Draft Initial Study and Mitigated Negative Declaration

Bluebird Canyon Drive Evacuation Route Widening Project

CIP 21-9454

June 20, 2022

Prepared for:

City of Laguna Beach
505 Forest Avenue
Laguna Beach, CA 92651

Prepared by:

Stantec Consulting Services Inc.
38 Technology Drive
Irvine CA 92618-5312

DRAFT INITIAL STUDY & MITIGATED NEGATIVE DECLARATION, BLUEBIRD CANYON DRIVE EVACUATION ROUTE PROJECT

Revision	Description	Author		Quality Check		Independent Review	

DRAFT INITIAL STUDY & MITIGATED NEGATIVE DECLARATION, BLUEBIRD CANYON DRIVE EVACUATION ROUTE PROJECT

This document entitled draft Initial Study & Mitigated Negative Declaration, Bluebird Canyon Drive Evacuation Route Project was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of City of Laguna Beach (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by 
(signature)
Gilberto Ruiz, Principal Environmental Planner

Reviewed by 
(signature)
Christine Abraham, Principal Environmental Planner

Approved by 
(signature)
Michael Weber, Senior Principal Scientist

Table of Contents

ACRONYMS ..... **IV**

1.0 INTRODUCTION **1**
1.1 INCORPORATION BY REFERENCE 1
1.2 RESPONSIBLE AGENCIES AND AGENCIES CONSULTED 1
1.3 ENVIRONMENTAL PROCESS AND AGENCY USE OF DOCUMENT 1
1.4 ORGANIZATIONS AFFILIATED WITH THE PROJECT 2
1.5 NATIVE AMERICAN CONSULTATION 2
1.6 FINDINGS FROM THE INITIAL STUDY 3
1.7 PROCESS FOR ADOPTING A MITIGATED NEGATIVE DECLARATION 4
1.8 MITIGATION MONITORING AND REPORTING PROGRAM 4

2.0 PROJECT DESCRIPTION **5**
2.1 PROJECT DESCRIPTION 5
2.1.1 Project Location and Boundaries 5
2.1.2 Existing Site Characteristics 5
2.1.3 Project Characteristics 7
2.1.4 Approvals Required 15
2.2 PROJECT CONSTRUCTION & PHASING 15
2.3 CONSTRUCTION VEHICLE ACCESS AND STAGING 15
2.4 PROJECT SCHEDULE 16
2.5 PROJECT HISTORY AND BACKGROUND 16

3.0 IMPACT ANALYSIS **17**
3.1 AESTHETICS 17
3.2 AGRICULTURE AND FOREST RESOURCES 20
3.3 AIR QUALITY 21
3.4 BIOLOGICAL RESOURCES 24
3.5 CULTURAL RESOURCES 32
3.6 ENERGY 36
3.7 GEOLOGY AND SOILS 37
3.8 GREENHOUSE GAS EMISSIONS 40
3.9 HAZARDS AND HAZARDOUS MATERIALS 42
3.10 HYDROLOGY AND WATER QUALITY 46
3.11 LAND USE AND PLANNING 51
3.12 MINERAL RESOURCES 57
3.13 NOISE 58
3.14 POPULATION AND HOUSING 62
3.15 PUBLIC SERVICES 63
3.16 RECREATION 64
3.17 TRANSPORTATION 65
3.18 TRIBAL CULTURAL RESOURCES 67

3.19 UTILITY AND SERVICE SYSTEMS 69
3.20 WILDFIRE 70
3.21 MANDATORY FINDINGS OF SIGNIFICANCE 73

4.0 LIST OF PREPARERS 76
4.1 CITY OF LAGUNA BEACH 76
4.2 STANTEC 76

5.0 REFERENCES 77

LIST OF TABLES

Table 1. Unmitigated Project Construction Emissions in Comparison to SCAQMD Significance Criteria 22
Table 2. Vegetation Community and Land Cover Type and Impact Acreages on the Project Site 28
Table 3. Total Estimated Project GHG Emissions 41
Table 4. Typical Construction Best Management Practices 48
Table 5. General Plan and Local Coastal Program Consistency Analysis 52
Table 6. Summary of Federal Highway Administration Roadway Construction Noise Model at Existing Residential Receptor 59
Table 7. Estimated Vibration Levels for Construction Equipment 61

LIST OF FIGURES

Figure 1. Project Location 6
Figure 2. Grading & Drainage Sheet 8
Figure 3. Street Improvement Plan Sheet “A” 9
Figure 4. Street Improvement Plan Sheet “B” 10
Figure 5. Signing & Striping Plan 11
Figure 6. Planting Plan 12
Figure 7. Irrigation Plan 13
Figure 8. Erosion Control Plan 14
Figure 9. Vegetation Communities and Land Cover Types 30

LIST OF APPENDICES

APPENDIX A MITIGATION MONITORING & REPORTING PROGRAM

APPENDIX B AIR QUALITY & GREENHOUSE GAS STUDY

APPENDIX C BLUEBIRD CANYON DRIVE RETAINING WALL (CIP 21-9454) BIOLOGICAL AND AQUATIC RESOURCES MEMORANDUM

APPENDIX D CULTURAL RESOURCES MEMORANDUM

APPENDIX E PALEONTOLOGICAL RESOURCE ASSESSMENT

APPENDIX F DESKTOP STUDY – HAZARDOUS MATERIALS & ENVIRONMENTAL RECORDS REVIEW REPORT

APPENDIX G NOISE MODEL OUTPUTS

ACRONYMS

AB	Assembly Bill
AC	asphalt-concrete
BMPs	Best Management Practices
BSA	Biological Survey Area
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CRPR	California Rare Plant Rank
CSWRCB	California State Water Resources Control Board
DAMP	Drainage Area Management Plan
EO	Executive Order
ESHA	Environmentally Sensitive Habitat Area
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal year
GHG	Greenhouse gas
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
lbs	pounds
LBUSD	Laguna Beach Unified School District
LEQ	time-equivalent sound level
LMAX	maximum sound level
LSTs	localized significance thresholds
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MT	metric tons
NCCP	Natural Community Conservation Plan
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
Pb	Lead
PM_{10}	Particulate Matter with diameters that are generally 10 micrometers or smaller
$PM_{2.5}$	Particulate Matter with diameters that are generally 2.5 micrometers or smaller
PRC	Public Resource Code
RCNM	Roadway Construction Noise Model
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District

SCCIC	South Central Coastal Information Center
SO_X	Sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
U.S.C.	U.S. Code (of Federal Regulations)
USGS	U.S. Geological Survey
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled
VOC	volatile organic compound

1.0 INTRODUCTION

The City of Laguna Beach (hereinafter "City") has prepared this Initial Study (IS) and Mitigated Negative Declaration (MND) to evaluate potential environmental impacts that could occur from the proposed construction and operation of the Bluebird Canyon Drive Evacuation Route Project (hereinafter referred to as the "proposed Project; Project"). This introductory section briefly describes the agency use of the document and related studies. A detailed project description is presented in Section 2.0 (Project Description) of this document.

Pursuant to §15367 of the California Environmental Quality Act (CEQA) Guidelines, the City is the Lead Agency responsible for preparing this IS/MND to analyze potential impacts associated with the proposed Project.

1.1 INCORPORATION BY REFERENCE

Pursuant to CEQA Guidelines, Section 15150, this IS incorporates by reference all or portions of other technical documents that are a matter of public record. Those documents either relate to the proposed Project or provide additional information concerning the environmental setting for it. Where all or a portion of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of this IS. The information and evaluations contained in this IS are based, in part, on the technical studies and/or planning documents that include the Project site or provide information addressing the general Project area. These are identified within the Appendix section of the IS (see Table of Contents) and within Section 4.0, References.

1.2 RESPONSIBLE AGENCIES AND AGENCIES CONSULTED

Responsible agencies include all public agencies other than the Lead Agency that have discretionary approval power over the Project (CEQA Guidelines §15381). Responsible agencies in respect to this Project may include:

- California Coastal Commission
- California Water Boards, San Diego – Region 9
- California Department of Fish & Wildlife – Region 5

1.3 ENVIRONMENTAL PROCESS AND AGENCY USE OF DOCUMENT

This environmental document has been prepared consistent with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code, §§21000-21177), the CEQA Guidelines, and the City of Laguna Beach CEQA Implementation Handbook (April 3, 2007). This environmental document is intended to be used as a decision-making tool for the City in considering and acting on the proposed Project. Responsible Agencies (i.e., regulatory agencies) may elect to use this environmental analysis for discretionary actions associated with the implementation of the proposed Project.



This document is intended to provide decision makers and the public with information concerning the potential environmental effects associated with the adoption and implementation of the proposed Project, and potential ways to reduce or avoid possible environmental impacts. The environmental analyses presented in this document primarily focus on the changes in the environment that would result from the Project. This environmental document also evaluates all phases of the Project including construction and operation.

1.4 ORGANIZATIONS AFFILIATED WITH THE PROJECT

Pursuant to the provisions of the CEQA Guidelines, the City is the Lead Agency for this proposed Project. The proposed Project will be subject to a public hearing which will be heard by the City. Contact persons for the entities involved in the preparation of this IS/MND are:

City of Laguna Beach
Pierre Sawaya, Project Manager
Public Works Department
505 Forest Avenue
Laguna Beach, CA 92651
e-mail: psawaya@lagunabeachcity.net

Environmental Consultant
Stantec Environmental Consulting Inc.
Gilberto Ruiz, Principal Environmental Planner
38 Technology Drive
Irvine CA 92618-5312
e-mail: gilberto.ruiz@stantec.com

1.5 NATIVE AMERICAN CONSULTATION

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The Project area is considered to be of low sensitivity for Native American and tribal cultural resources based on the negative results of the Sacred Lands Files Search, conducted by the Native American Heritage Commission (NAHC) of behalf of the City on September 3, 2021. As part of its Assembly Bill (AB) 52 consultation requirements, on March 11, 2022, the City sent letters to all tribal representatives identified by the NAHC making them aware of the proposed Project. Two Tribes responded to the Consultation inquiry. On April 15, 2022, Christina Conley of the Gabrielino Tongva Indians of California responded via email. In her correspondence, Ms. Conley indicated the NAHC had stated that the area has tested positive for cultural resources and will require Native American Monitoring for all ground disturbances and that the City advise her of their next steps. On April 27, 2022, correspondence via email was also received by Joyce Stanfield Perry of the Juaneño Band of Mission Indians, Acjachemen Nation.

In her email, Ms. Stanfield Perry noted because of the sensitivity of this area and known presence of two cultural resources within the area, one of the Cultural Resources mitigation measures (CUL-1) should be revised to include Native American monitoring during ground disturbance. The City's responses to the correspondence received from the Tribes and their requests are provided in Section 3.5 (Cultural Resources) and Section 3.18 (Tribal Cultural Resources). In addition, the City invited Ms. Conley to conduct a joint site visit of the project site, but she indicated it was not necessary at this time and declined. The City will continue to communicate any updates during the final design and construction phases to the Tribe and others, if requested.

1.6 FINDINGS FROM THE INITIAL STUDY

Based upon the analysis contained in the IS, the proposed Project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Based upon the analysis contained in the IS, the proposed Project would have a less than significant with mitigation incorporated impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Biological Resources
- Cultural Resources
- Noise
- Mandatory Findings of Significance

1.7 PROCESS FOR ADOPTING A MITIGATED NEGATIVE DECLARATION

Based on the responses to the IS checklist questions (described above and analyzed below), the City has determined that a MND is the appropriate level of CEQA environmental documentation. As such, prior to adoption of the MND and consideration of the proposed Project, the City will issue a Notice of Intent (NOI) to Adopt an MND and the Initial Study and will be provided to Responsible Agencies, Trustee Agencies, Agencies with jurisdiction by law, and the public for 30 days to review and comment.

Approval of the proposed Project by the Lead Agency (City) is contingent on adoption of the IS/MND after considering agency and any public comments. By adopting the IS/MND, the Lead Agency certifies that the analyses provided in the IS/MND were reviewed and considered by the City and reflect its independent judgment and analysis.

1.8 MITIGATION MONITORING AND REPORTING PROGRAM

As noted above and contained within the analysis provided below, mitigation measures are required in order to reduce impacts for some environmental parameters analyzed in the IS/MND. These will be included in the Project's Mitigation Monitoring and Reporting Program (MMRP) (see Appendix A of this IS/MND) and will be incorporated into the Project's overall requirements. The MMRP ensures implementation of the measures being imposed to mitigate or avoid the potentially significant adverse environmental impacts identified using monitoring and reporting. Monitoring is generally an ongoing or periodic process of Project oversight; reporting generally consists of a written compliance review that is presented to the decision-making body (e.g., City Council) or authorized staff person.

The MMRP contains a table which includes the mitigation measures denoting impacts, mitigation measures adopted by the City in connection with approval of the proposed Project, level of significance after mitigation, responsible and monitoring parties, and the Project phase in which the measures are to be implemented.



2.0 PROJECT DESCRIPTION

2.1 PROJECT DESCRIPTION

The Project Description for this environmental document provides an understanding of all components of the Project. The following sections describe the Project location, surrounding site uses, and existing site characteristics, as well as Project details.

2.1.1 Project Location and Boundaries

The Project is located within the City along Bluebird Canyon Drive, between Oriole Drive and Rancho Laguna Drive. The Project boundaries are roughly Rancho Laguna Road westerly about 850 linear feet. Figure 1 (Project Location) illustrates the geographic location of the Project. The entire City of Laguna Beach is located within the California Coastal Zone, including the Project site.

2.1.2 Existing Site Characteristics

The Project site is located about three-quarters of a mile from the Laguna Beach coast along Bluebird Canyon Drive, one of the City's major east/west canyons. The paved and striped roadway is comprised of two 12-foot lanes with no dedicated shoulder in either direction. The posted speed limit is 25 miles per hour. Traffic control is via a stop sign. There is one residential access road on the south side of the roadway and no residential access roads on the north side within the Project limits. The south side of the roadway is characterized by steep slopes containing dense vegetation. The north side is comprised of grasses, punctuated by gum trees (*Eucalyptus* sp.) and juvenile (City-planted) coast live oak (*Quercus agrifolia*) and sparse shrubbery, with gradual to steep slopes leading to the canyon bottom. The north side of the roadway has two sections of 6-inch asphalt curb intended to direct runoff to inlet areas of the storm drain system. The roadway also contains various underground utilities, including sewer (City of Laguna Beach), water (Laguna Beach County Water District), natural gas (SoCalGas), and overhead utilities including electrical (Southern California Edison), and cable tv (Cox Communications). Adjacent land uses are comprised of single-family residential and open space. There are no single-family residences immediately adjacent to the roadway within the Project limits, although one residence located at 1085 Bluebird Canyon Drive is located approximately 50 feet south and above the roadway on the hillside.

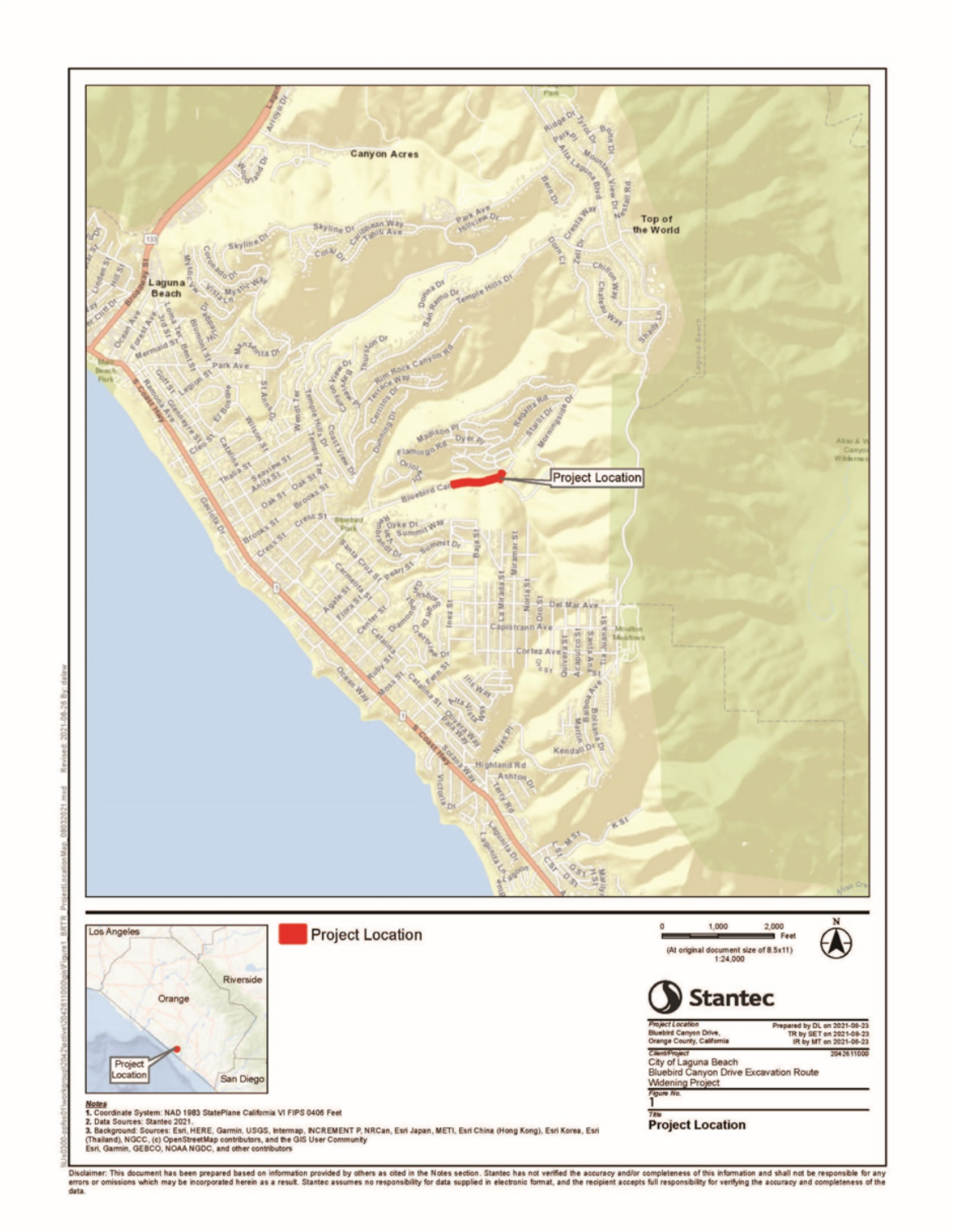


Figure 1. Project Location

2.1.3 Project Characteristics

The City proposes the Project, which includes the construction of a wood lagging retaining wall on the north side of Bluebird Canyon Drive and widening of a portion of the north side of Bluebird Canyon Drive, from approximately Rancho Laguna Road westerly about 850 linear feet to provide an eight-foot-wide roadway shoulder. The Project will improve emergency egress for the surrounding community. Bluebird Canyon is home to over 400 residences and is surrounded by dense coastal sage scrub vegetation. Bluebird Canyon Drive is a key evacuation route for these residences, and widening the road is needed to provide additional capacity for emergency egress, as identified in the City's Wildfire Mitigation and Fire Safety Report.

The general site slopes downward to the north into the Bluebird Canyon drainage course, at ratios from 1.5:1 to 2:1. As part of the proposed widening, a four- to eight-foot-high soldier pile supported retaining wall system (beam and lagging) founded in competent bedrock materials would be constructed along the north side of Bluebird Canyon Drive, extending some 850 feet. A Midwest Guardrail System and a four-inch asphalt-concrete (AC) dike is proposed to be constructed along this portion of the widened roadway. The existing two-direction 12-foot lanes would remain in their existing configurations. In addition, the existing wood stairs to the path along Bluebird Canyon Drive (north side) would be modified, and the access would be preserved with a barrier opening. These activities and features would require the removal and relocation of a number of existing power and communication poles by others, which is being coordinated by the City.

In addition, the proposed Project may also require modification to all or a portion of the existing slopes. The preliminary design indicates the excavations for deepened foundations for the north wall would be some 30-feet below existing grades, but would not be a continuous trench and instead, would include piles located at pre-determined locations.

Runoff from the north side would be directed along the existing and new curb sections and would drain to the proposed catch basins and storm drainpipes and drain into the existing slope areas.

The proposed Project would include drainage elements needed to protect the slope and to drain the flat areas in the superelevation transition along the middle segment of the Project. Existing storm drain facilities would be protected in place and would not be impacted. Two new catch basins would be constructed. The Project would utilize Filtrexx, StormExx Clean, or similar type product, catch basin inserts at two new sump inlet locations. These two locations provide design treatment runoff capacity for drainage areas on the north side impacted by the Project.

Figure 2 (Grading & Drainage Sheet), Figure 3 (Street Improvement Plan Sheet "A"), Figure 4 (Street Improvement Plan Sheet "B"), Figure 5 (Signing & Striping Plan), Figure 6 (Planting Plan), Figure 7 (Irrigation Plan), and Figure 8 (Erosion Control Plan) show the Project characteristics described above.

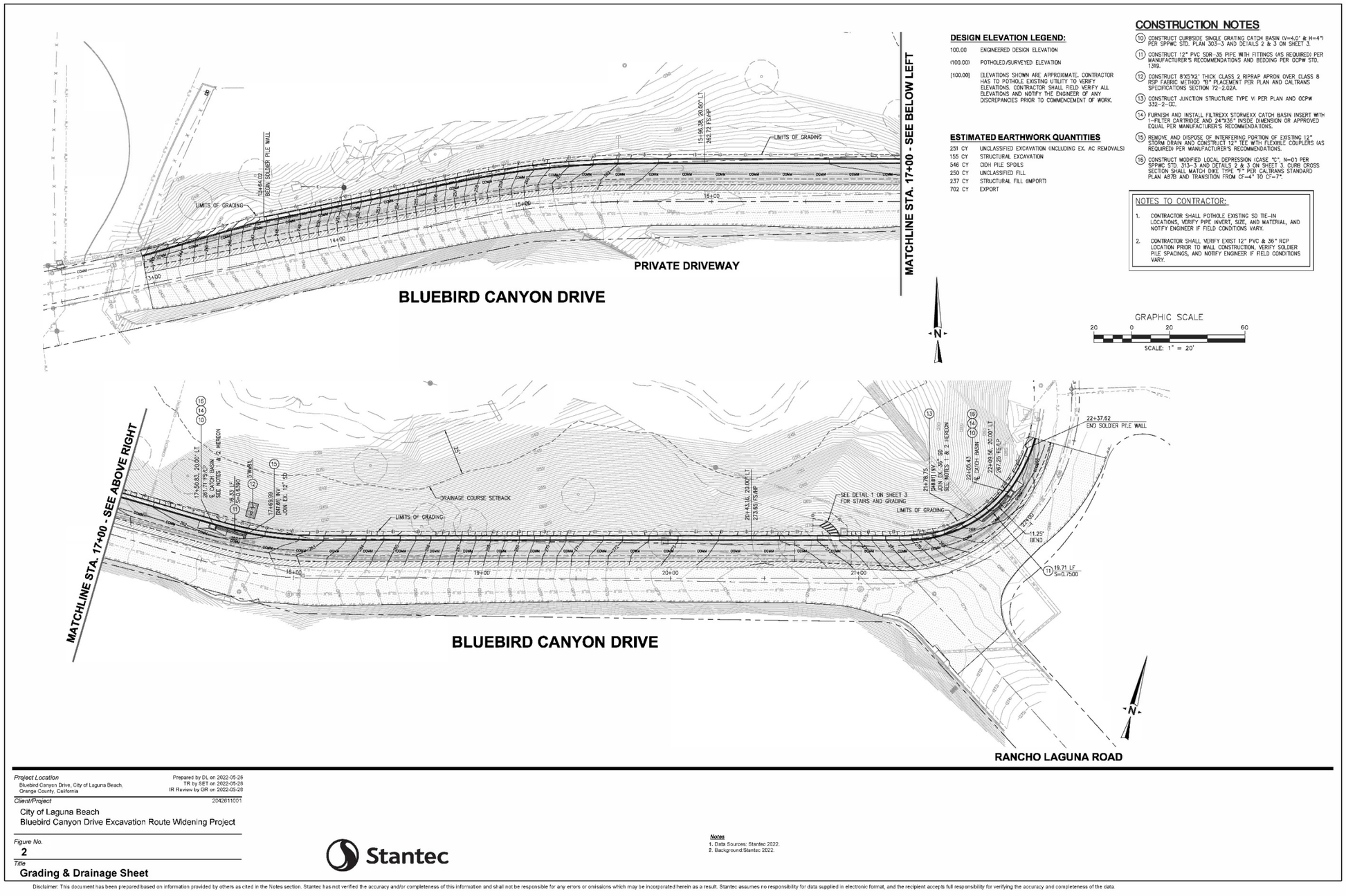
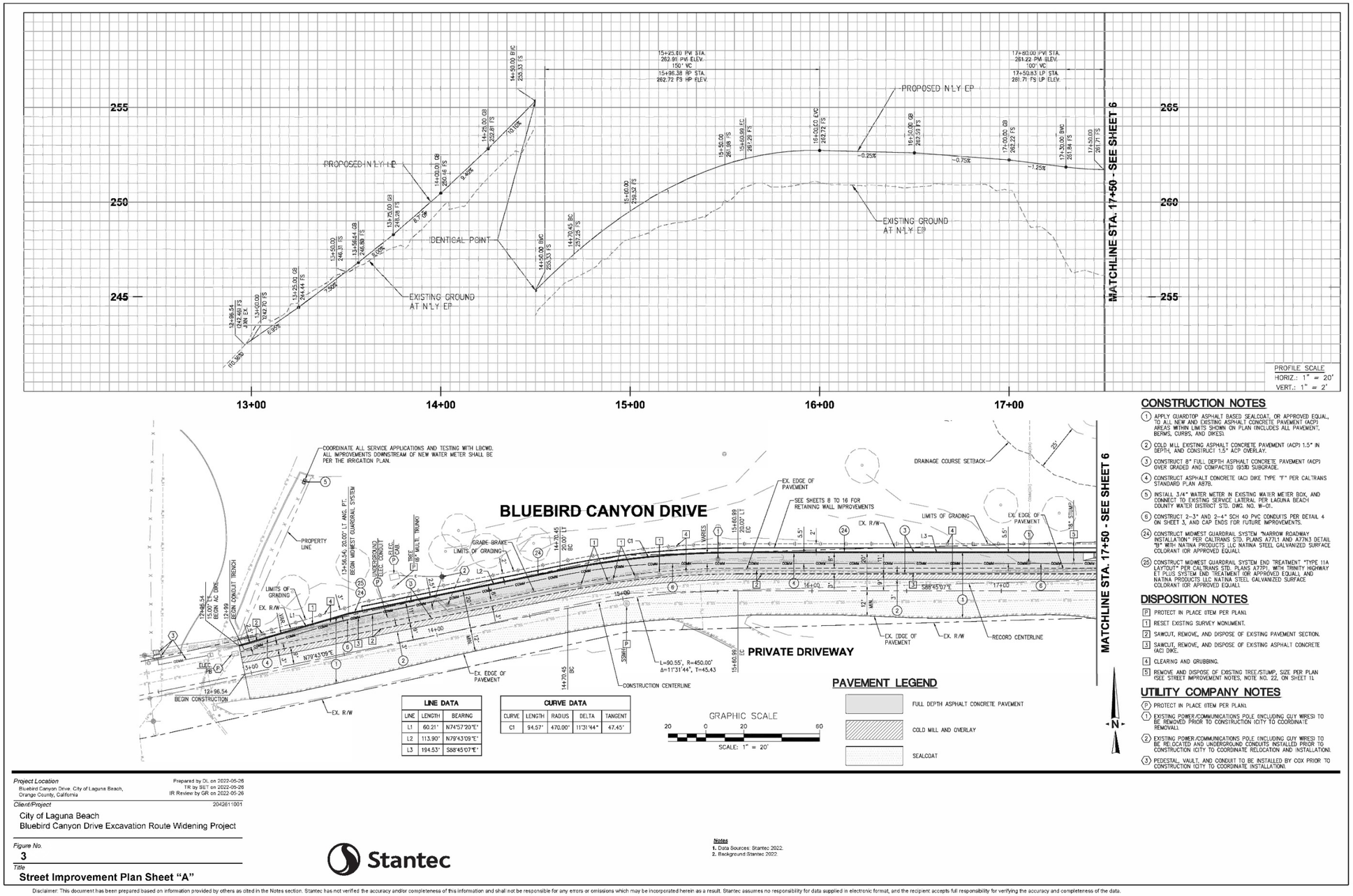
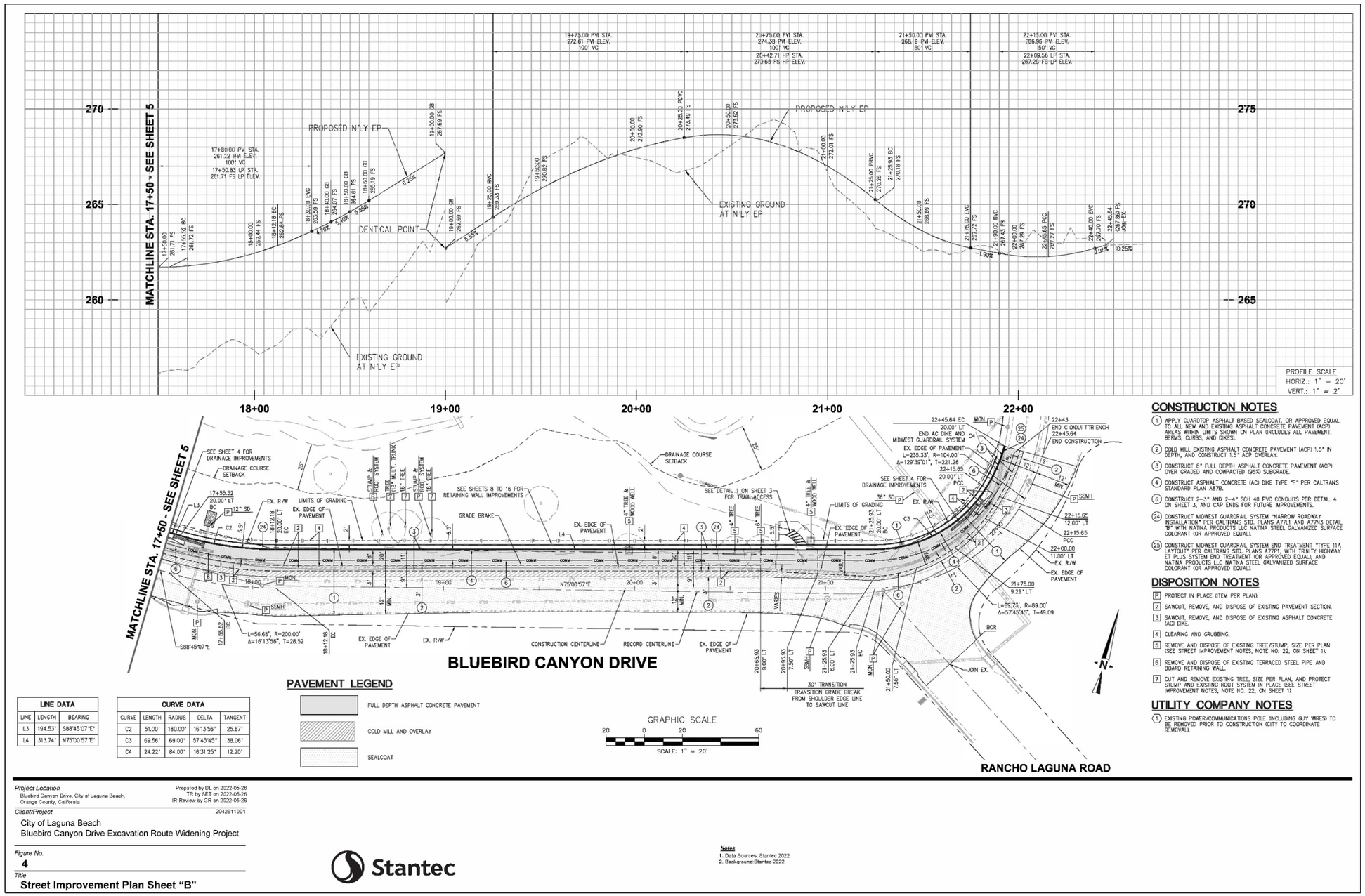


Figure 2. Grading & Drainage Sheet



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Figure 3. Street Improvement Plan Sheet "A"



LINE DATA		
LINE	LENGTH	BEARING
L3	194.53'	S88°45'07"E
L4	313.74'	N75°00'57"E

CURVE DATA				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C2	51.00'	180.00'	16°13'56"	25.67'
C3	69.56'	69.00'	57°45'45"	38.06'
C4	24.22'	84.00'	16°31'25"	12.20'

CONSTRUCTION NOTES

1. APPLY GUARDTOP ASPHALT BASED SEALCOAT, OR APPROVED EQUAL, TO ALL NEW AND EXISTING ASPHALT CONCRETE PAVEMENT (ACP) AREAS WITHIN LIMITS SHOWN ON PLAN (INCLUDES ALL PAVEMENT, BERMS, CURBS, AND DIKES).
2. COLD MILL EXISTING ASPHALT CONCRETE PAVEMENT (ACP) 1.5" IN DEPTH, AND CONSTRUCT 1.5" ACP OVERLAY.
3. CONSTRUCT 8" FULL DEPTH ASPHALT CONCRETE PAVEMENT (ACP) OVER GRADED AND COMPACTED (95%) SUBGRADE.
4. CONSTRUCT ASPHALT CONCRETE (AC) DIKE TYPE "F" PER CALTRANS STANDARD PLAN A87B.
6. CONSTRUCT 2–3" AND 2–4" SCH 40 PVC CONDUITS PER DETAIL 4 ON SHEET 3, AND CAP ENDS FOR FUTURE IMPROVEMENTS.
24. CONSTRUCT MIDWEST GUARDRAIL SYSTEM "NARROW ROADWAY INSTALLATION" PER CALTRANS STD. PLANS A77L1 AND A77N3 DETAIL "B" WITH NATINA PRODUCTS LLC NATINA STEEL GALVANIZED SURFACE COLORANT (OR APPROVED EQUAL)
25. CONSTRUCT MIDWEST GUARDRAIL SYSTEM END TREATMENT "TYPE 11A LAYTOUT" PER CALTRANS STD. PLANS A77P1, WITH TRINITY HIGHWAY ET PLUS SYSTEM END TREATMENT (OR APPROVED EQUAL) AND NATINA PRODUCTS LLC NATINA STEEL GALVANIZED SURFACE COLORANT (OR APPROVED EQUAL)

DISPOSITION NOTES

P. PROTECT IN PLACE (ITEM PER PLAN).
2. SAWCUT, REMOVE, AND DISPOSE OF EXISTING PAVEMENT SECTION.
3. SAWCUT, REMOVE, AND DISPOSE OF EXISTING ASPHALT CONCRETE (AC) DIKE.
4. CLEARING AND GRUBBING.
5. REMOVE AND DISPOSE OF EXISTING TREE/STUMP, SIZE PER PLAN (SEE STREET IMPROVEMENT NOTES, NOTE NO. 22, ON SHEET 1).
6. REMOVE AND DISPOSE OF EXISTING TERRACED STEEL PIPE AND BOARD RETAINING WALL.
7. CUT AND REMOVE EXISTING TREE, SIZE PER PLAN, AND PROTECT STUMP AND EXISTING ROOT SYSTEM IN PLACE (SEE STREET IMPROVEMENT NOTES, NOTE NO. 22, ON SHEET 1).

UTILITY COMPANY NOTES

1. EXISTING POWER/COMMUNICATIONS POLE (INCLUDING GUY WIRES) TO BE REMOVED PRIOR TO CONSTRUCTION (CITY TO COORDINATE REMOVAL).

