1		4		15:30			183		167		350	
3:45			2	6	5	8	7	14	15:45			147	633	148	603	295	1236
4:00			8		3		11		16:00			138		117		255	
4:15			4		1		5		16:15			158		138		296	
4:30			15		6		21		16:30			132		143		275	
4:45			9	36	12	22	21	58	16:45			121	549	124	522	245	1071
5:00			10		8		18		17:00			153		179		332	
5:15			28		11		39		17:15			133		142		275	
5:30			31		11		42		17:30			162		128		290	
5:45			35	104	30	60	65	164	17:45			135	583	147	596	282	1179
6:00			43		51		94		18:00			106		135		241	
6:15			62		53		115		18:15			84		139		223	
6:30			80		86		166		18:30			88		110		198	
6:45			97	282	94	284	191	566	18:45			95	373	103	487	198	860
7:00			126		87		213		19:00			84		117		201	
7:15			129		128		257		19:15			56		75		131	
7:30			158		199		357		19:30			56		81		137	
7:45			152	565	191	605	343	1170	19:45			47	243	69	342	116	585
8:00			147		200		347		20:00			62		64		126	
8:15			145		160		305		20:15			47		64		111	
8:30			133		172		305		20:30			30		48		78	
8:45			145	570	154	686	299	1256	20:45			48	187	59	235	107	422
9:00			104		158		262		21:00			47		62		109	
9:15			94		137		231		21:15			45		53		98	
9:30			114		145		259		21:30			37		46		83	
9:45			137	449	132	572	269	1021	21:45			28	157	47	208	75	365
10:00			123		97		220		22:00			16		34		50	
10:15			122		110		232		22:15			27		31		58	
10:30			100		104		204		22:30			19		20		39	
10:45			99	444	114	425	213	869	22:45			14	76	14	99	28	175
11:00			134		96		230		23:00			15		10		25	
11:15			126		110		236		23:15			13		16		29	
11:30			105		100		205		23:30			10		7		17	
11:45			109	474	111	417	220	891	23:45			11	49	8	41	19	90
TOTALS				2974		3114		**6088**	**TOTALS**				4299		4493		**8792**
SPLIT %				48.9%		51.1%		**40.9%**	**SPLIT %**				48.9%		51.1%		**59.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,273	7,607	14,880

AM Peak Hour			7:30	7:30	**7:30**	**PM Peak Hour**			15:00	15:00	**15:00**
AM Pk Volume			602	750	**1352**	**PM Pk Volume**			633	603	**1236**
Pk Hr Factor			0.953	0.938	**0.947**	**Pk Hr Factor**			0.865	0.903	**0.883**
7 - 9 Volume	0	0	1135	1291	**2426**	**4 - 6 Volume**	0	0	1132	1118	**2250**
7 - 9 Peak Hour			7:30	7:30	**7:30**	**4 - 6 Peak Hour**			17:00	17:00	**17:00**
7 - 9 Pk Volume	0	0	602	750	**1352**	**4 - 6 Pk Volume**	0	0	583	596	**1179**
Pk Hr Factor	0.000	0.000	0.953	0.938	**0.947**	**Pk Hr Factor**	0.000	0.000	0.900	0.832	**0.888**

Appendix U

La Costa /Sheridan Int. LOS Calculations with Mitigation and Signal Warrant

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	783	17	75	893	18	87
Future Volume (veh/h)	783	17	75	893	18	87
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	851	18	82	971	20	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1318	28	128	1143	35	165
Arrive On Green	0.72	0.72	0.72	0.72	0.14	0.14
Sat Flow, veh/h	1823	39	84	1581	251	1194
Grp Volume(v), veh/h	0	869	1053	0	116	0
Grp Sat Flow(s),veh/h/ln	0	1862	1665	0	1458	0
Q Serve(g_s), s	0.0	14.0	12.5	0.0	4.3	0.0
Cycle Q Clear(g_c), s	0.0	14.0	26.4	0.0	4.3	0.0
Prop In Lane		0.02	0.08		0.17	0.82
Lane Grp Cap(c), veh/h	0	1346	1271	0	201	0
V/C Ratio(X)	0.00	0.65	0.83	0.00	0.58	0.00
Avail Cap(c_a), veh/h	0	2135	1961	0	405	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.1	5.5	0.0	23.2	0.0
Incr Delay (d2), s/veh	0.0	0.5	1.8	0.0	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.7	4.4	0.0	1.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	4.7	7.3	0.0	25.8	0.0
LnGrp LOS	A	A	A	A	C	A
Approach Vol, veh/h	869			1053	116	
Approach Delay, s/veh	4.7			7.3	25.8	
Approach LOS	A			A	C	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		11.9		45.6			45.6
Change Period (Y+Rc), s		4.0		4.0			4.0
Max Green Setting (Gmax), s		16.0		66.0			66.0
Max Q Clear Time (g_c+I1), s		6.3		16.0			28.4
Green Ext Time (p_c), s		0.2		8.7			13.2

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	735	52	53	735	15	60
Future Volume (veh/h)	735	52	53	735	15	60
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	799	57	58	799	16	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1095	78	142	1039	41	166
Arrive On Green	0.64	0.64	0.64	0.64	0.14	0.14
Sat Flow, veh/h	1719	123	57	1631	287	1166
Grp Volume(v), veh/h	0	856	857	0	82	0
Grp Sat Flow(s),veh/h/ln	0	1842	1688	0	1471	0
Q Serve(g_s), s	0.0	11.4	1.8	0.0	1.8	0.0
Cycle Q Clear(g_c), s	0.0	11.4	13.2	0.0	1.8	0.0
Prop In Lane		0.07	0.07		0.20	0.79
Lane Grp Cap(c), veh/h	0	1173	1181	0	210	0
V/C Ratio(X)	0.00	0.73	0.73	0.00	0.39	0.00
Avail Cap(c_a), veh/h	0	2081	1998	0	649	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.5	4.5	0.0	14.1	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.9	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	1.5	0.0	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.4	5.3	0.0	15.3	0.0
LnGrp LOS	A	A	A	A	B	A
Approach Vol, veh/h	856			857	82	
Approach Delay, s/veh	5.4			5.3	15.3	
Approach LOS	A			A	B	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		9.2		27.1			27.1
Change Period (Y+Rc), s		4.0		4.0			4.0
Max Green Setting (Gmax), s		16.0		41.0			41.0
Max Q Clear Time (g_c+I1), s		3.8		13.4			15.2
Green Ext Time (p_c), s		0.2		7.5			7.9

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

LA COSTA AVE / SHERIDAN RD YEAR 2035

 VOL.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More					Hour
Both Approaches - Major Street							
Higher Approach - Minor Street							

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐	No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐	No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☐ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐	No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐	No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐	No ☐

PART B **SATISFIED YES ■ NO ☐**

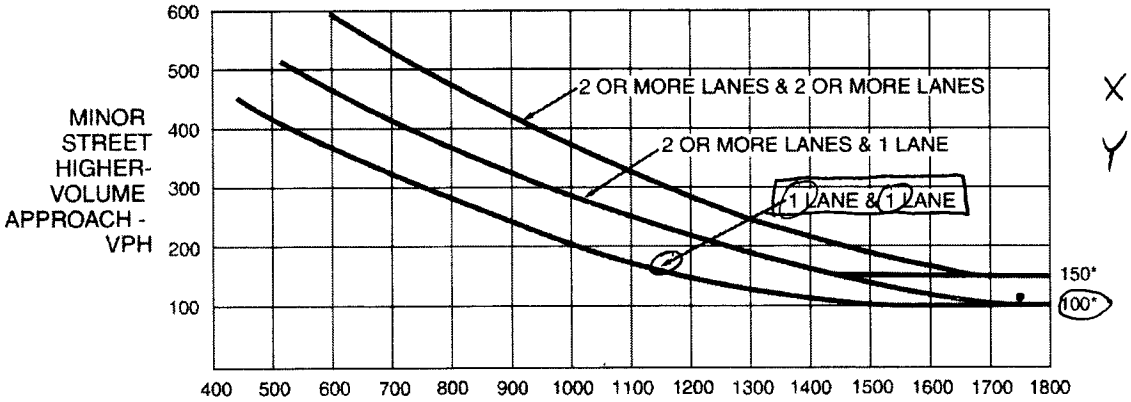
APPROACH LANES	One	2 or More	AM Hour
Both Approaches - Major Street	✓		1745
Higher Approach - Minor Street	✓		104

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ■	No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

LA COSTA AVE / SHERIDAN RD YEAR 2035 VOL.

Figure 4C-3. Warrant 3, Peak Hour

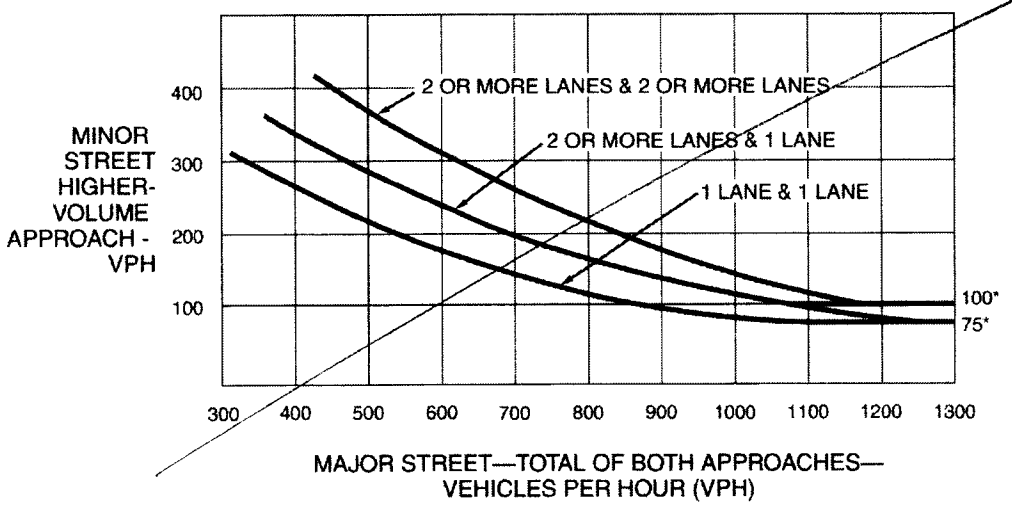


X = 1,745
Y = 104

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET) NA.



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX M-1
PRELIMINARY SEWER SYSTEM STUDY AND PRELIMINARY WATER DEMAND

THIS PAGE INTENTIONALLY LEFT BLANK

PRELIMINARY SEWER STUDY

MAREA VILLAGE

1900 & 1950 N. Coast Highway 101
Encinitas, CA 92024
APN: 216-041-06, 20 and 21

PREPARED FOR

Fenway Capital Advisors
674 Via De la Valle, Suite 310
Solana Beach, CA 92075

PREPARED BY:

Pasco Laret Suiter & Associates, Inc.

Engineer: William J. Suiter, P.E
Registration No. RCE 68964

27127 Calle Arroyo, Suite 1904
San Juan Capistrano, CA 92675
(949) 661-6695

Date Prepared: January 2021
Date Revised: February 2021

PASCO LARET SUITER
& ASSOCIATES
CIVIL ENGINEERING + LAND PLANNING + LAND SURVEYING

TABLE OF CONTENTS

	SECTION
INTRODUCTION	**1**
PROJECT OVERVIEW	**1.1**
PROJECT DESCRIPTION	**1.2**
METHODOLOGY	**2.0**
PLANNING AND DESIGN CRITERIA	**2.1**
WASTEWATER FLOW GENERATION FACTORS	**2.2**
GRAVITY SEWERS	**2.3**
FLOW ANALYSIS	**3.0**
EXISTING SEWER FACILITIES	**3.1**
PROJECTED SEWAGE FLOWS	**3.2**
EXISTING AND PROJECTED FLOW ANALYSIS	**3.3**
RESULTS AND CONCLUSIONS	**4.0**

FIGURES

FIGURE 1-1: PROJECT SITE PLAN

TABLES

TABLE 1-2: LAND USAGE & EDU FACTORS

TABLE 2-2: SEWAGE GENERATION FACTORS

TABLE 3-2: PROJECTED SEWAGE FLOWS

TABLE 3-3: SUMMARY OF SEWER CAPACITY

APPENDICES

APPENDIX A: EXISTING SEWER FACILITIES MAP

APPENDIX B: PROPOSED ONSITE SEWER FACILITIES MAP

APPENDIX C: PROPOSED NORMAL DEPTH FLOW CALCULATIONS

1.0 INTRODUCTION

This report provides an overview of sewer service for the Marea Village development and recommends sewage facilities specific to the needs of the project. Marea Village is located in the City of Encinitas currently within the Leucadia Wastewater District (LWD) and LWD has existing facilities adjacent to the project site. This report will calculate sewage flows from the project, as well as recommend new onsite facilities and analyze whether existing offsite facilities have the capacity to accommodate project flows.

1.1 PROJECT OVERVIEW

Marea Village is located at 1900 & 1950 N. Highway 101 in the City of Encinitas. Elevations within the project range from 56 feet above mean sea level (AMSL) to 95 feet AMSL. The project is bordered to the south and west by Seabluffe residential community, N. Highway 101 to the east, and the Encinitas Beach Hotel to the north. Access to Marea Village will be provided via private streets and one main road entrance off of N. Coast Highway 101 at the SE corner of the site as shown on Figure 1-1.

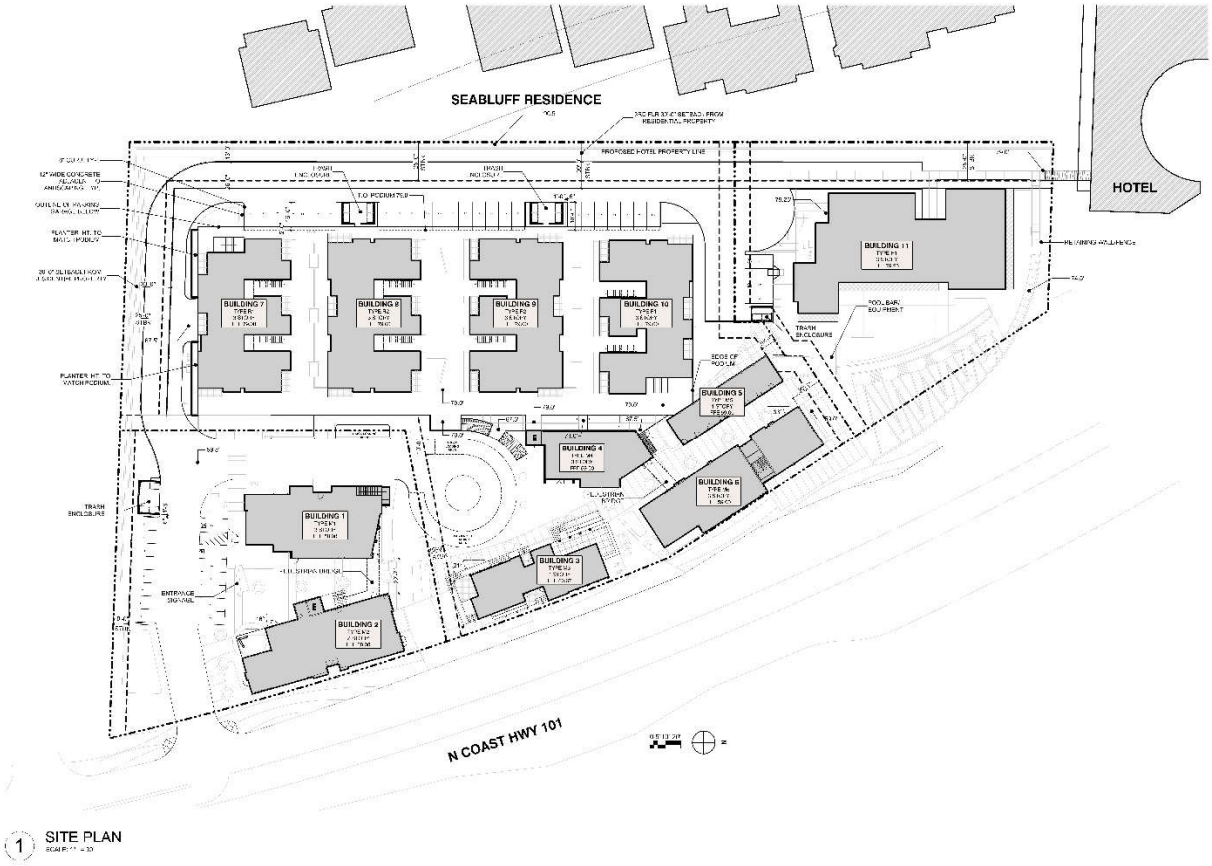


FIGURE 1-1: PROJECT SITE PLAN

1.2 PROJECT DESCRIPTION

Marea Village is a mixed-use project located on a 3.79-acre site and will consist of 94 rental apartment units, 30 hotel rooms and approximately 18,262 square feet of commercial uses.

The project's proposed land uses and their Equivalent Dwelling Unit values (according to Ordinance No. 141 from the Board of Directors of the Leucadia Wastewater District) are provided in Table 1-2.

The proposed on-site sewer improvements for the development will be private. See Appendix B for Proposed Onsite Sewer Facilities Map with the following references to existing sewer manhole (SMH) numbers and segment numbers.

Only sewage flows generated from Buildings 3, 4, 5 and 6 will flow through Segment 1. The sewage flows generated from the remainder of the project site will join those from Segment 1 at Ex. SMH #02-0500 and create a combined sewage flow through Segment 2 until reaching Ex. SMH #02-0490.