Project Location
Bluebird Canyon Drive, City of Laguna Beach, Orange County, California

Prepared by DL on 2022-05-26
TR by SET on 2022-05-26
IR Review by GR on 2022-05-26

Client/Project
2042611001
City of Laguna Beach
Bluebird Canyon Drive Excavation Route Widening Project

Figure No.
4

Title
Street Improvement Plan Sheet "B"

Stantec

Notes
1. Data Sources: Stantec 2022.
2. Background: Stantec 2022.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Figure 4. Street Improvement Plan Sheet "B"

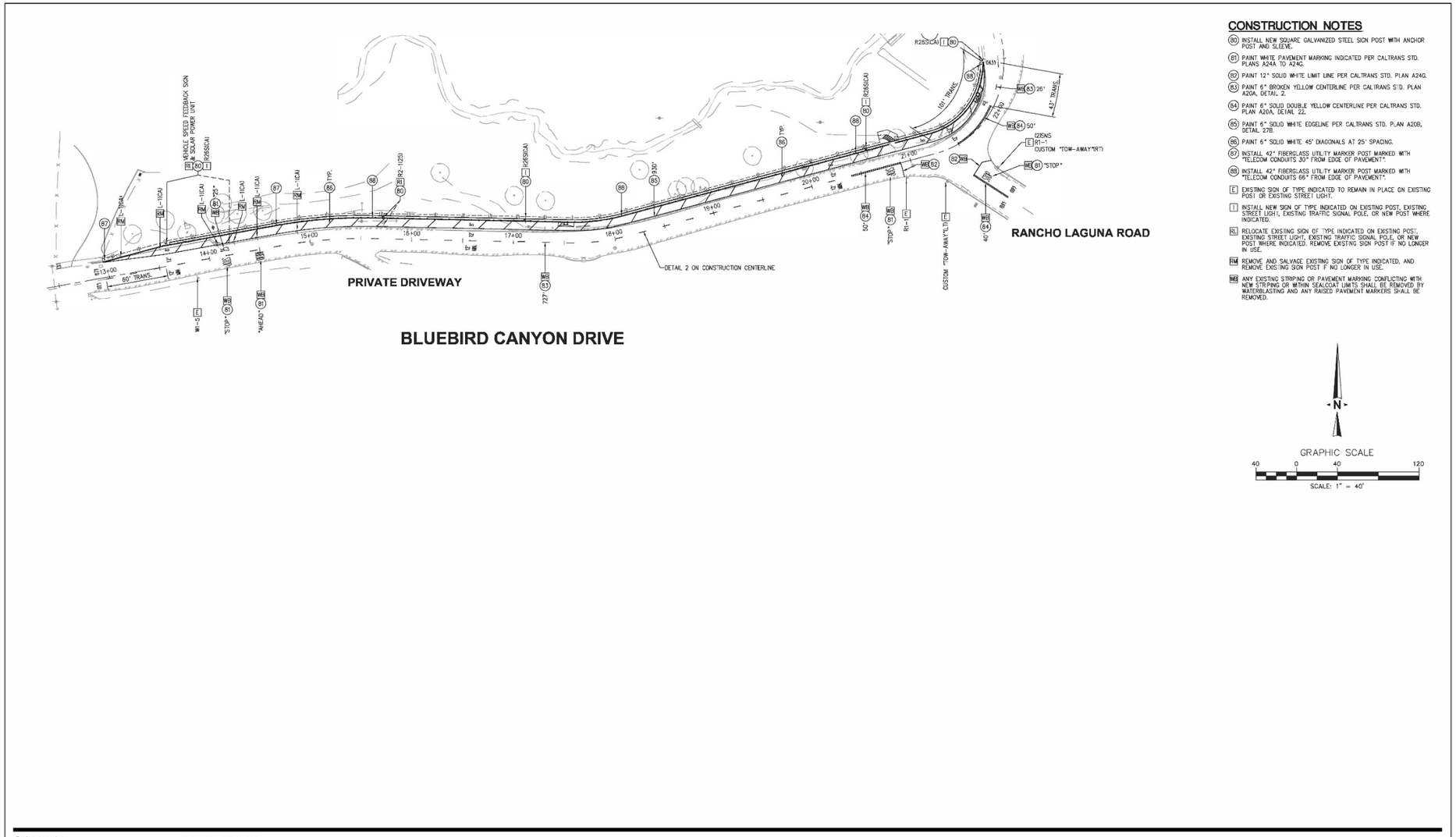


Figure 5. Signing & Striping Plan

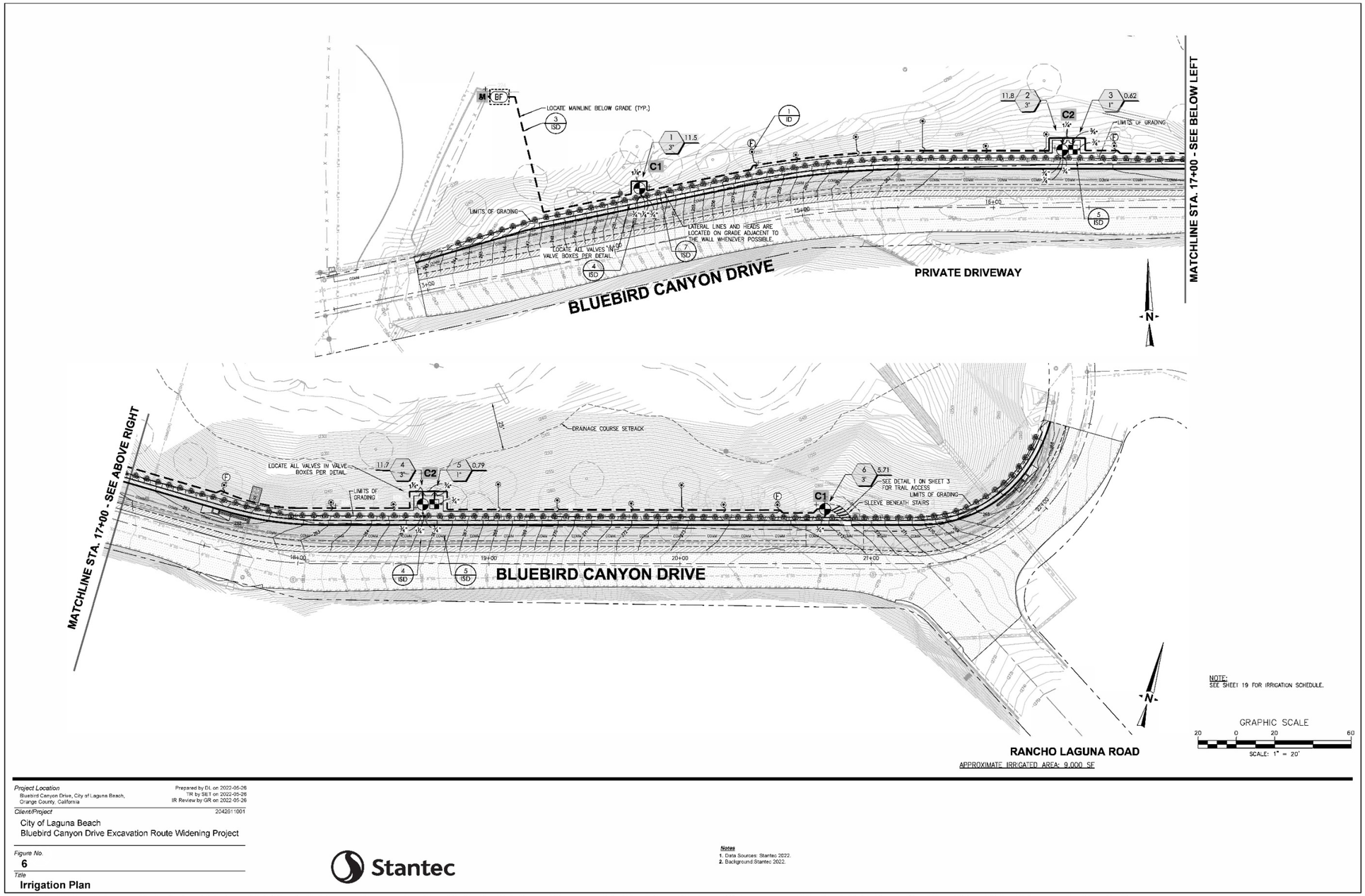


Figure 6. Planting Plan

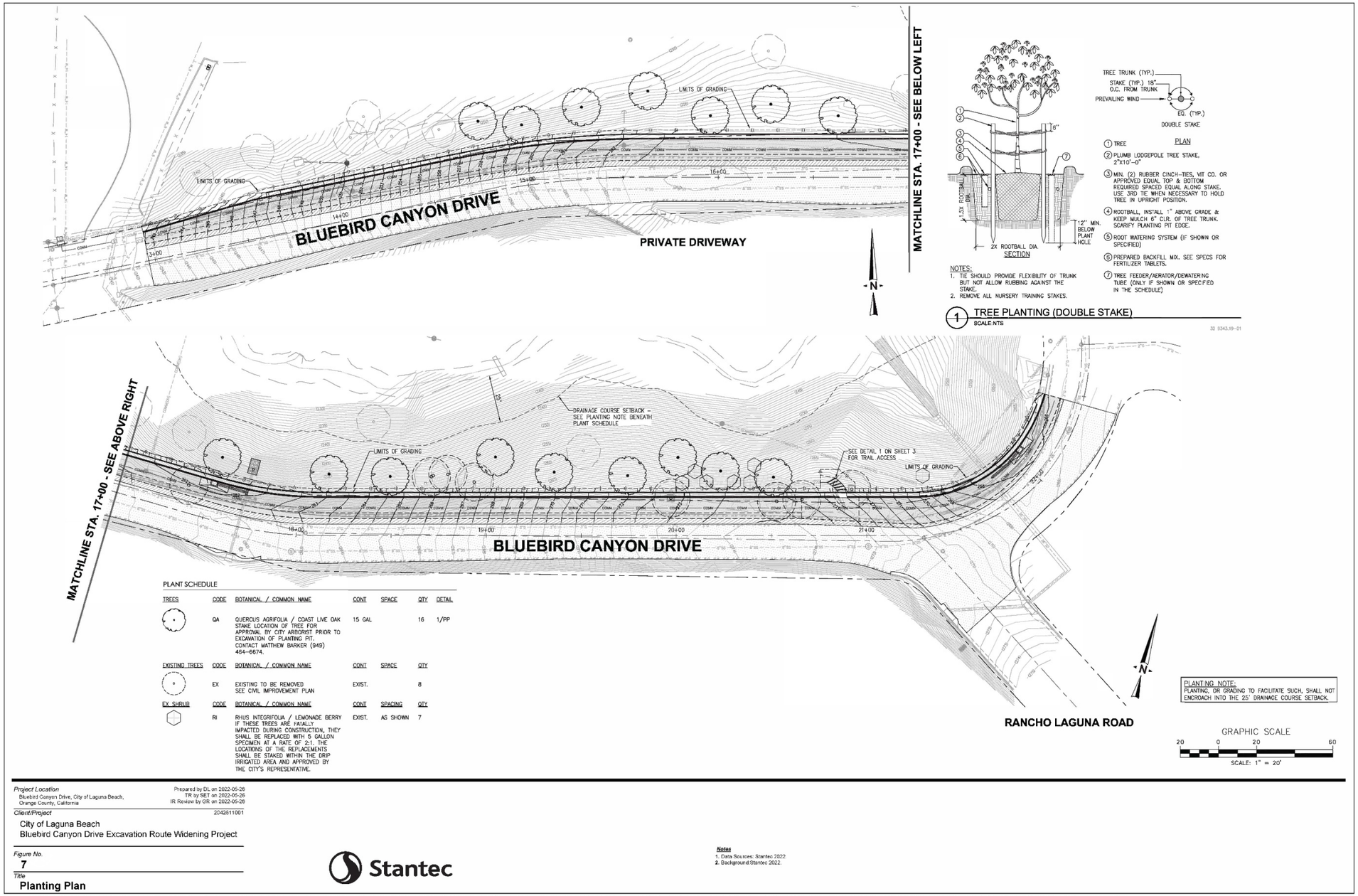
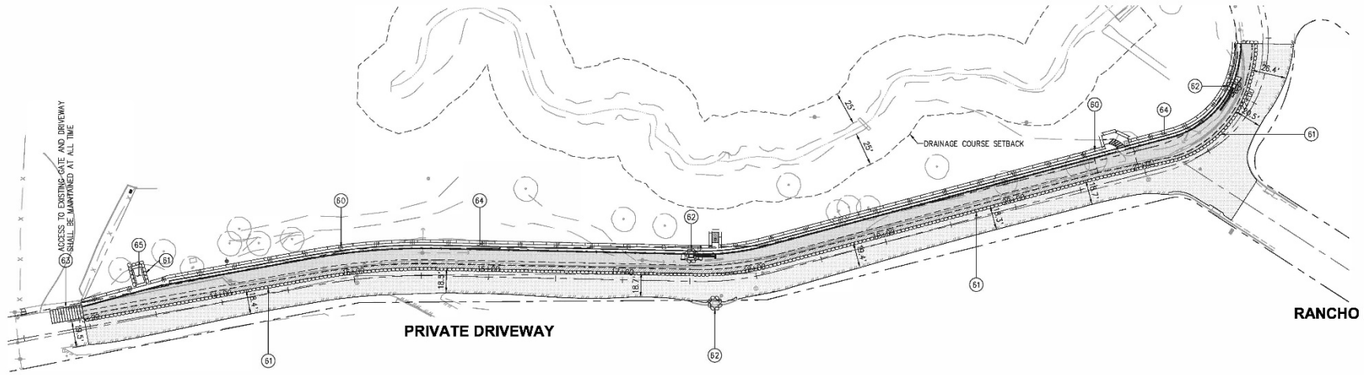


Figure 7. Irrigation Plan



CONSTRUCTION NOTES

(60) INSTALL FIBER ROLL PER CASQA BMP SE-5 AND DETAIL 1 ON SHEET 22.

(61) INSTALL GRAVEL BAG BERM PER CASQA BMP SE-6 AND DETAIL 2 ON SHEET 22.

(62) INSTALL INLET PROTECTION PER CASQA BMP SE-10 AND DETAIL 3 ON SHEET 22.

(63) INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT PER CASQA BMP TC-1 AND DETAIL 4 ON SHEET 22.

(64) HYDROMULCH RECONSTRUCTED SLOPE AND BENCH AREAS (BETWEEN FACE OF SOLDIER PILE WALL AND DAYLIGHT LINE OR BETWEEN BACK OF AC DIKE AND DAYLIGHT LINE IF SOLDIER PILE WALL IS NOT PRESENT) WITH BONDED FIBER MATRIX AND NATIVE SEED MIX. INSTALL PER PROJECT SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, AND CASQA BMP EC-3 AND EC-4.

(65) PROVIDE TEMPORARY ROLL-OFF TYPE CONCRETE WASHOUT BIN (5-CY CAPACITY) AND CONCRETE WASHOUT SIGN IN ACCORDANCE WITH CASQA BMP WM-8.

HYDROSEED MIX — 1
S&S SEEDS COASTAL SAGE SCRUB MIX
FOR IRRIGATED AND NON-IRRIGATED AREAS
(AVAIL THROUGH S&S SEEDS 805-684-0436)

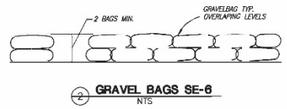
LBS/ACRE	GENUS SPECIES	(COMMON NAME)	PURITY/TOTAL WT%
2.00	COLLINSIA HETEROPHYLLA	(CHINESE HOUSES)	95/90
3.00	ENCELIA CALIFORNICA	(BUSH SUNFLOWER)	40/80
1.00	ERIOGYCTON CRASSIFOLIUS	(THICK-LEAF YERBA SANTA)	40/40
3.00	ERIOPHYLLUM CONFERTIFLORUM	(GOLDEN YARROW)	30/90
2.00	ESCHSCHOLZIA CALIFORNICA	(CALIFORNIA POPPY)	98/75
2.00	LASTHENIA GLABRATA	(GOLDFIELDS)	90/85
8.00	LOTUS SCOPARIUS	(DEERWEED)	90/60
4.00	LUPINUS SUCCULENTUS	(ARROYO LUPINE)	98/85
2.00	MIMULUS PUNICEUS	(RED MONKEYFLOWER)	02/55
1.00	OENOTHERA CHEIRANTHIFOLIA	(CALIFORNIA PRIMROSE)	98/75
30.0	PLANTAGO INSULARIS	(PLANTAIN)	98/75
2.00	SISYRINCHIUM BELLUM	(BLUE-EYED GRASS)	90/75
60.00	TOTAL LBS/ACRE		

EROSION, SEDIMENT, AND CHEMICAL CONTROL NOTES:

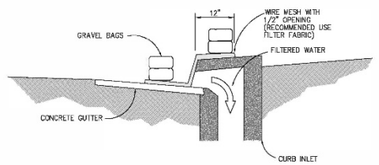
1. BMPs AS SHOWN HEREIN, SHALL BE INSTALLED PER THE CASQA BMP FACT SHEETS.
2. THE INFORMATION ON THESE DRAWINGS IS ACCURATE FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY. CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE APPROVED CONSTRUCTION PLAN, IF APPLICABLE, AND THE INFORMATION SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS.
3. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL EROSION AND SEDIMENT CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE.
4. MINOR ADJUSTMENTS TO BMP PLACEMENT AND SEQUENCE OF BMP IMPLEMENTATION ARE ANTICIPATED IN THE FIELD DURING CONSTRUCTION DUE TO CONSTRAINTS ASSOCIATED WITH CONSTRUCTION ACTIVITIES, SCHEDULING AND UNFORESEEN FIELD CONDITIONS. THE OWNER, OR THE ASSIGNED DESIGNEE, SHALL APPROVE ALL FIELD ADJUSTMENTS TO THE EROSION AND SEDIMENT CONTROL DRAWINGS (ESCDs).
5. INSTALL FIBER ROLLS (SE-5) ALONG ALL NEWLY GRADED SLOPES.
6. ALL DISTURBED AREAS MUST HAVE EROSION CONTROLS, CONSISTING OF SOIL BINDERS (EC-5), HYDRAULIC MULCH (EC-3), OR GEOTEXTILES AND MATS (EC-7), APPLIED WITHIN 14 DAYS OF INACTIVITY. ADDITIONALLY, UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL DISTURBED AREAS NOT PERMANENTLY STABILIZED BY HARDSCAPE, SHALL BE STABILIZED VIA HYDROSEED (EC-4) OR HYDRAULIC MULCH WITH SEED (EC-3).
7. CONTRACTOR SHALL COORDINATE WITH THE OWNER THE SPECIFICATION FOR SEED MIX TO BE USED IN HYDROSEEDING.
8. ALL SPILLS SHALL BE REPORTED IMMEDIATELY. TO THE EXTENT THAT THE WORK CAN BE ACCOMPLISHED SAFELY, SPILLS OF OIL, PETROLEUM PRODUCTS AND SUBSTANCES LISTED UNDER 40CFR PARTS 110, 117, AND 302, AND SANITARY AND SEPTIC WASTES SHOULD BE CONTAINED AND CLEANED UP IMMEDIATELY. (REFER TO CASQA BMP FACT SHEET, WM-4)
9. SHOULD GROUNDWATER BE ENCOUNTERED DURING EXCAVATION, CONTACT THE OWNER PRIOR TO DEWATERING. FOLLOW ENVIRONMENTAL GUIDELINES FOR DISPOSAL OF GROUNDWATER.
10. SHOULD CONTAMINATED SOIL BE ENCOUNTERED DURING GRADING ACTIVITIES, CONTACT THE OWNER. FOLLOW ENVIRONMENTAL GUIDELINES FOR DISPOSAL OF CONTAMINATED SOIL.
11. THE CONTRACTOR SHALL ENSURE THAT ALL PAVED ROADWAYS UTILIZED BY CONSTRUCTION TRAFFIC ARE SWEPT AND CLEANED, AS NEEDED, PER CASQA BMP FACT SHEET SE-7.
12. THE CONTRACTOR IS RESPONSIBLE FOR AMENDING AND ADMINISTERING THE ESCCP TO CONFORM TO THE CONTRACTOR'S ACTUAL CONSTRUCTION PRACTICES DURING HIS COURSE OF WORK AND FOR THE CONTRACTOR'S ACTUAL CONSTRUCTION PRACTICES DURING HIS COURSE OF WORK AND FOR THE ENTIRE CONTRACT DURATION AND PROVIDING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS FOR ANY ADDITIONAL BMPs NOT SHOWN OR IDENTIFIED IN THE ACCEPTED ESCCP WHICH MAY BE REQUIRED TO COMPLY WITH THE PERMIT REQUIREMENTS, THE ESCCP NOTES, OR AS REQUESTED BY THE OWNER.
13. THE CONTRACTOR IS HEREBY NOTIFIED THAT SPECIFIC CONSTRUCTION PRACTICES IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (STANDARD SPECIFICATIONS), SECTION 7-8, "WORK SITE MAINTENANCE," ARE CONSIDERED TO BE BEST MANAGEMENT PRACTICES. APPLICABLE CONSTRUCTION PRACTICES IN THE STANDARD SPECIFICATIONS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR EROSION SEDIMENT AND CHEMICAL CONTROL PLAN (ESCCP) AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THEREFORE.

REQUIRED CASQA BMPs	
EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
EC-3	HYDRAULIC MULCH
EC-4	HYDROSEEDING
EC-10	VELOCITY DISSIPATION DEVICES
EC-12	STREAMBANK STABILIZATION
NS-1	WATER CONSERVATION PRACTICES
NS-2	DEWATERING OPERATIONS
NS-3	PAVING & GRINDING OPERATIONS
NS-6	ILLICIT CONNECTION
NS-9	VEHICLE & EQUIPMENT FUELING
NS-10	VEHICLE & EQUIPMENT MAINTENANCE
NS-12	CONCRETE CURING
NS-13	CONCRETE FINISHING
SE-5	FIBER ROLLS
SE-6	GRAVEL BAGS
SE-7	STREET SWEEPING
TC-1	STABILIZED CONSTRUCTION ENTRANCE
WE-1	WIND EROSION CONTROL
WM-1	MATERIAL DELIVERY & STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PREVENTION & CONTROL
WM-5	SOLID WASTE MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY SEPTIC WASTE MANAGEMENT
WM-10	LIQUID WASTE MANAGEMENT

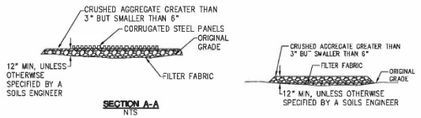
1 FIBER ROLLS SE-5
NTS



2 GRAVEL BAGS SE-6
NTS

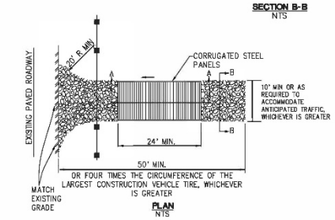


3 INLET PROTECTION SE-10
NTS



SECTION A-A
NTS

SECTION B-B
NTS



PLAN
NTS

4 STABILIZED CONSTRUCTION ENTRANCE/EXIT TC-1
NTS



Project Location
Bluebird Canyon Drive, City of Laguna Beach, Orange County, California

Prepared by DL on 2022-05-26
TR by SET on 2022-05-26
IR Review by GR on 2022-05-26

Client/Project
City of Laguna Beach
Bluebird Canyon Drive Excavation Route Widening Project

204281100

Figure No.
8

Title
Erosion Control Plan

Stantec

Notes
1. Data Sources: Stantec 2022.
2. Background:Stantec 2022.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Figure 8. Erosion Control Plan

2.1.4 Approvals Required

The Project requires compliance with CEQA and the CEQA Guidelines, and that would be associated with the Planning Commission Design Review and a Coastal Development Permit, which will be issued by the City under its certified Local Coastal Program.

2.2 PROJECT CONSTRUCTION & PHASING

The Project is proposed to be constructed as funding becomes available for roadway improvements. Construction is expected to commence in 2022 and be completed by 2023. Below is a brief description of anticipated Project phasing:

- *Mobilization* – This phase would entail mobilization of equipment and personnel to the work site.
- *Clearing & Grubbing* – This phase would include the demolition or portions of the existing roadway, clearing of any vegetation, trees and associated roots or stumps from the Project site.
- *Grading* – This phase involves making sure appropriate slopes for the roadway and drainage improvements are made.
- *Trenching & Structure*s – This phase includes preparing trenches for the underground components of the Project. It also entails the construction of any above or below ground structures, such as the catch basins, retaining wall, structure backfill, and guardrail.
- *Street Paving, Stripping, and Signing* – This phase would entail asphalt-concrete (AC) paving along the Project roadway segment, striping the roadway, and placing signage and other features in order to meet required public safety standards.
- *Landscaping & Demobilization* – This phase includes removing equipment, material, and personnel from the worksite and installing the landscaping, including replacement of trees, hydroseeding, and temporary irrigation.

The construction methods would entail the following:

- Cast-In-Drilled-Hole foundations installed with a small drill rig (24- & 30-inch diameter piles)
- Concrete forming, reinforcement, and placement
- Minor associated structural earthwork and grading with a backhoe or small excavator
- Miscellaneous street and storm drain improvements, including curb and gutter, storm drain inlets and piping, AC paving, and landscaping and irrigation.

The construction duration is estimated to take up to six to eight months to complete.

2.3 CONSTRUCTION VEHICLE ACCESS AND STAGING

Access to Bluebird Canyon Drive by residents and contractors during construction would be achieved via the existing road at South Coast Highway. Bluebird Canyon Drive would remain open during the construction period, although one side of the roadway may be blocked during required roadwork and



flagmen would be put in place to direct traffic flow. Two minimum 10-foot lanes will be maintained open after working hours. No temporary closure of adjacent streets is anticipated.

Construction staging and equipment/material storage would be located at the western end of the Project limits on the north side of Bluebird Canyon Drive. Construction parking areas would be located along the north and south sides of Rancho Laguna Road.

2.4 PROJECT SCHEDULE

The proposed Project schedule is as follows:

- Fiscal year (FY) 2022-23 – Initiate Final Plans, Specifications, and Estimates Phase
- FY 2022-23 – Ready to Bid
- FY 2022-23 – Complete construction

2.5 PROJECT HISTORY AND BACKGROUND

Laguna Beach is a coastal hillside community that is surrounded by open space. Its physical characteristics include prominent ridgelines, steep hillsides with gullies, arroyos, rugged canyon bottoms, and low-lying coastal areas, which create a variety of hazardous conditions that can impact the community. Bluebird Canyon is home to over 400 residences and is surrounded by dense coastal sage scrub vegetation. There are two major safety issues associated with the Bluebird Canyon Drive area: fire and landslides. Both have occurred within the canyon and surrounding areas. In addition, climate change is expected to result in drier and hotter weather resulting in the potential for more frequent wildfires, while wetter and more intense winter storms could exacerbate slope instability causing landslides. Due to the likelihood of these reoccurring events, the proposed Project is intended to increase capacity for emergency egress for residents and emergency ingress for emergency response vehicles along Bluebird Canyon Drive.



3.0 IMPACT ANALYSIS

3.1 AESTHETICS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Visual & Neighborhood Context

The proposed Project is located within the City along Bluebird Canyon Drive between 800 feet east of Oriole Drive to Rancho Laguna Drive. The south side of the roadway is characterized by steep slopes containing dense vegetation. The north side is comprised of grasses, punctuated by Eucalyptus trees and sparse shrubbery with gradual to steep slopes leading to the canyon bottom. The roadway also contains various above and below ground utilities. Adjacent land uses are comprised of single-family residential and open space. There are no single-family residences immediately adjacent to the roadway within the Project limits, although one residence located at 1085 Bluebird Canyon Drive is located approximately 50 feet south and above the roadway on the hillside.

Bluebird Canyon is defined by steep hillsides, natural open space, and Bluebird Creek, and is known for its narrow, winding streets and large Eucalyptus trees which overhang the roadway and create the neighborhood's rustic, scenic character. The City's Landscape and Scenic Highways Resource Document describes Bluebird Canyon as "a picturesque neighborhood that begins at the intersection of Cress Street and Bluebird Canyon Drive, immediately upstream from Bluebird Park." In addition, it is characterized by a mix of small cottages and newer homes, creating a rustic landscape of interesting architecture, narrow roadways, and abundant vegetation. Early plantings of Blue Gum and Sugar Gum Eucalyptus trees along Bluebird Canyon Drive and on the canyon floor have naturalized and become the theme tree species for this canyon neighborhood.

a) Would the project have a substantial adverse effect on a scenic vista? (No Impact)

The Project site is not a designated scenic vista. As such, the proposed Project would not result in any long or short-term significant impacts to a scenic vista either during construction or operation. Therefore, no impacts would result, and no mitigation measures are required.

b) Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

The Project site is not located within a state scenic highway. As such, the proposed Project would not substantially damage scenic resources, including, but not limited to trees, rock outcroppings, or historic buildings within a state scenic highway. Therefore, no impacts would result, and no mitigation measures are required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (Less Than Significant Impact)

A review of the City's Landscape & Scenic Highways Element indicates landscapes within the City have changed over time with the original views comprised of expansive hillside and ocean views owing to the low growing native vegetation on hillside slopes and native trees within the canyons. With homesteading, the landscape changed through the planting of groves of Eucalyptus and orchards and construction of houses and stores. Moreover, the Landscape & Scenic Highways Element also distinguishes between public and private views. Public views are those from streets, parks, beaches, and view trails, while private views are those from within a residence or parcel of land to a location off-site. The proposed landscape plan is subject to design review, which will assess impacts to viewsheds. Pursuant to Section 25.05.040(H) of the Municipal Code, projects subject to design review are required to be designed and located in a manner that best satisfies the design review criteria, including the Landscaping and View Equity criteria.

The proposed Project is located within Bluebird Canyon (neighborhood 7a), an urbanized area containing remnant natural and introduced vegetation (e.g., Eucalyptus) along the canyon slopes and drainage. Construction activities (e.g., construction equipment, vehicles, supplies/materials, workers) will be visible to the existing surrounding uses (e.g., nearby residences) for up to eight months during Project construction, and related visual impacts associated with Project construction would be short-term. The Project would not result in a visually intrusive sight to viewers, either during construction or operation, because existing views from passing motorists or pedestrians are fleeting and not expansive or unobstructive. Similarly, existing residential views of Bluebird Canyon Drive are limited, due to the presence of intervening trees and landscaping and slopes along the north and south sides of the roadway. The roadway widening would introduce new permanent roadway features (i.e., guardrail and retaining wall) along Bluebird Canyon Drive that are not currently present. It would also require the removal of eight non-native Eucalyptus trees which would be replaced by 16 native coast live oak (*Quercus agrifolia*) trees. The elimination of these trees would not substantially change existing views for



motorists or area residents, since they are widely disbursed, and intermittent views of the canyon and canyon bottom would remain. Policy 2.3 of the City's Landscape & Scenic Highways Element indicates the following:

- Maintain Laguna Beach's traditional landscape character, including its tree-scape. Include the following criteria in decisions related to view and tree management:
    - Select and locate trees to protect and enhance ocean, canyon, and hillside views. Delineate the intent of landscape plans at plant maturity in relation to the location of view corridors or screening areas.

The use of native trees (including coast live oak) would also be consistent with the Landscape & Scenic Highways Element's design and maintenance goals:

- Properly select, locate, and maintain trees to ensure continued beauty, health, view preservation, and to minimize safety hazards;
- Establishing beneficial ecological and biological functions in the manmade landscape and maintaining them in natural areas;
- Minimizing maintenance costs—becoming self-maintaining and requiring little intervention;
- Choose plant materials that are not invasive and harmful to Laguna Beach's sensitive habitats; and
- Reinforcing the cultural context in relation to history and aesthetics.

The Project would be compatible with the applicable zoning designation and with the City's General Plan, since it would contain features (landscaping, materials) consistent with the Landscape & Scenic Highways Element. Therefore, the Project is considered visually compatible with the immediate area and will not substantially degrade the visual character or quality of the site and its surroundings, either during construction or operation. Therefore, impacts would be less than significant, and no mitigation measures are required.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (No Impact)

Construction activities would occur during daylight hours and would not require construction at night and/or associated nighttime lighting. During operation, no streetlights are proposed. Therefore, the Project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area, either during construction or operation. Therefore, no impacts would result, and no mitigation measures are required.

3.2 AGRICULTURE AND FOREST RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use, or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime, Unique or Statewide Importance Farmland to non-agricultural use? (No Impact)

Based on review of the California Agricultural Land Evaluation criteria, the Project is not located in, nor is adjacent to, designated agricultural land and would not convert prime, unique, or statewide importance farmland to non-agricultural use. Therefore, no impacts would result, and no mitigation measures are required.

b) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract? (No Impact)

The City does not include areas zoned for agricultural use or land subject to a Williamson Act contract. Therefore, no impacts would result, and no mitigation measures are required.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public

Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (No Impact)

Based on review of the City's General Plan elements and California Department of Forestry and Fire Protection criteria, the Project is not located in, nor is adjacent to, designated forest land, timberland or zoned for Timberland Production. As such, the proposed Project would not conflict with existing zoning, nor cause the rezoning of forest land, timberland, or Timberland Production. Therefore, no impacts would result, and no mitigation measures are required.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use? (No Impact)

While the City is located in a hillside area adjacent to the Pacific Ocean, based on review of the Forestry and Fire Protection criteria, the Project Area is not located in, nor is adjacent to, designated forest land. As such, the Project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impacts would result, and no mitigation measures are required.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (No Impact)

See responses a through d above. The proposed Project would not involve changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. Based upon the analysis in this section, no impacts would result, and no mitigation measures are required.

3.3 AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

The Air Quality and Greenhouse Gas (GHG) Study performed by Stantec Consulting Services Inc., dated March 17, 2022, is contained within Appendix B of this Initial Study/Mitigated Negative Declaration (IS/MND).

a) Would the project conflict with or obstruct implementation of the applicable air quality plan? (Less than Significant Impact)

The Project is limited to and consists of the widening of a road and construction of a retaining wall to improve circulation during emergency evacuations. Project-associated emissions would be generated during construction from off-road equipment, as well as fugitive dust from activities on unpaved surfaces/excavation. As shown in Table 1, Project construction emissions are below the applicable South Coast Air Quality Management District (SCAQMD) mass emissions thresholds of significance. Localized significance thresholds were determined by evaluating the distance from the work area to the nearest sensitive receptor which in this case was a residence located approximately 110 feet to the west of the project site. Consequently, construction associated emissions would not be expected to conflict with or obstruct implementation of the applicable air quality plan.

There is not expected to be an increase in operation phase emissions, because emission causing activities are not expected during the operational phase. In addition, the Project will improve the emergency vehicle access along the route to improve circulation. As such, operation phase emissions are not considered to result in additional impacts to air quality.

Table 1. Unmitigated Project Construction Emissions in Comparison to SCAQMD Significance Criteria

Component	VOC	NO_X	SO_X	CO	PM_{10}	$PM_{2.5}$	Lead (Pb)
Peak Daily Emissions (lbs/day)							
Regional Thresholds Construction	75	100	150	550	150	55	3
Localized Thresholds Construction	n/a	93	n/a	738	13	5	n/a
Estimated Construction Emissions	2.26	26.87	0.10	23.07	7.86	2.26	n/a
Exceeds Regional Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**	**n/a**
Exceeds Localized Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**	**n/a**

SOURCE: Stantec, 2022

Because Project emissions would not conflict with or obstruct implementation of the Air Quality Management Plan (2106), the unmitigated Project impacts would be less than significant.

b) 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)

In accordance with SCAQMD methodology, projects that do not exceed, or can be mitigated to less than the daily threshold values do not add significantly to a cumulative impact. As discussed above in response a), estimated Project construction emissions are below the applicable SCAQMD regional mass



emissions thresholds of significance, as shown in Table 1. The Project would not involve an increase in operation phase emissions and would not be expected to conflict with or obstruct implementation of the applicable air quality plan. The proposed Project would therefore not 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, and potential unmitigated Project impacts would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations? (Less Than Significant Impact)

Sensitive receptors are defined as populations that are more susceptible to the effects of pollution than the population at large. Sensitive receptors are facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollutant. Land uses identified to be sensitive receptors by SCAQMD in the California Air Quality Resources Board (CARB)'s Air Quality Handbook include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project site is directly adjacent to sensitive receptors to the north, west, and east, with single-family residences as close as approximately 110 feet (33.5 meters) from the Project site boundary. Projects that are below the SCAQMD localized significance thresholds (LSTs) would not be expected to expose sensitive receptors to substantial pollutant concentrations. As shown in Table 1, the Project's construction emissions would be below the applicable LSTs. Therefore, the Project emissions would not expose sensitive receptors to substantial pollutant concentrations, and the potential unmitigated Project impacts would be less than significant.

d) Would the project create objectionable odors affecting a substantial number of people? (No Impact)

The SCAQMD has identified land uses commonly subject to odor complaints. These land uses include agriculture (farming and livestock), wastewater treatment, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project involves minor and short-term conventional construction activities that do not involve any of the SCAQMD identified land uses subject to odor complaints or components with the potential to create objectionable odors affecting a substantial number of people. The construction, operation, and maintenance of the proposed Project would not involve the type of land uses or industrial operations typically associated with odor nuisance. There are no known land uses typically associated with the generation of nuisance odors in the Project area. Therefore, the unmitigated Project impacts would have no impact regarding other emissions.



3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Appendix C of this IS/MND contains the results of the biological resources survey, and which are summarized below.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less Than Significant Impact with Mitigation Incorporated)

Special-Status Plant Species

No special-status plant species were observed during the August 2021 survey. Most of the 18 special-status plants known to occur within three miles of the Project area (CDFW 2021, USFWS 2021a) were determined to either have a low potential for occurrence or were not likely to occur at all. A list of these

species is included in Appendix C, Bluebird Canyon Drive Retaining Wall (CIP 21-9454) Biological and Aquatic Resources Memorandum.

One California Native Plant Society California Rare Plant Rank (CRPR) 1B.2 species, summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), a small to medium sized scrub, had a moderate potential to occur in the lemonade berry scrub in the Project area but was not observed during the August 2021 survey. No special-status plant species are expected occur in the Project area; therefore, there will not be any impacts to special-status plant species from the implementation of this Project, and no mitigation measures are required.

Special-Status Wildlife Species

One federal candidate species, monarch butterfly (*Danaus plexippus*), was observed flying in the Biological Survey Area (BSA) near the drainage north of the Project site during the August 2021 survey. Most of the other 40 special-status wildlife known to occur within 10 miles of the Project site were determined to have no potential for occurrence in or adjacent to the Project site due to lack of suitable habitat.

Eight special-status wildlife species have a moderate potential to occur in the BSA, including five reptiles, two birds, and one mammal. Five reptilian species, coast horned lizard (*Phrynosoma blainvillii*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), orange-throated whiptail (*Aspidoscelis hyperythra*), red-diamond rattlesnake (*Crotalus ruber*), and southern California legless lizard (*Anniella stebbinsi*), have a moderate potential to occur in most of the BSA except for the disturbed/developed areas. The scrub habitat and areas along the drainage provide the highest quality habitat for the special-status reptilian species.

Two bird species, Cooper's hawk (*Accipiter cooperii*) and southern rufous-crowned sparrow (*Aimophila ruficeps canescens*) have a moderate potential to occur in the BSA. The Cooper's hawk could use the blue gums (*Eucalyptus globulus*) for roosting and forage along the drainage or in the lemonade berry scrub habitat. The rufous-crowned sparrow could use the scrub habitats for foraging and nesting. One mammal species, Delzura pocket mouse (*Chaetodipus californicus femoralis*) has moderate potential to occur in the BSA in open areas within or adjacent to scrub vegetation.

Special-status, California Fish and Game Code, and/or Migratory Bird Treaty Act (MBTA) protected bird species are also likely to nest in native and non-native vegetation in the BSA.

In general, direct impacts to special-status plants and terrestrial wildlife include ground-disturbing activities associated with construction of the proposed Project and increased human presence (i.e., crushing, trampling, trapping). Potential indirect impacts include increased noise levels from heavy equipment (wildlife only), increased human disturbance, exposure to fugitive dust, the spread of noxious weeds, and disruption of breeding or foraging activity due to routine maintenance activities (wildlife only). Weed abatement through herbicide application or mechanized tools could also impact special-status species.

If the proposed Project construction were to occur during the avian nesting season (generally considered to be between February 15th through September 15th; although some raptors species may nest as early as January), impacts to nesting birds could occur. The MBTA of 1918 (16 U.S.C. 703-711) does not allow for take of migratory birds.



The MBTA makes it unlawful to possess, buy, sell, purchase, barter or "take" any migratory bird listed in Title 50 of the Code of Federal Regulations Part 10. "Take" is defined as possession or destruction of migratory birds, their nests, or eggs. Disturbances that cause nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend may be a violation of the MBTA. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs.

If implementation of the proposed Project were to impact special-status species, these impacts would be considered significant. Therefore, Mitigation Measures BIO-1 through BIO-4 would require pre-construction wildlife surveys prior to ground disturbance, relocation of wildlife found within proposed Project impact areas during pre-construction surveys and daily monitoring, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate Project personnel regarding on-site plants and wildlife, implementation of site-wide Best Management Practices (BMPs) (i.e., restriction on open trenches and guidelines for refueling near drainage features), nesting bird surveys and avoidance measures for active nests. These measures would be implemented to mitigate these potentially significant impacts. Implementation of these Mitigation Measures would ensure that potential impacts to special-status wildlife species are reduced to a less than significant level.

Mitigation Measures

BIO-1 Pre-Construction Wildlife Surveys and Biological Monitoring

Project Area Survey: A project area survey shall be conducted by a qualified biologist prior to grading and building permit issuance to document the total area of Environmentally Sensitive Habitat Area (ESHA) that will be disturbed. This shall be submitted to the City before grading work is done and will be used to identify the replacement planting process and the number of plants and species required.

Wildlife Surveys: Prior to ground disturbance or vegetation clearing within the Project site, a qualified biologist shall conduct surveys for wildlife (no more than 14 days prior to site disturbing activities) where suitable habitat is present and directly impacted by construction activities. Wildlife found within the Project site or in areas potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project prior to the start of construction. Special-status species found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area.

Biological Monitoring: A qualified biological monitor, with expertise in the species known to occur or with the potential to occur on the Project site, shall be retained to monitor construction activities. The qualified biologist shall be present during initial ground disturbance for each phase of construction. Once initial ground disturbance is complete, monitoring will occur periodically during all construction activities. The qualified biologist(s) shall be present during all ground-disturbing activities immediately adjacent to, or within sensitive habitat and shall flag the edge of sensitive vegetation.

If required, during pre-construction surveys and/or required monitoring efforts, the qualified biologist will relocate common and special-status species that enter the Project site; some special-status species may



require specific permits prior to handling and/or have established protocols for relocation. Records of all detection, capture and release shall be reported to CDFW.

BIO-2 Environmental Awareness Training

All Project personnel must attend an environmental awareness and compliance training program prior to working on the Project site. The training program shall present the environmental regulations and applicable permit conditions that the Project team shall comply with. The training program shall include applicable measures established for the Project to minimize impacts to water quality and avoid sensitive resources, habitats, and species. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to the City.

BIO-3 Implement Best Management Practices (BMPs)

Grading plans for the Project shall indicate that the Project shall implement the following BMPs:

- Restrict non-essential equipment to the existing roadways and/or ruderal areas to avoid disturbance to native vegetation.
- All excavation, steep-walled holes, or trenches more than six inches in depth will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).
- Minimize mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians.
- Removal/disturbance of vegetation shall be minimized to the greatest extent feasible.
- Install and maintain appropriate erosion/sediment control measures, as needed, throughout the duration of work activities.
- Vehicles shall not be driven, or equipment operated, in water covered/wetted portions of any potentially jurisdictional aquatic feature.
- No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.



BIO-4 Nesting Bird Surveys and Avoidance Measures

Prior to initial site disturbance/issuance of grading permits, seasonally timed presence/absence surveys for nesting birds shall be conducted by a qualified biologist. If construction activities carry over into a second nesting season(s) the surveys will need to be completed annually until the Project is complete. A minimum of three survey events, three days apart shall be conducted (with the last survey no more than three days prior to the start of site disturbance), if construction is scheduled to begin during avian nesting season (February 15th through September 15th); surveys for raptors shall be conducted from January 1st to August 15th. Surveys shall be conducted within 500 feet of all Project activities.

If special-status species are observed, consultation with U.S. Fish and Wildlife Service (USFWS) and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. The prescribed buffers may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. If construction occurs outside of avian nesting season, only a single presence/absence survey will be required.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less Than Significant Impact with Mitigation Incorporated)

Special-status natural communities are defined by CDFW (2009) as "...communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects." All vegetation within the state is ranked with an "S" rank; however, only those that are of special concern (S1-S3 rank) are generally evaluated under CEQA. Based on this ranking, none of the vegetation communities on the Project site are sensitive. Table 2 provides a breakout of the potential impacts by vegetation and land cover types.

Table 2. Vegetation Community and Land Cover Type and Impact Acreages on the Project Site

Vegetation Community and Land Cover Type	Temporary Impacts	Permanent Impacts	Total
	Acres		
Vegetation Community			
Lemonade Berry Scrub	0.23	0.09	0.32
Land Cover Type			
Disturbed/Developed	0.64	0.21	0.85
TOTAL	**0.87**	**0.30**	**1.17**

Construction of the proposed Project would remove vegetation, alter soil conditions, and have the potential to result in the loss of native seed banks within small portions of the Project site. Construction activities could also result in the spread of noxious weeds within the Project site and adjacent habitats in



the BSA. During operation and maintenance of the Project, impacts would occur during routine maintenance activities and could include trampling or crushing of native vegetation by foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence on foot or equipment.

Lemonade berry scrub (*Rhus integrifolia* shrubland alliance) occurs within the BSA and the Project site. This alliance is co-dominated by lemonade berry and toyon (*Heteromeles arbutifolia*). Approximately 0.32 acre of lemonade berry scrub occurs in the Project's temporary and permanent impact areas, in the northeastern portion and along the south edge of the Project site (Table 2, Figure 9); the Project would result in the permanent removal of 0.09 acre of this habitat which includes seven lemonade berry shrubs.

Mitigation Measure BIO-5 below, which includes minimizing vegetation removal and compensation for impacts to native vegetation communities, would be implemented to mitigate these potential impacts. In addition, BIO-2 and BIO-3 would require environmental awareness training for all Project personnel and implementation of BMPs (i.e., establishment of construction exclusion zones). Implementation of these measures would ensure that potential impacts to sensitive lemonade berry habitats, are reduced to a less than significant level.

Mitigation Measures

BIO-5 Vegetation Removal and Replacement

Construction activities shall be done in such a manner as to minimize the removal of native vegetation. If native vegetation removal cannot be avoided, and the removal is approved by the City of Laguna Beach, temporary impacts shall be replaced at a 1:1 ratio. The compensation for the loss of permanently impacted habitats may be achieved, in order of preference, either by a) on-site habitat creation within disturbed areas or enhancement of impacted communities with similar species compositions to those present prior to construction provided sufficient space and compatibility in the planting palette exists, b) off-site (at a location deemed appropriate by the City and CDFW) creation or enhancement of lemonade berry scrub within the City of Laguna Beach, or c) participation in an established mitigation bank program.

Prior to the removal of native vegetation, if on or off-site mitigation is required, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared that will guide all restoration and monitoring activities. This plan shall include, at a minimum, the following:

- Proposed species list for creation/enhancement
- Planting/seeding methodology
- Irrigation plan
- Weeding schedule
- Success criteria
- Monitoring methodology and schedule and
- Reporting requirements.



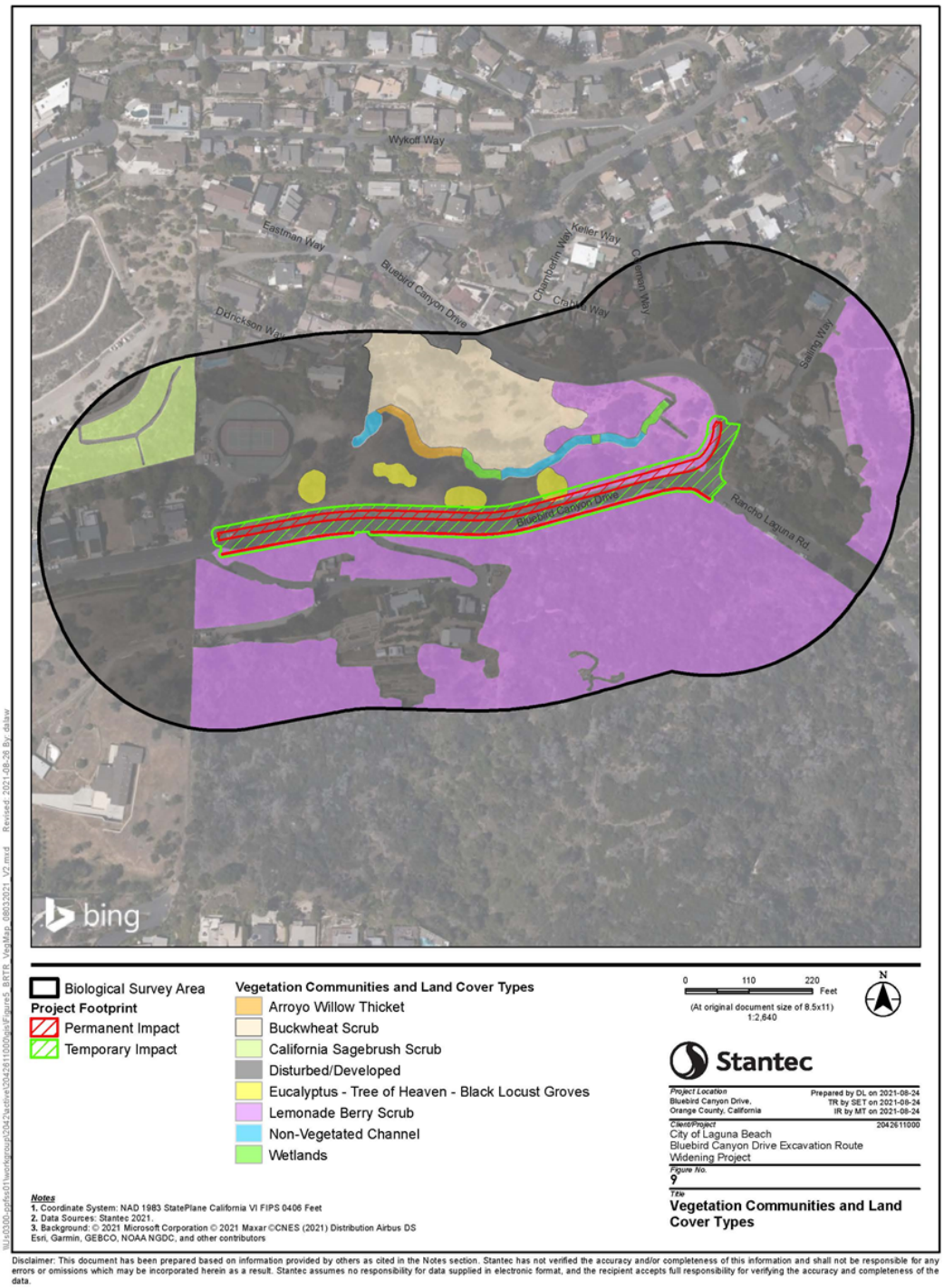


Figure 9. Vegetation Communities and Land Cover Types

Temporarily impacted vegetation will be restored in place. If on-site habitat mitigation or off-site mitigation is selected for compensation for the permanent impact then the following mitigation is recommended: The planting of 0.18 acre (a 2:1 ratio) of lemonade berry scrub (to compensate for the lemonade berry proposed for removal).

The project also requires removal of eight non-native trees. The trees will be replaced at a 2:1 ratio. Sixteen coast live oak trees will be planted on site or nearby to replace any potential raptor nesting habitat area. The size and location of the planting shall be included in the HMMP.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (No Impact)

A potentially jurisdictional aquatic feature observed during the August 2021 survey is approximately 50 feet north of the Project site (Figure 9). The proposed Project would be implemented along existing Bluebird Canyon Drive and the adjacent upland lemonade berry scrub and would not impact the potentially jurisdictional aquatic feature. BMPs and erosion control measures would be implemented to prevent sediment from going into the drainage (see Figure 8). No areas within the Project site exhibited features that would be potentially jurisdictional. Therefore, no impacts would occur, and no mitigation measures are required.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Less Than Significant Impact)

Wildlife movement corridors are defined on both a regional and on a local scale. Regionally, the proposed Project does not fall within a movement corridor. On a local basis, the undeveloped areas surrounding the Project site provide habitat for wildlife movement. Migratory birds may use the Project site and vicinity for breeding, nesting, and foraging, or as transient rest sites during migration flights. Because the Project is small, mostly within a disturbed and developed areas, and of a short duration, impacts to the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery site would be minor and would be less than significant. Therefore, no mitigation measures are required.

e) Would the project conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

The City's General Plan/Open Space-Conservation Element focuses on preservation of natural resources, managed production of resources, outdoor recreation, public health and safety, and the conservation, development, and utilization of natural resources. The boundaries of this planning area correlate to the boundaries of the Laguna Canyon watershed. The General Plan describes robust



vegetation and wildlife in the City's open space and undeveloped areas, including threatened or endangered species that are known to occur in the City[1].

However, the General Plan targets "High Value" and "Very High Value" areas for protection and areas bordering those areas for special study of potential impacts from development on the high value areas. The Project site is in a developed residential area. Most of the Project site is within the existing Bluebird Canyon Drive. The Project site is biologically simplified and is of low faunal carrying capacity. The project is consistent with the General Plan policies that require preservation of the nearby watercourse. The Project site at present does not contain any protected species, nor is it near high or very high value areas depicted in the City's General Plan.

The implementation of the proposed Project will not conflict with any local policies or ordinance protecting said resources (e.g., trees). A total of eight blue gum trees located within the Project site will be removed and replaced with 16 coast live oak (*Quercus agrifolia*) trees. This replacement is consistent with the City's tree policy. In addition, these trees are native to the area, unlike the introduced non-native gum trees and would provide habitat and resources for native species. Therefore, the proposed Project will not conflict with any policies or ordinance pertaining to biological resources. Therefore, no impacts would result, and no mitigation measures are required.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impacts)

While the Project occurs within the boundaries of the County of Orange Central and Coastal Subregion Natural Community Conservation Plan (NCCP), it would not conflict with any of the plan's requirements. Section 5.9 (Infrastructure Policies) of the NCCP allows for certain infrastructure projects in the Reserve System, including roadway and safety improvement projects. In addition, the NCCP considered development and maintenance activities in its overall reserve design, thereby allowing these activities to occur, and has also implemented an adaptive management approach. Therefore, this proposed Project will not conflict with the provisions of an adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state habitat conservation plan. Therefore, no impacts would result, and no mitigation measures are required.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒

[1] City of Laguna Beach. 1993. Laguna Beach General Plan – Open Space/Conservation.https://www.lagunabeachcity.net/home/showpublisheddocument/8160/637406985567470000 . Accessed March 2021.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES — Would the project:				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

This section addresses potential impacts to cultural resources, both historical and archaeological, that could result from the proposed Project. A memorandum was prepared by Stantec Consulting Services Inc. (Stantec), on March 18, 2022, that analyzes whether the proposed Project would impact cultural resources as defined by CEQA. The following analysis is based on information provided in this memorandum, which is included in Appendix D of this IS/MND.

To prepare this memorandum, Stantec conducted requested a records search from the South-Central Coastal Information Center (SCCIC), on December 14, 2021. On August 11, 2021, Stantec requested a Native American Heritage Commission Sacred Lands Files search a Tribal Contact List, the latter of which was forwarded to the City. Stantec consulted the California Built Environment Resource Directory and reviewed the Laguna Beach Historic Register. Additionally, historic topographic maps and aerials were reviewed for the Project site. On March 11, 2022, Stantec conducted an archaeological field survey of the Project site and immediate vicinity.

The Project area is considered to be of low sensitivity for Native American and tribal cultural resources based on the negative results of the Sacred Lands Files Search, conducted by the Native American Heritage Commission (NAHC) of behalf of the City on September 3, 2021. As part of its Assembly Bill (AB) 52 consultation requirements, on March 11, 2022, the City sent letters to all tribal representatives identified by the NAHC making them aware of the proposed Project. Two Tribes responded to the Consultation inquiry. On April 15, 2022, Christina Conley of the Gabrielino Tongva Indians of California responded via email. In her correspondence, Ms. Conley indicated the NAHC had stated that the area has tested positive for cultural resources and will require Native American Monitoring for all ground disturbances and that the City advise her of their next steps. On April 27, 2022, correspondence via email was also received by Joyce Stanfield Perry of the Juaneño Band of Mission Indians, Acjachemen Nation. In her email, Ms. Stanfield Perry noted because of the sensitivity of this area and known presence of two cultural resources within the area, one of the Cultural Resources mitigation measures (CUL-1) should be revised to include Native American monitoring during ground disturbance. In addition, the City invited Ms. Conley to conduct a joint site visit of the project site, but she indicated it was not necessary at this time and declined. The City's responses to the correspondence received from the Tribes and their requests are as follows:

Correspondence received by the City from NAHC stated "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." Similarly, the results of the archival background records search revealed no previously recorded resources within the Project Area



and two prehistoric resources within a one-half mile radius of the current Project Area. In addition, no cultural resources of archaeological (prehistoric/historic) or historic architectural were identified within the Project location during the pedestrian survey.

Although the Sacred Lands listing results were negative, no previously recorded resources are within the project area and two prehistoric resources are located one-half mile away from the project area, and there are no known cultural or archaeological or historic architectural resources within the project location, at the request of the Gabrielino Tongva Indians of California and Juaneño Band of Mission Indians, Acjachemen Nation, the City will require Native American monitoring during ground disturbance (e.g., installation of foundations, minor grading with backhoe or small excavator - see also Section 2.2 [Project Construction & Phasing]).

The City will continue to communicate any updates during the final design and construction phases to the Tribe and others, if requested.

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? (No Impact)

The proposed Project includes the widening of Bluebird Canyon Drive to provide an eight-foot-wide roadway shoulder along approximately 850 linear feet of the public right-of-way and the construction of a new retaining wall. The Project area includes three parcels located to the north of Bluebird Canyon Drive between 800 feet east of Oriole Drive to Rancho Laguna Road. The western parcel is associated with assessor parcel number (APN) 644-361-02 and the two eastern parcels area associated with APN 644-361-03 and APN 644-353-14. The parcels are vacant with no existing buildings or structures except drainage facilities. Research also indicated that there are no listed or previously identified historical resources located within a radius of 100 feet of the Project site.

The threshold for determining significant impacts on historical resources in the State CEQA Guidelines is whether a proposed project would cause a substantial adverse change, which is defined as demolition, destruction, relocation, or alteration of the resource or its immediate vicinity such that the historical resource is materially impaired (Title 14 CCR Section 15064.5[b][1]). As there are no existing buildings or structures on the Project site or within 100 feet that meet the definition of a historical resource pursuant to CEQA, the Project would have no direct or indirect impacts on historical resources. No mitigation is required or recommended.

b) Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5? (Less Than Significant Impact with Mitigation Incorporated)

The results of the record search at the SCCIC identified one prior cultural resource survey was conducted in 1978 and yielded negative results. No previously recorded archaeological resources were identified within the Project area as a result of the records search. Archival research demonstrates that Bluebird Canyon Drive has been in existence since at least 1938. Historic aerial imagery shows the Project area as a mix of natural vegetation and orchards on the western margin, with no built environment resources.



Residential development began circa 1950s/1960s and is ongoing and beyond the western terminus of the Project area, and only along the north side of the roadway.

The Project area is characterized as the rugged back coastal reaches of the San Joaquin Hills. Vegetation is a mix of natural wildland scrub in undeveloped areas with ornamental bushes and trees in residential areas. Bluebird Canyon Drive is representative of a road cut/graded/paved along the natural hilly landscape resulting in a narrow two-lane road, sans sidewalks, bound on the south by steeply rising hillside and on the north by a descending slope leading to foot trails.

Stantec performed an archaeological survey of the Project area, on March 11, 2022. No cultural resource materials (prehistoric, historic, built environment) were identified within the Project area. The proposed Project is, therefore, not anticipated to have an impact on any known or potential archaeological resources.

However, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously unknown unique archaeological resources. Consistent with the City's General Plan, a mitigation measure is presented below to reduce potential impacts to cultural resources in the unlikely event said resources are discovered or disturbed during grading or construction activities associated with implementation of the Project. Therefore, Mitigation Measure CUL-1 requires implementation of standard inadvertent discovery procedures to reduce potential impacts to previously undiscovered subsurface unique archaeological resources. With the implementation of Mitigation Measure CUL-1, potential impacts would be avoided or reduced to a less than significant level.

CUL-1 Cultural Materials Discovered During Construction

Native American and archaeological monitoring by the Gabrielino Tongva Indians of California and the Juaneño Band of Mission Indians, Acjachemen Nation are required during ground disturbing construction activities for the excavation (i.e., clearing and grubbing, grading, and trenching). If any cultural resource is encountered during the ground disturbing construction activities, all construction activities within a 50-foot radius of the identified potential resource shall cease until a qualified archaeologist, if other than the archaeological monitor, approved by the City shall be retained by the contract to evaluate the finds, evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation 523 series forms, and develop and carry out a program of mitigation as appropriate. The archaeologist shall determine whether the resource requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the resource is determined to be eligible for listing on the California Register of Historical Resources as a unique archaeological resource as defined in Public Resource Code (PRC) Section 15064.5, the archaeologist, in consultation with consulting Native American Groups, shall develop a plan for the treatment of the resource. The plan shall contain appropriate mitigation measures, including avoidance, preservation in place, data recovery excavation, or other appropriate measures outlined in Public Resources Code Section 21083.2.

c) Would the project disturb any human remains, including those interred outside formal cemeteries? (Less Than Significant Impact)

There are no known human remains within the Project area, and there are no indications that the Project location has been used for burial purposes in the past. Therefore, it is unlikely that human remains would

be encountered during construction. However, although ground disturbance and subsurface construction activities associated with the proposed Project could potentially disturb previously undiscovered human burial sites, compliance with Section 7050.5 of the California Health and Safety Code and PRC 5097.98 would reduce potential impacts to less than significant levels without the incorporation of mitigation.

3.6 ENERGY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. ENERGY — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Less Than Significant)

Energy in the form of electricity and transportation fuel would be expended to construct the proposed Project. However, the amount of energy consumption would be minor in comparison to the number of available resources. In addition, modern construction equipment has been designed to be more efficient, due to energy reduction requirements by state and federal regulations. Moreover, equipment would not be permitted to remain idling while not is use, which would further reduce the consumption of energy resources. During Project operation, no energy consumption would be expected since there are currently no streetlights along the roadway. Therefore, impacts would be less than significant, and no mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No Impact)

The City does not have an adopted Energy Plan; however, local jurisdictions, including the City, are actively seeking to eliminate energy waste, improve the efficiency with which energy is used, encourage the use of renewable energy resources, such as the sun and wind, and increase awareness of energy issues in the City. These measures serve as the basis of a road map for integrating comprehensive alternative strategies into the community in ways that make economic sense and help the City in adapting to the changing climate. They also assist to reduce energy use related to buildings, reduced vehicle emissions, and lighting maintained and operated by the City and Southern California Edison. As the Project consists of the installation of roadway facilities intended to assist in emergency evacuation of the area, there are no characteristics of the Project that would result in a conflict or obstruction with a state or local plan related to renewable energy or energy efficiency. Therefore, no impacts would result, and no mitigation measures are required.



3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GEOLOGY AND SOILS — Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. The rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Less Than Significant Impact)

The City, as well as most of southern California, is in a region of historical seismic activity. No known active fault systems are located within the limits of the City or the Project site. Furthermore, no part of the City has been delineated on the Alquist-Priolo Earthquake Fault Zone map. However, the City is in a region with several active faults. The most significant faults potentially affecting the City on a regional

basis are the Newport-Inglewood Fault, the Whittier-Elsinore Fault, and the San Jacinto Fault. There are also distant faults that could affect the City by generating a powerful shock, such as the San Andreas Fault and the San Jacinto Fault, two great faults that have historically shown activity.

The Newport-Inglewood Fault runs north-south, approximately three miles west of the City. Therefore, based on the foregoing analysis, the proposed Project will not result in significant impacts in relation to a rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, and no mitigation measures are required.

ii. Strong seismic ground shaking? (Less Than Significant Impact)

There are active or potentially active fault systems that can affect the City, including the Project site. The most significant known active faults include the Newport-Inglewood Fault and the Whittier-Elsinore Fault. The closest approach of an active fault to the Project site is the Newport- Inglewood fault, which is located approximately three miles to the west of the City. According to the City's GIS Map, there is an unnamed fault located approximately 150 feet to the east of Bluebird Canyon Drive near Rancho Laguna Road. The potential for damage resulting from seismic-related events exists within the City, as it does throughout Southern California. Seismic hazards include ground shaking, ground failure, ground displacement, tsunamis, and seiches. The site is expected to be subject to moderate to severe ground shaking from a regional seismic event within the life of the proposed Project. The Newport-Inglewood Fault Zone and the Whittier-Elsinore Fault Zone have the greatest potential for causing earthquake damage related to ground shaking at the Project site. However, the proposed Project includes no habitable structures that would be impacted by a seismic event and the retaining wall and guardrail would be constructed to the City's design standards. Therefore, impacts would be less than significant, and no mitigation measures are required.

iii. Seismic-related ground failure, including liquefaction? (Less Than Significant Impact)

According to the Geologic Hazard Zones Map in the City General Plan, Safety Element and its GIS Map, the site is not located within a potential liquefaction zone. The proposed Project entails minor roadway widening and associated improvements intended to assist in emergency evacuation of the adjacent neighborhoods and facilitate emergency vehicle access along Bluebird Canyon Drive. There are also no habitable structures proposed as part of the proposed Project. Therefore, all potential impacts relative to this topic are considered less than significant, and no mitigation measures are required.

iv. Landslides? (Less Than Significant Impact)

According to the Geologic Hazard Zones Map of the City General Plan, Safety Element and its GIS Map, the western portion of the Project site is located within a Seismic Hazard Landslide Area. The proposed Project entails minor roadway widening, and associated improvements intended to assist in emergency evacuation of the adjacent neighborhoods and facilitate emergency vehicle access along Bluebird Canyon Drive. Both the guardrail and retaining wall components of the proposed Project have been engineered and would be constructed in consideration of their location within a Seismic Hazard Landslide Area. In addition, there are no habitable structures proposed. Therefore, all potential impacts relative to this topic are considered less than significant, and no mitigation measures are required.



b) Would the project result in substantial soil erosion or the loss of topsoil? (Less Than Significant Impact)

The proposed Project would modify, but largely maintain, the natural contours and roadway and adjacent north and south slopes to implement the emergency evacuation improvements. Construction activities would not result in substantial soil erosion or loss of topsoil, nor would this be expected during operation. The improvements would be constructed in a manner in compliance with City erosion control measures. In addition, the proposed Project would be required to adhere to the City's Grading Manual, which includes measures to address and control erosion and siltation. Therefore, impacts would be less than significant, and no mitigation measures are required.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? (Less Than Significant Impact)

The Bluebird Canyon area has experienced landslides, including a massive landslide that occurred in 2005. However, according to the Geologic Hazard Zones Map of the City General Plan, Safety Element and its GIS Map, the Project site is not located within or subject to an off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts would be less than significant, and no mitigation measures are required.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Less Than Significant Impact)

The Project proposes implementation of emergency evacuation improvements that would facilitate evacuation of the adjacent neighborhoods and facilitate emergency vehicle access along Bluebird Canyon Drive and includes no habitable structures. In addition, an analysis of the on-site soils indicates they are low to moderately expansive, as defined in Table 18-1-B of the Uniform Building Code (1994). However, the improvements have been designed to consider these conditions. Therefore, no significant impacts relative to this topic are anticipated due to Project implementation, and no mitigation measures are required.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (No Impact)

The proposed Project involves implementation of emergency evacuation improvements that would facilitate evacuation of the adjacent neighborhoods and facilitate emergency vehicle access along Bluebird Canyon Drive and includes no habitable structures; as such, the Project does not involve issues pertaining to soils incapable of supporting septic tanks or alternative wastewater disposal systems. Therefore, no impacts would occur, and no mitigation measures are required.



f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant with Mitigation)

A Paleontological Resource Assessment was prepared for the proposed Project and is contained within Appendix E of this IS/MND. The results of this assessment indicate that two geologic units are present in the Project area: landslide deposits, which have low paleontological potential, and the Topanga Formation, which has high paleontological potential (as assessed using the classifications of the Society of Vertebrate Paleontology [2010]). As the proposed Project will require some soil disturbance, impacts to potential paleontological resources is considered potentially significant. However, with the implementation of Mitigation Measures GEO-1. GEO-2 and GEO-3, these impacts would be reduced to less than significant levels.

GEO–1 Paleontological Monitoring & Mitigation Plan

A paleontologist meeting professional standards as defined by Murphey et al. (2019) shall be retained as the Project Paleontologist to oversee all aspects of paleontological mitigation, including paleontological monitoring of earthwork and ground disturbing activities into undisturbed geologic units with high paleontological potential, to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). Within the Project Area the Topanga Formation has high paleontological potential and is present as shallowly as 1.5 feet below ground surface.

GEO–2 Workers' Environmental Awareness Program

The Project Paleontologist shall develop a Worker's Environmental Awareness Program training that communicates requirements and procedures for the inadvertent discovery of paleontological resources during construction to be delivered by the paleontologist or their designated representative to the construction crew prior to the onset of ground disturbance.

GEO–3 Inadvertent Discoveries

In the event that paleontological resources are encountered during construction activities, all work must stop in the immediate vicinity of the finds while the paleontological monitor documents the find. The designated Project Paleontologist shall assess the find. Should the Project Paleontologist assess the find as significant, the find shall be collected and curated in an accredited repository along with all necessary associated data and curation fees.

3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS — Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The analysis and conclusions contained in this section are derived from Appendix B (Air Quality & Greenhouse Gas Study) of this IS/MND.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less Than Significant Impact)

The Project is limited to and consists of the expansion of a road and construction of a retaining wall. The Project would generate GHG emissions during construction from off-road equipment and on-road vehicle exhaust from worker vehicles and materials delivery. There would be no increase in operation phase emissions and the Project would not be expected to conflict with or obstruct implementation of the applicable air quality plan. As such, operation phase emissions are not considered to result in additional potential impacts to climate change.

Detailed GHG emissions estimates for the proposed Project are included in Appendix B. Table 3 below, presents a summary of the estimated total GHG emissions that would likely result from Project construction. To be consistent with SCAQMD GHG emissions policy, presented emissions from construction activities have been amortized over a 30-year lifetime.

Table 3. Total Estimated Project GHG Emissions

Project Phase	CO_2e	
Construction Emissions (Total Metric Tons)	213	
Construction Emissions (Total Metric Tons; amortized over 30 years)	7.1	
Operation Emissions (annual)	No increase	
Interim SCAQMD Threshold (Total Metric Tons)		**3,000**
Project Emissions Exceed SCAQMD Threshold?		**No**

SOURCE: Appendix A, Air Quality & Greenhouse Study (see Appendix B of this IS/MND).

As shown in Table 3, construction of the Project would emit an estimated 213 metric tons (MT) of CO_2e. When the emissions are amortized over 30 years in accordance with SCAQMD guidance, the 30-year annualized value is 7.1 MT of CO_2e per year. The 7.1 metric tons addition of CO_2e emissions is less than the 3,000 MT CO_2e significance threshold. Therefore, the Project would not generate greenhouse gas emissions, either directly or indirectly, that would be considered to have a substantial adverse effect on the environment. Consequently, potential unmitigated impacts would be less than significant.



b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Less Than Significant Impact)

The State Legislature, enacted AB 32, the California Global Warming Solutions Act of 2006, which was signed on September 27, 2006, to further the goals of EO S-3-05 (Health and Safety Code, S38500 et seq.). AB 32 requires CARB to adopt statewide GHG emissions limits to achieve statewide GHG emissions levels at the same levels they were atmospherically in 1990 by the year 2020. A longer-range goal requires an 80 percent reduction in GHG emissions from 1990 levels by 2050. CARB adopted the 2020 statewide target and mandatory reporting requirements in December 2007 and the Scoping Plan in December 2008. SB 32, signed on September 8, 2016, expands on the mandate of AB 32 requiring CARB to ensure that state GHG emissions are reduced to 40 percent below the 1990 emission level by year 2030. Section 38566 is added to the current Health and Safety Code, which states "the State board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31, 2030". CARB prepared the 2017 Final Scoping Plan to prepare a blueprint for the state to meet SB 32's goals (CARB 2017).

The Project does not include stationary sources of GHG emissions and is not subject to compliance with AB 32's cap-and-trade program. The proposed Project would not conflict with any measures within CARB's Final Scoping Plan. The City has also enacted a Climate Protection Action Plan to reduce overall City emissions by seven percent below 1990 levels by 2012. The City's plan is specific to the reduction of GHG associated with buildings, transportation and land use, government operations, commercial operations, and water management. Specific reduction measures for transportation projects relevant to the Project include providing traffic calming measures to increase pedestrian safety and amenity. The proposed Project is increasing safety by providing additional road space for emergency vehicles. The Project is limited to and consists of the expansion of a road and construction of a retaining wall. The Project's use of fuels during construction would be consistent with existing regulations related to low carbon fuel standards achieved through regulations placed on the fuel manufacturing and supply industry. Considering the above and considering that the Project's GHG emissions would be below SCAQMD's thresholds of significance, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Potential unmitigated impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use compatibility plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

The analysis and conclusions contained in this section are derived from Appendix F (Desktop Study – Hazardous Materials & Environmental Records Review Report) of this IS/MND.

The proposed Project would not result in any significant impacts to hazards and hazardous materials. The Project site is currently developed with an existing roadway, although portions of the right-of-way are unimproved. The proposed Project will provide egress for emergency vehicles along Bluebird Canyon Drive and the adjacent neighborhoods. Construction activities would be the primary source of hazardous materials during the Project's construction phase. During operation, hazardous materials associated with vehicles traveling along the roadway, such as oil and grease, brake dust, and other associated pollutants would be expected. However, these are currently assumed to be present as part of the existing Project environment and would likely continue to be present after Project implementation.

The subject Project site is not on a list of hazardous materials sites compiled pursuant to California Government Code §65962.5. Based on a review of the State of California Water Resource Control Board's (SWRCB's) GeoTracker online environmental database, there are no sites with an open case status within 1,000 feet of the proposed Project. The closest listed sites have a case closed status and are not considered to represent an environmental risk related to construction and operation of the Project. A summary of these listings and their location relative to the proposed Project is summarized below:

- **M B M Auto**, 1890 South Coast Highway, Laguna Beach, CA 92651 (Approximately 1,100 feet south southwest of the Project)

  This site was subject to an unauthorized release from a leaking underground storage tank in 1991 that was subject to corrective action (soil vapor extraction and soil excavation) under the



regulatory oversight of the Orange County Health Care Agency. The status of the site is listed as case closed, as of August 6, 2001. Based on the status and distance from the proposed Project, this site does not represent a risk for the proposed Project.

- **Texaco**, 1833 South Coast Highway, Laguna Beach, CA 92651 (Approximately 1,500 feet south southwest of the Project)

  This site was subject to an unauthorized release from a leaking underground storage tank in 1991 that was subject to corrective action (free product removal, soil vapor extraction, soil excavation and in-situ chemical treatment) under the regulatory oversight of the Orange County Health Care Agency. The status of the site is listed as case closed, as of October 20, 2017. Based on the status and distance from the proposed Project, this site does not represent a risk for the proposed Project.

- **Laguna Auto Service**, 1779 South Coast Highway, Laguna Beach, CA 92651 (Approximately 1,500 feet to the south southwest of the Project)

  This Project site was subject to an unauthorized release from a leaking underground storage tank in 1990. The site was managed under the regulatory oversight of the Orange County Health Care Agency. The status of the site is listed as case closed, as of December 23, 1998. Based on the status and distance from the proposed Project, this site does not represent a risk for the proposed Project.

a) Would the project create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials? (Less Than Significant Impact)

The Project proposes minor roadway widening of Bluebird Canyon Drive in order to improve emergency vehicle egress along the road and to the adjacent neighborhoods. The proposed Project does not include the routine transport, use, or disposal of hazardous materials that could create a significant hazard to the public or the environment. The proposed Project involves the construction of roadway improvements on the Project site. Construction will involve the use of hazardous materials such as gasoline and diesel fuel. These would be transported and used in accordance with applicable regulatory requirements intend to protect the public and environment. The proposed Project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. Therefore, impacts would be less than significant, and no mitigation measures are required.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Less Than Significant Impact)

The proposed Project will not be a generator of hazardous materials. No significant hazardous materials would be stored or handled on-site associated with the operational characteristics of the proposed Project. However, construction equipment will be operating on the Project site, and temporary storage of hazardous materials (such as fuels, lubricants, and cleaning solutions) on the site could occur. Additionally, in relation to construction activities, the proper use and maintenance of equipment, along with the use of BMPs, greatly reduces the potential risk of spills and releases that can result in impacts to



soil and/or groundwater. Therefore, adherence to standard and required ordinances and laws would reduce potential impacts to less than significant levels, and no mitigation measures are required.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (No Impact)

There are no existing or proposed public schools within one-quarter mile of the site. The proposed roadway widening will not emit hazardous emissions or involve hazardous or acutely hazardous materials, substances, or waste. Therefore, there would be no impact to schools related to hazardous emissions or hazardous or acutely hazardous materials, and no mitigation measures are required.

d) Would the project be located on a site which is included on a list of hazardous materials sites which complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (No Impact)

The location of the Project site is not included on a list of hazardous materials sites compiled pursuant to California Government Code §65962.5. As mentioned above, there are no open case sites close to the proposed Project that have the potential to impact the proposed Project. In addition, the Project itself will not result in any impacts relative to hazardous materials sites. Therefore, no impacts would result, and no mitigation measures are required.

e) For a project located within 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 result in a safety hazard or excessive noise for people residing or working in the project area. (No Impact)

The proposed Project is not located within an airport land use plan, nor within two miles of a public or public use airport. The closest airport to the Project site is John Wayne Airport, which is located approximately nine miles northwest. Therefore, no impacts related to a safety hazard or excess noise for people residing or working in the area would result. Therefore, no impacts would result, and no mitigation measures are required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less than Significant Impact)

The proposed Project involves minor roadway widening along Bluebird Canyon Drive intended to facilitate emergency vehicle egress along the roadway and the adjacent neighborhoods and is identified by the City as an evacuation route. There is nothing associated with the proposed Project (construction or operation) that would impede implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. The roadway would remain open during construction activities. The proposed Project will not result in any impacts to an adopted emergency response plan or an emergency evacuation plan and is intended to facilitate egress by emergency vehicles along the roadway and adjacent neighborhoods. Therefore, a less than significant impact would result, and no mitigation measures are required.



g) Would the project Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (No Impact)

A review of the City's General Plan Safety Element indicates the entire City is designated as being in a Very High Fire Hazard Severity Zone[2]. The proposed Project is located within an urbanized environment and contains highly flammable fuels and is part of the wildlands/urban interface zone. Construction equipment would be normally equipped with spark arrestors and other safety features to reduce the potential for fire. During operation, there would be no potential sources of ignition for fire since the proposed Project entails minor roadway widening. In addition, the proposed Project is intended to facilitate emergency vehicle egress along the roadway and access to the adjacent neighborhoods and which would further assist emergency services to evacuate these areas, if needed, during an emergency situation involving wildfire. Therefore, the proposed Project would not be expected to result in conditions that would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. As such, no impacts would result, and no mitigation measures are required.

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would	☐	☐	☒	☐
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐

[2] City of Laguna Beach General Plan, Safety Element, pages 47-48.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements? (Less Than Significant Impact)

Portions of the City (including the Project site) are located in the Laguna Coastal Streams Watershed. The Project area is under the jurisdiction of the RWQCB, San Diego Region, for issues related to water quality. The San Diego Region includes cities and municipalities in a portion of south Orange County (including the City), Riverside County and San Diego County. Each of the nine Regional Boards within California is required to adopt a Water Quality Control Plan, or Basin Plan. Each Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (1) designates beneficial uses for surface and ground waters; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy; (3) describes implementation programs to meet the objectives and protect the beneficial uses of all waters in the region; and (4) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.

There is a Drainage Area Management Plan (DAMP) which is implemented by the cities (including Laguna Beach), County of Orange, and Orange County Flood Control District. The DAMP was prepared in compliance with specific requirements of the National Pollutant Discharge Elimination System (NPDES) storm water program. The DAMP includes a wide range of BMPs and control techniques to further reduce the number of pollutants entering the storm drain system. The proposed Project also includes a Water Quality Memorandum (under separate cover to the IS/MND) which identifies specific BMPs and which are also in part, shown in Figure 8.

The City prepared the Laguna Coastal Streams Watershed Workplan, which is updated each year. Previous water quality studies prepared by "Heal the Beach" and the County of Orange have found that the water quality in the Pacific Ocean along the Laguna Coastal Streams Watershed consistently ranks among the cleanest in southern California, with regard to meeting ocean plan objectives.

Bluebird Canyon Drive is currently paved and will continue to remain so when the proposed Project improvements are completed. Construction activity includes any work associated with minor grading and construction of the Project site. This includes clearing and grubbing, grading, trenching, and construction of structures associated with the proposed Project. Due to the minor soil disturbance associated with construction activity, there is the potential for some sediment to be transported from the construction site into receiving waters, such as Bluebird Canyon Creek, a mapped United States Geological Survey (USGS) blueline stream, although this potential is low, given it is more than 25 feet from the proposed work and therefore, would be outside the required setbacks. As shown in Figure 2 (Grading & Drainage Sheet), the distance from the grading limits is more than 25-feet from the top of the drainage course bank. Other potential pollutants include metals and fuels from vehicles and heavy equipment.



In accordance with NPDES regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the State General Construction Activity Storm Water Permit (Water Quality Order 99-08-DWQ). The proposed Project will disturb approximately 0.4 acre of soil.

As such, the Project will be conditioned to implement BMPs during construction activities. The purpose of implementing BMPs is to prevent all construction pollutants from contacting storm water and to keep all erosion products from moving off-site into receiving waters. Figure 8 (Erosion Control Plan) contains the design and description of BMPs that would be in place during construction of the proposed Project.

Certain discharges of non-storm water, such as irrigation, pipe flushing and testing, are permitted, as long as they do not cause or contribute to a violation of any water quality standard; violate any provision of the General Permit; or require a non-storm water permit (such as those issued by the San Diego RWQCB). Typical construction BMPs required by the NPDES permit and the pollutants they target are shown in Table 4. Due to characteristics of the proposed Project (minor roadway widening), not all of the typical construction BMPs identified in Table 4 are applicable to the Project (e.g., storm drain inlets).

Pollutants associated with the Project could include sediments (soil disturbance), nutrients (fertilizers, eroded soils), metals (vehicles), oil, and grease (vehicles).

Table 4. Typical Construction Best Management Practices

Construction BMPs for incorporation, where applicable, into the Storm Water Pollution Prevention Plan (SWPPP)	Sediment	Nutrients	Pathogens	Pesticides	Metals	Other
Soil and slope stabilization utilizing the appropriate combination of natural and synthetic mattings, geotextiles, mulches, and temporary and permanent seeding.	X	X			X	
Temporary desilting basins constructed where necessary and consisting of ponds with outflow pipes designed to retain or detain runoff sufficiently to allow sediment to settle.	X	X			X	
Storm drain inlet protection utilizing an appropriate combination of barrier devices such as sandbags, straw rolls, hay bales, fiber rolls, gravel, silt fencing, screens, and temporary drain signs (raising awareness and limiting construction wastes from entering the storm drain system).	X	X			X	Trash
Energy dissipation devices installed where necessary and consisting of physical devices such as rock, riprap, and concrete rubble intended to prevent scour of downstream areas.	X	X			X	

Construction BMPs for incorporation, where applicable, into the Storm Water Pollution Prevention Plan (SWPPP)	Sediment	Nutrients	Pathogens	Pesticides	Metals	Other
On-site dust control and street sweeping employed when and where necessary, paying close attention to paved areas and areas susceptible to wind erosion (such as soil stockpiles).	X	X			X	Trash
Stabilized construction entrance consisting of pads of aggregate and located where traffic enters public rights-of-way; when and where necessary, wash racks or tire rinsing may be employed (tire rinse waters being directed through on-site sediment control devices).	X				X	
Diversion structures consisting of devices such as silt fencing, temporary or permanent channels, V ditches, earthen dikes, downdrains, straw bales, and sandbag check dams should be utilized where necessary to divert storm water flows from disturbed areas.	X				X	Trash
Adherence to Groundwater Extraction Permit by conducting required testing, monitoring, and discharge provisions for activities, including dewatering and foundation dewatering.	X				X	
Construction housekeeping practices consisting of practices such as barricading catch basins and manholes during paving activities; utilizing plastic sheeting, secondary containment, or bermed areas for construction materials when necessary; removing construction debris in a timely fashion; designating and lining concrete washout areas; and berming or locating sanitary facilities away from paved areas.	X		X		X	Trash
Fertilizer, pesticide, and soil amendment management, including not over applying such materials.		X		X		

Source: California Storm Water BMP Handbooks (2003)

Because the proposed Project would be required to adhere to standard measures to protect water quality, impacts would be less than significant, and no mitigation measures are required.



b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less Than Significant Impact)

The Project site is located on developed land, and the subject property will remain developed after implementation of the Project. The overall amounts of impervious surfaces, both existing and proposed, would largely remain the same and would not change substantially, such that a measurable difference would occur. The proposed Project will not impact groundwater supplies or interfere with groundwater recharge. Therefore, the proposed Project would result in less than significant impacts on groundwater, and no mitigation measured are required.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (Less Than Significant Impact):

i. Result in substantial erosion or siltation on- or off-site?