TABLE 1-2: LAND USAGE & EDU FACTORS			
Land Usage	**EDU FACTORS**	**Prop. Units/Area/Seats**	**Total Prop. EDUs**
Segment 1			
Bldg #3, Commercial	1.0 (up to 1,000 sf), 0.6 (per 1,000 sf up to 5000 sf), 0.4 (per 1,000 sf over 5,000 sf)	1,129 sf	1.6
Bldg #3, Restaurant	3.0 (45 seats max)	45 seats (estimate)	3
Bldg #4, Residential	1.0 (per living unit)	4 units	4
Bldg #4, Retail	1.0 (up to 1,000 sf), 0.6 (per 1,000 sf up to 5000 sf), 0.4 (per 1,000 sf over 5,000 sf)	1,898 sf	1.6
Bldg #4, Restaurant	3.0 (45 seats max)	45 seats (estimate)	3
Bldg #5, Commercial	1.0 (up to 1,000 sf), 0.6 (per 1,000 sf up to 5000 sf), 0.4 (per 1,000 sf over 5,000 sf)	1,544 sf	1.6
Bldg #6, Residential	1.0 (per living unit)	8 units	8
Bldg #6, Retail	1.0 (up to 1,000 sf), 0.6 (per 1,000 sf up to 5000 sf), 0.4 (per 1,000 sf over 5,000 sf)	2,490 sf	2.2
Bldg #6, Restaurant	3.0 (45 seats max) 1.0 (additional 15 seats)	60 seats (estimate)	4
		Segment 1 EDUs	**29.0**
Segment 2			
Multiple Dwelling	1.0 (per living unit)	82 units	82
Hotel	0.55 (per unit w/ kitchen)	30 units	16.5
Bldg #1, Residential	1.0 (per living unit)	6 units	6
Bldg #1, Retail	1.0 (up to 1,000 sf), 0.6 (per 1,000 sf up to 5000 sf), 0.4 (per 1,000 sf over 5,000 sf)	2,652 sf	2.2
Bldg #1, Restaurant	3.0 (45 seats max)	41 seats (estimate)	3
Bldg #2, Residential	1.0 (per living unit)	4 units	4
Bldg #2, Commercial	1.0 (up to 1,000 sf), 0.6 (per 1,000 sf up to 5000 sf), 0.4 (per 1,000 sf over 5,000 sf)	2,509 sf	2.2
Bldg #2, Restaurant	3.0 (45 seats max) 1.0 (additional 15 seats)	53 seats (estimate)	4
		Segment 2 (without Segment 1) EDUs	**119.9**
		Segment 1 & 2 Combined EDUs	**148.9**

2.0 METHODOLOGY

2.1 PLANNING AND DESIGN CRITERIA

Leucadia Wastewater District has developed design standards and criteria that shall be used for the planning, design and construction of its sewer collection and transmission system within its service area. Sewer facility sizing for this study shall be based on the Leucadia Wastewater District Standard Specifications and Procedures for Wastewater Facility Projects dated May 2019.

2.2 WASTEWATER FLOW GENERATION FACTORS

The sewage generation factors used to project average flows from the project are summarized in Table 2-2. According to LWD Standard Specifications and Procesures for Wastewater Facility Projects, a flow factor of 215 gpd/EDU shall be used to calculate average sewage flows.

TABLE 2-2: SEWAGE GENERATION FACTORS

Land Usage	Average Flow Factor
Multiple Dwelling	215 gpd/EDU
Hotel	215 gpd/EDU
Commercial	215 gpd/EDU

2.3 GRAVITY SEWERS

All existing and proposed gravity sewers will be designed to convey peak dry weather flow in accordance with Leucadia Wastewater District Asset Management Plan (dated May 25, 2018). For pipes with a diameter smaller than 15-inches, the sewers will be designed to flow half full at peak flow. Manning's equation with n=0.013 will be used to size gravity sewers and all new sewers will be designed to maintain a minimum velocity of two feet per second at design capacity to prevent deposition of solids.

Manning's formula for open channel flow hall be used for hydraulic calculations:

$$V = \frac{1.486}{N} \times R^{\frac{2}{3}} \times S^{\frac{1}{2}} \quad \text{and} \quad Q=AV$$

V=Velocity (ft/s)

N=Manning coefficient of roughness = 0.013

R=Hydraulic radius (ft)=Area/Wetted Perimeter at specified depth of flow

S=Slope (ft/ft)

Q=Flow (cf/s)

A=Cross sectional open area of the pipe (sf)

3.0 FLOW ANALYSIS

3.1 EXISTING SEWER FACILITIES

This section analyzes the existing 8-inch LWD sewer system (Segments 1 and 2 on Appendix A) from the point of connection where flows from Marea Village enters (Ex. SMH #02-0510 and #02-0500 on Appendix A) and up until reaching existing SMH #02-0490 (see Appendix A)where the flows confluence with two other 8-inch inlets and outlet one 10-inch pipe flowing easterly across N. Coast Highway 101.

Description of Existing Facilities

LWD has several existing sewer facilities in the vicinity of the Marea Village project within N. Coast Highway 101. The closest available sewer facility to connect to from the project is an 8-inch diameter gravity sewer pipe adjacent to the project's right-of-way line. The sewer line flows north to south parallel to the right-of-way line and begins at a terminal manhole (Ex. SMH #02-0510) located at the midpoint of the project's right-of-way. From the terminal manhole, sewage flows travel south approximately 395 feet to a second existing manhole at the SE corner of the project site (Ex. SMH #02-0500). Flows then continue to travel to the south approximately 92 feet to a third existing manhole (Ex. SMH #02-0490) where additional flow from two other 8-inch diameter pipes combine and outlet into a 10-inch diameter pipe towards the east and into N. Coast Highway 101. See Appendix A for Existing Sewer Facilities Map.

Existing facilities downstream of SMH #02-0490 were not evaluated because they are trunk sewer lines whose necessary upgrades will be completed by LWD.

Existing Flows

Existing flows from the existing commercial area on the project site flow into the 8-inch sewer line. However, these commercial areas will be demolished and removed prior to the construction of Marea Village. In the proposed condition, only sewage flows from the

proposed development will enter and flow through the existing 8-inch pipe located along the project's right-of-way.

3.2 PROJECTED SEWAGE FLOWS

Based on the sewage generation factors presented in Section 2.2 and the proposed development for Marea Village in Section 1.2, Table 3-2 provides the projected wastewater flows for the project.

Sewer pipelines must be designed and sized using peak flow conditions determined by multiplying average flows by a peaking factor. A peaking factor of 3.50 was applied for this project, according to LWD's Standard Specifications's Table 1-2-1 for populations less than 5,000. Total peak flow for Marea Village is also provided in Table 3-2.

TABLE 3-2: PROJECTED SEWAGE FLOWS

Quantity	Average Flow Factor	Total Average Sewage Flow
Segment 1		
29.0 EDUs	215 gpd/EDU	**6,235 gpd**
		.0062 mgd
		4.33 gpm
Segment 1 & 2 Combined		
148.9 EDUs	215 gpd/EDU	**32,013.5 gpd**
		.0320 mgd
		22.23 gpm
Total Average Sewage Flow	**Peak Flow Factor**	**Peak Sewage Flow**
Segment 1		
6,235 gpd/ 4.33 gpm	3.50	**21,822.5 gpd/ 15.16 gpm**
Segment 1 & 2 Combined		
32,013.5 gpd/ 22.23 gpm	3.50	**112,047.25 gpd/ 77.81 gpm**

3.3 EXISTING AND PROJECTED FLOW ANALYSIS

As previously stated, there will be no existing sewage that will continue to flow through the LWD 8-inch pipes in front of Marea Village's right-of-way (Segments 1 and 2 on Appendix A). Only the project sewage flows from Section 3.2 will need to be analyzed.

Normal Depth Flow Calculations were completed using Advanced Engineering Software's (AES) Hydraulic Elements program and can be found in Appendix C. Table 3-3 summarizes the flow analysis results for Segments 1 and 2 in the final proposed condition.

TABLE 3-3: SUMMARY OF SEWER CAPACITY

Segment No.	Pipe Diameter (D)	Existing Slope	Existing Peak Flow	Add'l Peak Flow	Total Prop. Peak Flow	Prop. d/D	Velocity
1	8"	0.38%	0	15.16 gpm/ 0.03 cfs	15.16 gpm/ 0.03 cfs	0.13	1.3 ft/s
2	8"	0.76%	0	77.81 gpm/ 0.17 cfs	77.81 gpm/ 0.17 cfs	0.28	2.2 ft/s