The proposed Project will not result in a significant change to the drainage pattern of the Project site. The existing contours would largely remain the same, and the overall quantity of impervious surfaces would be about the same in area. The proposed Project would not involve the alteration of the course of a stream or river in a manner that would result in substantial erosion or siltation on-site or off-site. The roadway widening Project is planned to follow the natural contours and slopes of the property. Therefore, the proposed Project would result in less than significant impacts related to erosion or siltation, on-site or off-site, and no mitigation measures are required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The proposed Project will not alter the course of a stream or a river. Miscellaneous street and storm drain improvements, including curb and gutter, storm drain inlets, and piping are proposed. These improvements would be adequately sized to capture and convey the projected stormflows and would not result in flooding, either on- or off-site. Therefore, the proposed Project would result in less than significant impacts, and no mitigation measures are required.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Refer to responses a and c(ii), above.

Project impacts associated with runoff would be less than significant, and no mitigation measures are required.

iv. Impede or redirect flood flows?

Refer to responses a and c(ii), above.



Project impacts associated with impeding or redirecting flood flows would be less than significant, and no mitigation measures are required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Less Than Significant Impact)

According to the City's General Plan Safety Element, flooding is a recurring event in Laguna Beach. However, most of the storm drains in Laguna Beach are built to handle a 25-year flood events and those in Bluebird Canyon are built to handle 100-year flood events. These facilities are regularly maintained for debris removal. The storm drains planned as part of the proposed Project have been properly sized to accommodate the anticipated flows and would be connected to the existing conveyance facilities located in Bluebird Canyon Drive. Because the site is located inland, approximately three-quarters of mile from the Pacific Ocean, it is not anticipated that the Project site could potentially experience impacts associated with inundation by tsunami. The Project itself does not expose people or structures to a significant risk involving flooding, or flooding, as a result of the failure of a levee or dam since none of these facilities exist in the Project vicinity and the roadway facility already exist. As noted in Section 3.9 (Hazards & Hazardous Materials), there are no known pollutant sources which could be affected by inundation. Additionally, the City has emergency procedures in the event of a major event (e.g., flooding, earthquake, evacuation plans). Therefore, impacts associated with flooding, inundation by seiche, tsunami, or release of pollutants would be less than significant, and no mitigation measures are required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Less Than Significant Impact)

The proposed Project will be required to comply with all existing requirements regarding water quality. In addition, as noted in response b, above, the proposed Project would result in less than significant impacts related to groundwater recharge. Therefore, impacts related to obstructing the implementation of a water quality control plan or groundwater management plan would be less than significant, and no mitigation measures are required.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

a) Would the project physically divide an established community? (No Impact)

The Project site is currently developed. The proposed Project would provide emergency vehicle egress to the communities located along Bluebird Canyon Drive. Development of the proposed Project will not

physically divide an established community, because the roadway currently exists and is designed to connect the communities located in Bluebird Canyon and its adjacent environs. It also provides east/west access for these communities to the coast. Therefore, no impacts relative to this topic are anticipated, and no mitigation measures are required.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (No Impact)

The proposed Project is located within the public street right of way along Bluebird Canyon Drive and there is no General Plan land use designation for the site. The proposed Project will provide egress for emergency vehicles along Bluebird Canyon Drive, a major east/west canyon connecting the hillside and coastal neighborhoods. The proposed Project is consistent with the City's Zoning Code and General Plan Land Use, Open Space/Conservation, Landscape & Scenic Highway, Safety Elements, and its Wildfire Mitigation and Fire Safety Report. The proposed Project includes needed improvements to ensure emergency vehicles have adequate egress along Bluebird Canyon Drive and access to the adjacent neighborhoods. As noted in various sections of the IS/MND (e.g., Section 2.1.3 [Project Characteristics], 3.9 [Aesthetics], 3.20 [Wildfire), the proposed Project is consistent with the goals and objectives of these Elements. The proposed Project would also be consistent with the City's certified Local Coastal Program because these types of projects are included and as demonstrated below in Table 5. It is not anticipated that the proposed Project will result in any impacts due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and no mitigation measures are required.

Table 5. General Plan and Local Coastal Program Consistency Analysis

Policy	Consistency Analysis
Land Use Element	
Land Use Element (LUE) Policy 7.3: *Design and site new development to protect natural and environmentally sensitive resources, such as areas of unique scenic quality, public views, and visual compatibility with surrounding uses and to minimize natural landform alterations.*	**Consistent** – The proposed Project would represent a continuation of the existing roadway use but would provide enhanced emergency vehicle ingress and egress to the Bluebird Canyon area. As noted in Section 3.1 (Aesthetics), the analysis determined that the proposed Project would not result in any long or short-term significant impacts to a scenic vista, scenic resource, degrade the existing visual character or quality of public views of the site and its surroundings, or create a new source of substantial light or glare which would adversely affect day or nighttime views in the area either during construction or operation.
LUE Action 7.3.2: *Review all applications for new development to determine potential threats from coastal and other hazards.*	**Consistent** – The proposed Project would be subject to all discretionary requirement for this type of project. In addition, as noted in Section 3.7 (Geology & Soils), the proposed Project would be subject to similar risks (e.g.,

Policy	Consistency Analysis
	wildland fires, earthquake faults) as those already experienced by residents and structures contained within the City.
LUE Action 7.3.3: *Design and site new development to avoid hazardous areas and minimize risks to life and property from coastal and other hazards.*	**Consistent** – The proposed Project represents a continuation of the existing roadway use. In addition, as noted in Section 3.7 (Geology & Soils), the proposed Project would be subject to similar risks (e.g., wildland fires, earthquake faults) as those already experienced by residents and structures contained within the City.
LUE Action 7.3.4: *Require new development to assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*	**Consistent** – The proposed Project represents a continuation of the existing roadway use. In addition, as noted in Section 3.7 (Geology & Soils), the proposed Project would be subject to similar risks (e.g., wildland fires, earthquake faults) as those already experienced by residents and structures contained within the City. In addition, the hillsides along Bluebird Canyon were substantially altered during initial construction of the area's roadways and residences. The proposed roadway widening, and associated improvements would not substantially or significantly alter the existing condition since only a small portion of the existing north slope of the canyon would be affected and this area is flat.
LUE Policy 7.4: *Ensure that development, including subdivisions, new building sites and remodels with building additions, is evaluated to ascertain potential negative impacts on natural resources. Proposed development shall emphasize impact avoidance over impact mitigation. Any mitigation required due to an unavoidable negative impact should be located on-site, where feasible. Any off-site mitigation should be located within the City's boundaries close to the project, where feasible.*	**Consistent** – As noted in Section 3.4 (Biological Resources), no Special-Status plant species were observed during the August 2021 survey. The majority of Special-Status plants or animals known to occur in the region were determined to no potential for occurrence or were not likely to occur at all. Further, impacts to vegetation and land uses were minor (0.87 acre temporary and 0.3 acre permanent).
Policy 7.10: *Require new construction and grading to be located in close proximity to preexisting development to minimize environmental impacts and growth-inducing potential.*	The proposed Project is located within the Bluebird Canyon neighborhood, an urban/wildlands environment punctuated by developed and undeveloped lands. The roadway widening would occur along an undeveloped parcel of land purchased by the City in 2010 and would require minor grading to install required safety elements (e.g., guardrail, retaining wall). In addition, no



Policy	Consistency Analysis
	residential land uses are proposed and therefore, not growth-inducing impacts would result.
Policy 10.3: *Ensure that all new development, including subdivisions, the creation of new building sites and remodels that involve building additions, is evaluated to ascertain potential negative impacts on natural resources, ESHA and existing adjacent development. Proposed development shall emphasize ESHA impact avoidance over impact mitigation. Any mitigation required due to an unavoidable negative impact should be located on-site rather than off-site, where feasible. Any off-site mitigation should be located within the City's boundaries and in close proximity to the project.*	The proposed Project does not entail the construction of residential land uses. As noted in Section 3.4 (Biological Resources), the proposed project may require the removal of seven (7) lemonade berry scrub. These shrubs would be mitigated on-site at 2:1 ratio. There location is noted in Figure 6 (Planting Plan).
Open Space Conservation Element	
OSC Policy 4G*: Ensure that all development minimizes erosion, sedimentation, and other pollutants in runoff from construction-related activities to the maximum extent practicable. Ensure that development minimizes land disturbance activities during construction (e.g., clearing, grading and cut-and-fill), especially in erosive areas (including steep slopes, unstable areas, and erosive soils), to minimize the impacts on water quality.*	**Consistent** – As noted in Section 3.10 (Hydrology & Water Quality) impacts related to erosion would be addressed through standard permit requirements.
OSC Policy 7A: *Preserve to the maximum extent feasible the quality of public views from the hillsides and along the City's shoreline.*	**Consistent** – As noted in Section 3.1 (Aesthetics) although some new visual elements would be introduced to the roadway (e.g., retaining wall, guardrail, additional trees), impacts were determined to be less than significant, and no mitigation is required. In addition, the proposed Project would reintroduce native coast live oak (*Quercus agrifolia*) trees into Bluebird Canyon, and which historically were present, but were replaced with Eucalyptus and other non-native species. The existing views from the road of the canyon and adjacent hillsides would be preserved and would not substantially change or introduce new elements that are not already present.
OSC Policy 7K: *Preserve as much as possible the natural character of the landscape (including coastal bluffs, hillsides, and ridgelines) by requiring proposed development plans to preserve and enhance*	**Consistent** – The proposed Project represents a continuation of the existing roadway use but would introduce new permanent safety elements (e.g., retaining wall, guardrail). In addition, as noted in Section 3.7 (Geology &



Policy	Consistency Analysis
scenic and conservation values to the maximum extent possible, to minimize impacts on soil mantle, vegetation cover, water resources, physiographic features, erosion problems, and require recontouring and replanting where the natural landscape has been disturbed.	Soils), the proposed Project would be subject to similar risks (e.g., wildland fires, earthquake faults) as those already experienced by residents and structures contained within the City. In addition, Bluebird Canyon was substantially altered during initial roadway construction of the area and adjacent homes. Implementation of the proposed Project would not substantially or significantly alter the canyon or adjacent slopes.
4G: *Minimize Construction Impacts* *Ensure that all development minimizes erosion, sedimentation and other pollutants in runoff from construction-related activities to the maximum extent practicable. Ensure that development minimizes land disturbance activities during construction (e.g., clearing, grading and cut-and-fill), especially in erosive areas (including steep slopes, unstable areas and erosive soils), to minimize the impacts on water quality.*	The proposed Project would require minor grading to implement the roadway emergency and safety components (e.g., guardrail, retaining wall). This work would be required to comply with hydrology and water quality BMPs during construction and operation. As noted in Section 3.10 (Hydrology & Water Quality), because the proposed Project would be required to adhere to standard measures to protect water quality, impacts would be less than significant, and no mitigation measures are required.
9C a): *Streams on the Major Watershed and Drainage Courses Map and the South Laguna and Laguna Canyon Biological Values Maps which are also "blue-line" streams identified on the USGS 7.5 Minute Quadrangle Series, shall be identified and mapped on the Coastal Environmentally Sensitive Areas Map of the Land Use Plan. For these streams, a minimum setback of 25 feet from the top of the stream banks shall be required in all new developments. A greater setback may be necessary in order to protect all riparian habitat based on a site-specific assessment. No disturbance of major vegetation, or development, shall be allowed within the setback area. This provision shall not apply to channelized sections of streams without significant habitat value. Where development is proposed on an existing subdivided lot which is otherwise developable consistent with all City ordinances and other policies of this Plan except that application of this setback would result in no available building site on the lot, the setback may be reduced provided it is maintained at a width sufficient to protect all existing riparian habitat on the site and*	Bluebird Canyon is identified by the USGS as a blueline stream. As shown in Figure 2 (Grading & Drainage Sheet), the distance from the grading limits is more than 25-feet from the top of the drainage course bank. No vegetation disturbance is proposed within the 25-foot setback from the top of the stream bank and only minor vegetation disturbance would occur adjacent to the existing roadway and mitigation measures (see Section 3.4 [Biological Resources]) have been identified to address these impacts.

Policy	Consistency Analysis
provided all other feasible alternative measures, such as modifications to the size, siting and design of any proposed structures, have been exhausted.	
14A: *Require construction and grading to be concentrated on slopes of 30% or less.*	As noted in Figure 2 (Grading & Drainage Sheet), the area proposed for minor grading is relatively flat and would not require alteration of the adjacent slope to the north and therefore, would not affect Bluebird Canyon.
14B: *Prohibit construction and grading on slopes of 45% or greater.*	See response above.
14F: *Require grading projects to minimize earth-moving operations and encourage preservation of the natural topographic land feature.*	As noted in Figure 2 (Grading & Drainage Sheet), the area proposed for minor grading is relatively flat and would not require alteration of the adjacent slope to the north and therefore, would not affect Bluebird Canyon.
Coastal Land Use Plan	
Section 30240(A): *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.*	**Consistent** – As noted in Section 3.4 (Biological Resources), no Special-Status plant species were observed during the August 2021 survey. The majority of Special-Status plants or animals known to occur in the region were determined to no potential for occurrence or were not likely to occur at all. Further, impacts to vegetation and land uses were minor (0.87 acre temporary and 0.3 acre permanent).
Section 30244: *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*	**Consistent** – As noted in Section 3.5 (Cultural Resources) and Section 3.7 (Geology & Soils) impacts related to cultural and paleontological resources can be mitigated with the implementation of mitigation measures.
Landscape & Scenic Highway Element	
Policy 4.10 *Coordinate City maintenance in the public right-of-way with utility company and Caltrans maintenance activities.*	**Consistent** – As noted in Section 3.19 (Utility & Service System), construction would require relocation of existing power and communication poles along the project limits and would be undertaken by others (e.g., Southern California Edison, Cox Communications). There are no underground utilities that would need to be relocated. Coordination by the City would be undertaken in advance with the respective service provider.
Topic 7: Landform Stability; GOAL*: Minimize potential for landslides and debris flows through*	**Consistent** – As noted in Section 3.10 (Hydrology & Water Quality), the proposed



Policy	Consistency Analysis
landscape and development management strategies.	Project would include the implementation of erosion control measures and associated BMPs.
Policy 8.1 *Encourage landscape layout and plant material selection to create wildlife habitat opportunities compatible with ecological characteristics of adjacent natural habitat, human habitation, fire safety, and landform stability, where applicable.*	**Consistent** – As noted in Section 3.4 (Biological Resources) a total of 16 native coast live oak trees (*Quercus agrifolia*) trees would be planted to replace eight non-native Eucalyptus trees to be removed as part of the proposed Project. The planting of the coast live oak trees would enhance the local native habitat and are a species native to Bluebird Canyon.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (No Impact)

The site is currently developed with a public roadway (Bluebird Canyon Drive). The Project site is not located within a known and/or designated mineral resources area. Therefore, no loss of availability of known mineral resources would result, and no mitigation measures are required.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? (No Impact)

The City's General Plan does not delineate any locally important mineral resource in the Project area. Therefore, the proposed Project will not result in any significant impacts to a locally important mineral resource. Therefore, no impacts would result, and no mitigation measures are required.

3.13 NOISE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. NOISE — Would the project result in:				
a) 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?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) 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?	☐	☐	☐	☒

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Less Than Significant with Mitigation Incorporated)

Short-Term Construction Noise

Construction activities for the proposed Project would include mobilization, clearing and grubbing, grading, drilling, trenching and structures, street paving, striping and signage, and landscaping and demobilization. Each construction stage has its own mix of equipment and, consequently, its own noise characteristics. These various construction operations would change the character of the noise generated at the Project site and, therefore, the ambient noise level as construction progresses. The loudest phases of construction typically include grading and drilling, as the noisiest construction equipment is earthmoving and grading equipment.

To approximate noise levels resulting from the short-term construction of the Project, the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used. The RCNM is used as the FHWA's national standard for predicting noise generated from construction. The RCNM analysis includes the calculation of noise levels at a defined distance for a variety of construction equipment. The spreadsheet inputs include acoustical use factors and distance to receptors and calculates the expected Lmax[3] and Leq[4] values at a selected receptor.

[3] Note: The Lmax, or Maximum Sound Level, descriptor is the highest sound level measured during a single noise event (such as a vehicle pass by), in which the sound level changes value as time goes on. The maximum sound level is important in judging the interference caused by a noise event with common activities. Source: https://www.fhwa.dot.gov/Environment/noise/resources/fhwahep17053.pdf, Last Accessed March 18, 2022.
[4] Note: Leq, or Time-Equivalent Sound Level is a measure of sound energy. Source: https://www.fhwa.dot.gov/Environment/noise/resources/fhwahep17053.pdf, Last Accessed March 18, 2022.

Table 6 below list types of construction equipment that may be used throughout construction of this Project and the maximum and average operational noise level as measured at 110 feet from the operating equipment. The 110-foot distance represents the distance between the west edge of the project area and the existing single-family residence at 994 Bluebird Canyon Drive.

Table 6. Summary of Federal Highway Administration Roadway Construction Noise Model at Existing Residential Receptor

Source	Distance to Nearest Sensitive Receptor	Sound Level at Receptor		
		Lmax, dB(A)	Acoustical Use Factor	Leq, dB(A)
Backhoe	110 feet	70.7	40%	66.7
Crane	110 feet	73.7	16%	65.7
Cold Milling Machine[1]	110 feet	76.7	40%	72.8
Concrete Mixer Truck	110 feet	72.0	40%	68.0
Drill Rig Truck	110 feet	72.3	20%	65.3
Dump Truck	110 feet	69.6	40%	65.6
Excavator	110 feet	73.9	40%	69.9
Mechanical Sweeper	110 feet	74.7	10%	64.7
Paver	110 feet	70.4	50%	67.4
Pavement Saw	110 feet	82.7	20%	75.7
Roller	110 feet	73.2	20%	66.2

Source: FHWA 2006

1. The RCNM program does not contain specific noise levels for a cold milling machine. Therefore, the noise levels from the cold milling machine were estimated using the noise levels from a scraper.

A reasonable worst-case noise condition for general construction activity is that a pavement saw, excavator, and a cold milling machine would operate simultaneously at the same location. This represents a conservative scenario, as it assumes that all three pieces of equipment would be operating at the same time and same place. Construction would occur in sequential phases, thus, in reality, it is not likely the three loudest pieces of equipment would be operating simultaneously at the exact location of the Project site closest to the nearest noise-sensitive receiver. Nevertheless, the RCNM calculated that this scenario would result in a combined noise level of 84.1 dB(A) Lmax and 78.2 dB(A) Leq at the existing single-family residence 110 feet from the Project site. The construction noise modeling output results are attached in Appendix G.

Table 7-2 “General Assessment Construction Noise Criteria” in the September 2018 Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual[5] lists noise level thresholds

[5] https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, Last Accessed March 18, 2022.



in Leq, dB(A) to determine impact to neighboring properties based on the land use of the neighboring properties. For residential land uses, a noise level limit of 90 dB(A) Leq during daytime hours is noted.

Table 7-2 General Assessment Construction Noise Criteria

Land Use	$L_{eq.equip(1hr)}$, dBA	
	Day	Night
Residential	90	80
Commercial	100	100
Industrial	100	100

As stated above, the noise level calculated from the reasonable worst-case scenario is 77.1 dB(A) Leq at the nearest residential receptor. This level is below the FTA construction noise criteria of 90 dB(A) Leq.

Although noise levels from construction could create a perceived nuisance, increases in noise levels from construction activity would be temporary. All construction activities at the site would also be limited by conditions on construction permits requiring compliance with the City's Noise Ordinance. Allowable hours of construction are between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday. No work is permitted on Saturdays, Sundays, and Federal Holidays. In addition, to ensure that no potential significant noise impacts result due to the construction of the proposed Project (and consistent with City requirements), the following Mitigation Measure NOI-1 will reduce noise levels to a less than significant level.

NOI-1 Construction Activity

During construction activities, the following construction practices are required:

a) Stockpiling and staging activities shall be located as far as practicable from dwellings.

b) All mobile equipment shall have properly operating and maintained mufflers.

c) Require that construction activities employ feasible and practical techniques to minimize noise impacts on adjacent uses. Particular emphasis shall be placed on the restriction of hours in which work other than emergency work may occur.

d) As a condition of approval, non-emergency construction activities adjacent to existing noise-sensitive uses shall be limited to daylight hours between the hours of 8 a.m. and 4:00 p.m. Monday through Friday.

e) Construct temporary enclosures around exceptionally noisy activities. For example, shields can be used around pavement breakers such as jackhammers.

f) Select quieter demolition methods when possible.

g) Notify adjacent homes near any hardscape demolition activities as to time and place to allow residents to adjust their schedule to avoid noise disruption.



Long-Term Noise Impacts

The proposed Project will construct a retaining wall on the north side of Bluebird Canyon Drive and widening of a portion of the north side of Bluebird Canyon Drive, from approximately Rancho Laguna Road westerly about 850 linear feet, to provide an eight-foot-wide roadway shoulder. The road improvements planned for this Project are not expected to create any measurable increase in traffic volumes on the roadways. Therefore, no measurable noise impact will result from Project implementation. Potential Project impacts would derive exclusively from construction activities.

Therefore, based on the above analysis, and with incorporation of the required mitigation measure, noise impacts would be less than significant.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (Less Than Significant Impact)

During construction of the proposed Project, equipment such as drilling, trucks, and rollers may be used as close as 110 feet from the nearest single-family residence at 994 Bluebird Canyon Drive. Table 7-4 "Vibration Source Levels for Construction Equipment" in the 2018 Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA Report No. 0123 September 2018) lists vibration source levels for the construction equipment most likely to generate high levels of ground vibration. The equipment listed in the FTA table includes impact and sonic pile drivers, clam shovel drops, hydromills, vibratory rollers, hoe rams, large and small bulldozers, caisson drilling, loaded trucks, and jackhammers.

Equipment presumably to be used for the Bluebird Canyon Drive Evacuation Route Project includes drilling, loaded trucks, and rollers. Equipment used during Project construction could generate vibration levels between 0.0082 PPV and 0.0228 PPV at 110 feet, as shown below in Table 7. All estimated vibration levels should be below the FTA vibration threshold at which human annoyance could occur and below the threshold for potential building damage as defined by the California Department of Transportation, Transportation and Construction Vibration Guidance Manual, April 2020.[6] Therefore, impacts from construction vibration would be less than significant, and no mitigation would be required.

Table 7. Estimated Vibration Levels for Construction Equipment

Type of Equipment	Reference Peak Particle Velocity at 25 Feet	Calculated Peak Particle Velocity at 110 Feet	Threshold at which Human Annoyance Could Occur	Potential for Proposed Project to Exceed Threshold
Drilling	0.089	0.0096	0.10	No
Loaded Trucks	0.076	0.0082	0.10	No
Vibratory Roller	0.21	0.0228	0.10	No

Source: Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018

[6] https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf, Last Accessed March 18, 2022.

c) 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 Project site is not within an airport land use plan and is not within two miles of a public airport. The closest airport is John Wayne Airport, located approximately nine miles northwest of the Project site. In addition, the proposed Project site is not within the vicinity of a private airstrip. Therefore, no impact would result, and no mitigation measures are required.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. POPULATION AND HOUSING — Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No Impact)

The proposed Project consists of minor roadway widening of Bluebird Canyon Drive within the existing street right of way. The Project site is in a mixture of urban and natural lands where urban infrastructure already exists and serves the adjacent neighborhoods. No significant new infrastructure will be required for the proposed Project. The Project will not induce substantial population growth in the area, either directly or indirectly, beyond that already contemplated per the City's General Plan, and county and state population/housing projections. Therefore, no impact would result, and no mitigation measures are required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No Impact)

The proposed Project does not involve elimination of any existing housing. The Project site is developed with an existing roadway, and the proposed Project will not displace any existing housing. Therefore, no impacts would result, and no mitigation measures are required.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

Public services are already being provided to the City and to the Project site. It is not anticipated that the proposed Project would not result in substantial adverse impacts to public services, because it is already being serviced by public services and would not result in an increase in residents or need for associated services. In addition, the proposed Project is required to provide adequate egress for emergency vehicles along Bluebird Canyon Drive. These improvements would improve response time access to this and adjacent neighborhoods in Bluebird Canyon.

i. Fire protection? (Less Than Significant Impact)

The Laguna Beach Fire Department provides fire protection and emergency response services for the City. Response times to the site are dependent on various factors. Response time is generally five minutes or less. Emergency calls receive the quickest response times with alarm calls and non-emergency calls having longer response times respectively. The availability of personnel and extenuating circumstances may further affect response times. The closest Laguna Beach fire station (Fire Station 2) to the site (approximately 0.75 miles) is located at 285 Agate St, Laguna Beach, CA 92651. The proposed Project will widen a portion of Bluebird Canyon Drive, and which is needed to provide emergency vehicle egress to the neighborhoods located in Bluebird Canyon. This area is already served by the Laguna Beach Fire Department. Due to the Project characteristics and considering that the Project is facilitating



emergency vehicle egress, no impacts would result to fire protection services and/or facilities, and no mitigation measures are required.

ii. Police protection? (Less Than Significant Impact)

Law enforcement services are provided by the Laguna Beach Police Department, located at 505 Forest Avenue or approximately 1.5 miles from the Project site. The site is already includes a roadway, and therefore, demand for police protection is not anticipated to be significantly affected as a result of the proposed Project. The proposed Project is consistent with the City's General Plan and will not substantially increase demand for police services beyond what is currently provided for the existing Project site. Therefore, impacts would be less than significant impacts, and no mitigation measures are required.

iii. Schools? (No Impact)

The Project site is in the Laguna Beach Unified School District (LBUSD). Due to the Project characteristics (minor roadway widening), the Project will not result in any increased generation of students that could impact enrollment at LBUSD schools. Therefore, the proposed Project will not result in any impacts to schools, and no mitigation measures are required.

iv. Parks? (No Impact)

The proposed Project entails the widening of Bluebird Canyon Drive and does not propose the construction of commercial or residential land uses that could increase the demand for these uses. Therefore, the proposed Project is not anticipated to result in any impacts to existing neighborhood and regional parks and recreational facilities, and no mitigation measures are required.

v. Other public facilities? (No Impact)

The Project site is already developed with an existing roadway. The proposed Project will provide egress for emergency vehicles accessing the Bluebird Canyon area and adjacent neighborhoods. Project development would not result in any significant impact to public facilities. Public facilities already occur adjacent to the Project area, such as the roadway, utilities, and other public services. Therefore, no impacts relative to other public facilities would result, and no mitigation measures are required.

3.16 RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. RECREATION — Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (No Impact)

The Project itself will not generate residents (or increase the population), and therefore, create a resulting demand for parks and recreational facilities. The Project proposes minor widening of an existing roadway (Bluebird Canyon Drive). Therefore, the proposed Project would not result in significant increases in demand for the use of existing recreation facilities. Therefore, no significant impacts would result, and no mitigation measures are required.

b) Does the project include recreational facilities or require the construction of or expansion of recreational facilities which might have an adverse physical effect on the environment? (No Impact)

The proposed Project involves the minor widening of an existing roadway (Bluebird Canyon Drive). It does not include the construction or expansion of recreational facilities and would not result in use by visitors or residents that would result in adverse physical effects on the environment. The proposed Project would provide a beneficial impact on emergency vehicle egress along Bluebird Canyon Drive by enabling emergency personnel to access the Bluebird Canyon area and adjacent neighborhoods. Therefore, the proposed Project would not result in any impacts related to the expansion or construction of recreational facilities, and no mitigation measures are required.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. TRANSPORTATION — Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (Less Than Significant Impact)

The proposed Project will construct a retaining wall on the north side of Bluebird Canyon Drive and widening of a portion of the north side of Bluebird Canyon Drive from approximately Rancho Laguna Road westerly about 850 linear feet to provide an eight-foot-wide roadway shoulder. Bluebird Canyon Drive is classified as a Hillside Collector in the City's General Plan. Hillside Collectors are described as having the same characteristics as Collector Streets (generally providing access for predominately localized traffic between arterial highways and local streets and neighborhoods), but generally have grades steeper than 15 percent. The proposed Project represents a localized improvement that will improve emergency egress abilities for residents but will not result in additional roadway lanes for through traffic. The proposed Project is consistent with City policies roadway circulation; therefore, no significant impacts regarding conflicts with existing policies are anticipated with implementation of the proposed Project. The proposed Project will result in minor short-term construction-related traffic in association with construction workers, delivery of construction equipment, and minor earthwork/grading site preparation activities. A Construction Traffic Control Plan to reduce potential short-term construction related impacts will be required by the City was part of Project approval. Therefore, impacts would be less than significant, and no mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (No Impact)

As the Project is a safety project, per CEQA Guidelines section 15064.3 subdivision (b)(2), projects that do not increase vehicle miles traveled (VMT) should be presumed to cause a less than significant transportation impact. Guidance provided by the Governor's Office of Planning and Research states that transportation projects should be analyzed on the basis of VMT increases from induced travel, but that "rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets", including "assets that serve bicycle and pedestrian facilities", which do not add additional motor vehicle capacity, generally should not require an induced travel analysis. The proposed Project represents a localized improvement that will improve emergency egress abilities for residents but will not result in additional roadway capacity that would induce more vehicle traffic. Since the Project consists of safety improvements to a roadway, and is not expected to induce additional vehicle trips, it is presumed the Project will have no impact relative to CEQA Guidelines section 15064.3 subdivision (b), and no mitigation measures are required.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (No Impact)

The proposed Project provides safety improvements to an existing roadway and will be constructed in accordance with all applicable design guidelines and City codes; therefore, the proposed Project will not substantially increase hazards due to a geometric design feature. The proposed Project does not propose any modification to roadways other than what is related to construction of a retaining way and widening a portion of the roadway. The Project, as proposed, would not result in any impacts relative to design features or incompatible uses, and no mitigation measures are required.



d) Would the project result in inadequate emergency access? (Less Than Significant Impact)

The proposed Project does not result in any type of development or action that would result in inadequate emergency access. The proposed Project provides roadway widening that is needed for emergency vehicles egress. Bluebird Canyon Drive is a key evacuation route for residents, and widening the road is needed to provide sufficient emergency egress as identified in the City's Wildfire Mitigation and Fire Safety Report. The proposed Project will result in minor short-term construction-related traffic in association with construction workers, delivery of construction equipment, and minor earthwork/grading site preparation activities. A Construction Traffic Control Plan to reduce potential short-term construction related impacts will be required by the City was part of Project approval. In addition, the roadway would remain open during construction and during operation, would facilitate egress by emergency vehicles and access to the adjacent neighborhoods. Therefore, the proposed Project would result in less than significant impacts to emergency access, and no mitigation measures are required.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES — Would the project: cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or (No Impact)

The Project area is considered low for Native American and tribal cultural resources based on the negative results of the Sacred Lands Files Search, conducted by the Native American Heritage Commission of behalf of the City, on September 3, 2021. As part of its AB 52 consultation requirements,

on March 11, 2022, the City sent out letters to tribal representatives making them aware of the proposed Project. Two Tribes responded to the Consultation inquiry. On April 15, 2022, Christina Conley of the Gabrielino Tongva Indians of California responded via email. In her correspondence, Ms. Conley indicated the NAHC had stated that the area has tested positive for cultural resources and will require Native American Monitoring for all ground disturbances and that the City advise her of their next steps. On April 27, 2022, correspondence via email was also received by Joyce Stanfield Perry of the Juaneño Band of Mission Indians, Acjachemen Nation. In her email, Ms. Stanfield Perry noted because of the sensitivity of this area and known presence of two cultural resources within the area, one of the Cultural Resources mitigation measures (CUL-1) should be revised to include Native American monitoring during ground disturbance. The City's responses to the correspondence received from the Tribes and their requests are as follows:

Correspondence received by the City from NAHC stated "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." Similarly, the results of the archival background records search revealed no previously recorded resources within the Project Area and two prehistoric resources within a one-half mile radius of the current Project Area. In addition, no cultural resources of archaeological (prehistoric/historic) or historic architectural were identified within the Project location during the pedestrian survey.

Although the NAHC results were negative, no previously recorded resources are within the project area and two prehistoric resources are located one-half mile away from the project area, and there are no cultural or archaeological or historic architectural resources within the project location, at the request of the Gabrielino Tongva Indians of California and Juaneño Band of Mission Indians, Acjachemen Nation, the City will require Native American monitoring during ground disturbance (see mitigation measure CUL-1 in Section 3.5 [Cultural Resources]). However, it should be noted that for the purposes of the analysis contained in Section 3.18 (Tribal Cultural Resources), there are no listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) associated with the proposed Project and therefore, no impacts would result, and no mitigation measures are required.

The City will continue to communicate any updates during the final design and construction phases to the Tribe and others, if requested.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (No Impact)

See response 3.17 a) above.

As discussed above, there would be no impact in this regard, as there is no substantial evidence of the existence of tribal cultural resources in the Project area, and no mitigation measures are required.



3.19 UTILITY AND SERVICE SYSTEMS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (No Impact)

The proposed Project entails minor roadway widening of Bluebird Canyon Drive and does not include the construction or residential or commercial uses, thereby requiring the construction or expansion of water, wastewater treatment, electric power, natural gas, or communication facilities to serve these uses. Construction would require relocation of existing power and communication poles along the project limits and would be undertaken by others (e.g., Southern California Edison, Cox Communications). There are no underground utilities that would need to be relocated. Therefore, no impacts would result, and no mitigation measures are required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? (Less than Significant Impact)

The proposed Project entails minor roadway widening of Bluebird Canyon Drive and does not include the construction or residential or commercial uses, thereby requiring substantial water supplies. Landscaping would be reinstalled but would not utilize large quantities of water since much of this would either utilize a City-approved drought tolerant plants palette, combined with a drip and/or temporary spray irrigation



system. The proposed landscaping would be comprised of drought-tolerant species, thereby reducing the amount of water required, compared to existing conditions. Therefore, impacts would be less than significant, and no mitigation measures are required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (No Impact)

The proposed Project entails minor roadway widening of Bluebird Canyon Drive and does not include the construction or residential or commercial uses, and as such, there would be no wastewater generation associated with the Project. Therefore, no impact would occur, and no mitigation measures are required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Less than Significant Impact)

During construction, the proposed Project would generate solid waste associated with removal of a portion of the roadway. Depending on the condition of the roadway material, the City may recycle the roadway base. There are also additional construction-related materials that would generate solid waste. The amount of waste generated during construction would be minor and would not be beyond the capacity of local landfills. In addition, the proposed Project would be required to adhere to local and state construction-related debris recycling and waste diversion and disposal requirements as part of permit approvals. These requirements would assist in reducing the amount of construction-related solid waste being transported to area landfills. Therefore, impacts would be less than significant, and no mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (No Impact)

See response 13.8, d) above. The Project would comply with all federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, no impact would result, and no mitigation measures are required.

3.20 WILDFIRE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XX. WILDFIRE — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

a) Substantially impair an adopted emergency response plan or emergency evacuation plan? (Less Than Significant Impact)

A review of the City's General Plan's Safety Element indicates the City has considered emergency access issues throughout its jurisdiction and has developed programs and mechanisms to address this (e.g., access planning, upgrading roadway deficiencies, no parking zones, public access easements).[7] The Project site is identified as a designated evacuation route and is located along an impaired access road. The proposed Project includes minor roadway widening of Bluebird Canyon Drive and would include short-term construction activities, including construction equipment. However, the proposed Project would be required to adhere to traffic safety requirements, including a Traffic Management Plan, provided one is required by the City. The purpose of the proposed Project is to enhance emergency vehicle egress along Bluebird Canyon Drive and access to the adjacent neighborhoods. It would also facilitate emergency evacuation of these areas, if needed. Based upon the analysis above, the proposed Project would result in a less than significant impact, and no mitigation measures are required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (Less Than Significant Impact)

A review of the City's General Plan Safety Element indicates the entire City is designated as being in a Very High Fire Hazard Severity Zone.[8] To address this, the City has adopted special building requirements in its hazardous fire area (wildland/urban interface zone) that exceed the UBC requirements, implemented a fuel management program for vegetation and brush, and restricted the use of certain plant species (e.g., pine, cypress, cedar, junipers, acacia, bougainvillea, eucalyptus). Combined, these measures have assisted the City in reducing the potential for impacts due to wildfire. The proposed Project is located within an urbanized environment and contains highly flammable fuels and is part of the wildlands/urban interface zone.

Equipment use or malfunction, including lawnmowers, tractors, trucks and power lines are cited as some of the many causes of wildfire in California, with lightning strikes accounting for only 12 percent globally and even less in California. Despite the City's designation as a Very High Fire Hazard Severity Zone, construction projects take place safely throughout the City daily and occur year-round. In addition, they

[7] City of Laguna Beach General Plan, Safety Element, pages 8-9.
[8] City of Laguna Beach General Plan, Safety Element, pages 47-48.

utilize equipment and machinery (e.g., excavator mounted auger, boom truck, dump truck, post hole digger, pavement saw) similar to that proposed for the proposed Project. Given this, the equipment proposed for the proposed Project would not pose an increased risk for wildfire, provided standard safety (e.g., spark arrestors) measures are followed and the equipment is operated properly. Therefore, the proposed Project would not be expected to result in conditions that would exacerbate wildfire risk, expose Project occupants to these risks or to pollutant concentrations or the spread of wildfire. As such, impacts would be less than significant, and no mitigation measures are required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (No Impact)

See response XX. b) above. In addition, the proposed Project includes minor roadway widening of Bluebird Canyon Drive. It does not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As noted in responses a) and b) above, the proposed Project would include short-term construction activities only, including the use of construction equipment which would be equipped with safety features to reduce the potential for sparks and resulting fire. Therefore, no impacts would occur, and no mitigation measures are required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (Less Than Significant Impact)

The entire City is considered a High Fire Hazard Zone and the proposed Project is situated within a wildlands/urban interface area. Therefore, the risk of wildfire originating from this area is considered high. Although the Project site itself is flat, it does include slope areas on the north and south sides of the roadway. The north slope forms a portion of Bluebird Canyon Creek. Although the Project site is located within a wildlands/urban interface zone where a potential wildfire could originate, the proposed Project, in and of itself, would not generate significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, because it entails the construction of the same use (roadway) and would only include minor roadway widening. Moreover, pending a post-fire event in the vicinity of the proposed Project, the City would take appropriate measures to properly assess and evaluate the Project site to ensure the roadways are safe to access and use. Therefore, impacts would be less than significant, and no mitigation measures are required.



3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a 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)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Less than Significant with Mitigation Incorporated)

The analysis contained within Section 3.4 (Biological Resources) indicates that the Project site assessment revealed that the majority of special-status wildlife known to occur in the general region had a “low” or “moderate” potential of occurrence within the BSA, due to the developed nature of habitats within the BSA. During construction, if these activities occur during the avian nesting season, the proposed Project could be in conflict with the MBTA. The analysis also determined no riparian habitat or other sensitive communities are present within the BSA. Because construction activities would remove vegetation (non-native/ornamental), these activities could result in the spread of noxious weeds within the Project site and adjacent areas. Further, the analysis determined that with the implementation of Mitigation Measures BIO-1 through BIO-5, impacts would be less than significant.

As noted in Section 3.5 (Cultural Resources), the analysis determined no built environment historical resources would be affected with construction of the proposed Project. Moreover, the records searches conducted at the SCCIC for the proposed Project determined there were no known archaeological resources identified for the area, and therefore, no impacts to potential archaeological resources would result from Project implementation. However, subsurface construction activities associated with the

proposed Project could potentially damage or destroy previously undiscovered unique archaeological resources, and therefore, a mitigation measure was recommended to reduce impacts to less than significant levels. With the implementation of Mitigation Measure CUL-1, impacts would be less than significant.