4.0 RESULTS AND CONCLUSIONS

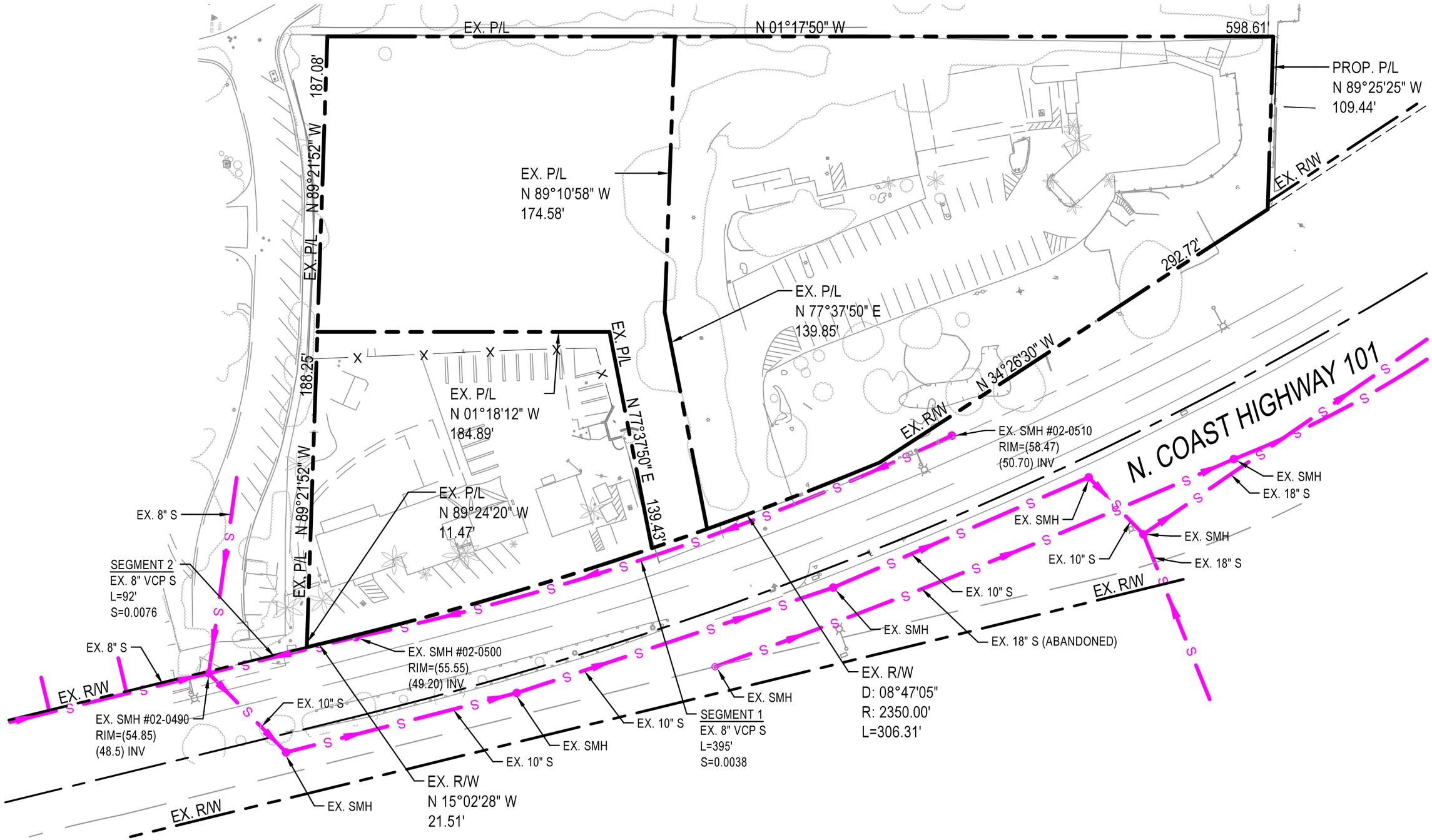
Based on the results from Appendix C and Table 3-3, the max d/D value within Segments 1 and 2 is 0.28. This is under the max value of 0.5 for 15 inch pipes or smaller, according to Leucadia Wastewater District Asset Management Plan (dated May 25, 2018). The existing pipes analyzed have enough capacity to carry the expected sewage flows of the proposed development.

Based on the results from Appendix C and Table 3-3, the velocity in segment 1 one does not meet the minimum 2 ft/s required per Leucadia Wastewater District. However, it should be noted that in the existing condition, velocity for Segment 1 also does not meet the minimum velocity requirement and that due to additional sewage flows in the proposed condition, the proposed project will help improve velocity.

Existing facilities downstream of Segments 1 and 2 were not evaluated because they are trunk sewer lines whose necessary upgrades will be completed by LWD. This proposed project will provide its share of contribution for any future upgrades by payment of their capacity fee.

APPENDIX A

EXISTING SEWER FACILITIES MAP



PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

EXHIBIT

SCALE = 1" = 60'

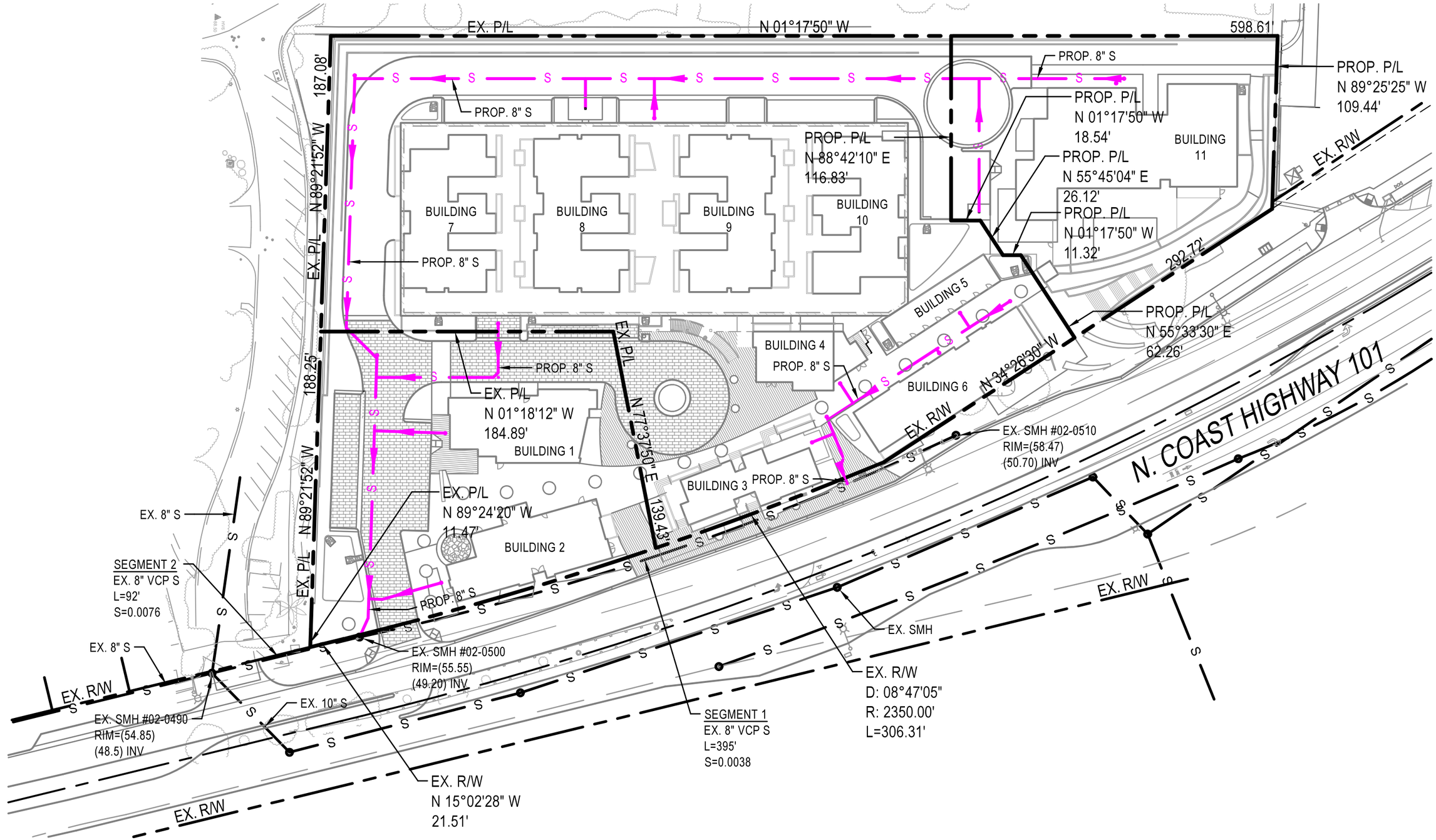
N W E S

EXISTING SEWER FACILITIES MAP

SHEET 1 OF 1

APPENDIX B

PROPOSED ONSITE SEWER FACILITIES MAP



PASCO LARET SUITER & ASSOCIATES
San Diego | Solana Beach | Orange County
Phone 949.661.6695 | www.plsaengineering.com

EXHIBIT

SCALE = 1" = 60'