As part of its AB 52 consultation requirements, on March 11, 2022, the City sent letters to tribal representatives making them aware of the proposed Project. Two Tribes responded to the Consultation inquiry. On April 15, 2022, Christina Conley of the Gabrielino Tongva Indians of California responded via email. In her correspondence, Ms. Conley indicated the NAHC had stated that the area has tested positive for cultural resources and will require Native American Monitoring for all ground disturbances and that the City advise her of their next steps. On April 27, 2022, correspondence via email was also received by Joyce Stanfield Perry of the Juaneño Band of Mission Indians, Acjachemen Nation. In her email, Ms. Stanfield Perry noted because of the sensitivity of this area and known presence of two cultural resources within the area, one of the Cultural Resources mitigation measures (CUL-1) should be revised to include Native American monitoring during ground disturbance. In addition, the City invited Ms. Conley to conducted a joint site visit of the project site, but she indicated it was not necessary at this time and declined. The City's responses to the correspondence received from the Tribes and their requests were discussed previously in Sections 3.5 (Cultural Resources) and Section 3.18 (Tribal Cultural Resources). Moreover, although the NAHC results were negative, no previously recorded resources are within the project area and two prehistoric resources are located one-half mile away from the project area, and there are no cultural or archaeological or historic architectural resources within the project location, at the request of the Gabrielino Tongva Indians of California and Juaneño Band of Mission Indians, Acjachemen Nation, the City will require Native American monitoring during ground disturbance. Therefore, impacts would continue to be less than significant with mitigation incorporated.

The City will continue to communicate any updates during the final design and construction phases to the Tribe and others, if requested.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a 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)? (Less Than Significant Impact)

The proposed Project would not increase environmental impacts after mitigation measures are incorporated, the incremental contribution to cumulative impacts would be anticipated as less than significant. The proposed Project is part of a City-wide emergency vehicle enhancement project that includes a number of critical emergency egress locations intended to facilitate emergency vehicle access. As noted in the analysis contained in the IS/MND, the proposed Project is not anticipated to substantially increase the number of vehicles accessing Bluebird Canyon Drive to the detriment of the environment, but instead would remain the same, based upon existing conditions, since only residents and their visitors would access the roadway. Therefore, the proposed Project would result in less than significant impacts, and no mitigation measures are required beyond those already identified in the IS/MND.



c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Less Than Significant Impact)

As discussed in Sections 3.1 through 3.20 of this IS, no environmental effects were identified as having any potentially significant impacts after mitigation measures were incorporated. As such, no environmental factors or effects were found to cause a substantial adverse effect on human beings, either directly or indirectly. Therefore, impacts would be less than significant, and no mitigation measures are required beyond those already identified in the IS/MND.



4.0 LIST OF PREPARERS

4.1 CITY OF LAGUNA BEACH

Thomas Perez	Capital Program Manager, Public Works
Pierre Sawaya	Project Manager, Public Works
Martina Caron, AICP	Principal Planner, Planning Department
Amber Dobson	Planning Manager, Planning Department

4.2 STANTEC

Mohammad Heiat, PE	Principal, Transportation
Dan Hayes, PE	Senior Project Engineer, Structural Engineer
David Lew, PE	Project Engineer, Roadway Engineer
Steve Cook, RLA	Landscape Architect
Gilberto Ruiz	Principal Environmental Planner
Christine Abraham, Esq.	Principal Environmental Planner
Brian Goss, E.I.T.	Associate Scientist
Jared Varonin, CFP, CRAM	Principal Biologist
Melissa Tu	Senior Biologist
Hannah Hart	Project Biologist
Alisa Reynolds, RPA	Cultural Resources Lead
Emily Rinaldi-Williams	Architectural Historian
Alyssa Bell, PhD	Senior Paleontologist
Lewis Simons, PG	Principal Geologist
Shelby Dawson, PG	Associate Geologist
Daryl Zerfass, PE, PTP	Principal, Transportation Planning & Traffic Engineering
Tracie Ferguson	Senior Associate, Acoustics
Mary Frank	Program Assistant/Editor
Sarah Troedson, GISP	Senior GIS Analyst
Danny Law	GIS Analyst



5.0 REFERENCES

The following references were used in part in whole to prepare this IS/MND.

1. Assembly Bill (AB) 32 Global Warming Solutions Act of 2006.
2. California Environmental Quality Act as amended January 1, 2022. §§21000-21178 of the Public Resources Code, State of California.
3. City of Laguna Beach General Plan.
4. City of Laguna Beach Zoning Code Map.
5. Guidelines for California Environmental Quality Act as amended January 1, 2022. §15000-
6. City of Laguna Beach General Plan, Open Space Conservation Element, updated 2005.
7. City of Laguna Beach General Plan, Safety Element, adopted October 19, 2021.
8. City of Laguna Beach General Plan, Scenic Highways Element, adopted November 13, 2018.
9. City of Laguna Beach General Plan, Land Use Element, adopted February 7, 2012.
10. City of Laguna Beach General Plan, Noise Element, adopted March 15, 2005.
11. Drainage Area Management Plan (DAMP), adopted by County of Orange July 1, 2003.
12. GeoTracker
13. City of Laguna Beach General Plan, Transportation, Circulation and Growth Management Element, June 1, 1999
14. City of Laguna Beach, Water Quality Division Website
15. Society of Vertebrate Paleontology. 2010. *Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources*. Available at https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf; Accessed on March 17, 2021.

Appendix A MITIGATION MONITORING & REPORTING PROGRAM

Appendix A
Mitigation Monitoring and Reporting Program

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
Biological Resources			
The analysis contained within the Section 3.4 (Biological Resources) indicates that the proposed Project has a "low" or "moderate" potential to affect sensitive species and associated habitats, due to the developed nature of the area. It also determined that during construction, if activities occur during the avian nesting season, the proposed Project could be in conflict with the MBTA. The analysis also determined no riparian habitat or other sensitive communities are present within the BSA.	**BIO-1 Pre-Construction Wildlife Surveys and Biological Monitoring** **Project Area Survey:** A project area survey shall be conducted by a qualified biologist prior to grading and building permit issuance to document the total area of Environmentally Sensitive Habitat Area (ESHA) that will be disturbed. This shall be submitted to the City before grading work is done and will be used to identify the replacement planting process and the number of plants and species required. **Wildlife Surveys:** Prior to ground disturbance or vegetation clearing within the Project site, a qualified biologist shall conduct surveys for wildlife (no more than 14 days prior to site disturbing activities) where suitable habitat is present and directly impacted by construction activities. Wildlife found within the Project site or in areas potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project prior to the start of construction. Special-status species found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area. **Biological Monitoring:** A qualified biological monitor, with expertise in the species known to occur or with the potential to occur on the Project site, shall be retained to monitor construction activities. The qualified biologist shall be present during initial ground disturbance for each phase of construction. Once initial ground disturbance is complete, monitoring will occur periodically during all construction activities. The qualified biologist(s) shall be present during all ground-disturbing activities immediately adjacent to, or within sensitive habitat and shall flag the edge of sensitive vegetation. If required, during pre-construction surveys and/or required monitoring efforts, the qualified biologist will relocate common and special-status species that enter the Project site; some special-status species may require specific permits prior to handling and/or have established protocols for relocation. Records of all detection, capture and release shall be reported to CDFW.	City of Laguna Beach Public Works Department Engineering Division	Prior to earthmoving activities or construction and then during initial ground disturbing activities, and periodically, as needed thereafter.

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
	BIO-2 Environmental Awareness Training All Project personnel must attend an environmental awareness and compliance training program prior to working on the Project site. The training program shall present the environmental regulations and applicable permit conditions that the Project team shall comply with. The training program shall include applicable measures established for the Project to minimize impacts to water quality and avoid sensitive resources, habitats, and species. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to the City.	City of Laguna Beach Public Works Department Engineering Division	Initial training prior to construction and administered as needed, provided new contractor/staff access the work site area.
	BIO-3 Implement Best Management Practices (BMPs) Grading plans for the Project shall indicate that the Project shall implement the following BMPs: • Restrict non-essential equipment to the existing roadways and/or ruderal areas to avoid disturbance to native vegetation. • All excavation, steep-walled holes, or trenches more than six inches in depth will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required). • Minimize mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians. • Removal/disturbance of vegetation shall be minimized to the greatest extent feasible. • Install and maintain appropriate erosion/sediment control measures, as needed, throughout the duration of work activities.	City of Laguna Beach Public Works Department Engineering Division	Prior to and during construction.

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
	• Vehicles shall not be driven, or equipment operated, in water covered/wetted portions of any potentially jurisdictional aquatic feature. No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.		
	BIO-4 Nesting Bird Surveys and Avoidance Measures Prior to initial site disturbance/issuance of grading permits, seasonally timed presence/absence surveys for nesting birds shall be conducted by a qualified biologist. If construction activities carry over into a second nesting season(s) the surveys will need to be completed annually until the Project is complete. A minimum of three survey events, three days apart shall be conducted (with the last survey no more than three days prior to the start of site disturbance), if construction is scheduled to begin during avian nesting season (February 15th through September 15th); surveys for raptors shall be conducted from January 1st to August 15th. Surveys shall be conducted within 500 feet of all Project activities. If Special-Status species are observed, consultation with U.S. Fish and Wildlife Service (USFWS) and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. The prescribed buffers may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. If construction occurs outside of avian nesting season, only a single presence/absence survey will be required.	City of Laguna Beach Public Works Department Engineering Division	Prior to earthmoving activities or construction.

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
	BIO-5 Vegetation Removal and Replacement Construction activities shall be done in such a manner as to minimize the removal of native vegetation. If native vegetation removal cannot be avoided, and the removal is approved by the City of Laguna Beach, temporary impacts shall be replaced at a 1:1 ratio. The compensation for the loss of permanently impacted habitats may be achieved, in order of preference, either by a) on-site habitat creation within disturbed areas or enhancement of impacted communities with similar species compositions to those present prior to construction provided sufficient space and compatibility in the planting palette exists, b) off-site (at a location deemed appropriate by the City and CDFW) creation or enhancement of lemonade berry scrub within the City of Laguna Beach, or c) participation in an established mitigation bank program. Prior to the removal of native vegetation, if on or off-site mitigation is required, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared that will guide all restoration and monitoring activities. This plan shall include, at a minimum, the following: • Proposed species list for creation/enhancement • Planting/seeding methodology • Irrigation plan • Weeding schedule • Success criteria • Monitoring methodology and schedule and Reporting requirements. Temporarily impacted vegetation will be restored in place. If on-site habitat mitigation or off-site mitigation is selected for compensation for the permanent impact then the following mitigation is recommended: The planting of 0.18 acre (a 2:1 ratio) of lemonade berry scrub (to compensate for the lemonade berry proposed for removal). The project also requires removal of eight non-native trees. The trees will be replaced at a 2:1 ratio. Sixteen coast live oak trees will be planted on site or nearby to replace any potential raptor nesting habitat area. The size and location of the planting shall be included in the HMMP.	City of Laguna Beach Public Works Department Engineering Division	Prior to earthmoving activities or construction.

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
Cultural Resources			
As noted in Section 3.5 (Cultural Resources), the analysis determined no built environment historical resources would be affected. Moreover, the records searches conducted at the SCCIC for the proposed Project determined there were no known archaeological resources identified for the area and therefore, no impacts to potential archaeological resources would result with proposed Project implementation. However, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered unique archaeological resources and therefore, a mitigation measure was recommended to reduce impacts to less than significant levels. With the implementation of mitigation measure CUL-1, impacts would be less than significant. As part of its AB 52 consultation requirements, on March 11, 2022, the City sent out letters to tribal representatives making them aware of the proposed Project. The City received correspondence from two Tribes: Gabrielino Tongva Indians of California and the Juaneño Band of Mission Indians, Acjachemen Nation. The City has agreed to Native American monitoring. The City will continue to communicate any updates during the final design and construction phases to the Tribe and others, if requested.	**CUL-1 Cultural Materials Discovered During Construction** Native American and archaeological monitoring by the Gabrielino Tongva Indians of California and the Juaneño Band of Mission Indians, Acjachemen Nation are required during ground disturbing construction activities for the excavation (i.e., clearing and grubbing, grading, and trenching). If any cultural resource is encountered during the ground disturbing construction activities, all construction activities within a 50-foot radius of the identified potential resource shall cease until a qualified archaeologist, if other than the archaeological monitor, approved by the City shall be retained by the contract to evaluate the finds, evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation 523 series forms, and develop and carry out a program of mitigation as appropriate. The archaeologist shall determine whether the resource requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the resource is determined to be eligible for listing on the California Register of Historical Resources as a unique archaeological resource as defined in Public Resource Code (PRC) Section 15064.5, the archaeologist, in consultation with consulting Native American Groups, shall develop a plan for the treatment of the resource. The plan shall contain appropriate mitigation measures, including avoidance, preservation in place, data recovery excavation, or other appropriate measures outlined in Public Resources Code Section 21083.2.	City of Laguna Beach Public Works Department Engineering Division	Prior to construction and grading activities.

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
Geology & Soils			
A Paleontological Resource Assessment was prepared for the proposed Project. The results of this assessment indicate that two geologic units are present in the Project area: landslide deposits, which have low paleontological potential, and the Topanga Formation, which has high paleontological potential. As the proposed Project will require some soil disturbance, impacts to potential paleontological resources is considered potentially significant. However, with the implementation of the following mitigation measures, these impacts would be reduced to less than significant levels.	**GEO–1 Paleontological Monitoring & Mitigation Plan** A paleontologist meeting professional standards as defined by Murphey et al. (2019) shall be retained as the Project Paleontologist to oversee all aspects of paleontological mitigation, including paleontological monitoring of earthwork and ground disturbing activities into undisturbed geologic units with high paleontological potential, to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). Within the Project Area the Topanga Formation has high paleontological potential and is present as shallowly as 1.5 feet below ground surface.	City of Laguna Beach Public Works Department Engineering Division	Prior to construction and grading and soil removal.
	GEO–2 Workers' Environmental Awareness Program The Project Paleontologist shall develop a Worker's Environmental Awareness Program training that communicates requirements and procedures for the inadvertent discovery of paleontological resources during construction to be delivered by the paleontologist or their designated representative to the construction crew prior to the onset of ground disturbance.	City of Laguna Beach Public Works Department Engineering Division	Prior to construction and grading and soil removal.
	GEO–3 Inadvertent Discoveries In the event that paleontological resources are encountered during construction activities, all work must stop in the immediate vicinity of the finds while the paleontological monitor documents the find. The designated Project Paleontologist shall assess the find. Should the Project Paleontologist assess the find as significant, the find shall be collected and curated in an accredited repository along with all necessary associated data and curation fees.	City of Laguna Beach Public Works Department Engineering Division	Prior to construction and grading and soil removal.

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
Noise			
As noted in Section 3.13 (Noise), during brief periods of jackhammering, a perceived temporary nuisance could be created at an adjacent residence, even with closed windows. Although noise levels from construction could create a perceived nuisance, increases in noise levels from construction activity would be temporary. All construction activities at the site would also be limited by conditions on construction permits requiring compliance with the City's Noise Ordinance. Allowable hours of construction are between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday. In addition, to ensure that no potential significant noise impacts result due to the construction of the proposed Project (and consistent with City requirements) a construction period noise mitigation measure is recommended to reduce impacts to a less than significant level.	**NOI-1 Construction Activity** During construction activities, the following construction practices are required: a) Stockpiling and staging activities should be located as far as practicable from dwellings. b) All mobile equipment shall have properly operating and maintained mufflers. c) Require that construction activities employ feasible and practical techniques to minimize noise impacts on adjacent uses. Particular emphasis shall be placed on the restriction of hours in which work other than emergency work may occur. d) As a condition of approval, non-emergency construction activities adjacent to existing noise-sensitive uses shall be limited to daylight hours between the hours of 8:00 a.m. and 4:00 p.m. Monday through Friday. e) Construct temporary enclosures around exceptionally noisy activities. For example, shields can be used around pavement breakers such as jackhammers. f) Select quieter demolition methods when possible. g) Notify adjacent homes near any hardscape demolition activities as to time and place to allow residents to adjust their schedule to avoid noise disruption.	City of Laguna Beach Public Works Department Engineering Division	During construction activities



Appendix B AIR QUALITY & GREENHOUSE GAS STUDY

Air Quality and Greenhouse Gas Study

Bluebird Canyon Evacuation Route Project

March 17, 2022

Lead Agency:

City of Laguna Beach
505 Forest Avenue
Laguna Beach, California, 92651

Proponent:

City of Laguna Beach
505 Forest Avenue
Laguna Beach, California, 92651

Consultant:

Stantec Consulting Services Inc.
38 Technology Drive
Irvine, California, 92618-5312

Table of Contents

ABBREVIATIONS ..... **II**

1.0 PROJECT OVERVIEW **1.1**

2.0 PROJECT DESCRIPTION **2.1**

3.0 EVALUATION OF ENVIRONMENTAL IMPACTS **3.2**
3.1 AIR QUALITY 3.2
3.1.1 Discussion: 3.2
3.1.2 Explanations: 3.8
3.2 GREENHOUSE GAS EMISSIONS 3.10
3.2.1 Discussion: 3.10
3.2.2 Explanations: 3.11

4.0 REFERENCES **4.14**

LIST OF TABLES

Table 1. Attainment Status of Orange County within South Coast Air Basin 3.3
Table 2. Summary of Ambient Air Quality at Mission Viejo Monitoring Station 3.3
Table 3. SCAQMD Air Quality Significance Thresholds (Mass Daily and Localized Thresholds) 3.5
Table 4. Proposed Project Construction Assumptions 3.7
Table 5. Unmitigated Project Construction Emissions in Comparison to SCAQMD Significance Criteria 3.8
Table 6. Total Estimated Project GHG Emissions 3.12

LIST OF APPENDICES

APPENDIX
A Air Quality and GHG Emission Output Files A1

Abbreviations

AQMP	Air Quality Management Plan
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
GHG	Greenhouse Gas
H_2S	Hydrogen Sulfide
LST	Localized Significance Thresholds
MMT	million metric tons
MPO	metropolitan planning organizations
MT	metric tons
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NO_X	Nitrogen Oxides
NO_2	Nitrogen Dioxide
O_3	Ozone
PM_{10}	Particulate Matter less than 10 microns in diameter
$PM_{2.5}$	Particulate Matter less than 2.5 microns in diameter
ppm	parts per million
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SF_6	Sulfur Hexafluoride
SO_2	Sulfur Dioxide
USEPA	United States Environmental Protection Agency



1.0 PROJECT OVERVIEW

The Bluebird Canyon Evacuation Route Project (Project) in the City of Laguna Beach (City) intends to widen approximately 850 feet of the north side of Bluebird Canyon Drive between Oriole Drive and Rancho Laguna Road in order to install an eight-foot-wide roadway shoulder. As part of the Project, a four- to eight-foot-high retaining wall will be constructed.

2.0 PROJECT DESCRIPTION

The Project site is located about three-quarters of a mile from the Laguna Beach coast along Bluebird Canyon Drive, one of the City's major east-west canyons. The paved and stripped roadway is comprised of two 12-foot lanes with no dedicated shoulder in either direction. The posted speed limit is 25 miles per hour. Traffic control is via stop sign. There is one residential access road on the south side roadway and no residential access roads on the north side within the project limits. The south side of the roadway is characterized by steep slopes containing dense vegetation. The north side is comprised of grasses, punctuated by Eucalyptus trees and sparse shrubbery with gradual to steep slopes leading to the canyon bottom. The north side of the roadway has two sections of 6-inch curb intended to direct runoff to inlet areas of the storm drain system. The roadway also contains various utilities, including City of Laguna Beach sewer and water, electrical (Southern California Edison), telephone (Frontier Communications), natural gas (SoCalGas), and cable (Cox Cable Company). Adjacent land uses are comprised of single-family residential and open space. There are no single-family residences immediately adjacent to the roadway within the project limits.

The proposed Project includes a widening of a portion of the north side of Bluebird Canyon Drive from approximately Rancho Laguna Road westerly about 850 linear feet to provide an eight-foot-wide roadway shoulder. Bluebird Canyon Drive is a key evacuation route for residents, and widening the road is needed to provide sufficient emergency egress. As part of the widening, a four- to eight-foot-high soldier pile supported retaining wall system will be constructed along the north side of Bluebird Canyon Drive, extending some 850 feet.

3.0 EVALUATION OF ENVIRONMENTAL IMPACTS

This document evaluates potential air quality and greenhouse gas emissions impacts related to the Project.

3.1 AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☐	☒

3.1.1 Discussion:

The Project site is located within Orange County and the South Coast Air Basin (SCAB). Regulatory oversight authority regarding air quality rests at the local, state, and federal levels with the South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), and U.S. Environmental Protection Agency (USEPA), respectively. The SCAB incorporates approximately 12,000 square miles, consisting of Orange County and the urbanized areas of San Bernardino, Riverside, and Los Angeles Counties. The distinctive climate of the SCAB is determined by its terrain and geographic location. The SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. The SCAB is classified as a dry-hot desert climate (SCAQMD 1993).

Ambient air quality is determined by comparing pollutant levels in ambient air samples to national and state standards. These standards are established by the USEPA and CARB at levels determined to be protective of public health and welfare, with an adequate margin of safety. California Ambient Air Quality Standards (CAAQS) were established in 1967, whereas National Ambient Air Quality Standards (NAAQS) were first



established by the federal Clean Air Act of 1970. California standards are generally more stringent than national standards.

Air quality standards specify the upper limits of pollutant concentrations, over defined durations, in ambient air, consistent with the management goal of preventing specific harmful effects. There are national and state standards for the six "criteria pollutants": ozone (O_3); carbon monoxide (CO); nitrogen dioxide (NO_2); suspended particulate matters including fine particulate matter with an aerodynamic diameter of less than 2.5 microns ($PM_{2.5}$), and respirable particulate matter with an aerodynamic diameter of less than 10 microns (PM_{10}); sulfur dioxide (SO_2); lead (Pb). Nitrogen oxides (NO_X) and volatile organic compounds (VOCs) are of particular interest as they are precursors to ozone formation. California has established ambient air quality standards for criteria pollutants, as well as visibility reducing particles; sulfates, hydrogen sulfide (H_2S); and vinyl chloride.

The USEPA and CARB determine the air quality attainment status relative to the level of pollutants in designated areas by comparing local ambient air quality measurements from state or local ambient air monitoring stations with the NAAQS and CAAQS. Non-attainment status indicates that ambient measurements for a given pollutant in that area exceed the NAAQS and/or CAAQS. Consistent with federal requirements, an unclassifiable designation is treated as an attainment designation. **Table 1** presents the federal and state attainment status for the project area which is in the County within the SCAB.

Table 1: Attainment Status of Orange County within South Coast Air Basin

Pollutant	Federal Designation	State Designation
Ozone (O_3)	Non-Attainment (Extreme)	Non-Attainment
Particulate Matter (PM_{10})	Attainment/Maintenance	Non-Attainment
Particulate Matter ($PM_{2.5}$)	Non-Attainment (Serious)	Non-Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Non-Attainment	Attainment
Hydrogen Sulfide (H_2S)	*	Attainment
Sulfates	*	Attainment
Visibility Reducing Particles	*	Attainment

Source: SCAQMD, 2018.
Notes: (*) = Not Applicable/ No Federal Standards.

As shown in **Table 1**, the Project is in an area designated non-attainment for both the federal and state standards for O_3 and $PM_{2.5}$, the state standard for PM_{10}, and the federal standard for lead. Because the SCAB currently exceeds these state and federal ambient air quality standards, the SCAQMD is required to implement strategies to reduce pollutant levels to recognized acceptable standards. The most recent air plan is the 2016 Air Quality Management Plan (AQMP), created in conjunction with the Southern California Association of Governments (SCAG), CARB, and USEPA to meet federal ozone and PM2.5 standards.

The CARB-maintained air monitoring stations measure SCAB air pollutant levels. The monitoring station that is located closest to the project study area is the Mission Viejo station, located at 26081 Via Pimiento, Mission Viejo, California 92691, which is approximately 8 miles northeast of the Project site. See Table 2 for the available data for this location includes measurements for ozone, PM2.5, and PM10 from 2018 to 2020.



Table 2: Summary of Ambient Air Quality at Mission Viejo Monitoring Station

Pollutant	Year		
	2018	2019	2020
Ozone			
Maximum 1-hr Concentration in parts per million (ppm)	0.121	0.106	0.171
Days exceeding CAAQS (0.09 ppm)	2	3	20
Days exceeding NAAQS (no standard)	0	0	1
State Maximum 8-hour concentration (ppm)	0.088	0.088	0.123
National Maximum 8-hour concentration (ppm)	0.088	0.087	0.122
Days exceeding CAAQS (0.070 ppm)	10	11	34
Days exceeding NAAQS (0.070 ppm)	9	11	32
$PM_{2.5}$			
National Maximum 24-hour concentration (micrograms per cubic meter [µg/m^3])	38.9	20.8	44.8
State Maximum 24-hour concentration (micrograms per cubic meter [µg/m^3])	38.9	20.8	44.8
Measured Days exceeding NAAQS (35 µg/m^3)	1	0	2
National Annual Average (AAM) (µg/m^3)	*	7.1	9.3
Does measured AAM exceed NAAQS (15 µg/m^3)?	*	No	No
State AAM (µg/m^3)	*	*	9.3
Does measured AAM exceed CAAQS (12 µg/m^3)?	*	*	No
PM_{10}			
National Maximum 24-hour concentration (µg/m^3)	55.6	45.1	56.2
State Maximum 24-hour concentration (µg/m^3)	55.6	44.2	55.1
Measured Days exceeding NAAQS (150 µg/m^3)	0	0	0
Measured Days exceeding CAAQS (50 µg/m^3)	1	0	2
National Annual Average (AAM) (µg/m^3)	19.5	17.1	18.3
Does measured AAM exceed NAAQS (no standard)?	No	No	No
State AAM (µg/m^3)	19.1	16.7	*
Does measured AAM exceed CAAQS (20 µg/m^3)?	No	No	*
NO_2 (not measured at Mission Viejo monitoring station)			
CO (not measured at Mission Viejo monitoring station)			
SO_2 (not measured at Mission Viejo monitoring station)			
HS (not measured at Mission Viejo monitoring station)			
SOURCE: CARB 2022 * Denotes insufficient data.			

As stated above, the SCAQMD in conjunction with SCAG, CARB, and USEPA prepared the 2016 AQMP (SCAQMD, 2017). The purpose of the 2016 AQMP is to provide a comprehensive and integrated program to lead the SCAB into compliance with the federal ozone and particulate matter standards. The 2016 AQMP was created so that SCAB could reach 8-hour ozone attainment based on the 2008 ozone standard. However, in 2015 the USEPA updated the 8-hour ozone standard from 75 parts per billion (ppb) to 70 ppb. The SCAQMD is currently preparing their 2022 AQMP which will set a blueprint for the basin to meet this updated ozone standard (SCAQMD, 2022).

The 2016 AQMP accounts for projected population growth, predicted future emissions in energy and transportation demand, and determined control strategies for the eventual achievement of NAAQS attainment designation. These control strategies are either organized into the SCAQMD rules and



regulations, or otherwise set forth as formal SCAQMD recommendations to other agencies. The 2016 AQMP includes policies that are consistent with the SCAQMD and specify review according to the recommendations of SCAQMD guidelines. Other policies are aimed at reducing transportation emissions and emissions from major stationary sources.

To control pollution within the basin, the SCAQMD has set forth a series of rules and regulations for the operation and construction of facilities within its jurisdiction. The Project would be subject to the following general SCAQMD rules and regulations:

Regulatory IV – Prohibitions

- Rule 401 – Visible Emissions: prohibits discharges of visible air contaminants that occlude the air beyond certain thresholds;
- Rule 402 – Nuisance: prohibits discharges of air contaminants that cause "injury, detriment, nuisance, or annoyance" to the public; and
- Rule 403 – Fugitive Dust: prohibits discharges of fugitive dust that exceed certain thresholds.

The SCAQMD has adopted regional and Localized Significance Thresholds (LSTs) to determine the significance of a project's potential air quality impacts. Separate thresholds of significance have been adopted for the construction and operation phases of projects. The LSTs were developed by the SCAQMD to assist lead agencies in analyzing localized air quality impacts from projects. LSTs look-up tables for one-, two-, and five-acre proposed projects emitting CO, nitrogen oxides (NO_x), $PM_{2.5}$ or PM_{10} were prepared for easy reference according to source receptor area. The LSTs methodology and associated mass rates are not applicable to mobile sources travelling over the roadways. It should be noted that SCAQMD does not mandate LSTs for new construction projects; more importantly, LSTs are a voluntary approach to be implemented at the discretion of local agencies (SCAQMD, 2008).

Table 3 below, presents the regional and voluntary LSTs applied to the Project and used for purposes of this analysis. These LSTs are based on a one-acre site with a 25-meter receptor distance in the Central Orange County Coastal area (Site Receptor Area 20). The closest sensitive receptor is approximately 110 feet (33.5 meters) from the Project site.

Table 3: SCAQMD Air Quality Significance Thresholds (Mass Daily and Localized Thresholds)

Regional Thresholds (lbs/day)	VOC	NO_X	SO_X	CO	PM_{10}	$PM_{2.5}$	Lead (Pb)
Construction	75	100	150	550	150	55	3
Operation	55	55	150	550	150	55	3
Localized Thresholds (lbs/day)[1]	**VOC**	**NO_X**	**SO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**Lead (Pb)**
Construction	N/A	93	N/A	738	13	5	N/A
Operation	N/A	93	N/A	738	4	2	N/A

Source: SCAQMD Air Quality Significance (Mass Daily) Regional Thresholds, 1993;
SCAQMD Mass Rate LST Lookup Tables, Appendix C, 2008

Notes:

1. Localized significance thresholds are from the SCAQMD lookup tables for Source Area 20 (Central Orange County Coastal) assuming a one-acre project site and a distance to the nearest sensitive receptor of 25-50 meters.
2. N/A = not applicable

The proposed project will generate temporary construction-related emissions of criteria air pollutants and ozone precursors (NOx and VOC). Emissions from the proposed Project were calculated using the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Roadway Construction Model, version 9.0.0. The Roadway Construction Model can be used to estimate the emission impacts of roadway projects and is acknowledged by the SCAQMD for air quality modeling (SCAQMD, 2022). The Roadway Construction Model estimates the project's emissions by project phase and over the entire construction duration. The model can be used to estimate vehicle exhaust and fugitive dust.

The Project is proposed to be constructed as funding becomes available for roadway improvements. Construction is anticipated to begin in 2022 and be completed by 2023. Specifically, the retaining wall will be constructed over a three-month period and the roadway expansion will take place over 3 weeks. It was assumed that the roadway expansion construction would occur concurrently as the retaining wall construction.

During construction the proposed project is anticipated to use a variety of off-road equipment (e.g., pavement saw, backhoes, excavators, cranes, etc). Construction will include on-site grading and paving. The grading phase of construction will include 406 cubic yards (CY) of material export and 485 CY of structural backfill that will be imported. Construction will also include 535 tons of asphalt import during the paving phase. Consistent with SMAQMD Roadway Construction Model defaults, the hauling truck size was assumed to be 20 CY. See **Table 4** below for the construction assumptions.

Table 4: Proposed Project Construction Assumptions

Construction Phase	Duration	Start Date	Proposed Construction Equipment	Modeled Construction Equipment	Grading/Paving Material
Grubbing/Land Clearing	1 week	12/1/2022	• Excavator Mounted Auger 24” • Excavator Mounted Auger 30” • Boom Truck • Post Hole Digger	• Excavator (2) • Off-Highway Truck (1) • Other Construction Equipment (1)	• 406 CY export[3] • 485 CY import
Grading/ Excavation	1 week	12/8/2022	• Excavator Mounted Auger 24” • Excavator Mounted Auger 30” • Boom Truck • Dump Truck • Post Hole Digger • Pavement Saw	• Excavator (2) • Off-Highway Trucks (2) • Other Construction Equipment (1) • Paving Equipment (1)	N/A
Drainage/ Utilities/Sub-grade	2 weeks	12/15/2022	• Boom Truck • Post Hole Digger • Backhoe/Skip Loader	• Off-Highway Trucks (1) • Other Construction Equipment (1) • Tractors/Loaders • /Backhoes (1)	N/A
Paving	8 weeks	1/1/2023	• Boom Truck • Paving Machine • Pavement Saw • Grinder • Backhoe/Skip Loader	• Off-Highway Trucks (1) • Pavers (1) • Paving Equipment (1) • Rollers (2)[1] • Tractors/ Loaders /Backhoes (1)[1] • Rollers (2)[1,2]	• 535 tons (642 CY) of paving import[4]

[1] Equipment number based on model defaults.
[2] Proposed grinders modeled as rollers.
[3] Total export includes 251 CY of unclassified excavation and 155 CY of structural over excavation.
[4] According to CalRecyle, the weight of concrete is approximately 2,400 tons per 1 CY. Paving import equals approximately 642 CY (CalRecycle 2018).
Source: Appendix A.



Estimated unmitigated Project construction emissions are summarized below in **Table 5**. Detailed emission estimates are provided in **Appendix A**. The Project does not include a source of lead emissions.

Table 5: Unmitigated Project Construction Emissions in Comparison to SCAQMD Significance Criteria

	Peak Daily Emissions (lbs/day)						
Component	**VOC**	**NO_X**	**SO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**Lead (Pb)**
Regional Thresholds Construction	75	100	150	550	150	55	3
Localized Thresholds Construction	N/A	93	N/A	738	13	5	N/A
Estimated Construction Emissions	2.26	26.87	0.10	23.07	7.86	2.26	N/A
Exceeds Regional Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**	**N/A**
Exceeds Localized Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**	**N/A**

SOURCE: Appendix A.
N/A = not applicable
lbs/day = pounds per day

3.1.2 Explanations:

a. Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The Project is limited to and consists of the expansion of a road and construction of a retaining wall. The majority of Project associated emissions would be generated during construction from off-road equipment as well as fugitive dust from activities on unpaved surfaces/excavation. As shown in **Table 5**, Project construction emissions are below the applicable SCAQMD mass emissions thresholds of significance. Consequently, construction associated emissions would not be expected to conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is designated as non-attainment under an applicable federal or state ambient air quality standard.

There is not expected to be an increase in operation phase emissions because emission causing activities are not expected during the operational phase. In addition, the Project will improve the emergency vehicle access along the route to improve circulation. As such, operation phase emissions are not considered to result in additional impacts to air quality.

Because Project emissions would not conflict with or obstruct implementation of the AQMP, the unmitigated Project impacts are considered to be less than significant.

b. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. In accordance with SCAQMD methodology, projects that do not exceed, or can be mitigated to less than the daily threshold values do not add significantly to a cumulative impact. As discussed above in response a), estimated Project construction emissions are below the applicable SCAQMD regional mass emissions thresholds of significance, as shown in **Table 5**. The Project would not involve an increase in operation phase emissions. The proposed Project would not 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 and potential unmitigated Project impacts are considered to be less than significant.

c. *Expose sensitive receptors to substantial pollutant concentrations?*

Less than Significant Impact. Sensitive receptors are defined as populations that are more susceptible to the effects of pollution than the population at large. Sensitive receptors are facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollutant. Land uses identified to be sensitive receptors by SCAQMD in the CARB's Air Quality Handbook include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project site is directly adjacent to sensitive receptors to the north, west, and east with single-family residences as close as approximately 110 feet (33.5 meters) to the Project site boundary. Projects that are below the SCAQMD LSTs would not be expected to expose sensitive receptors to substantial pollutant concentrations. As shown in **Table 5**, the Project's construction emissions would be below the applicable LSTs. Therefore, the projection that Project emissions will not expose sensitive receptors to substantial pollutant concentrations is considered valid and the potential unmitigated Project impacts are considered to be less than significant.

d. *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

No Impact. The SCAQMD has identified land uses commonly subject to odor complaints. These land uses include agriculture (farming and livestock), wastewater treatment, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD, 1993). The Project involves minor and short-term conventional construction activities that do not involve any of the SCAQMD identified land uses subject to odor complaints or components with the potential to create objectionable odors affecting a substantial number of people. The construction, operation, and maintenance of the proposed project would not involve the type of land uses or industrial operations typically associated with odor nuisance. There are no known land uses typically associated with the generation of nuisance odors in the Project area. Therefore the unmitigated Project impacts are considered to have no impact regarding other emissions.



3.2 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.2.1 Discussion:

Greenhouse gases (GHGs), are gases that trap heat in the atmosphere comparable to a greenhouse, which captures and traps radiant energy. GHGs are emitted by both natural processes and human activities. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature. Global warming is the observed increase in average temperature of the earth's surface and atmosphere.

The six major GHGs are carbon dioxide (CO_2), methane (CH_4), NO_2, sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons. The GHGs absorb longwave radiant energy emitted by the Earth, which warms the atmosphere. The GHGs emit longwave radiation both upward to space and back down toward the surface of the Earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect." However, emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. Emissions from human activities, such as fossil fuel combustion for electricity production and vehicles, have elevated the concentration of these gases in the atmosphere.

The California Air Pollution Control Officers Association, in its 2008 *Report on Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, stated:

> *"While it may be true that many GHG sources are individually too small to make any noticeable difference to climate change, it is also true that the countless small sources around the globe combine to produce a very substantial portion of total GHG emissions."*

The following plans and rules have been implemented by local governments to help control GHG emissions.

California Global Warming Solution Act of 2006 (AB32):

Under Assembly Bill (AB) 32, CARB is responsible for monitoring and reducing GHG emissions in the state and for establishing a statewide GHG emissions cap for 2020 that is based on 1990 emissions levels. CARB has adopted the AB 32 Climate Change Scoping Plan (Scoping Plan), which contains the main strategies



for California to implement to reduce CO_2 equivalent (CO_2e) emissions by 169 million metric tons (MMT) from the state's projected 2020 emissions level of 596 MMT CO_2e under a business-as-usual scenario (CARB, 2017). The Scoping Plan breaks down the amount of GHG emissions reductions the CARB recommends for each emissions sector of the state's GHG inventory but does not directly discuss GHG emissions generated by construction activities.

Senate Bills (SB) 97 and 375:

- Pursuant to Senate Bill (SB) 97, the State Office of Planning and Research prepared, and the Natural Resources Agency adopted amendments to the State of California Environmental Quality Act (CEQA) Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. Effective as of March 2010, the revisions to the CEQA Environmental Checklist Form (Appendix G) and the Energy Conservation Appendix (Appendix F) provide a framework to address global climate change impacts in the CEQA process; State CEQA Guidelines section 15064.4 was also added to provide an approach for assessing impacts from GHGs.

- SB375 (effective January 1, 2009) requires CARB to develop regional reduction targets for GHG emissions and prompted the creation of regional land use and transportation plans to reduce emissions from passenger vehicle use throughout the state. The targets apply to the regions covered by California's 18 metropolitan planning organizations (MPOs). The 18 MPOs must develop regional land use and transportation plans and demonstrate an ability to attain the proposed reduction targets by 2020 and 2035.

The SCAQMD has proposed a "bright-line" screening level threshold of 3,000 metric tons/year CO_2e for all non-industrial land use types. This bright-line threshold is based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, Less than Significant impact on GHG emissions. SCAQMD's guidelines for analyzing a project's GHG impacts is to amortize project emissions over the life of the project, as defined as a 30-year period, add them to annual operation phase emissions and compare the emissions to the 3,000 metric tons/year CO_2e threshold of significance level to determine significance (SCAQMD 2008).

Many California counties and cities have developed climate action plans focusing on reducing GHGs from local sources, to facilitate meeting the state reduction targets of AB 32. To date, the County has not adopted a Climate Action Plan. It should be noted that the City has implemented a Climate Protection Action Plan to reduce manmade greenhouse gas emissions 7% below 1990 levels by 2012 (City of Laguna Beach 2009).

3.2.2 Explanations:

a. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*



Less than Significant Impact. The Project is limited to and consists of the expansion of a road and construction of a retaining wall. The Project would generate GHG emissions during construction from off-road equipment and on-road vehicle exhaust from worker vehicles and materials delivery. There would be no increase in operation phase emissions. As such, operation phase emissions are not considered to result in additional potential impacts to climate change.