PROPOSED ONSITE SEWER FACILITIES MAP

SHEET 1 OF 1

APPENDIX C

PROPOSED NORMAL DEPTH FLOW CALCULATIONS

```
****************************************************************************
                 HYDRAULIC ELEMENTS - I  PROGRAM PACKAGE
         (C) Copyright 1982-2016 Advanced Engineering Software (aes)
             Ver. 23.0  Release Date: 07/01/2016  License ID 1452

                           Analysis prepared by:

                       PASCO LARET SUITER & ASSOCIATES

        27127 Calle Arroyo, Suite 1904, San Juan Capistrano, CA 92675

                              949.661.6695

                           plsaengineering.com



----------------------------------------------------------------------------
  TIME/DATE OF STUDY: 09:03 02/02/2021
============================================================================
 Problem Descriptions:
  Segment 1 Analysis


****************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
----------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   0.670
    PIPE SLOPE(FEET/FEET) =  0.0038
    PIPEFLOW(CFS) =         0.03
    MANNINGS FRICTION FACTOR = 0.013000
============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
----------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =      0.08
    CRITICAL FLOW AREA(SQUARE FEET) =     0.023
    CRITICAL FLOW TOP-WIDTH(FEET) =   0.430
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =            0.12
    CRITICAL FLOW VELOCITY(FEET/SEC.) =     1.310
    CRITICAL FLOW VELOCITY HEAD(FEET) =            0.03
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =      0.05
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =            0.10
============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
----------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =      0.09
    FLOW AREA(SQUARE FEET) =      0.03
    FLOW TOP-WIDTH(FEET) =     0.459
```

```
    FLOW PRESSURE + MOMENTUM(POUNDS) =            0.13
    FLOW VELOCITY(FEET/SEC.) =           1.042
    FLOW VELOCITY HEAD(FEET) =           0.017
    HYDRAULIC DEPTH(FEET) =      0.06
    FROUDE NUMBER =     0.734
    SPECIFIC ENERGY(FEET) =            0.11
==============================================================================
```

```
****************************************************************************
                 HYDRAULIC ELEMENTS - I  PROGRAM PACKAGE
         (C) Copyright 1982-2016 Advanced Engineering Software (aes)
             Ver. 23.0  Release Date: 07/01/2016  License ID 1452
```


Analysis prepared by:

PASCO LARET SUITER & ASSOCIATES

27127 Calle Arroyo, Suite 1904, San Juan Capistrano, CA 92675

949.661.6695

plsaengineering.com


```
----------------------------------------------------------------------------
  TIME/DATE OF STUDY: 09:15 02/02/2021
============================================================================
Problem Descriptions:
  Segment 2 Analysis


****************************************************************************
>>>>PIPEFLOW HYDRAULIC INPUT INFORMATION<<<<
----------------------------------------------------------------------------
    PIPE DIAMETER(FEET) =   0.670
    PIPE SLOPE(FEET/FEET) =  0.0076
    PIPEFLOW(CFS) =         0.17
    MANNINGS FRICTION FACTOR = 0.013000
============================================================================
    CRITICAL-DEPTH FLOW INFORMATION:
----------------------------------------------------------------------------
    CRITICAL DEPTH(FEET) =      0.19
    CRITICAL FLOW AREA(SQUARE FEET) =     0.081
    CRITICAL FLOW TOP-WIDTH(FEET) =   0.603
    CRITICAL FLOW PRESSURE + MOMENTUM(POUNDS) =            1.09
    CRITICAL FLOW VELOCITY(FEET/SEC.) =     2.086
    CRITICAL FLOW VELOCITY HEAD(FEET) =            0.07
    CRITICAL FLOW HYDRAULIC DEPTH(FEET) =      0.14
    CRITICAL FLOW SPECIFIC ENERGY(FEET) =            0.26
============================================================================
    NORMAL-DEPTH FLOW INFORMATION:
----------------------------------------------------------------------------
    NORMAL DEPTH(FEET) =      0.18
    FLOW AREA(SQUARE FEET) =      0.08
    FLOW TOP-WIDTH(FEET) =     0.595
```

```
    FLOW PRESSURE + MOMENTUM(POUNDS) =            1.09
    FLOW VELOCITY(FEET/SEC.) =           2.216
    FLOW VELOCITY HEAD(FEET) =           0.076
    HYDRAULIC DEPTH(FEET) =      0.13
    FROUDE NUMBER =     1.087
    SPECIFIC ENERGY(FEET) =            0.26
==============================================================================
```

APPENDIX M-2
FIRE FLOW ANALYSIS

THIS PAGE INTENTIONALLY LEFT BLANK

Fire Flow Analysis

Technical Memorandum

Subject	Fire Flow Analysis – Fenway N. Hwy. 101
Client	San Dieguito Water District
Prepared By	Christian Ramirez, EIT
Reviewed By	Shyamala Raveendran, P.E
Date - *FINAL*	April 15, 2021

PURPOSE

Infrastructure Engineering Corporation (IEC) performed a fire flow analysis for a proposed property development located at 1900 and 1950 North Coast Highway in Encinitas, California in the San Dieguito Water District's (District) service area.

The Development site is located north of the intersection of North Coast Highway 101 and Moorgate Road, with assessor's parcel numbers (APNs) of 216-041-06-00, 216-041-20 & 21. The proposed project consists of multi-family apartments under the R-30 Hosing Element Overlay Zone. 1950 North Coast Highway is a mix of residential and non-residential uses, consisting of 84 dwelling units, 18,270 square feet of a 30 room hotel and 10,774 square feet of a commercial development on a 3-acre project site. 1900 North Coast Highway includes the construction of a mixed-use development with ten dwelling units and 7,488 square feet of commercial space. The proposed site shown in Figure 1 consists of 8-inch piping that connects to the existing system via a 6-inch line to the north west and via a 12-inch line to the south east of the site. The site also includes three proposed fire hydrants. The property is located in the 240 Pressure Zone and is fed from two pressure reducing stations (PRS). The setting and location of the PRS are listed in Table 1.

The applicant provided an estimated maximum daily demand of 81,498 gallons per day (gpd) for the project. Two sets of fire flow test simulations were performed using the District's existing hydraulic model at two different hydrant pairs as shown in Table 2 under a steady-state Maximum Day demand condition with District reservoirs at 50% level. Model results were compared against District planning criteria of a total fire flow of 2,500 gallons per minute (gpm) across two hydrants at a minimum pressure of 20 psi and with maximum pipe velocity of 15 feet per second (ft/s).

Conclusion

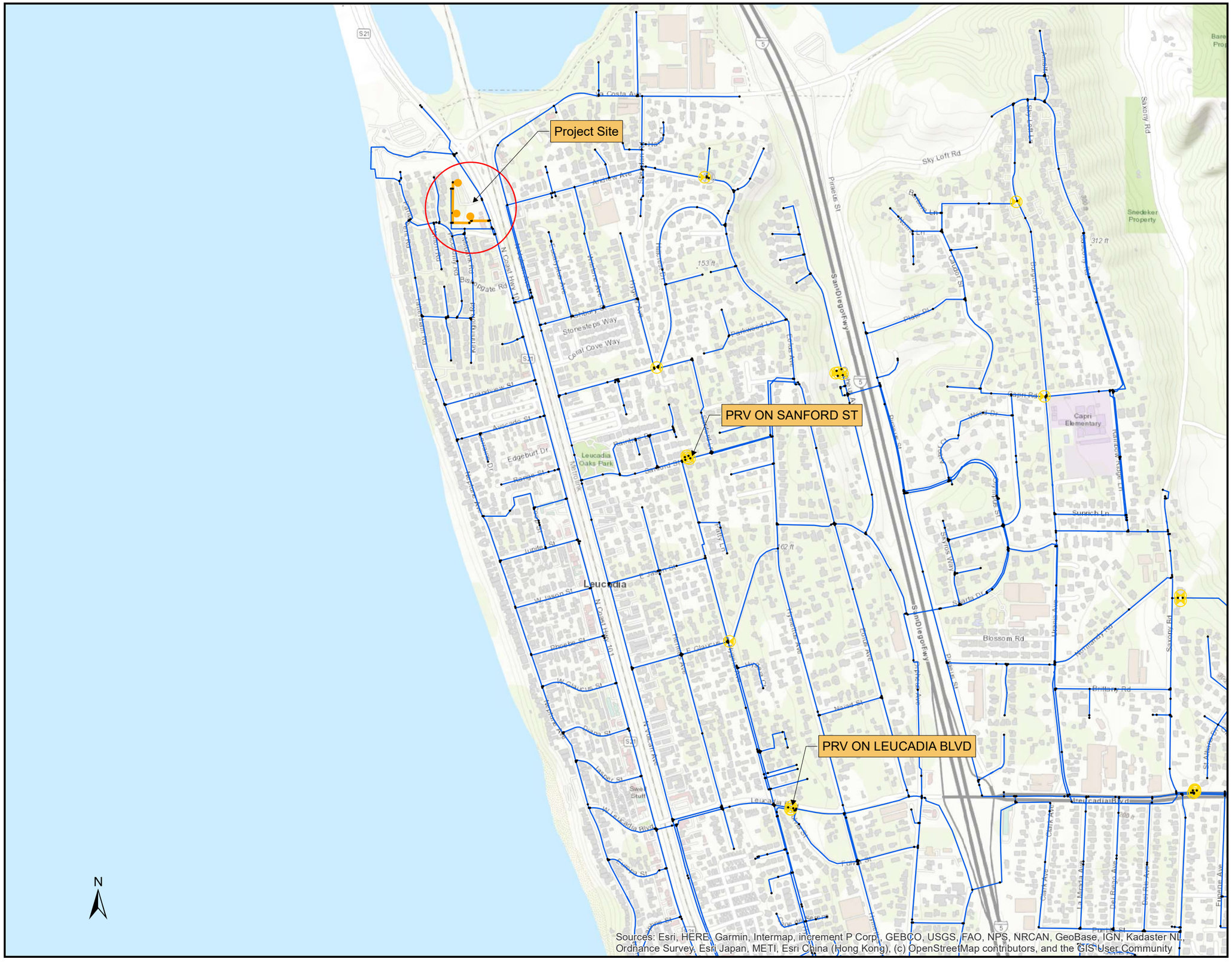
Model results show that each hydrant pair can meet the required fire flows of 2,500 gpm, at residual pressures of 20 psi and pipe velocities under 15 ft/s with 8-inch on-site piping.

Table 1. PRS Setting

PRS Location	# of Valves	Size	Setting
Sanford St. & Hygeia Ave	2	8	55
		3	62
Leucadia Blvd & Fulvia St.	3	8	47
		4	62
		3	52

Table 2. Results Summary

		Hydrant Combination			
		1 & 2		2 & 3	
Hydrant No.	Static Pressure	FF (GPM)	Residual Pressure(PSI)	FF (GPM)	Residual Pressure (PSI)
1	63.01	628.5	37.63	x	x
2	63.01	2028.5	36.79	528.5	46.52
3	72.11	x	x	2000	53.96
	Total	2657		2528.5	



Legend

Proposed Hydrant

Pipe

Active

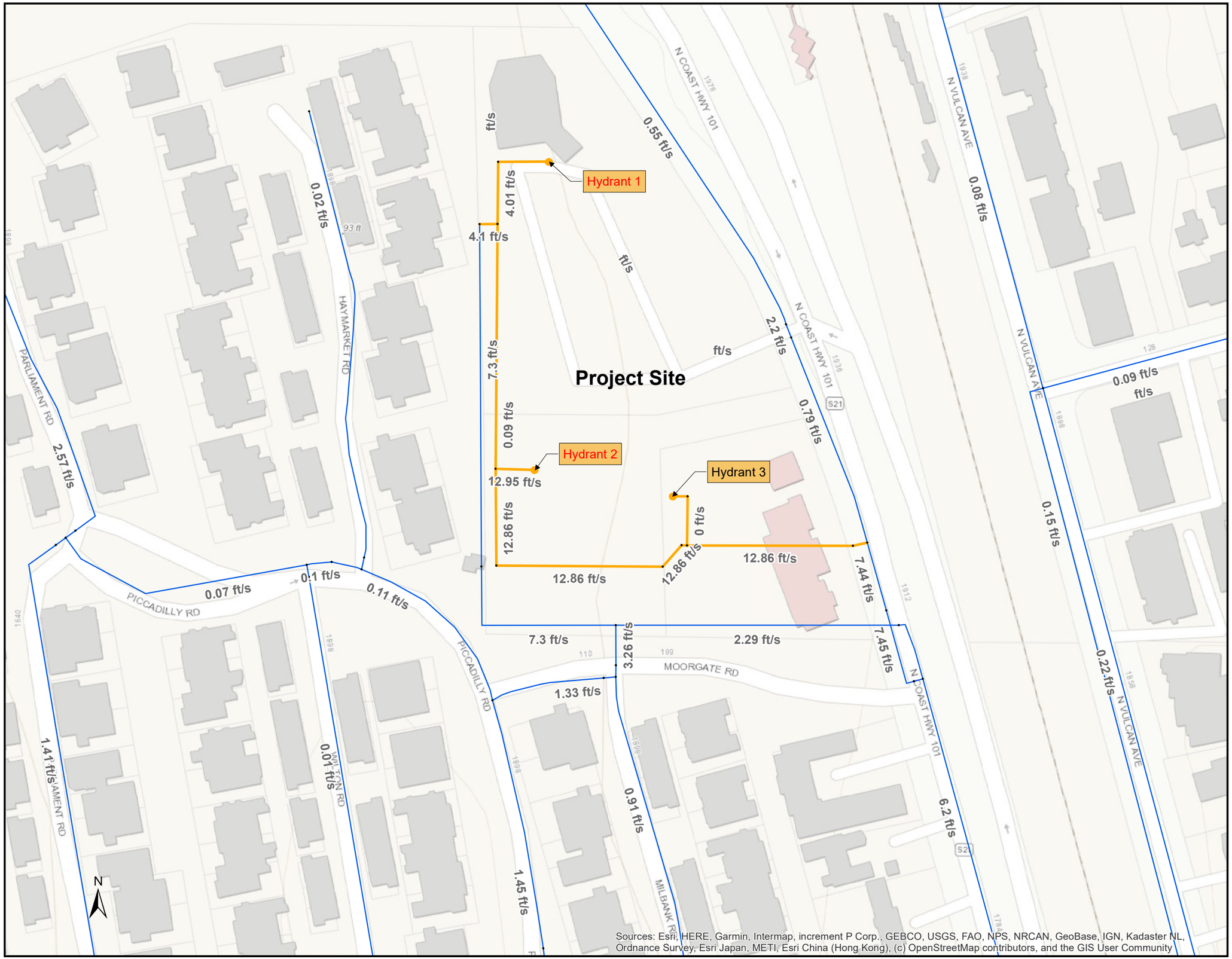
Proposed Pipe

Infrastructure ENGINEERING CORPORATION

San Dieguito Water District
Fenway N Hwy 101

Site Map

Figure 1



Legend

Proposed Hydrant

Pipe

Active

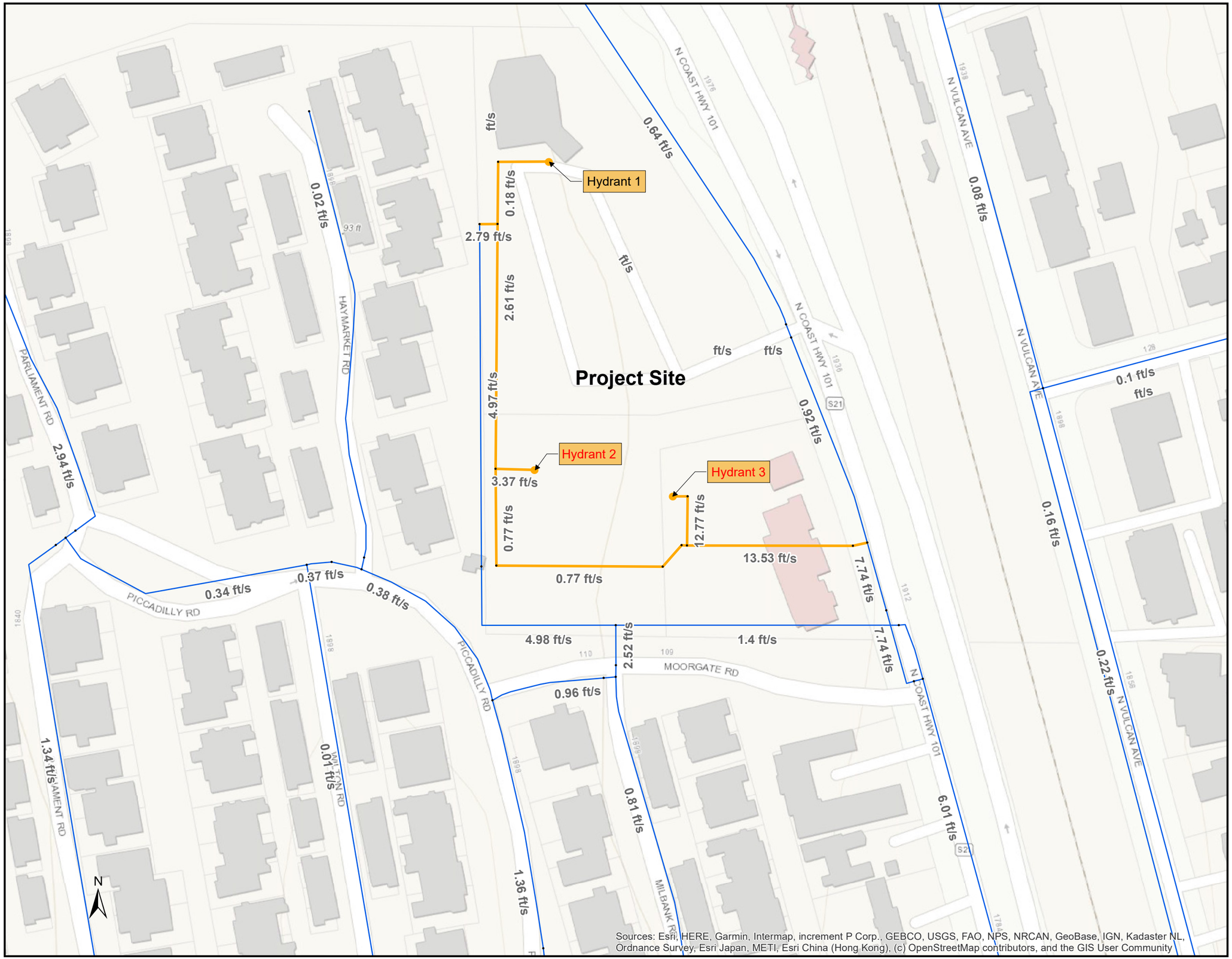
Proposed Pipe

Infrastructure ENGINEERING CORPORATION

San Dieguito Water District
Fenway N Hwy 101

Velocities under MDD+ FF with Hydrant 1 and 2

Figure 2



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Legend

Proposed Hydrant

Pipe

Active

Proposed Pipe

Infrastructure ENGINEERING CORPORATION

San Dieguito Water District
Fenway N Hwy 101

Velocities under MDD+ FF with Hydrant 2 and 3

Figure 3

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX M-3
PRELIMINARY WATER DEMAND SUMMARY