Detailed GHG emissions estimates for the proposed Project are included in **Appendix A**. **Table 6** below, presents a summary of the estimated total GHG emissions that would likely result from Project construction. To be consistent with SCAQMD GHG emissions policy, presented emissions from construction activities have been amortized over a 30-year lifetime.

Table 6: Total Estimated Project GHG Emissions

Project Phase	CO_2e	
Construction Emissions (Total Metric Tons)	213	
Construction Emissions (Total Metric Tons; amortized over 30 years)	7.1	
Operation Emissions (annual)	No increase	
Interim SCAQMD Threshold (Total Metric Tons)		**3,000**
Project Emissions Exceed SCAQMD Threshold?		**No**

SOURCE: Appendix A.

As shown in **Table 6**, construction of the Project would emit an estimated 213 metric tons (MT) of CO_2e. When the emissions are amortized over 30 years in accordance with SCAQMD guidance, the 30-year annualized value is 7.1 MT of CO_2e per year. The 7.1 metric tons addition of CO_2e emissions is less than the 3,000 MT CO_2e significance threshold and the Project would therefore not generate greenhouse gas emissions, either directly or indirectly, that would be considered to have a substantial adverse effect on the environment. Consequently, potential unmitigated impacts are considered to be less than significant.

b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The State Legislature, enacted AB 32, the California Global Warming Solutions Act of 2006 which was signed on September 27, 2006, to further the goals of EO S-3-05 (Health and Safety Code, S38500 et seq.). AB 32 requires CARB to adopt statewide GHG emissions limits to achieve statewide GHG emissions levels at the same levels they were atmospherically in 1990 by the year 2020. A longer-range goal requires an 80% reduction in GHG emissions from 1990 levels by 2050. CARB adopted the 2020 statewide target and mandatory reporting requirements in December 2007 and the Scoping Plan in December 2008. SB 32, signed on September 8, 2016, expands on the mandate of AB 32 requiring CARB to ensure that state GHG emissions are reduced to 40 percent below the 1990 emission level by year 2030. Section 38566 is added to the current Health and Safety Code, which states “the State board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31,



2030". CARB prepared the 2017 Final Scoping Plan to prepare a blueprint for the state to meet SB 32's goals (CARB 2017).

The Project does not include stationary sources of GHG emissions and is not subject to compliance with AB 32's cap-and-trade program. The proposed Project would not conflict with any measures within CARB's Final Scoping Plan. The City has also enacted a Climate Protection Action Plan to reduce overall City emissions by 7% below 1990 levels by 2012. The City's plan is specific to the reduction of GHG associated with buildings, transportation and land use, government operations, commercial operations, and water management. Specific reduction measures for transportation projects relevant to the Project include providing traffic calming measures to increase pedestrian safety and amenity. The proposed Project is increasing safety by providing additional road space for emergency vehicles. The Project is limited to and consists of the expansion of a road and construction of a retaining wall. The Project's use of fuels during construction would be consistent with existing regulations related to low carbon fuel standards achieved through regulations placed on the fuel manufacturing and supply industry. Considering the above, as well as that the Project's GHG emissions would be below SCAQMD's thresholds of significance, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Potential unmitigated impacts are considered to be less than significant.



4.0 REFERENCES

California Air Resources Board (CARB). 2016. Ambient Air Quality Standards. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf.

_____.2017. The 2017 Climate Change Scoping Plan Update. Available at: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

City of Laguna Beach. 2009. *Climate Protection Action Plan*. Available at: https://www.lagunabeachcity.net/home/showpublisheddocument/10200.

South Coast Air Quality Management District, 2018, National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin, available at http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14, accessed on March 15, 2022.

South Coast Air Quality Management District, 2017, Final 2016 Air Quality Management Plan, available at http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.

South Coast Air Quality Management District, 2008, Final Localized Significance Threshold Methodology, available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.

South Coast Air Quality Management District, 2022. 2022 Air Quality Management Plan, available at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan#.

South Coast Air Quality Management District, 2022. Air Quality Modeling, available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-modeling?msclkid=9a83ba08a54411ec945606bc6d4c7ae0.

South Coast Air Quality Management District, 1993, CEQA Air Quality Handbook.

Appendix A

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Bluebird Roadway Expansion

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.46	15.65	20.99	6.47	0.87	5.60	1.79	0.63	1.16	0.08	8,228.02	0.94	0.85	8,504.19
Grading/Excavation	2.26	23.07	26.87	7.86	1.16	6.70	2.26	0.87	1.39	0.10	10,340.96	1.49	0.87	10,638.91
Drainage/Utilities/Sub-Grade	1.13	10.96	9.29	7.17	0.47	6.70	1.80	0.41	1.39	0.03	2,584.42	0.71	0.03	2,611.29
Paving	1.45	16.47	18.72	0.83	0.83	0.00	0.63	0.63	0.00	0.07	6,965.60	0.96	0.62	7,174.95
Maximum (pounds/day)	2.26	23.07	26.87	7.86	1.16	6.70	2.26	0.87	1.39	0.10	10,340.96	1.49	0.87	10,638.91
Total (tons/construction project)	0.05	0.55	0.62	0.11	0.03	0.08	0.04	0.02	0.02	0.00	228.74	0.03	0.02	235.38

Notes:

Project Start Year ->	2022
Project Length (months) ->	3
Total Project Area (acres) ->	1
Maximum Area Disturbed/Day (acres) ->	0
Water Truck Used? ->	No

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	894	0	1,350	0	200	0
Grading/Excavation	891	0	1,350	0	800	0
Drainage/Utilities/Sub-Grade	0	0	0	0	560	0
Paving	0	642	0	990	400	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Bluebird Roadway Expansion

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.05	0.07	0.02	0.00	0.02	0.01	0.00	0.00	0.00	27.15	0.00	0.00	25.46
Grading/Excavation	0.01	0.08	0.09	0.03	0.00	0.02	0.01	0.00	0.00	0.00	34.13	0.00	0.00	31.85
Drainage/Utilities/Sub-Grade	0.01	0.06	0.05	0.04	0.00	0.04	0.01	0.00	0.01	0.00	14.21	0.00	0.00	13.03
Paving	0.03	0.36	0.41	0.02	0.02	0.00	0.01	0.01	0.00	0.00	153.24	0.02	0.01	143.20
Maximum (tons/phase)	0.03	0.36	0.41	0.04	0.02	0.04	0.01	0.01	0.01	0.00	153.24	0.02	0.01	143.20
Total (tons/construction project)	0.05	0.55	0.62	0.11	0.03	0.08	0.04	0.02	0.02	0.00	228.74	0.03	0.02	213.54

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Road Construction Emissions Model **Version 9.0.0**
Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a
yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type

Project Name	Bluebird Roadway Expansion	
Construction Start Year	2022	Enter a Year between 2014 and 2040 (inclusive)
Project Type	2	1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction
Project Construction Time	3.00	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)
Project Length	0.34	miles
Total Project Area	0.87	acres
Maximum Area Disturbed/Day	0.34	acres
Water Trucks Used?	2	1. Yes 2. No

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd^3) (assume 20 if unknown)	Import Volume (yd^3/day)	Export Volume (yd^3/day)
Soil	Grubbing/Land Clearing	20.00		894.00
	Grading/Excavation	20.00	485.00	406.00
	Drainage/Utilities/Sub-Grade			
	Paving			
Asphalt	Grubbing/Land Clearing			
	Grading/Excavation			
	Drainage/Utilities/Sub-Grade			
	Paving	20.00	642.00	

Mitigation Options

On-road Fleet Emissions Mitigation		Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Off-road Equipment Emissions Mitigation		Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation). Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing	0.30	0.30	12/1/2022	1/1/2022
Grading/Excavation	0.30	1.35	12/11/2022	1/11/2022
Drainage/Utilities/Sub-Grade	0.50	0.90	12/21/2022	1/21/2022
Paving	2.00	0.45	1/6/2023	2/6/2022
Totals (Months)	3			

Please note: You have entered a different number of months than the project length shown in cell D16.
Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing		30.00		45	1350.00
Miles/round trip: Grading/Excavation		30.00		45	1350.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		0	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.42	3.08	0.11	0.05	0.02	1,748.57	0.00	0.27	1,830.52
Grading/Excavation (grams/mile)	0.04	0.42	3.08	0.11	0.05	0.02	1,748.57	0.00	0.27	1,830.52
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.42	3.05	0.11	0.05	0.02	1,737.07	0.00	0.27	1,818.48
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.12	1.26	9.56	0.33	0.15	0.05	5,204.17	0.01	0.82	5,448.08
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.03	0.00	0.00	0.00	17.17	0.00	0.00	17.98
Pounds per day - Grading/Excavation	0.12	1.26	9.56	0.33	0.15	0.05	5,204.17	0.01	0.82	5,448.08
Tons per const. Period - Grading/Excavation	0.00	0.00	0.03	0.00	0.00	0.00	17.17	0.00	0.00	17.98
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.01	0.06	0.00	0.00	0.00	34.35	0.00	0.01	35.96

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions User Input	User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT
Miles/round trip: Grubbing/Land Clearing		30.00		0	0.00
Miles/round trip: Grading/Excavation		30.00		0	0.00
Miles/round trip: Drainage/Utilities/Sub-Grade		30.00		0	0.00
Miles/round trip: Paving		30.00		33	990.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.42	3.08	0.11	0.05	0.02	1,748.57	0.00	0.27	1,830.52
Grading/Excavation (grams/mile)	0.04	0.42	3.08	0.11	0.05	0.02	1,748.57	0.00	0.27	1,830.52
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.42	3.05	0.11	0.05	0.02	1,737.07	0.00	0.27	1,818.48
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.06	0.88	6.83	0.24	0.11	0.04	3,743.10	0.00	0.59	3,918.50
Tons per const. Period - Paving	0.00	0.02	0.15	0.01	0.00	0.00	82.35	0.00	0.01	86.21
Total tons per construction project	0.00	0.02	0.15	0.01	0.00	0.00	82.35	0.00	0.01	86.21

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions User Input	User Override of Worker Commute Default Values	Default Values		
Miles/ one-way trip		20	Calculated Daily Trips	Calculated Daily VMT
One-way trips/day		2		
No. of employees: Grubbing/Land Clearing		5	10	200.00
No. of employees: Grading/Excavation		20	40	800.00
No. of employees: Drainage/Utilities/Sub-Grade		14	28	560.00
No. of employees: Paving		10	20	400.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.02	1.00	0.08	0.05	0.02	0.00	328.72	0.00	0.01	330.96
Grading/Excavation (grams/mile)	0.02	1.00	0.08	0.05	0.02	0.00	328.72	0.00	0.01	330.96
Draining/Utilities/Sub-Grade (grams/mile)	0.02	0.97	0.08	0.05	0.02	0.00	324.93	0.00	0.01	327.10
Paving (grams/mile)	0.02	0.91	0.07	0.05	0.02	0.00	317.66	0.00	0.01	319.68
Grubbing/Land Clearing (grams/trip)	1.11	2.85	0.32	0.00	0.00	0.00	70.54	0.08	0.03	82.43
Grading/Excavation (grams/trip)	1.11	2.85	0.32	0.00	0.00	0.00	70.54	0.08	0.03	82.43
Draining/Utilities/Sub-Grade (grams/trip)	1.08	2.81	0.31	0.00	0.00	0.00	69.76	0.07	0.03	81.43
Paving (grams/trip)	1.04	2.75	0.29	0.00	0.00	0.00	68.26	0.07	0.03	79.50

Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.03	0.50	0.04	0.02	0.01	0.00	146.50	0.00	0.00	147.74
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.49
Pounds per day - Grading/Excavation	0.13	2.02	0.18	0.08	0.03	0.01	585.99	0.01	0.02	590.98
Tons per const. Period - Grading/Excavation	0.00	0.01	0.00	0.00	0.00	0.00	1.93	0.00	0.00	1.95
Pounds per day - Drainage/Utilities/Sub-Grade	0.09	1.37	0.12	0.06	0.02	0.00	405.46	0.01	0.01	408.86
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.01	0.00	0.00	0.00	0.00	2.23	0.00	0.00	2.25
Pounds per day - Paving	0.06	0.93	0.08	0.04	0.02	0.00	283.14	0.01	0.01	285.42
Tons per const. Period - Paving	0.00	0.02	0.00	0.00	0.00	0.00	6.23	0.00	0.00	6.28
Total tons per construction project	0.00	0.04	0.00	0.00	0.00	0.00	10.88	0.00	0.00	10.97

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

Water Truck Emissions User Input	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Round Trips/Vehicle/Day	Default Values Round Trips/Vehicle/Day	Calculated Trips/day	User Override of Miles/Round Trip	Default Values Miles/Round Trip	Calculated Daily VMT
Grubbing/Land Clearing - Exhaust		0		5	0		8.00	0.00
Grading/Excavation - Exhaust		0		5	0		8.00	0.00
Drainage/Utilities/Subgrade		0		5	0		8.00	0.00
Paving		0		5	0		8.00	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.42	3.08	0.11	0.05	0.02	1,748.57	0.00	0.27	1,830.52
Grading/Excavation (grams/mile)	0.04	0.42	3.08	0.11	0.05	0.02	1,748.57	0.00	0.27	1,830.52
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.42	3.05	0.11	0.05	0.02	1,737.07	0.00	0.27	1,818.48
Paving (grams/mile)	0.03	0.40	2.98	0.11	0.05	0.02	1,714.99	0.00	0.27	1,795.36
Grubbing/Land Clearing (grams/trip)	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions	**ROG**	**CO**	**NOx**	**PM10**	**PM2.5**	**SOx**	**CO2**	**CH4**	**N2O**	**CO2e**
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing	0.28	0.34	5.60	0.02	1.16	0.00
Fugitive Dust - Grading/Excavation		0.34	6.70	0.02	1.39	0.00
Fugitive Dust - Drainage/Utilities/Subgrade		0.34	6.70	0.04	1.39	0.01

Off-Road Equipment Emissions

Grubbing/Land Clearing

Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option: Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Excavators	0.40	6.51	3.55	0.17	0.16	0.01	1,000.03	0.32	0.01	1,010.81
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Off-Highway Trucks	0.53	3.36	4.01	0.15	0.13	0.01	1,278.99	0.41	0.01	1,292.76
1.00			Model Default Tier	Other Construction Equipment	0.38	4.02	3.82	0.20	0.18	0.01	598.33	0.19	0.01	604.79
			Model Default Tier	Other General Industrial Equipn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
Grubbing/Land Clearing	pounds per day	1.31	13.89	11.38	0.52	0.48	0.03	2,877.35	0.93	0.03	2,908.36
Grubbing/Land Clearing	tons per phase	0.00	0.05	0.04	0.00	0.00	0.00	9.50	0.00	0.00	9.60

Grading/Excavation

Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Mitigation Option: Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00	3		Model Default Tier	Excavators	0.40	6.51	3.55	0.17	0.16	0.01	1,000.03	0.32	0.01	1,010.81
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2		Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00			Model Default Tier	Off-Highway Trucks	1.06	6.72	8.03	0.29	0.27	0.03	2,557.97	0.83	0.02	2,585.51
1.00			Model Default Tier	Other Construction Equipment	0.38	4.02	3.82	0.20	0.18	0.01	598.33	0.19	0.01	604.79
			Model Default Tier	Other General Industrial Equipn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Paving Equipment	0.18	2.55	1.74	0.08	0.08	0.00	394.47	0.13	0.00	398.73
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2		Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2		Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	4		Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Number of Vehicles	Equipment Tier	Type		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation		pounds per day	2.02	19.79	17.13	0.75	0.69	0.05	4,550.80	1.47	0.04	4,599.85
	Grading/Excavation		tons per phase	0.01	0.07	0.06	0.00	0.00	0.00	15.02	0.00	0.00	15.18

Drainage/Utilities/Subgrade	Default Number of Vehicles	Mitigation Option: Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Off-Highway Trucks	0.52	3.33	3.86	0.14	0.13	0.01	1,279.30	0.41	0.01	1,293.07
1.00			Model Default Tier	Other Construction Equipment	0.37	4.01	3.69	0.19	0.18	0.01	598.31	0.19	0.01	604.77
			Model Default Tier	Other General Industrial Equipn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	3		Model Default Tier	Tractors/Loaders/Backhoes	0.16	2.24	1.63	0.09	0.08	0.00	301.35	0.10	0.00	304.60
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment	If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab			ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Number of Vehicles	Equipment Tier	Type		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drainage/Utilities/Sub-Grade		pounds per day	1.05	9.58	9.17	0.42	0.38	0.02	2,178.96	0.70	0.02	2,202.44
	Drainage/Utilities/Sub-Grade		tons per phase	0.01	0.05	0.05	0.00	0.00	0.00	11.98	0.00	0.00	12.11

Paving	Default Number of Vehicles	Mitigation Option: Override of Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Default Equipment Tier		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Override of Default Number of Vehicles	*Program-estimate*		Equipment Tier	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Off-Highway Trucks	0.50	3.29	3.57	0.13	0.12	0.01	1,279.89	0.41	0.01	1,293.67
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		Model Default Tier	Pavers	0.19	2.88	1.88	0.09	0.08	0.00	455.22	0.15	0.00	460.13
	1		Model Default Tier	Paving Equipment	0.17	2.56	1.60	0.08	0.07	0.00	394.47	0.13	0.00	398.72
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2		Model Default Tier	Rollers	0.31	3.70	3.22	0.18	0.16	0.01	508.22	0.16	0.00	513.69
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1		Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	3		Model Default Tier	Tractors/Loaders/Backhoes	0.15	2.23	1.54	0.08	0.07	0.00	301.58	0.10	0.00	304.82
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User-Defined Off-road Equipment If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab

Number of Vehicles	Equipment Tier	Type		ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day	PM2.5 pounds/day	SOx pounds/day	CO2 pounds/day	CH4 pounds/day	N2O pounds/day	CO2e pounds/day
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving	pounds per day		1.33	14.66	11.81	0.55	0.50	0.03	2,939.37	0.95	0.03	2,971.03
	Paving	tons per phase		0.03	0.32	0.26	0.01	0.01	0.00	64.67	0.02	0.00	65.36
Total Emissions all Phases (tons per construction period) =>				0.05	0.49	0.40	0.02	0.02	0.00	101.16	0.03	0.00	102.25

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/day	Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

Appendix C BLUEBIRD CANYON DRIVE RETAINING WALL (CIP 21-9454) BIOLOGICAL AND AQUATIC RESOURCES MEMORANDUM

Stantec

Memo

To:	Pierre Sawaya	From:	Melissa Tu
	City of Laguna Beach		Stantec
File:	Bluebird Canyon Drive Retaining Wall	Date:	August 27, 2021

Reference: Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources

This memo presents the proposed Bluebird Canyon Drive Retaining Wall Project (Project) including a brief Project description and a desktop review, methods, results, and conclusion for biological and aquatic resources.

PROPOSED PROJECT

The City of Laguna Beach (City) proposes the Bluebird Canyon Drive Retaining Wall Project (proposed Project). The proposed Project includes the construction of a retaining wall on the north side of Bluebird Canyon Drive and widening of a portion of the north side of Bluebird Canyon Drive from approximately Rancho Laguna Road westerly about 850 linear feet to provide an eight-foot-wide roadway shoulder (see Attachment 1, Figures 1 through 3). The widening is needed for emergency vehicles egress. Bluebird Canyon Drive is a key evacuation route for residents, and widening the road is needed to provide sufficient emergency egress as identified in the City's Wildfire Mitigation and Fire Safety Report.

The existing two-direction 12-foot lanes would remain in their existing configurations. In addition, access to the existing stairs and path along Bluebird Canyon Drive (north side) would be preserved in place with a barrier opening.

As part of the widening, a four- to eight-foot-high retaining wall, extending some 950 feet would be constructed along the north side of the roadway. Cable railing, guard rail, and a six-inch curb would also be constructed along this portion of the widened roadway. These activities and features would require the removal and relocation of existing power poles, and which would be organized with the City and Southern California Edison.

At a future date, the proposed Project may also require construction of a new retaining wall/debris wall along the south side of the road. This southern retaining wall/debris wall is estimated to be 8- to 12-feet tall including 2- to 6-feet of retention and a 6-feet extension for future debris capture and 850-feet long. It would extend approximately 850 feet westerly from the stop sign at Rancho Laguna Road/Bluebird Canyon Drive.

In addition, the proposed Project may also require modification to all or a portion of the existing slope on the south side of the roadway. The preliminary design indicates the excavations for deepened foundations for both walls would be some 30-feet below existing grades, but would not be a continuous trench and instead, would include piles located at pre-determined locations.

Runoff from the site would be directed along the existing and new curb sections and would drain as it currently does via sheet flow (along Bluebird Canyon Drive) and percolate into the existing slope areas. The proposed Project will include drainage elements needed to protect the slope and to drain the flat areas in the superelevation transition along the middle segment of the project. Existing storm drain facilities will be protected in place and will not be impacted.

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

Equipment for this proposed Project may include an excavator, drill rig, trucks, crane, loaders, asphalt mixer, road roller, grader, and forklift. The construction of the proposed Project (not including the southerly retaining/debris wall) is expected to take approximately four months to complete.

BIOLOGICAL RESOURCES

Stantec biologists conducted a habitat assessment, mapped vegetation communities, and mapped aquatic resources to determine the types of biological and aquatic resources within and adjacent to the proposed Project area. Prior to conducting the fieldwork, Stance biologists and Geographic Information System (GIS) specialists conducted a desktop review of the proposed Project and the surrounding areas.

DESKTOP REVIEW

The desktop review consisted of multiple data sources including Google Earth aerial photos, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) database, United States Fish and Wildlife Service (USFWS**)** Information for Planning and Consultation (iPac) database, and USFWS National Wetland Inventory (NWI) Wetlands Mapper online database review (CDFW 2021, Google Earth 2021, USFWS 2021a, 2021b). The CNDDB search consisted of 10-mile radius search from the Project area for special-status fish and wildlife species and a three-mile radius search for rare plant species.

Based on Google Earth imagery and online photographs, the Project along the north side of Bluebird Canyon Drive is dominated by large blue gum (*Eucalyptus globulus*) trees. Abutting Bluebird Canyon Drive on the south side is dense lemonade berry (*Rhus integrifolia*) dominated scrub. Downslope of the Project on the north side is an unnamed drainage. Tennis courts and residential properties occur southwest, southeast, and northwest of the Project (Google Earth 2021).

Based on the online review 73 special-status species have been documented within 10 miles of the Project, 41 fish and wildlife speciesand 32 plant species (CDFW 2021, USFWS 2021a). This memorandum includes a review of the 41 special-status fish and wildlife species and the rare plant species within three-miles of the Project.

METHODS

Two Stantec biologists conducted a habitat assessment and reconnaissance-level survey and mapped vegetation communities and aquatic resources from the public right-of-way to document the environmental conditions present within 300 feet of the Project area (the Biological Survey Area [BSA]). The primary goals of the survey were to map vegetation communities and potentially jurisdictional aquatic resources and identify and assess habitat that may be capable of supporting special-status plant or wildlife species. The biologists recorded all plant and wildlife species observations during the survey. However, this assessment did not include focused, protocol-level surveys for rare plants or wildlife or other special-status resources.

The survey was conducted during a season and time of day when resident and migratory birds would be expected to be present and exhibiting normal activity, small mammals would be active and detectable visually or by sign, and above-ground amphibian and reptile movement would generally be detectable. However, it should be noted that some wildlife species and individuals may have been difficult to detect due to their elusive nature, cryptic morphology, or nocturnal behavior. The survey was conducted during

daylight hours when temperatures were such that reptiles and other wildlife would be active (i.e., between 65- and 95-degrees Fahrenheit).

The BSA was investigated on foot (where accessible) by experienced field biologists walking throughout publicly accessible areas while visually scanning for wildlife and their sign and listening to wildlife songs and calls. The biologists paused as necessary to listen for wildlife or to identify, record, or enumerate any observed species. Species present were identified and recorded through direct visual observation, sound, or their sign (e.g., scat, tracks, etc.). Species identifications conform to the most up-to-date field guides and technical literature.

RESULTS

This results section includes a discussion on historic soils, vegetation communities, aquatic resources, and special-status species in the BSA. The two Stantec biologists conducted the survey on August 5, 2021, from 7:00 am to 2:30 pm. The temperature ranged from 64 to 73 degrees Fahrenheit and 100 percent cloud cover to ten percent cloud cover. Photographs of the BSA and Project area are presented in Attachment 2.

SOILS

Two soil types have been documented in the Project area, Anaheim clay loam and Balcom clay loam (USDA 2021). Figure 4 presents the historic soils in the BSA. Neither soil type is a hydric soil.

VEGETATION COMMUNITIES AND LAND COVER TYPES

Six vegetation communities and two land cover types occur in the BSA. Vegetation descriptions and nomenclature are based on the second edition of *A Manual of California Vegetation* (Sawyer et al. 2009), where applicable, and have been defined to the alliance level. However, the BSA was too small to follow the minimum size for mapping. The vegetation communities include California sagebrush scrub, lemonade berry scrub, eucalyptus - tree of heaven-black locust groves, arroyo willow thickets, emergent wetlands. All of the vegetation communities except eucalyptus - tree of heaven-black locust groves are sensitive vegetation communities. The two land cover types include non-vegetated channel and disturbed/developed areas. The areas are described below and presented in Table 1 and on Figure 5 in Attachment A.

Vegetation Communities

Scrub Vegetation

California Buckwheat Scrub

California buckwheat scrub (*Eriogonum fasciculatum* shrubland alliance) occurs within the northeastern portion of the BSA north of the Project area (Figure 5). This alliance is dominated by California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*) and includes scattered lemonade berry and toyon (*Heteromeles arbutifolia*). The California buckwheat scrub in the BSA is sparse with bare ground and non-native annual grasses. The BSA contains 1.21 acres of California buckwheat scrub.

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

Table 1. Vegetation Communities and Land Cover Type in the BSA and Project Area

Vegetation Community and Land Cover Type	BSA	Project Area		
		Temporary Impacts	Permanent Impacts	Total
	Acres			
Vegetation Community				
Scrub				
California Buckwheat Scrub	1.21	0	0	0
California Sagebrush Scrub	0.64	0	0	0
Lemonade Berry Scrub	6.57	0.23	0.09	0.21
Subtotal	***8.42***	***0.23***	***0.09***	***0.32***
Riparian/Wetland				
Arroyo Willow Thicket	0.07	0	0	0
Cattail Wetland	0.06	0	0	0
Subtotal	***0.13***	***0***	***0***	***0***
Non-Native				
Eucalyptus - Tree of Heaven - Black Locust Groves	0.22	0[1]	0[1]	0
Land Cover Type				
Disturbed/Developed	10.73	0.64	0.21	0.85
Non-Vegetated Channel	0.13	0	0	0
Subtotal	***10.86***	***0.64***	***0.21***	***0.85***
TOTAL	**19.63**	**0.87**	**0.30**	**1.17**

Note: [1] Eucalyptus tree branches hang over the Project area but no trees are proposed for removal.

California Sagebrush Scrub

California sagebrush scrub (*Artemisia californica* shrubland alliance) occurs within the northwestern portion of the BSA northwest of the Project area (Figure 5). This alliance is dominated by California sagebrush. The BSA contains 0.64 acre of California sagebrush scrub.

Lemonade Berry Scrub

Lemonade berry scrub (*Rhus integrifolia* shrubland alliance) occurs within the BSA and the Project areas. This alliance is co-dominated by lemonade berry and toyon. The BSA contains 6.57 acres of this alliance. Approximately 0.21 acre of lemonade berry scrub occurs in the Project's temporary and permanent impact aeras in the northeastern portion and along the south edge of the Project area (Table1, Figure 5).

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

Riparian/Wetland Vegetation

Arroyo Willow Thickets

Arroyo willow thickets (*Salix lasiolepis* shrubland alliance) occur along the banks of the western portion of the drainage that is north of the Project area (Figure 5). Arroyo willow (*Salix lasiolepis*) is the dominant species in this alliance. The BSA contains 0.07 acre of arroyo willow thickets.

Emergent Wetlands

Emergent wetlands occur in the central and eastern portions of the unnamed drainage that is north of the Project area (Figure 5). The eastern section of the wetland is dominated by cattails (*Typha* sp.) and the central portion of the wetlands is dominated by wild celery (*Apium graveolens).* The banks adjacent to the central portion of the wetland is dominated by poison oak (*Toxicodendron diversilobum*). The BSA contains 0.06 acre of emergent wetland.

Non-Native Vegetation

Eucalyptus-Tree of Heaven-Black Locust Groves

Eucalyptus-tree of heaven-black locust groves (*Eucalyptus* spp. - *Ailanthus altissima - Robinia pseudoacacia* woodland semi-natural alliance) occur along the north side of Bluebird Canyon Drive, just north of the Project area (Figure 5). This alliance is dominated by large blue gum (eucalyptus) trees. The BSA contains 0.22 acre of blue gum trees. While the canopy extends into the Project area none of tree trunks are within the Project area.

Land Cover Types

Disturbed/Developed

Over half (10.73 acres) of the approximately 20-acre BSA is disturbed/developed. Most of the disturbed/developed land cover type in the BSA is developed areas that include single-family residential properties. The northern portion of the Project area is disturbed non-native grasses and ruderal vegetation that is routinely mowed by the City (Figure 5).

Non-Vegetated Channel

A non-vegetated channel occurs in the BSA approximately 50 feet north of the Project area. The non-vegetated channel is presented on Figure 5. The BSA contains 0.13 acre of non-vegetated channel.

AQUATIC RESOURCES

The aquatic resources in the BSA north of the Project area include the non-vegetated channel, emergent wetlands, and the arroyo willow thicket. Figure 6 presents the aquatic resources that likely fall under the jurisdiction of the CDFW, the San Diego Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE).

PLANT AND WILDLIFE SPECIES

A list of plant and wildlife species observed in the BSA are presented in Attachments 3 and 4. One special-status species was observed during the survey, monarch (*Danaus plexippus*) and is discussed in the next

section, Special-Status Species. A total of 64 plant species were documented in the BSA, 28 are native and 36 are non-native. A total of 27 wildlife species were observed in the BSA, 14 bird species, eight invertebrates including three butterfly species, evidence of two mammal species, and three reptilian species. The bird species listed in Attachment 4 are protected under California Fish and Game Code and the Migratory Bird Treaty Act.

SPECIAL-STATUS SPECIES

The potential for special-status species to occur in or near the BSA is based on the desktop review and the habitat assessment.

Plant Species

Eighteen rare plant species have been documented within three miles of the Project aera (CDFW 2021, USFWS 2021a). A list of these species is included in Attachment 5. Six of 18 plant species have potential to occur in the lemonade berry scrub, California sage scrub, or buckwheat scrub in the BSA.

Fish and Wildlife Species

The 41 special-status fish and wildlife species documented within ten miles of the Project area consist of two amphibians, eight reptiles, 20 birds, two fish, two invertebrates, and seven mammals (Attachment 5, Table 5-2) (CDFW 2021, USFWS 2021a). Most of the special-status fish and wildlife species in Table 5-2 are not likely to occur in the BSA due to lack of suitable habitat. One species, the monarch butterfly was observed in BSA on August 5, 2021. The one individual that was observed was flying through the BSA near the arroyo willow thicket.

Seven special-status wildlife species have a moderate potential to occur in the BSA, four reptiles, two birds, and one mammal. The four reptilian species have moderate potential to occur in most of the BSA except for the disturbed/developed areas. The scrub habitat and areas along the drainage provide the highest quality habitat for the special-status reptilian species. Two bird species, Cooper's hawk (*Accipiter cooperii*) and southern rufous-crowned sparrow (*Aimophila ruficeps canescens*) have a moderate potential to occur in the BSA. The Cooper's hawk could use the blue gums for roosting and forage along the drainage or in the scrub habitats. The rufous-crowned sparrow could use the scrub habitats for foraging and nesting. One mammal species, Delzura pocket mouse (*Chaetodipus californicus femoralis*) has moderate potential to occur in the BSA in open areas within or adjacent to scrub vegetation.

Special-status, California Fish and Game Code, and/or Migratory Bird Treaty Act protected bird species are likely to nest in native and non-native vegetation in the BSA.

CONCLUSIONS

Most of the Project area is comprised of disturbed/developed areas. However, native lemonade berry scrub occurs in along the southern side and northeastern portion of Project area (Figure 5). Approximately 1 acre of temporary and permanent impacts are expected to occur from the implementation of the Project, with over eighty percent of the impacts being to disturbed/developed areas.

A jurisdictional drainage occurs approximately 50 feet north and downslope of the Project area. Special-status plant and wildlife species have potential to occur in the BSA and/or Project area.

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

Based on the sensitive biological resources within and adjacent to the Project area, a California Environmental Quality Act Initial Study and Mitigated Negative Declaration (IS/MND) is recommended for potentially significant impacts to Biological Resources. Avoidance and minimization measures in the IS/MND would reduce the potential impacts to biological resources to less than significant.

Thank you for this opportunity to assist the City with this Project. Please reach out to me if you have any questions.

Stantec



Melissa Tu, Senior Biologist
Phone: 858-261-4592
Melissa.Tu@stantec.com

c. Mohammad Heiat
Gilberto Ruiz

Attachment: Attachment 1 Figures
Attachment 2 Photographic Record
Attachment 3 Plant List
Attachment 4 Wildlife List
Attachment 5 Special-Status Species Potential to Occur Tables

References

CDFW (California Department of Fish and Wildlife). 2021. RAREFIND database. Electronic database managed by the California Natural Diversity Data Base, Wildlife Data and Habitat Analysis Branch, California Department of Fish and Wildlife. Sacramento, CA.

Google Earth. 2021. Aerial imagery.

Sawyer, J.O., T. Keeler-Wolf and J.M. Evens. 2009. *Manual of California Vegetation*, Second Edition. California Native Plant Society, Sacramento, California.

USDA (U.S. Department of Agriculture). 2021. Web Soil Survey. Natural Resources Conservation Service.

USFWS (United States Fish and Wildlife Service). 2021a. Information for Planning and Consultation. Available on: https://ecos.fws.gov/ipac/. Accessed June 2021.

_____. 2021b. National Wetlands Inventory. Available online: https://www.fws.gov/wetlands/. Accessed June 2021.

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

ATTACHMENT 1 FIGURES





Project Location

0 1,000 2,000 Feet

(At original document size of 8.5x11)
1:24,000

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-08-23
TR by SET on 2021-08-23
IR by MT on 2021-08-23

Client/Project
2042611000

City of Laguna Beach
Bluebird Canyon Drive Retaining Wall

Figure No.
1

Title
Project Location

Notes
1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021.
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

\\Us0300-pprfs01\workgroup\2042\active\2042611000\gis\Figure1_BRTR_ProjectLocationMap_08032021.mxd Revised: 2021-08-26 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.