THIS PAGE INTENTIONALLY LEFT BLANK

3161 - Fenway N Hwy 101

Prepared by: Pasco Laret Suiter & Associates

DATE: 2/11/2021

PRELIMINARY WATER DEMAND SUMMARY

Projected Water Demands

Land Use	*Quantity*	*Demand Factor*	*Projected Water Demand (gpd)*
Residential	94 units	450 gpd/unit*	42300
Hotel	0.42 acres	7000 gpd/acre*	2940
Commercial	0.42 acres	5000 gpd/acre*	2100
Landscaping	Per Landscape Architect		600
		TOTAL =	47940
		Max Day Demand Peaking Factor =	1.7**
		Max Daily Demand (MDD), gpd =	81498
		Fire Flow Demand (FF), gpm =	2500

Proposed Water Conservation Measures and Water Savings

Measure	*Location*	*Yearly Water Savings (gal/unit)*	*Daily Water Savings (gpd/unit)*	*Project Total Water Savings (gpd)* [1]
Hot Water Pipe Insulation	Indoor	2400 gal/unit	6.57	618
Pressure Reducing Valves	Indoor	1800 gal/unit	4.93	463
Water Efficient Dishwashers	Indoor	650 gal/unit	1.78	167
Dual Flush Toilets	Indoor	4000 gal/unit	10.96	1030
			TOTAL=	2279

[1] Based on 94 Residential Units

References

* Water Agency Standards (WAS) - Design Guidelines: Section 4.1 (7/28/14)

** San Dieguito Water District Water System Master Plan: Section 3.5 (June 2010)

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX N
PROJECT FACILITY AVAILABILITY FORMS

THIS PAGE INTENTIONALLY LEFT BLANK

PROJECT FACILITY AVAILABILITY FORM- City of Encinitas

SEWER

Please type or use pen

Fenway Capital Advisors — (858) 880-4277
Owner's Name — Phone

674 Via de la Valle, Suite 310
Owner's Mailing Address — Street

Solana Beach — CA — 92075
City — State — Zip

ORG _____
ACCT _____
ACT _____
TASK _____
DATE _____ AMT $ _____

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION — TO BE COMPLETED BY APPLICANT

A.
- [ ] Major Subdivision (TM)
- [ ] Minor Subdivision (TPM)
- [ ] Certificate of Compliance: _____
- [ ] Boundary Adjustment
- [ ] Specific Plan or Specific Plan Amendment
- [ ] Rezone (Reclassification) from _____ to _____ zone
- [ ] Major Use Permit (MUP), purpose: _____
- [ ] Time Extension... Case No. _____
- [ ] Expired Map... Case No. _____
- [X] Other Design Review Permit, Boundary Adjustment & Coastal Development Permit

B.
- [X] Residential . . . Total number of dwelling units 94 units
- [X] Commercial. . . Gross floor area 18,262 s.f.
- [ ] Industrial. . . . . Gross floor area _____
- [X] Other. . . . . Gross floor area 30 hotel rooms

C. Total Project acreage 3.79 Total number of lots 3

D. Is the project proposing its own wastewater treatment plant? Yes [ ] No [X]
Is the project proposing the use of reclaimed water? Yes [ ] No [X]

Assessor's Parcel Number(s)
(Add extra if necessary)

2	1	6	0	4	1	0	6
2	1	6	0	4	1	2	0
2	1	6	0	4	1	2	1

Thomas Bros. Page _____ Grid _____

Project address 1900, 1950 & 2100 N Coast Hwy 101
Street

Comm.Advisory Board Area

Owner/Applicant agrees to pay all necessary construction costs and dedicate all district required easements to extend service to the project.
OWNER/APPLICANT MUST COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: _____ Date: 2/2/2021

Address: 27127 Calle Arroyo, Suite 1904, San Juan Capistrano, CA 92675 Phone: (949) 661-6695 ext. 224

(On completion of above, present to the sewer district to establish facility availability. Section 2 below)

SECTION 2. FACILITY AVAILABILITY — TO BE COMPLETED BY DISTRICT

District name Leucadia Wastewater District Service area Encinitas

A. [X] Project is in the district.
- [ ] Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
- [ ] Project is not in the district and is **not** within its Sphere of Influence boundary.
- [ ] The project is not located entirely within the district and a potential boundary issue exists with the _____ District.

B. [X] Facilities to serve the project [X] ARE [ ] ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached. Number of sheets attached: _____
- [ ] Project will not be served for the following reason(s): _____

C. [ ] **District conditions are attached. Number of sheets attached:** _____
- [ ] **District has specific water reclamation conditions which are attached. Number of sheets attached:** _____
- [X] **District will submit conditions at a later date.**

D. [ ] **How far will the pipeline(s) have to be extended to serve the project?** N/A

Date: 2/2/21 Expiration date: 2/2/22 *(One year from date of issuance unless district indicates otherwise)*

Authorized signature: _____ Print name: Ian Riffel

Print title: Field Services Specialist Phone: (760) 753-0155

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF FACILITIES OR SERVICE BY THE DISTRICT. On completion of Section 2 by the district, applicant is to submit this form with application to the Zoning Counter at the Planning & Community Development, 505 S. Vulcan Ave., Encinitas, CA 92024

PROJECT FACILITY AVAILABILITY FORM - City of Encinitas

WATER

Please type or use pen

Fenway Capital Advisors — (858) 880-4277
Owner's Name — Phone

674 Via de la Valle, Suite 310
Owner's Mailing Address — Street

Solana Beach — CA — 92075
City — State — Zip

ORG _____
ACCT _____
ACT _____
TASK _____
DATE _____ AMT $ _____

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION — TO BE COMPLETED BY APPLICANT

A.
- [ ] Major Subdivision (TM)
- [ ] Minor Subdivision (TPM)
- [ ] Specific Plan or Specific Plan Amendment
- [ ] Certificate of Compliance: _____
- [ ] Boundary Adjustment
- [ ] Rezone (Reclassification) from _____ to _____ zone.
- [ ] Major Use Permit (MUP), purpose: _____
- [ ] Time Extension... Case No. _____
- [ ] Expired Map... Case No. _____
- [X] Other Design Review Permit, Boundary Adjustment & Coastal Development Permit

B.
- [X] Residential ..... Total number of dwelling units 94 units
- [X] Commercial ..... Gross floor area 18,262 s.f.
- [ ] Industrial ..... Gross floor area _____
- [X] Other ..... Gross floor area 30 hotel rooms

C. Total Project acreage 3.79 Total number of lots 3

D. Is the project proposing the use of groundwater? ☐ Yes ☒ No
Is the project proposing the use of reclaimed water? ☐ Yes ☒ No

Assessor's Parcel Number(s)
(Add extra if necessary)

2	1	6	0	4	1	0	6
2	1	6	0	4	1	2	0
2	1	6	0	4	1	2	1

Thomas Bros. Page _____ Grid _____

1900, 1950 & 2100 N Coast Hwy 101
Project address — Street

92024
Community Planning Area/Subregion — Zip

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: _____ Date: 2/2/2021

Address: 27127 Calle Arroyo, Suite 1904, San Juan Capistrano, CA 92675 Phone: (949) 661-6695 ext. 224

(On completion of above, present to the water district to establish facility availability, Section 2 below)

SECTION 2. FACILITY AVAILABILITY — TO BE COMPLETED BY DISTRICT

District name San Dieguito Water District Service area Encinitas, CA

A.
- [X] Project is in the district.
- [ ] Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
- [ ] Project is not in the district and is not within its Sphere of Influence boundary.
- [ ] The project is not located entirely within the district and a potential boundary issue exists with the _____ District.

B. [X] Facilities to serve the project ☒ ARE ☐ ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached ____. (Number of sheets)
- [ ] Project will not be served for the following reason(s): _____

C.
- [ ] **District conditions are attached. Number of sheets attached:** _____
- [ ] **District has specific water reclamation conditions which are attached. Number of sheets attached:** _____
- [X] **District will submit conditions at a later date.**

D. [ ] **How far will the pipeline(s) have to be extended to serve the project?** _____

Date: 2/2/2021 Expiration date: 2/2/2022 *(One year from date of issuance unless district indicates otherwise.)*

Authorized signature: _____ Print name: Christina Olson

Print title: Associate Engineer Phone: (760) 633-2792

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT. On completion of Section 2 by the district, applicant is to submit this form with application to the Zoning Counter at the Planning & Community Development Dept., 505 S. Vulcan Ave., Encinitas, CA 92024

DPL#399W(Rev.4/12/91)

Project # 300000360971
Job # 300000368672

2/5/2021

Fenway Capital Advisors
Mike Jensen
674 Via de la Valle, Suite 310
Solana Beach, CA 92075

Dear Mike Jensen:

Subject: Encinitas Mixed Use (AD) at 1950 N Highway 101, Encinitas

In accordance with SDG&E "RULES FOR THE SALE OF ELECTRIC ENERGY" and "RULES OF THE SALE OF GAS", filed with and approved by the California Public Utilities Commission, gas and electric facilities can be made available to 1950 N Highway 101, Encinitas.

If purchaser is to pay any cost for the installation and/or extension of utility service, the costs will be calculated in conformance with our extension and service rules.

Evidence of financial arrangements for the installation of gas and electricity can be obtained from the developer and/or owner based on correspondence from SDG&E on this project.

Our ability to serve future projects in our service territory will depend on the supply of fuel and other essential materials available to us and on our obtaining government authorization to construct the facilities required.

Online Portal & Contact Information

Did you know you can access your Planner's contact information and track the progress of your project on the new SDG&E Builder Services Portal? Visit sdge.com/builder-portal and have your Project #: 300000360971 and Access Code: 092552.

We appreciate your business and hope you are very satisfied with our service. If I may be of further assistance or should you have any non-construction-related questions (easements, charges, etc.), please call me or your Project Support Coordinator at the number below. Our office hours are 7:00 a.m. to 4:00 p.m., Monday through Friday. For additional information, visit sdge.com/builder-services.

Sincerely,

Rosie Matanane

Rosie Matanane
Project Planner III
(760) 480-7728

Encinitas
UNION SCHOOL DISTRICT

101 S. Rancho Santa Fe Road
Encinitas, CA 92024-4349
Phone: (760) 944-4300
FAX: (760) 944-4393
www.eusd.net

Board of Trustees
Emily Andrade
Gregg Sonken
Marla Strich
Marlon Taylor
Jodie Williams

Superintendent
Andrée Grey, Ed.D.

Assistant Superintendents
Amy Illingworth, Ed.D.
Educational Services

Angelica Lopez, Ed.D.
Administrative Services

Joseph Dougherty
Business Services

February 3, 2021

Fenway Capital Advisors
Attn: Mike Jensen
674 Via de la Valle, Suite 310
Solana Beach, CA 92075
mjensen@fenwayca.com

Dear Mr. Jensen:

This letter is in response to your request for information on our school district's attendance areas for "Marea Village". This ninety-four unit apartment project is located at 1900 and 1950 N Coast Highway 101, Encinitas, CA.

This development is within Paul Ecke Elementary School boundary, a K – 6th grade school located at 185 Union Street, Encinitas, CA 92024. Their phone number is (760) 944-4323. Paul Ecke Elementary is approximately 1.80 miles away. The district does not provide school bus transportation.

You and your clients are advised that this project is in a significant growth area. As such, the Board will make adjustments as necessary to provide appropriate housing for students. In addition, fees will be levied in accordance with Government Code Section 53080 or Section 65970 prior to the issuance of building permits.

Sincerely,

Beth Hilton

Beth Hilton
Director, Fiscal Services

San Dieguito
Union High School District

Board of Trustees
Joyce Dalessandro
Kristin Gibson
Beth Hergesheimer
Melisse Mossy
Maureen "Mo" Muir

Superintendent
Robert A. Haley, Ed.D.

710 Encinitas Boulevard, Encinitas, CA 92024
Telephone (760) 753-6491
www.sduhsd.net

Facilities Planning & Construction Department

February 5, 2021

Mike Jensen
Fenway Capital Advisors
674 Via de la Valle, Suite 310
Solana Beach, CA 92075

Re: Marea Village
1099 & 1950 N. Coast Hwy 101, Encinitas
94 Multi-Units
216-041-20, 216-041-21, 216-041-06

Dear Mr. Jensen,

This letter is to inform you, on behalf of the San Dieguito Union High School District, that the District will serve the residents of the homes to be constructed in the proposed development.

The San Dieguito Union High School District is experiencing growth and as a general policy, assigns students to schools according to the enclosed attendance boundary policy. However, the District cannot guarantee attendance of students to a specific school within the District from this new development. Students who reside in the development may be reassigned from their original school of enrollment to another school within the District at the beginning of a new school year if student enrollment at the original school exceeds the school's capacity. This policy was ratified by the Governing Board on March 15, 1990 and is in the process of being updated. A copy of this resolution "School Assignments for New Residential Development" is enclosed.

This project is in the Diegueno Middle School and La Costa Canyon High School attendance area.

This development will be subject to all assessments and fees of the District that are in effect at the time that building permits are issued.

Sincerely,

John Addleman

John Addleman
Executive Director of Planning Services
Enclosures

District Site Addresses - San Dieguito Union High School District

Canyon Crest Academy
5951 Village Center Loop Road
San Diego, CA 92130
(858) 350-0253

Carmel Valley Middle School
3800 Mykonos Lane
San Diego, CA 92130
(858) 481-8221

Diegueno Middle School
2150 Village Park Way
Encinitas, CA 92024
(760) 944-1892

Earl Warren Middle School
155 Stevens Avenue
Solana Beach, CA 92075
(858) 755-1558

La Costa Canyon High School
One Maverick Way
(3451 Camino de Los Coches)
Carlsbad, CA 92009
(760) 436-6136

Oak Crest Middle School
675 Balour Drive
Encinitas, CA 92024
(760) 753-6241

Pacific Trails Middle School
5975 Village Center Loop Road
San Diego, CA 92130
(858) 509-1000

San Dieguito High School Academy
800 Santa Fe Drive
Encinitas, CA 92024
(760) 753-1121

Sunset High School
684 Requeza Street
Encinitas, CA 92024
(760) 753-3860

Torrey Pines High School
3710 Del Mar Heights Road
San Diego, CA 92130
(858) 755-0125

ATTENDANCE BOUNDARIES

In order to maintain an equitable balance in the enrollment at each campus, the Board shall establish attendance boundaries for each school in the San Dieguito Union High School District. Boundaries of school attendance areas in the District shall be as follows:

1. Canyon Crest Academy shall be open to a limited number of 9-12 grade students within District boundaries through an open enrollment application process approved by the Board of Trustees.
2. La Costa Canyon High School shall include the boundaries of the Encinitas and Cardiff school districts and the area north of Escondido Creek in Rancho Santa Fe District.
3. San Dieguito High School Academy shall be open to a limited number of 9-12 grade students within District boundaries through an open enrollment application process approved by the Board of Trustees.
4. Torrey Pines High School shall include the boundaries of the Del Mar, Solana Beach and Rancho Santa Fe school districts, with the exception of the area north of Escondido Creek in the Rancho Santa Fe School District.
5. Diegueño Middle School shall include the following portions of the Encinitas Elementary District for grades 7-8:
    a. East of El Camino Real; south of Olivenhain Road and north of Encinitas Boulevard.
    b. La Costa east of Rancho Santa Fe Road.
    c. Leucadia - South of La Costa Avenue; west of El Camino Real; north of Union Street; west of Saxony Road; north of Encinitas Boulevard to the coast; south to Cardiff State Beach and west of Highway 101.
6. Oak Crest Middle School shall include the boundaries of the Cardiff Elementary District and the remainder of the Encinitas Elementary District for grades 7-8.
7. Earl Warren Middle School shall include the boundaries of Del Mar Elementary School District west of Interstate 5, and the Solana Beach Elementary School District , except for that portion of the Solana Beach Elementary School District located in North City West, and the boundary area served by Solana Ranch Elementary.
8. Carmel Valley Middle School shall include the area bounded by land east of Interstate 5 extending to the District's eastern most boundary; and land south of the Carmel Valley Planning Area boundary (generally following Gonzales Canyon) extending to the district's southernmost boundary for grades 7-8, except the boundary areas served by Ashley Falls Elementary, Sycamore Ridge Elementary, and Solana Ranch Elementary.
9. Pacific Trails Middle School shall include the boundary areas of the Del Mar Elementary School District served by Ashley Falls Elementary and Sycamore Ridge Elementary, and the boundary area of the Solana Beach Elementary School District served by Solana Ranch Elementary.

It is the intent of the Board of Trustees to provide equal educational opportunities for all students of the District. In order to avoid duplication of certain costly facilities, some programs will be offered on a single campus and opportunities will be provided for all qualified district students to attend under specified conditions.

The administration is authorized to establish procedures that set forth the conditions under which students may attend classes at a District campus located outside of their assigned attendance boundaries.

Approved by the Governing Board
on 3/15/90

SAN DIEGUITO UNION HIGH SCHOOL DISTRICT

RESOLUTION NO. _____/89-90
School Assignments For New Residential Development

WHEREAS, the San Dieguito Union High School District is experiencing growth in student enrollment, and

WHEREAS, the majority of the enrollment growth results from new families occupying homes in new residential housing developments, and

WHEREAS, individual school assignments for students in these subdivisions may need to change from year to year, or within a year, at the discretion of the superintendent, and

WHEREAS, the San Dieguito Union High School District Board of Trustees adopted a policy on attendance boundaries for each school,

THEREFORE, BE IT RESOLVED, that the policy of the San Dieguito Union High School District that students enrolling from new residential housing development will be assigned to a specific school, at the time of enrollment, subject to change as school capacity and availability requires.

BOARD OF TRUSTEES

President

Clerk

Member

Member

Member

March 15, 1990
Adoption Date

THIS PAGE INTENTIONALLY LEFT BLANK