Project Location

Quadrangle: Laguna Beach
Township & Range: 7S 8W, 7S 9W
Section: 25, 30

0 1,000 2,000 Feet

(At original document size of 8.5x11)
1:24,000

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-08-23
TR by SET on 2021-08-23
IR by MT on 2021-08-23

Client/Project
2042611000

City of Laguna Beach
Bluebird Canyon Drive Retaining Wall

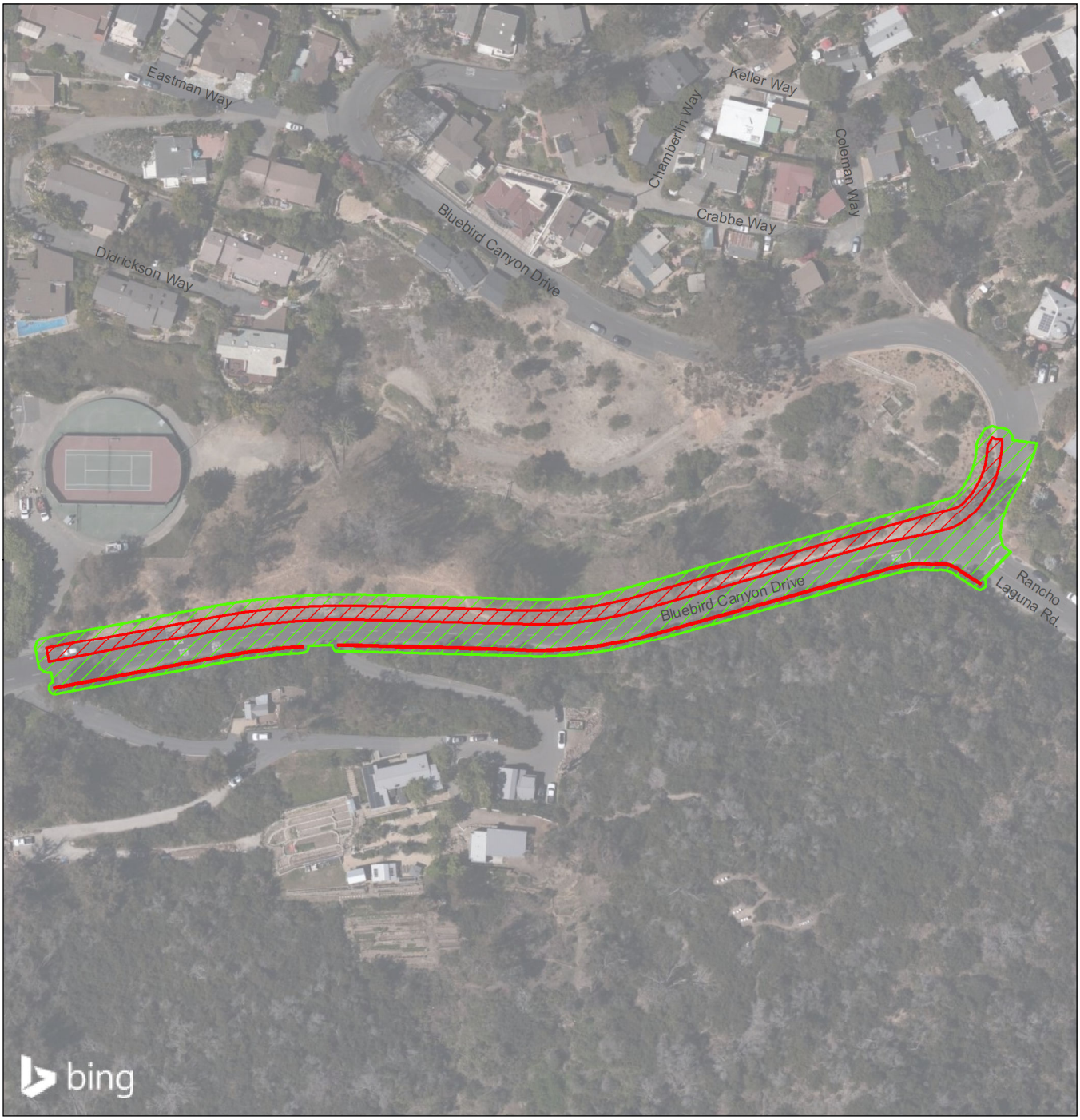
Figure No.
2

Title
Project Topography

Notes
1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021.Township, Range, and Section from BLM California Cadastal PLSS Standardized Data 2020. 7.5 Minute Quadrangles from USGS 2021
3. Background: Esri, Garmin, GEBCO, NOAA NGDC, and other contributors
Copyright:© 2013 National Geographic Society, i-cubed

\\Us0300-prfss01\workgroup\2042\active\2042611000\gis\Figure2_BRTR_ProjectTopoMap_08032021.mxd Revised: 2021-08-26 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Project Footprint

Permanent Impact

Temporary Impact

0 70 140 Feet

(At original document size of 8.5x11)
1:1,680

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-08-23
TR by SET on 2021-08-23
IR by MT on 2021-08-23

Client/Project
2042611000

City of Laguna Beach
Bluebird Canyon Drive Retaining Wall

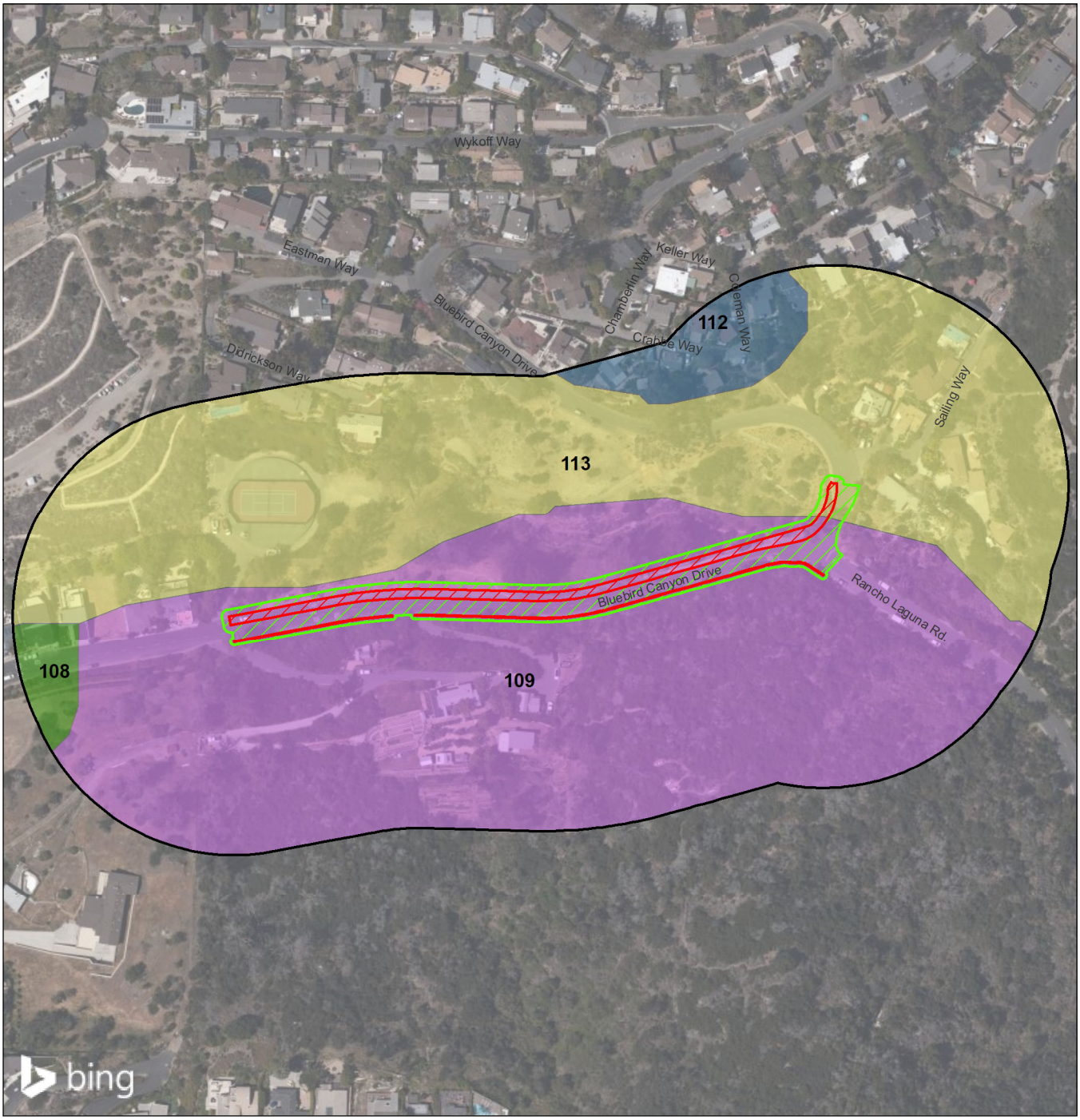
Figure No.
3

Title
Project Boundary

Notes
1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021.
3. Background: © 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus DS Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

\\Us0300-pfss01\workgroup\2042\active\2042611000\gis\Figure3_BRTR_ProjectBoundaryMap_08032021.mxd Revised: 2021-08-26 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Biological Survey Area

Project Footprint

Permanent Impact

Temporary Impact

Soils Map Unit Symbol

- 108; Anaheim clay loam, 15 to 30 percent slopes
- 109; Anaheim clay loam, 30 to 50 percent slopes
- 112; Balcom clay loam, 15 to 30 percent slopes
- 113; Balcom clay loam, 30 to 50 percent slopes

0 110 220 Feet

(At original document size of 8.5x11)
1:2,640

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-08-23
TR by SET on 2021-08-23
IR by MT on 2021-08-23

Client/Project
2042611000

City of Laguna Beach
Bluebird Canyon Drive Retaining Wall

Figure No.
4

Title
Historic Soils

Notes

1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021. NRCS 2021.
3. Background: © 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus DS Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

\\Us0300-prfss01\workgroup\2042\active\2042611000\gis\Figure4_BRTR_SoilsMap_08032021_V2.mxd Revised: 2021-08-26 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Biological Survey Area

Project Footprint

Permanent Impact

Temporary Impact

Vegetation Communities and Land Cover Types

- Arroyo Willow Thicket
- Buckwheat Scrub
- California Sagebrush Scrub
- Disturbed/Developed
- Eucalyptus - Tree of Heaven - Black Locust Groves
- Lemonade Berry Scrub
- Non-Vegetated Channel
- Wetlands

0 110 220 Feet

(At original document size of 8.5x11)
1:2,640

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-08-24
TR by SET on 2021-08-24
IR by MT on 2021-08-24

Client/Project
2042611000

City of Laguna Beach
Bluebird Canyon Drive Retaining Wall

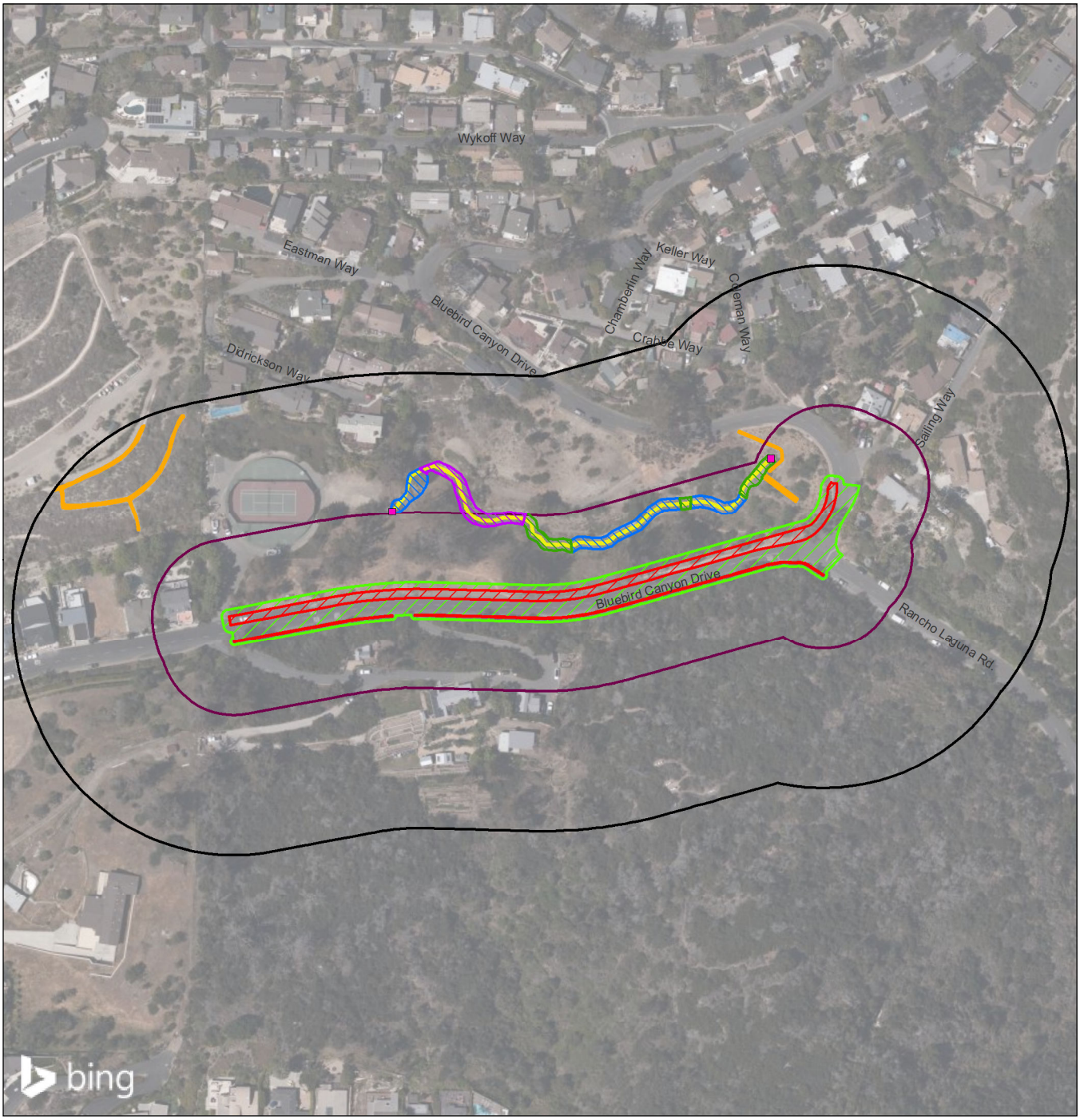
Figure No.
5

Title
Vegetation Communities and Land Cover Types

Notes
1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021.
3. Background: © 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus DS Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

\\Us0300-ppfss01\workgroup\2042\active\2042611000\gis\Figure5_BRTR_VegMap_08032021_V2.mxd Revised: 2021-08-26 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Biological Survey Area
Aquatic Resources Survey Area
Project Footprint
Permanent Impact
Temporary Impact

Culvert Location
Concrete Drainage
CDFW and RWQCB Riparian
CDFW and RWQCB Waters
Wetlands
USACE Waters

0 110 220 Feet

(At original document size of 8.5x11)
1:2,640

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-08-24
TR by SET on 2021-08-24
IR by MT on 2021-08-24

Client/Project
2042611000

City of Laguna Beach
Bluebird Canyon Drive Retaining Wall

Figure No.
6

Title
Aquatic Resources

Notes
1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021.
3. Background: © 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus DS Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

\\Us0300-prfss01\workgroup\2042\active\2042611000\gis\Figure6_BRTR_AquaticResourcesMap_08032021_V2.mxd Revised: 2021-08-26 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

ATTACHMENT 2 PHOTOGRAPHIC RECORD

STANTEC CONSULTING SERVICES INC.
PHOTOGRAPHIC RECORD

Client: City of Laguna Beach	**Job Number:** 2042611000
Site Name: Bluebird Canyon Drive Retaining Wall Project	**Photographer:** M. Tu, A. Townsend

Photo 1: August 5, 2021



View of culvert on west end of Survey Area.

Photo 2: August 5, 2021



View looking upstream in the drainage from the culvert on the west end of the Survey Area.

STANTEC CONSULTING SERVICES INC. PHOTOGRAPHIC RECORD	
Client: City of Laguna Beach	**Job Number:** 2042611000
Site Name: Bluebird Canyon Drive Retaining Wall Project	**Photographer:** M. Tu, A. Townsend

Photo 3: August 5, 2021



View of drainage and the banks looking northeast with a non-native date palm (*Phoenix canariensis*) in the drainage.

Photo 4: August 5, 2021



View of arroyo willow (*Salix lasiolepis*) thicket in drainage, looking northwest.

STANTEC CONSULTING SERVICES INC. PHOTOGRAPHIC RECORD	
Client: City of Laguna Beach	**Job Number:** 2042611000
Site Name: Bluebird Canyon Drive Retaining Wall Project	**Photographer:** M. Tu, A. Townsend

Photo 5: August 5, 2021



View of old rodent burrows with spider webs in the drainage bank, looking north.

Photo 6: August 5, 2021



Algae and mosquito larvae in isolated pool in the drainage.

STANTEC CONSULTING SERVICES INC. PHOTOGRAPHIC RECORD	
Client: City of Laguna Beach	**Job Number:** 2042611000
Site Name: Bluebird Canyon Drive Retaining Wall Project	**Photographer:** M. Tu, A. Townsend

Photo 7: August 5, 2021



View of the west side of the Project area next to Bluebird Canyon Drive with blue gum (*Eucalyptus globulus*) trees on the north side of the road, looking west.

Photo 8: August 5, 2021



View of Project area next to Bluebird Canyon Drive with blue gum trees on the north side of the road and lemonade berry scrub on the southside of the road, looking south.

STANTEC CONSULTING SERVICES INC. PHOTOGRAPHIC RECORD	
Client: City of Laguna Beach	**Job Number:** 2042611000
Site Name: Bluebird Canyon Drive Retaining Wall Project	**Photographer:** M. Tu, A. Townsend

Photo 9: August 5, 2021



Lemonade berry scrub south of Bluebird Canyon Drive, looking southwest.

Photo 10: August 5, 2021



View of drainage looking upstream of root structures growing across the drainage, looking east.

STANTEC CONSULTING SERVICES INC. PHOTOGRAPHIC RECORD	
Client : City of Laguna Beach	**Job Number:** 2042611000
Site Name: Bluebird Canyon Drive Retaining Wall Project	**Photographer:** M. Tu, A. Townsend

Photo 11: August 5, 2021



View of emergent wetland dominated by root celery (*Apium graveolens*) in the drainage, looking east.

Photo 12: August 5, 2021



View of culvert under Bluebird Canyon Drive on the west side of the road, looking east (east of this area the drainage is within private property).

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

ATTACHMENT 3 PLANT LIST

Table A3-1. Plants Species Observed in the BSA

Scientific Name[1]	Common Name[1]	Status[1,2]	Wetland Indicator Status[3]
Acacia redolens	prostrate acacia	non-native	NI
Apium graveolens	root celery	non-native	NI
Artemisia californica	California sagebrush	native	NI
Avena sp.	wild oat	non-native, invasive	NI
Baccharis pilularis	chaparral broom	native	NI
Baccharis salicifolia	mule fat	native	FAC
Bromus diandrus	ripgut brome	non-native, invasive	NI
Bromus madritensis	compact brome	non-native, invasive	UPL
Carpobrotus edulis	hottentot big	non-native, invasive	FACU
Chenopodium murale	nettle-leaved goosefoot	non-native	FACU
Corethrogyne filaginifolia	common sandaster	native	NI
Cylindropuntia sp.	Cholla	native	NI
Cynodon dactylon	Bermuda grass	non-native, invasive	FACU
Cyperus involucratus	umbrella plant	non-native	FACW
Datura wrightii	angel trumpet	native	UPL
Diplacus aurantiacus	sticky monkeyflower	native	FACU
Encelia californica	California bush sunflower	native	NI
Encelia farinosa	brittlebush	native	NI
Epilobium canum	wild fuchsia	native	NI
Erigeron bonariensis	South American horseweed	non-native	FACU
Eriogonum cinereum	ashy-leaf buckwheat	native	NI
Eriogonum fasciculatum	California buckwheat	native	NI
Escholtzia californica	California poppy	native	NI
Eucalyptus globulus	blue gum	non-native	NI
Euphorbia peplus	petty spurge	non-native	NI
Euphorbia prostrata	ground spurge	non-native	FACU
Foeniculum vulgare	sweet fennel	non-native, invasive	NI
Helichrysum luteoalbum	jersey cudweed	non-native	NI
Helminthotheca echioides	bristly oxtongue	non-native	FAC
Heteromeles arbutifolia	toyon	native	NI
Hirschfeldia incana	Spanish mustard	non-native, invasive	UPL
Hordeum murinum	bare barley	non-native, invasive	FACU
Isocoma menziesii	Menzies' goldenbush	native	FAC
Malacothamnus fasciculatus	chaparral mallow	native	NI
Malephora crocea	coppery mesembryanthemum	non-native	FACU
Marrubium vulgare	white horehound	non-native	FACU
Mesembryanthemum cordifolium	baby sun rose	non-native	FAC
Mesembryanthemum crystallinum	crystalline ice plant	non-native, invasive	FACU
Nicotiana glauca	tree tobacco	non-native, invasive	FACU
Opuntia sp.	prickly pear	native	NI
Phoenix canariensis	Canary Island date palm	non-native	NI
Pinus halepensis	Aleppo pine	non-native	NI

Platanus racemosa	western sycamore	native	FAC
Polygonum aviculare	prostrate knotweed	non-native	FAC
Polypogon monspeliensis	annual beard grass	non-native	FACW
Polypogon viridis	water beard grass	non-native	FACW
Populus alba	silver leaf poplar	non-native	NI
Rhus integrifolia	lemonade berry	native	NI
Ribes speciosum	fuchsia-flowered gooseberry	native	NI
Rosa californica	California wild rose	native	FAC
Salix lasiolepis	arroyo willow	native	FACW
Salsola tragus	Russian thistle	non-native	FACU
Sambucus nigra ssp. *caerulea*	blue elderberry	native	FACU
Solanum sp.	nightshade	native	NI
Sonchus oleraceus	sow thistle	non-native	UPL
Spergularia sp.	sandspurry	native	NI
Stipa miliaceum	smilograss	non-native	NI
Tamarix ramosissima	tamarisk	non-native, invasive	NI-but assumed FAC
Tetragonia tetragonioides	New Zealand spinach	non-native	NI
Toxicodendron diversilobum	poison oak	native	FACU
Tropaeolum majus	nasturtium	non-native	UPL
Typha sp.	cattail	native	OBL
Washingtonia robusta	Mexican fan palm	non-native, invasive	FACW
Xanthium strumarium	cocklebur	native	FAC

Notes: [1] Calflora 2021.

[2] Plant species are considered Invasive if CalIPC rated Moderate or higher (CalIPC 2021).

[3] Wetland Indicator Status (USACE 2021):

NI	No Indicator
OBL	Obligate Wetland plants, plants that occur almost always (est. probability >99 percent) in wetlands under natural conditions, but which may also occur rarely (est. probability <1 percent) in non-wetlands.
FACW	Facultative Wetland plants, plants that occur usually (est. probability >67 to 99 percent) in wetlands, but also occur (est. probability 1 to 33 percent) in non-wetlands.
FAC	Facultative plants, plants with a similar likelihood (est. probability 33 to 67 percent) of occurring in both wetlands and non-wetlands.
FACU	Facultative Upland plants, plants that occur sometimes (est. probability 1 percent to <33 percent) in wetlands but occur more often (est. probability >67% to 99%) in non-wetlands.
UPL	Obligate Upland plants, plants that occur rarely (est. probability <1 percent) in wetlands but occur almost always (est. probability >99 percent) in non-wetlands under natural conditions.

References:

Calflora. 2021. What Grows Here. Available at: https://www.calflora.org. Accessed August.

CalIPC (California Invasive Plant Council). 2021. The CalIPC Inventory. Available at: https://www.cal-ipc.org/plants/inventory/. Accessed August.

USACE (U.S. Army Corps of Engineers). 2021. National Wetland Plant List. Available at: https://cwbi-app.sec.usace.army.mil/nwpl_static/v34/home/home.html. Accessed: August.

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

ATTACHMENT 4 WILDLIFE LIST

Table A4-1. Wildlife Species Observed in the BSA

Scientific Name	Common Name
Birds	
Aphelocoma californica	California scrub jay
Buteo jamaicensis	red-tailed hawk
Calypte anna	Anna's hummingbird
Chamaea fasciata	wrentit
Colaptes auratus	Northern flicker
Corvus brachyrhynchos	American crow
Falco sparverius	American kestrel
Haemorhous mexicanus	house finch
Melozone crissalis	California towhee
Mimus polyglottos	northern mockingbird
Pipilo maculatus	spotted towhee
Psaltriparus minimus	bushtit
Spinus psaltria	lesser goldfinch
Zenaida macroura	mourning dove
Invertebrates	
Ants	
Linepithema humile	Argentine ant
Bees	
Apis mellifera	European honeybee
Butterflies	
Pieris rapae	cabbage white
Danaus plexippus	monarch
Leptotes marina	marine blue
Damsel and Dragonflies	
Libellula saturata	Flame skimmer
Enallagma cyanthigerum	Common blue damselfly
Mosquitoes	
Culex sp.	mosquito (larva)
Mammals	
Otospermophilus beecheyi	California ground squirrel
Thomomys bottae	Botta's pocket gopher
Reptiles	
Coluber lateralis lateralis	California striped racer
Sceloporus occidentalis	western fence lizard
Uta stansburiana	side-blotched lizard

Reference: **Bluebird Canyon Drive Retaining Wall (CIP 21- 9454) Biological and Aquatic Resources**

ATTACHMENT 5 SPECIAL-STATUS SPECIES POTENTIAL TO OCCUR TABLES

Table A5-1. Rare Plant Species Documented within Three Miles of the BSA

Scientific Name	Common Name	Status[1]	Habitat Description	Potential Occurrence within the BSA
Aphanisma blitoides	Aphanisma	CRPR 1B.2	Saline-adapted plant found in sand or scrub along the immediate coast.	**None.** No suitable habitat in the BSA.
Atriplex coulteri	Coulter's saltbush	CRPR 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and grassland.	**None.** No suitable habitat in the BSA.
Atriplex pacifica	south coast saltscale	CRPR 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and playas.	**None.** No suitable habitat in the BSA.
Atriplex parishii	Parish's brittlescale	CRPR 1B.1	Alkaline soils in chenopod scrub, playas, and vernal pools. Elevation: 25 to 1,900 meters (m).	**None.** No suitable habitat in the BSA.
Atriplex serenana var. *davidsonii*	Davidson's saltscale	CRPR 1B.2	Alkaline soils in coastal bluff scrub and coastal scrub.	**None.** No suitable habitat in the BSA
Brodiaea filifolia	Thread-leaved brodiaea	FT / SE / CRPR 1B.1	Chaparral (openings), coastal scrub (openings), and grassland. Occurs in openings on clay soils.	**None.** No suitable habitat in the BSA.
Calochortus weedii var. *intermedius*	mariposa-lily	CRPR 1B.2	Meadows and seeps, chaparral, lower montane coniferous forest. Vernally moist areas.	**None.** No suitable habitat in the BSA.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	CRPR 1B.1	Coastal bluff scrub (sandy), coastal dunes.	**None.** No suitable habitat in the BSA.
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	CRPR 1B.2	Chaparral, cismontane woodland.	**Moderate.** Suitable coastal scrub habitat in the BSA.
Dudleya multicaulis	many-stemmed dudleya	CRPR 1B.2	Chaparral, coastal sage scrub, and grassland.	**Low.** Suitable coastal scrub habitat in the BSA.
Dudleya stolonifera	Laguna Beach dudleya	FT / SE /1B.1	Chaparral, cismontane woodland, coastal sage scrub, and grassland.	**Low.** Suitable coastal scrub habitat in the BSA.
Euphorbia misera	cliff spurge	CRPR 2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub.	**None.** No suitable habitat in the BSA.

Scientific Name	Common Name	Status[1]	Habitat Description	Potential Occurrence within the BSA
Horkelia cuneata var. *puberula*	mesa horkelia	CRPR 1B.1	Chaparral (maritime), cismontane woodland, coastal scrub.	**Low.** Suitable coastal scrub habitat in the BSA.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	CRPR 1B.2	Chaparral, coastal scrub (often disturbed areas, sandy), wetland-riparian.	**Low.** Suitable coastal scrub habitat in the BSA.
Nama stenocarpa	mud nama	CRPR 2B.2	Marshes and swamps, lake shores, riverbanks, intermittently wet areas.	**None.** No suitable habitat in the BSA.
Navarretia fossalis	Spreading navarretia	FT / CRPR 1B.2	Chenopod scrub, marshes, and vernal pools.	**None.** No suitable habitat in the BSA.
Quercus dumosa	Nuttall's scrub oak	CRPR 1B.1	Closed-cone coniferous forest, chaparral, coastal scrub, sandy, clay loam	**Low.** Suitable coastal scrub habitat in the BSA.
Verbesina dissita	big-leaved crownbeard	CRPR 1B.1	Chaparral (maritime), coastal sage scrub	**None.** No suitable habitat in the BSA.

Notes: [1] FT = Federally Threatened, SE = California (state) Endangered.

California Rare Plant Ranks (CRPR):
1B = Rare throughout their range with most of them endemic to California
2B = Rare in California but more common outside California
0.1 = Seriously threatened in California (over 80 percent of occurrences threatened; high degree and immediacy of threat)
0.2 = Moderately threatened in California (20 to 80 percent of occurrences threatened; moderate degree and immediacy of threat)

Table A5-2. Special-Status Fish and Wildlife Species Documented within Ten Miles of the BSA

Common Name	Scientific Name	Status[1] Federal/State	Habitat Description	Potential Occurrence within Project Area
Amphibians				
Arroyo toad	*Anaxyrus californicus*	FE / SSC	Intermittent and perennial streams	**None.** No suitable habitat in the BSA.
Western spadefoot	*Spea hammondii*	- / SSC	Ponds and vernal pools.	**None.** No suitable habitat in the BSA.
Reptiles				
California glossy snake	*Arizona elegans occidentalis*	- / SSC	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	**Low.** Suitable habitat is present in BSA.
Coast horned lizard	*Phrynosoma blainvillii*	- / SSC	Coastal sage scrub, chaparral, grasslands, oak woodland, riparian woodland, pinyon-juniper woodland, coniferous forest.	**Moderate.** Suitable habitat is present in the BSA.
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	- / SSC	Found in semiarid areas with sparse vegetation and open areas, woodland & riparian areas.	**Moderate.** Suitable habitat is present in the BSA.
Orange-throated whiptail	*Aspidoscelis hyperythra*	- / WL	Found in sage scrub and chaparral habitats.	**Moderate.** Suitable habitat is present in the BSA.
Red-diamond rattlesnake	*Crotalus ruber*	- / SSC	Coastal sage scrub, chaparral, oak woodland, rocky hillsides, and rocky desert flats.	**Moderate.** Suitable habitat is present in BSA.
Southern California legless lizard	*Anniella stebbinsi*	- / SSC	Sandy or loose loamy soils, preferably with some moisture, under sparse vegetation.	**Moderate.** Suitable habitat is present in BSA.
Two-striped garter snake	*Thamnophis hammondii*	- / SSC	Found near water including pools, creeks, cattle tanks, and others. Associated with oak woodland, riparian, coastal sage scrub, scrub oak, sparse pine, chaparral, and brushland habitats.	**Low.** The small area of suitable drainage habitat is surrounded by Bluebird Canyon Drive and residential development.
Western pond turtle	*Emys marmorata*	- / SSC	Requires surface water for breeding and foraging. Habitat usually includes aquatic vegetation. Occurs below 6,000-foot elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.3 mile from water for egg-laying.	**None.** No suitable habitat in the BSA. The ponded water in the drainage is too small to support western pond turtle.

Birds				
Belding's savannah sparrow	*Passerculus sandwichensis bedlingi*	- / SE	Coastal salt marsh specifically dense pickleweed vegetation.	**None.** No suitable habitat occurs in the BSA.
Bank swallow	*Riparia riparia*	- / ST	Banks and bluffs along rivers and streams.	**Low.** Small areas of marginally suitable habitat in the BSA.
Burrowing owl	*Athene cunicularia*	- / SSC	Inhabits grassland with burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation; agricultural areas along roadsides and water conveyance structures near cropland.	**Low.** Small areas of marginally suitable habitat in the BSA.
California horned lark	*Eremophila alpestris actia*	- / WL	Grasslands, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	**Low.** Limited suitable habitat in the BSA. Most potential habitat is mowed.
California least tern	*Sternula antillarum browni*	FT / ST	Coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, salt pans and mudflats at lagoons and estuaries, and man-made salt ponds.	**None.** No suitable habitat in the BSA.
Coastal cactus wren	*Campylorhynchus brunneicapillus sandiegensis*	- / SSC	Southern California coastal sage scrub. Wrens require tall cactus for nesting and roosting.	**Low.** Due to lack of suitable cactus patches.
Coastal California gnatcatcher	*Polioptila californica californica*	FT / SSC	Obligate, permanent resident of coastal sage scrub below 3,400 feet in southern California. Low, coastal sage scrub in arid washes, on mesas & slopes.	**Low.** A patch of California sagebrush dominated coastal sage scrub occurs in the northwest portion of the BSA.
Cooper's hawk	*Accipiter cooperi*	- / WL	Woodland, chiefly of open, interrupted, or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	**Moderate:** Suitable habitat occurs in the BSA.
Ferruginous hawk	*Buteo regalis*	- / WL	Open terrain, grasslands, deserts during migration & winter	**Low.** Limited suitable habitat in the BSA.
Grasshopper sparrow	*Ammodramus savannarum*	- / SSC	Grasslands with scattered shrubs.	**Low.** Small areas of marginally suitable habitat in the BSA.
Light-footed Ridgeway's rail	*Rallus obsoletus levipes*	FE / SE	Dense marsh vegetation.	**None.** No suitable habitat in the BSA.

Long-eared owl	*Asio otus*	- / SSC	Open landscapes with groups of trees, hedges, or small woods, as well as pastureland with rows of trees and bushes, any type of forest with clearings, forest edge, orchards with old fruit trees, parks, etc.	**Low.** Small areas of marginally suitable habitat in the BSA.
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	- / WL	Breeds in coastal sage scrub and chaparral habitats.	**Moderate.** Suitable habitat is present in the BSA.
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE / SE	Breeds in dense riparian areas associated with nearby rivers, swamps, and wetlands.	**None.** No suitable habitat in the project area.
Tricolored blackbird	*Agelaius tricolor*	- / ST	Highly colonial species, requires open water, protected nesting substrate, & foraging area with insect prey near the colony.	**None.** No suitable habitat in the BSA.
Western snowy plover	*Charadrius alexandrinus*	FT / SSC	Coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, salt pans and mudflats at lagoons and estuaries, and man-made salt ponds.	**None.** No suitable habitat in the BSA.
White-tailed kite	*Elanus leucurus*	- / FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Low.** Small areas of marginally suitable habitat in the BSA. May forage in BSA but unlikely to nest.
Yellow rail	*Coturnicops noveboracensis*	- / SSC	Marshes and meadows with moist soil or shallow standing water.	**None.** No suitable habitat in the BSA.
Yellow warbler	*Setophaga petechia*	- / SSC	Dense riparian vegetation.	**Low.** Small areas of marginally suitable habitat in the BSA.
Yellow-breasted chat	*Icteria virens*	- / SSC	Nests in dense riparian thickets and brushy tangles in the lower portions of foothill canyons and in the lowlands.	**Low.** Small areas of marginally suitable habitat in the BSA.
Fish				
Arroyo chub	*Gila orcuttii*	- / SSC	Fresh water	**None.** No suitable habitat in the BSA.
Steelhead - southern California DPS[2]	*Oncorhynchus mykiss irideus pop. 10*	FE / -	Fresh and salt water	**None.** No suitable habitat in the BSA.

Invertebrates				
Monarch	*Danaus plexippus pop. 1*	FC / -	Milkweed patches. Eucalyptus woodlands for winter roosting.	**Occurs.**
Riverside fairy shrimp	*Streptocephalus woottoni*	FE / -	Surface water in deep vernal pools or large ponds.	**None.** No suitable habitat in the BSA.
Mammals				
Big free-tailed bat	*Nyctinomops macrotis*	- / SSC	Cliffs, rocky outcrops, desert scrub, coniferous forests, montane woodland, and riparian areas.	**Low.** Limited suitable habitat in the BSA.
Dulzura pocket mouse	*Chaetodipus californicus femoralis*	- / SSC	Variety of habitats including coastal scrub, chaparral & grassland especially grass-chaparral edges.	**Moderate.** Suitable habitat is present in the BSA.
Pacific pocket mouse	*Perognathus longimembris pacificus*	FE / SSC	Grassland-sage scrub edges. Occurs in three locations one in Dana Point and two on Camp Pendleton.	**None.** No suitable habitat in the BSA.
Pallid bat	*Antrozous pallidus*	- / SSC	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Low.** Could forage but limited by minimal suitable roosting habitat in BSA.
San Diego desert woodrat	*Neotoma lepida intermedia*	- / SSC	Coastal sage scrub and chaparral with rock outcrops, boulders, cactus patches, or dense undergrowth.	**Low.** Limited suitable habitat is present. Little cactus in the sage scrub habitat.
Townsend's big-eared bat	*Corynorhinus townsendii*	- / SSC	Occurs in coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Roosts in caves, mines, buildings, bridges, rock crevices and hollow trees.	**Low.** Could forage, but there is sparse suitable roosting habitat present in study area.
Western mastiff bat	*Eumops perotis californicus*	- / SSC	Primarily a cliff dwelling species. Foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	**Low.** Could forage, but little or no suitable roosting habitat present in study area.

Notes:

[1] FC = federal candidate, FE = federally endangered, FP = California fully protected, FT = federally threatened, SE = California (state) endangered, SSC = California Species of Special Concern, ST = California (state) threatened, WL=watchlist

[2] DPS = distinct population segment

Appendix D CULTURAL RESOURCES MEMORANDUM

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

March 18, 2022

City of Laguna Beach
505 Forest Avenue
Laguna Beach, CA 92651

Re: *Cultural Resource Inventory Report for the Bluebird Canyon Drive Evacuation Route Widening and Retaining Wall Project.*

Stantec Consulting Services Inc. (Stantec) is pleased to provide the results of our cultural resource inventory report in support of Bluebird Canyon Drive Evacuation Route Widening and Retaining Wall Project (Project).

Project Location and Description

The Project is located within the City of Laguna Beach (City) and along an approximate 12-foot wide x 850-foot long narrow two lane stretch of Bluebird Canyon Drive between Oriole and Rancho Laguna Drives (Figure 1). The Project roadway has no shoulder or sidewalks and is situated along the rugged slopes of the San Joaquin Hills that characterize this area of Laguna Beach.

The City proposes the construction of a retaining wall on the north side of Bluebird Canyon Drive. Additionally proposed is a widening of the north side of Bluebird Canyon Drive from approximately Rancho Laguna Road westerly about 850 linear feet to provide an eight-foot-wide roadway shoulder to better accommodate emergency vehicles access/egress and residential evaluation for fire safety.

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

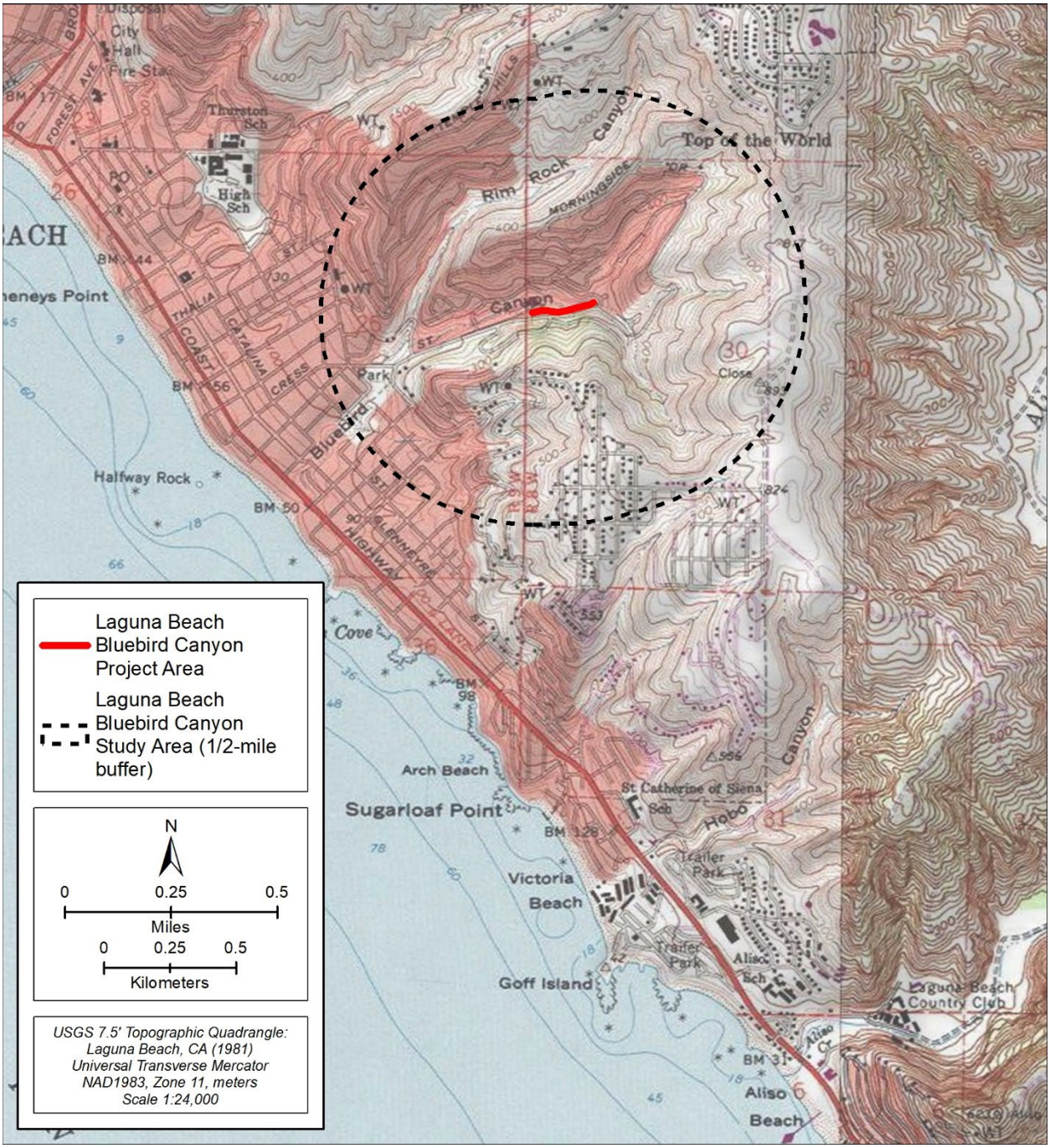


Figure 1. Project Area and Half-mile Study Area

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

Cultural Resources Inventory Report

Stantec Consulting Services Inc. (Stantec) conducted an archival records search as part of the Desktop Critical Issues Analysis for the Laguna Beach Bluebird Canyon Retaining Wall Project. Provided below is a summary of the archival records search conducted on December 13, 2021, by Hubert Switalski at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) located at California State University Fullerton (CSUF). A summary of findings is provided below.

Records Search

This report summarizes a records search of the entire Project Area as well as a ½-mile radius surrounding the Project Area conducted on December 13, 2021, at the SCCIC. The search entailed a review of previously recorded prehistoric and historical archaeological sites, historic period built-environment resources, as well as a review of known cultural inventories/surveys, test excavations, data recovery projects, monitoring projects and regional cultural overviews.

Previously Conducted Cultural Resource Studies

The search revealed that one archaeological study was previously conducted within the Project Area, yielding negative results, and seven cultural resource studies have been previously conducted within the surrounding ½-mile Study Area. Of those seven studies, six were cultural resource surveys/inventories (Anonymous 1973; Anonymous 1978; Cottrell 1977; Crabtree 1976; Mabry 1978; Unknown 2008; and Whitney-Desautels 1991), and one was a listing of Native American campsites (Romero 1935).

Of the 7 cultural resource surveys/inventories, three were positive and four were negative. For a summary of previously conducted cultural resource studies see Table 1.

TABLE 1
SUMMARY OF CULTURAL RESOURCE STUDIES PREVIOUSLY CONDUCTED WITHIN THE STUDY AREA.

Author	Year	Level of Investigation	Results	Report Reference No.
Anonymous	1973	Survey	Positive	OR-00705
Anonymous	1978	Survey	Negative	*OR-00230
Cottrell, Marie G.	1977	Survey	Negative	OR-00547
Crabtree, Robert H.	1976	Survey	Negative	OR-00567

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

Author	Year	Level of Investigation	Results	Report Reference No.
Mabry, Theo	1978	Survey	Positive	OR-00294
Romero, John B.	1935	Native American Campsite Listing	-	OR-00512
Unknown	2008	Survey	Positive	OR-04179
Whitney-Desautels, Nancy A. and Fred Sundberg	1991	Survey	Negative	OR-01147

**Study conducted within the current Project Area*

Previously Recorded Archaeological Resources

Results of the archival background records search also revealed no previously recorded resources within the Project Area and two prehistoric resources within a ½-mile radius of the current Project Area (Table 2). Resource 30-00007 is a prehistoric Native American campsite documented by John Romero in 1935 and 30-00791 consists of a shell scatter.

TABLE 2
SUMMARY OF KNOWN CULTURAL RESOURCES LOCATED WITHIN THE STUDY AREA.

Quad	Trinomial	Primary No.	Component	Description
Laguna Beach	CA-ORA-0007	30-00007	Prehistoric	Romero's Camp
Laguna Beach	CA-ORA-00791	30-00791	Prehistoric	Shell scatter

*Site located within the project area

Archival Research

As part of the archival research the following sources were consulted:

TABLE 3
SUMMARY OF ARCHIVAL RESEARCH

Name	**Location**	**Results**
Archaeological Determinations of Eligibility	SCCIC	None in Project location

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

Name	Location	Results
Built Environment Resource Directory (BERD) for Orange County (Built Environment Resource Directory (BERD)	Built Environment Resource Directory (BERD) (ca.gov)	None in Project location
National Register of Historic Places (NRHP)	NPGallery NRHP Archive Search (nps.gov)	None in Project location
California Register of Historic Resources	https://ohp.parks.ca.gov/ListedResourcesnational%20/?view=county&criteria=30	None in Project location
California State Landmarks		None in Project location
California Points of Historical Interest		None in Project location
Laguna Beach Historic Register	lagunabeachcity.net	None in Project location
Laguna Beach 1981 Inventory		None in Project location
Laguna Beach 2014 Draft Inventory		None in Project location

Additionally, the following historic period topographic maps were consulted: Laguna Beach (1948, 1965) 7.5-minute and 15-minute topographic quadrangles.

Native American Heritage Commission outreach

On August 11, 2021, at the request of the City, Stantec submitted a request to the NAHC for a Sacred Lands File search and a Tribal Contacts List. The results of each were forwarded to the City for use in their Assembly Bill 52 consultation obligations.

Archaeological Survey

On March 11, 2022, Stantec Archaeologist, Saeed Sawaed conducted an intensive pedestrian survey of the Project location. Mr. Sawaed was able to survey approximately 75% of the Project location. The remaining 25% that was not surveyed was constrained by private property and/or steep slope and impenetrable vegetation (south side of road). Mr. Sawaed implemented a 10-meter transect along the shoulder of the road, where accessible. The Project location is mostly asphalt paved. The north side of the road, near the east end of the Project location features the Bluebird Canyon Natural Trail, the pathway of which leads away from the Project area. No cultural resources of archaeological (prehistoric/historic) or historic architectural were identified within the Project location during the pedestrian survey. The Survey Form can be found in Attachment 1.

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

Summary

Results of the archival background records search revealed that one archaeological study was previously conducted within the Project Area and seven were conducted within a ½-mile radius of the Project Area. Furthermore, no resources have been previously recorded within the Project Area and two prehistoric resources were recorded within a ½ mile radius of the Project Area.

The Project Area is located along the southern California coastline and given known cultural resource sensitivity in the region, Stantec conducted an archaeological survey of the Project location. The results of the survey were negative. The City will undertake AB 52 consultation in support of the Project.

Respectfully,

Shannon Loftus, MA HP, RPA
Principal-Cultural Resource Technical Lead (Southern CA / HI)
Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627

Mobile: 661.473-4590
shannon.loftus@stantec.com

Attachment: Cultural Survey Form

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

References

Anonymous
1973. *A Final Report on the Scientific Resources Survey for Moulton Ranch.* Report on file at the South Central Coastal Information Center.

___
1978. *Archaeological Survey at Bluebird Canyon Laguna Beach, California.* Report on file at the South Central Coastal Information Center.

Cottrell, Marie G.
1977. *An Archaeological Survey Along Proposed Route of a Fire Supply Line in Laguna Beach.* Report on file at the South Central Coastal Information Center.

Crabtree, Robert H.
1976. *Scientific resources Survey (Archaeology and Paleontology) of Arch Beach Heights – Portafina Project, Laguna Beach, California.* Report on file at the South Central Coastal Information Center.

Mabry, Theo
1978. *Archaeological Records Research and Reconnaissance Survey – 118-acre Parcel, Arch Beach Heights Area Laguna Beach, Ca.* Report on file at the South Central Coastal Information Center.

Romero, John B.
1935. *Orange County, California, Indian Campsites.* Report on file at the South Central Coastal Information Center.

Unknown
2008. *Laguna Beach Historic Resources Inventory.* Report on file at the South Central Coastal Information Center.

Whitney-Desautels, Nancy A. and Fred Sundberg
1991. *Archaeological Survey of the Diamond/Crestview Study Area Laguna Beach Orange County, California.* Report on file at the South Central Coastal Information Center.

Stantec Consulting Services Inc.
5500 Ming Avenue, Suite 410
Bakersfield, CA 93309-4627
Tel: (661) 617.5873

Attachment

Cultural Survey Form

Cultural Survey Form 2.0

Project	Bluebird (2042611000)
ID	213506
Survey Date	03/10/2022
User	Saeed Sawaed
Project Name	Bluebird

Survey Location Information

Survey Area (select one, or create a new one)	Bluebird Canyon Drive
State (enter full name)	California
County/Counties	Orange
Land Ownership	Private
Land Owner (enter the specific agency or land owner [enter address if known], otherwise enter "unknown")	Unknown

Survey Description

Surveyed By (Enter first and last name)	Saeed Sawaed
Infrastructure Type (What are you surveying for [ex. distribution pole , oil and gas pipeline, street widening, housing unit, etc.]? If you do not know, put "unknown", or if this is for research purposes put N/A")	N/A
Is this a...	New Survey
General Topography, Vegetation/ Ground Cover (Use this section to provide an overview of the environment. Detail more specific to your survey area can be provided in the current surface conditions)	Survey area is located within the Laguna Hills mountain terrain. Residential houses are in the surrounding area with an active road cutting N/S. Abundant vegetation in the surrounding area.
Weather, Safety Concerns, Site Visits from Other Personnel	Late Morning: 72F/Mostly Sunny with offshore breeze Surveyed boundaries are located between an active residential road and residential properties. Be mindful of the residence in the area and oncoming traffic. Terrain is on an elevated slope, watch for any slip trip and fall hazards.
Access to Survey Area (Provide as much detail as possible)	Survey area can be accessed from Route CA-1 or from Route CA-133 South leading into CA-1.

Current Condition of Survey Area	Abundant vegetation in the surrounding area. Active hiking trail starting from the south end of the survey boundary line
Acres Surveyed (if unknown, type "unknown")	Unknown

Survey Type Percentage	
Percent Pedestrian Coverage	75
Percent Visual Overview Coverage	25
Percent Aerial Coverage	0
Transect Width	10 Meters

Photo Point 1	
Drop a Point	33.53641774,-117.76388463
Latitude	33.53641774
Longitude	-117.76388463
UTM	11S 429075m E 3711018m N
Accuracy	4.98 m
Field Number	P220310-105-01
Detailed Description/ Location (include [1] a brief description, [2] view direction [3] and photo number "01, 02, 03....")	Overview of surveyed area
Photo (HORIZONTAL ONLY)	



Facing East; survey area overview from W corner . Start of trailhead to left; Bluebird Canyon Rd to right



Facing North; survey area overview from W corner



Facing Northeast; sign at trailhead

Comments	Along the northern boundary of the survey area exists a pedestrian trail named “Bluebird Cyn Nature Trail”. The pathway of the main trail leads away from the survey boundary.

Photo Point 2	
Drop a Point	33.53696221,-117.76107586
Latitude	33.53696221
Longitude	-117.76107586
UTM	11S 429336m E 3711076m N
Datum	WGS84
Accuracy	4.9 m
Field Number	P220310-105-02
Detailed Description/ Location (include [1] a brief description, [2] view direction [3] and photo number "01, 02, 03....")	Overview of Surveyed area
Photo (HORIZONTAL ONLY)	



Facing West; Overview of survey area. Bluebird Canyon Rd to left



Facing West; Overview of Bluebird Canyon Rd/Rancho Laguna Rd intersection



Facing Southwest; Bluebird Canyon Road near Ranch Laguna Rd intersection

Comments

Photo Point 3

Drop a Point	33.53638593,-117.76391319
Latitude	33.53638593
Longitude	-117.76391319
UTM	11S 429073m E 3711015m N
Accuracy	4.51 m
Field Number	P220310-105-03
Detailed Description/ Location (include [1] a brief description, [2] view direction [3] and photo number "01, 02, 03....")	Overview of surveying areas

Photo (HORIZONTAL ONLY)



Facing East; Overview of Bluebird Canyon Rd from W end. Southern boundary to the right

Comments	Southern boundary of survey area has a steep sloping cliff face thick with foliage. Adjacent road is private. Not possible to do transect in between.

Photo Point 4

Drop a Point	33.53658371,-117.76256510
Latitude	33.53658371
Longitude	-117.7625651
UTM	11S 429198m E 3711036m N
Accuracy	5.26 m
Field Number	P220310-105-04
Detailed Description/ Location (include [1] a brief description, [2] view direction [3] and photo number "01, 02, 03....")	Overview of surveying area

Photo (HORIZONTAL ONLY)



Facing North; Continuation of trail outside of survey boundary area



Facing East; Continuation of trail outside of survey boundary area

Comments

Appendix E PALEONTOLOGICAL RESOURCE ASSESSMENT

Paleontological Resource Assessment for the Bluebird Canyon Drive Retaining Wall Project (CIP 21-9424), City of Laguna Beach, California

August 27, 2021

Prepared for:

City of Laguna Beach
505 Forest Avenue
Laguna Beach, California, 92651

Prepared by:

Alyssa Bell, Ph.D.
Stantec Consulting Services Inc.
38 Technology Drive
Irvine CA 92618-5312



PALEONTOLOGICAL RESOURCE ASSESSMENT FOR THE BLUEBIRD CANYON DRIVE RETAINING WALL PROJECT (CIP 21-9424), CITY OF LAGUNA BEACH, CALIFORNIA

Revision	Description	Author		Quality Check		Independent Review	

PALEONTOLOGICAL RESOURCE ASSESSMENT FOR THE BLUEBIRD CANYON DRIVE RETAINING WALL PROJECT (CIP 21-9424), CITY OF LAGUNA BEACH, CALIFORNIA

This document entitled Paleontological Resource Assessment for the Bluebird Canyon Drive Retaining Wall Project (CIP 21-9424), City of Laguna Beach, California Stantec Consulting Services Inc. (“Stantec”) for the account of City of Laguna Beach (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by  _____
(signature)
Alyssa Bell, Senior Paleontologist

Reviewed by  _____
(signature)
Cara Corsetti, Senior Principal

Approved by  _____
(signature)
Gilberto Ruiz, Principal Environmental Planner

Table of Contents

EXECUTIVE SUMMARY ..... **I**

ABBREVIATIONS ..... **III**

GLOSSARY ..... **IV**

1.0 INTRODUCTION **1**
1.1 PROJECT DESCRIPTION 1
1.1.1 Project Location and Boundaries 1
1.1.2 Project Plans 1
1.2 PALEONTOLOGICAL RESOURCES 4

2.0 REGULATORY FRAMEWORK **4**
2.1 STATE OF CALIFORNIA 5
2.1.1 California Environmental Quality Act 5
2.1.2 Public Resources Code 5
2.1.3 California Coastal Act, Section 30244 5
2.2 LOCAL REGULATIONS 5
2.2.1 City of Laguna Beach General Plan 5

3.0 PROFESSIONAL STANDARDS **6**

4.0 GEOLOGIC SETTING **6**

5.0 METHODOLOGY **7**
5.1 RECORDS SEARCH 7
5.2 GEOTECHNICAL STUDY 7
5.3 SCIENTIFIC LITERATURE REVIEW 7
5.4 PALEONTOLOGICAL RESOURCES ASSESSMENT 8

6.0 RESULTS **8**
6.1 PROJECT AREA GEOLOGY 8
6.2 PALEONTOLOGICAL POTENTIAL OF GEOLOGIC UNITS IN THE PROJECT AREA 9

7.0 RECOMMENDATIONS AND MANAGEMENT CONSIDERATIONS **12**

8.0 REFERENCES **14**

LIST OF TABLES

Table 1 Summary of the records search from the LACM showing the closest fossil localities in the Miocene-aged Topanga Formation 12
Table 2 Paleontological potential of geologic units within the Project Area 12

LIST OF FIGURES

Figure 1. Project Vicinity. 2
Figure 2. Project Location. 3
Figure 3. Geologic map of the Project Area after on Morton et al. (2004) 10

LIST OF APPENDICES

APPENDIX A 1

Executive Summary

Stantec Consulting Services, Inc. (Stantec) conducted a paleontological resources assessment on behalf of the City of Laguna Beach for the Bluebird Canyon Drive Retaining Wall Project (the Project) located along Bluebird Canyon Drive in the City of Laguna Beach in Orange County, California. This paleontological study was conducted in support of City of Laguna Beach for the proposed road widening and installation of retaining/debris walls.

The Project is subject to compliance with the California Environmental Quality Act (CEQA) requirements regarding the Project's potential impacts on paleontological resources. As part of CEQA compliance, a paleontological resources assessment was conducted to determine potential impacts of the proposed Project on paleontological resources.

This paleontological resource investigation consisted of a museum records search from the Natural History Museum of Los Angeles County of the Project Area and vicinity, a review of the most recent geologic mapping, a geotechnical investigation of the Project Area, and relevant scientific literature, and a pedestrian survey. This research was used to assign paleontological potential rankings of the Society of Vertebrate Paleontology (2010) to the geologic units present in the Project Area, either at the surface or in the subsurface. The results of this assessment indicate that two geologic units are present in the Project Area: landslide deposits, which are assessed as having low paleontological potential, and the Topanga Formation, which is assessed as having high paleontological potential. Paleontological mitigation measures may be required to satisfy CEQA requirements that protect paleontological resources. In order to avoid impacts to paleontological resources, Stantec recommends the following mitigation measures be implemented:

1. A paleontologist meeting professional standards as defined by Murphey et al. (2019) shall be retained as the Project Paleontologist to oversee all aspects of paleontological mitigation, including paleontological monitoring of earthwork and ground disturbing activities into undisturbed geologic units with high paleontological potential, to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). Within the Project Area the Topanga Formation has high paleontological potential and is present as shallowly as 1.5 feet below ground surface (bgs).

2. The Project Paleontologist shall develop a Worker's Environmental Awareness Program (WEAP) training that communicates requirements and procedures for the inadvertent discovery of paleontological resources during construction to be delivered by the paleontologist or their designated representative to the construction crew prior to the onset of ground disturbance.

3. In the event that paleontological resources are encountered during construction activities, all work must stop in the immediate vicinity of the finds while the paleontological monitor documents the find. The designated Project Paleontologist shall assess the find. Should the Project



Paleontologist assess the find as significant, the find shall be collected and curated in an accredited repository along with all necessary associated data and curation fees.

Based on the findings in this study and the implementation of the above mitigation measures, the proposed Project should not cause an adverse impact to paleontological resources. Therefore, no additional paleontological resource studies are recommended or required at this time. Changes to the Project plans from those assessed in this study will require additional assessment for impacts to paleontological resources.



Abbreviations

CEQA	California Environmental Quality Act
LACM	Natural History Museum of Los Angeles County
SVP	Society of Vertebrate Paleontology

Glossary

Paleontological Resource	Any evidence of ancient life. This includes the remains of the body of an organism, such as bones, skin impressions, shell, or leaves, as well as traces of an organism's activity, such as footprints or burrows, called trace fossils, and relevant associated geologic data. Also referred to as fossils.

1.0 INTRODUCTION

Stantec Consulting Services, Inc. (Stantec) conducted a paleontological resources assessment on behalf of the City of Laguna Beach for the Bluebird Canyon Drive Retaining Wall Project (the Project) located at along Bluebird Canyon Drive in the City of Laguna Beach in Orange County, California (Figure 1). This paleontological study was conducted in support of the City of Laguna Beach for the proposed improvements along Bluebird Canyon Drive, including road widening and installation of retaining/debris walls.

The Project is subject to compliance with the California Environmental Quality Act (CEQA) requirements regarding the Project's potential impacts on paleontological resources. As part of CEQA compliance, Stantec's Senior Paleontologist conducted a paleontological resources assessment to assess potential impacts of the proposed Project on paleontological resources.

1.1 PROJECT DESCRIPTION

1.1.1 Project Location and Boundaries

The Project is located within the City of Laguna Beach along Bluebird Canyon Drive west of the intersection with Rancho Laguna Road Specifically, the Project Area is located in a portion of Section 30, Township 7 South, Range 8 West, as depicted on the Laguna Beach, CA USGS 7.5-minute series topographic quadrangle (Figure 2).

1.1.2 Project Plans

The City of Laguna Beach proposes the widening of a portion of the north side of Bluebird Canyon Drive from approximately Rancho Laguna Road westerly about 850 linear feet in order to provide an eight-foot-wide roadway shoulder. The widening is needed for emergency vehicles egress. Bluebird Canyon Drive is a key evacuation route, and widening the road is needed to provide sufficient emergency egress, as identified in the City's Wildfire Mitigation and Fire Safety Report. The existing two-direction 12-foot lanes would remain in their current configurations. In addition, access to the existing stairs and path along Bluebird Canyon Drive (north side) would be preserved in place with a barrier opening. These activities and features would require the removal and relocation of a number of power poles. Coordination would be undertaken with the City and utility provider, Southern California Edison.

As part of the widening, a four- to eight-foot-high retaining wall, extending some 950 feet would be constructed along the north side of the roadway. Cable railing, guard rail, and a six-inch curb would also be constructed along this portion of the widened roadway. At a future date, the proposed Project may also require construction of a new retaining wall along the south side of the road. This southern retaining wall/debris wall is estimated to be eight to 12-feet in total height including two to six feet of retention and a six-foot extension for future debris capture. It would extend approximately 850 feet westerly from the stop

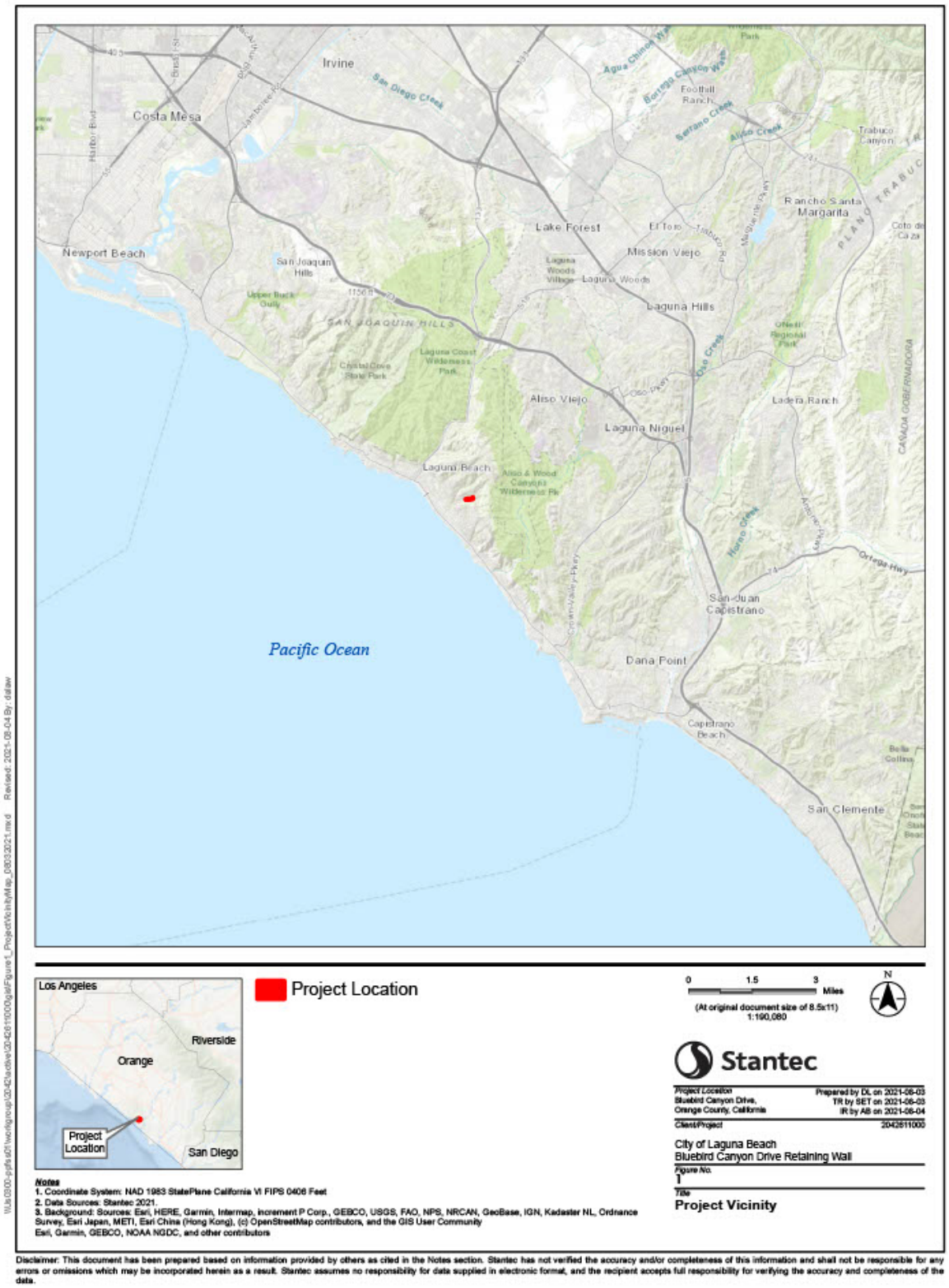


Figure 1. Project Vicinity.

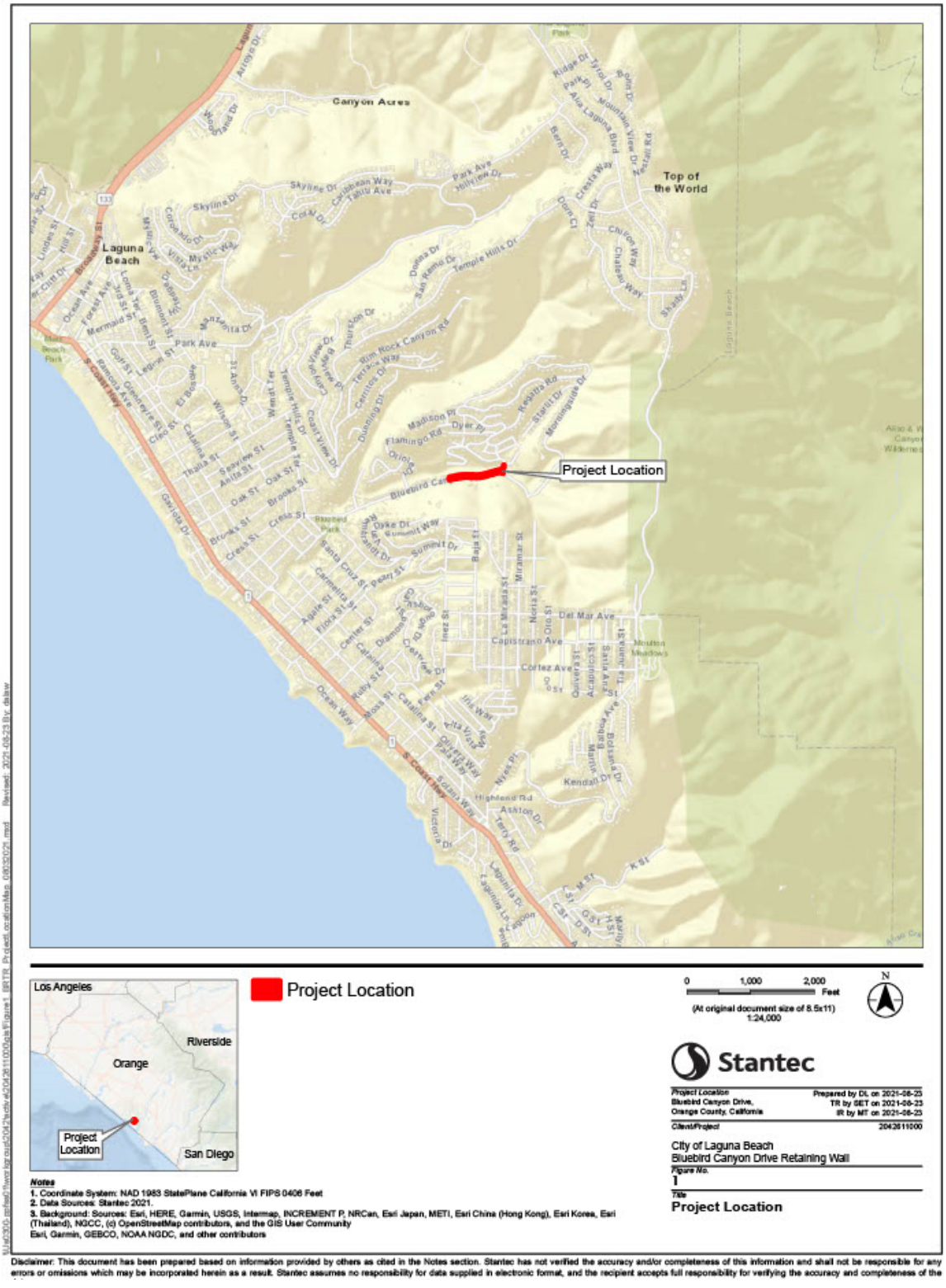


Figure 2. Project Location.

sign at Rancho Laguna Road/Bluebird Canyon Drive. In addition, it may also require modification to all or a portion of the existing slope. The preliminary design indicates the excavations for deepened foundations for both walls would be some 30-feet below existing grades in depth. Runoff from the site would be directed along the existing and new curb and would drain as it currently does via sheet flow (along Bluebird Canyon Drive) and percolation into the existing slope areas. The project will include drainage elements needed to protect the slope and to drain the flat areas in the superelevation transition along the middle segment of the project. It is assumed that the other existing storm drain facilities will be protected in place and will not be impacted.

Staging areas for equipment and materials would be left to the discretion of the contractor. The equipment mix is expected to be similar to those associated with these types of projects and may include an excavator, drill rig, trucks, crane, loaders, asphalt mixer, road roller, grader, and forklift. The construction of the proposed Project (not including the southerly retaining wall) is expected to take approximately four months to complete.

1.2 PALEONTOLOGICAL RESOURCES

Paleontological resources, or fossils, are any evidence of ancient life. This includes the remains of the body of an organism, such as bones, skin impressions, shell, or leaves, as well as traces of an organism's activity, such as footprints or burrows, called trace fossils. In addition to the fossils themselves, geologic context is an important component of paleontological resources, and includes the stratigraphic placement of the fossil as well as the lithology of the rock in order to assess paleoecologic setting, depositional environment, and taphonomy. Fossils are protected by federal, state, and local regulations as nonrenewable natural resources.

The Society of Vertebrate Paleontology (SVP) defines significant paleontological resources as

> "identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i. e., older than about 5,000 radiocarbon years)" [SVP 2010].

It should be noted that the threshold for significance varies with a variety of factors, including geologic unit, geographic area, and the current state of scientific research, and may also vary between different agencies (Murphey et al. 2019).

2.0 REGULATORY FRAMEWORK

California and the City of Laguna Beach have enacted laws and regulations that provide for the protection of paleontological resources. This investigation was conducted to meet these requirements regarding paleontological resources on the lands proposed for development. It is expected that any potential adverse impacts arising from any proposed development activities will be contained within the Project Area, as shown in Figures 1 and 2.

2.1 STATE OF CALIFORNIA

2.1.1 California Environmental Quality Act

CEQA (Public Resources Code [PRC] Section 21000 et seq) requires that before approving most discretionary projects, the Lead Agency must identify and examine any significant adverse environmental effects that may result from activities associated with such projects. As updated in 2016, CEQA separates the consideration of paleontological resources from cultural resources (PRC Section 21083.09). The Appendix G checklist (Title 14, Division 6, Chapter 3, California Code of Regulations [CCR] 15000 et seq.) requires an answer to the question, "Will the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" Under these requirements, Stantec has conducted a paleontological resources assessment to determine impacts of the proposed Project on paleontological resources within the Project Area.

2.1.2 Public Resources Code

The California Public Resources Code (PRC) (Chapter 1.7, Sections 5097 and 30244) includes additional state-level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts to paleontological resources resulting from development on state lands, define the removal of paleontological sites or features from state lands as a misdemeanor, and prohibit the removal of any paleontological site or feature from state land without permission of the applicable jurisdictional agency.

2.1.3 California Coastal Act, Section 30244

The California Coastal Act authorizes the California Coastal Commission to protect paleontological resources in Section 30244, which states, "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

2.2 LOCAL REGULATIONS

2.2.1 City of Laguna Beach General Plan

The Open Space and Conservation Element of the City of Laguna Beach General Plan (2012) recognizes the importance of paleontological resources with two policies that provide for their protection:

> **12A**. Promote the conservation of land having archaeological and/or paleontological importance, for its value to scientific research and to better understand the cultural history of Laguna Beach and environs; and
>
> **12D**. Preserve cultural/scientific sites, including geologically unique formations having archaeological significance.

3.0 PROFESSIONAL STANDARDS

The SVP (2010), the Bureau of Land Management (BLM) (2016) and a number of scientific studies (Eisentraut and Cooper 2002; Murphey et al. 2019; Scott and Springer 2003) have developed guidelines for professional qualifications, conducting paleontological assessments, and developing mitigation measures for the protection of paleontological resources. These guidelines are broadly similar, and include the use of museum records searches, scientific literature reviews, and, in some cases, field surveys to assess the potential of an area to preserve paleontological resources. Should there be potential for significant resources to be impacted, accepted mitigation measures include paleontological monitoring, data recordation of all fossils encountered, collection and curation of significant fossils and associated data, and in some cases screening of sediment for microfossils. This study has been conducted in accordance with these guidelines and the recommendations provided herein meet these standards.

4.0 GEOLOGIC SETTING

The Project Area is located in the northern Peninsular Ranges geomorphic province. The Peninsular Ranges formed as a volcanic island arc collided with the west coast of North America and was accreted onto the margin of the continent, resulting in the expansion of the continent westward. The Peninsular Ranges are part of a larger subduction zone that extends all along western North America, with this particular geomorphic province extending from the Los Angeles Basin in the north to Baja in the south, and extending to Santa Catalina, Santa Barbara, San Nicolas, and San Clemente Islands on the west and the Colorado Desert on the east (Norris and Webb 1990). The core of the Peninsular Ranges formed as the core of a magmatic arc in the Mesozoic that resulted from active subduction along the Pacific Plate boundary (Harden 2004).

Two main batholiths of plutonic rock form the core of the Peninsular Ranges. The western batholith, where the Project Area is located, was emplaced first and is 140 – 105 million years old (Ma) and consists of mafic plutonic rocks, while the eastern batholith is 99 – 92 Ma and consists of silica-rich granodiorites and tonalities (Kimbrough et al. 2001). These plutonic rocks intruded into the older rocks of a Paleozoic carbonate platform, heavily metamorphosing them (Harden 2004). There was volcanic activity associated with the subduction zone as well, with the Santiago Peak Volcanics deposited from 130 – 120 Ma as primarily andesitic and silicic flows, that were then metamorphosed by the ongoing batholith emplacement (Fife et al. 1967). Later in the Cretaceous, marine sedimentary rocks accumulated over the plutons and volcanic rocks, deposited as turbidity currents in what was an ocean at the time (Kimbrough et al. 2001). These rocks are in turn overlain by more recent sedimentary deposits leading up to the present day, that have been heavily uplifted and faulted by tectonic activity throughout the Cenozoic. These deposits were marine through the Eocene and then shifted to terrestrial volcanic and sedimentary strata by the Oligocene and lower Miocene (Powell 1993).

Locally, the Project Area is located on the coast at the base of the San Joaquin Hills. The San Joaquin Hills form the southern boundary of the Los Angeles Basin, and are some of the northern-most hills of the

Peninsular Ranges province. The basement rock complex is called the Catalina Schist, thinly-foliated metamorphic rocks that are best seen on Catalina Island, and are buried within the core of the mountains on most of the mainland (Vedder 1970). The basement complex is covered by approximately 1.5 km of Cenozoic-aged sedimentary rocks that are primarily marine in origin that have been uplifted over the last 120,000 years (Grant et al. 1999). In the vicinity of the Project Area these sediments are a mix of marine and terrestrial units that are predominantly Paleocene through Pliocene in age (66 – 2.5 Ma), with Miocene-aged (20 – 5 Ma) igneous dikes intruded into them and are capped by Pleistocene and younger terrestrial sediments (Tan and Edgington 1976).

5.0 METHODOLOGY

The paleontological resource assessment reported herein consisted of a records search from the Natural History Museum of Los Angeles County (LACM) as well as a review of a geotechnical study of the Project Area (Geofirm 1991), the relevant scientific literature, and the most recent geologic mapping. To assess if paleontological resources are likely to be encountered in any given area, the paleontological potential of the geologic units present in the area is assessed. Paleontological potential of a geologic unit consists of both (a) the potential for yielding abundant vertebrate fossils or for yielding significant vertebrate, invertebrate, plant, or trace fossils and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data (SVP 2010). Unlike archaeological resources that often have a limited aerial extent, paleontological resources may occur throughout a geologic unit, and so paleontological potential is assessed for the unit as a whole. Provided below is the methodology used during the current study to assess the potential of the Project to impact paleontological resources.

5.1 RECORDS SEARCH

A records search (see Appendix A) of the Project Area and vicinity was requested from the LACM on August 3, 2021, with the results received from the LACM on August 7, 2021. The search returned the closest known paleontological localities of the LACM to the Project Area from geologic units that are present at the Project Area, either at the surface or in the subsurface.

5.2 GEOTECHNICAL STUDY

A geotechnical study of the Project Area was undertaken by Geofirm (2021) that included a review of two previous boings as well as four new 8-inch hollow stem auger borings and five hand-excavated test pits. The logs from these field explorations were consulted to assess the surficial and subsurficial geology of the Project Area. The results of this study were used to inform the paleontological resources assessment, as described below.

5.3 SCIENTIFIC LITERATURE REVIEW

In order to assess the paleontological potential of the Project Area, geologic mapping (Morton et al. 2004, Tan and Edington 1976) was consulted to identify all geologic units present at the surface or likely

present in the subsurface. The scientific literature was then consulted to determine the history of each of these units for preserving fossil resources.

5.4 PALEONTOLOGICAL RESOURCES ASSESSMENT

The results of the museum records search, geotechnical assessment, and the scientific literature review were used to assign the paleontological potential rankings of the SVP (2010) to the geologic units present in the Project Area. These rankings are designed to inform the development of appropriate mitigation measures for the protection of paleontological resources and are widely accepted as industry standards in paleontological mitigation (Murphey et al. 2019; Scott and Springer 2003). These rankings are as follows:

High Potential. Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rock units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations that are temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.), some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks.

Undetermined Potential. Rock units for which little information is available in the literature or museum records concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study and field work is necessary to determine if these rock units have high or low potential to contain significant paleontological resources.

Low Potential. Rock units that are poorly represented by fossil specimens in institutional collections or, based on general scientific consensus, only preserve fossils in rare circumstances (e. g., basalt flows or Recent colluvium) have low paleontological potential.

No Potential. Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites).

6.0 RESULTS

The results of the paleontological resources assessment are described below.

6.1 PROJECT AREA GEOLOGY

Geologic mapping by Morton et al. (2004) and Tan and Edgington (1976) indicate the surface of the Project Area consists of two geologic units: landslide deposits and the Topanga Formation, with artificial fill and slopewash deposits identified during the geotechnical study (Geofirm 2021). These

geologic units range in age from the Recent to the middle Miocene, approximately 20 million years ago (Ma), and are described below.

Artificial Fill (not shown in Figure 3). While the geologic mapping of the region (Morton et al. 2004, Tan and Edgington 1976) does not identify artificial fill present in the Project Area, this is likely due to the scale of these maps and the small size of the Project Area. A geotechnical study conducted at the Project Area identified fill present at the surface in all seven borelogs, as well as mixed with slopewash debris in the test excavations (Geofirm 2021). The thickness of the artificial fill in the borelogs ranged from 1.5 feet to 8 feet below ground surface (bgs).

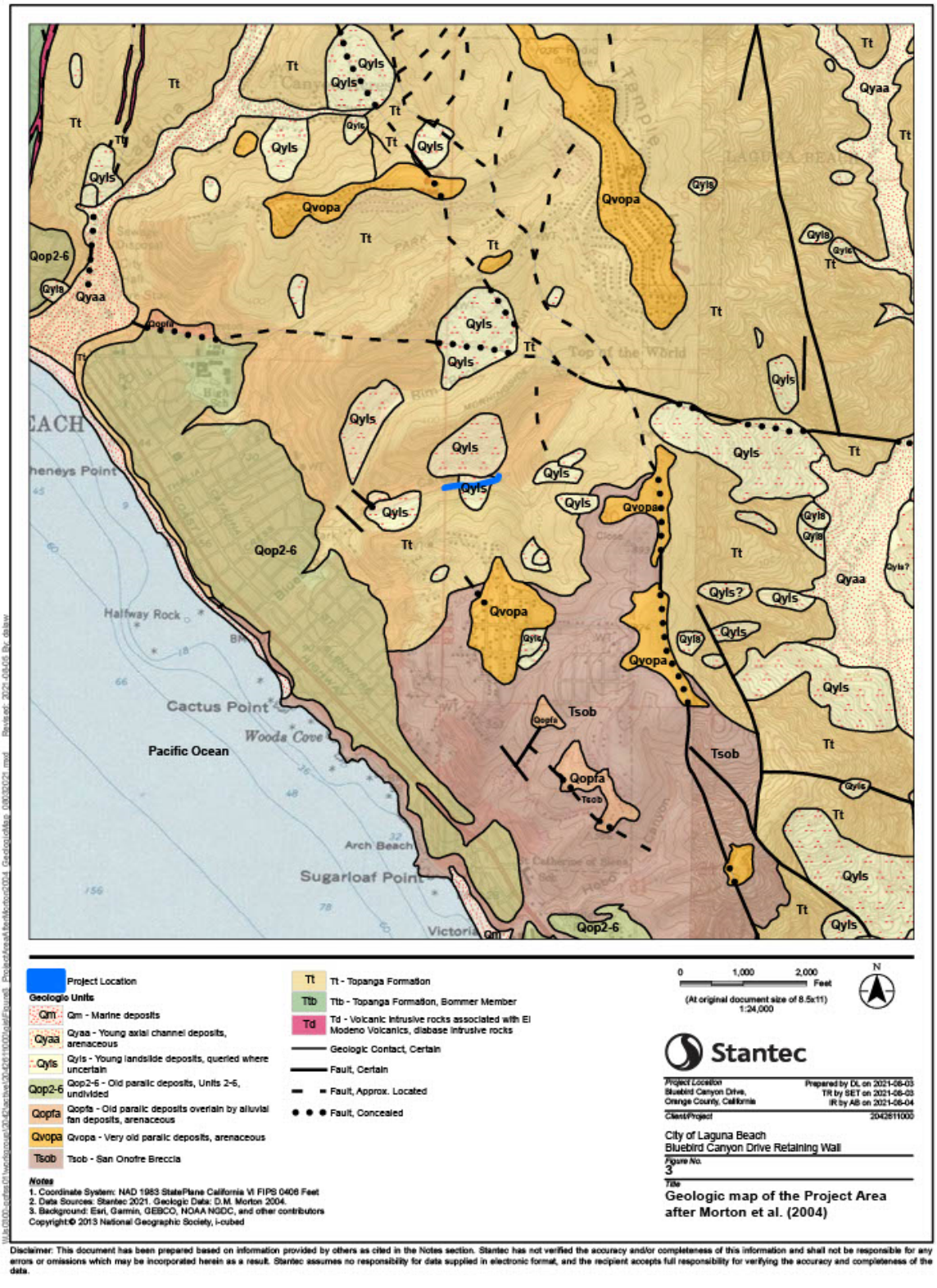
Landslide Deposits (Qls in Figure 3). Landslide deposits coming off of the steep slopes around the Project Area are mapped across the majority of the Project Area (Morton et al. 2004). These deposits consist of broken-up and weathered material that has eroded during sudden mass-wasting events (Tan and Edgington 1976). The geotechnical study of the Project Area was not able to confirm the presence of landslide deposits, as no rupture surface was identified in the borings over the bedrock observed in the subsurface (Geofirm 2021). Rather, Geofirm (2021) recorded slopewash deposits in borings and test pits from the Project Area, as described below.

Slopewash Deposits (Qsw in Figure 3). Slopewash deposits are not mapped at the surface in the Project Area (Morton et al. 2004) but were identified at the surface and in the subsurface underlying artificial fill in the Project Area (Geofirm 2021). Logs from boring and test excavations identified slopewash as consisting of weakly consolidated silty clay with some medium to coarse sand that, when present, ranged from 5 to 10 feet thick, but was not present in all areas sampled (Geofirm 2021). In some borings slope wash was mixed with artificial fill at the surface, while in others it occurred at depths of 2.5 feet to 8 feet bgs underlying artificial fill. Slope wash deposits in the vicinity of the Project date to the late Holocene.

Topanga Formation (Tt in Figure 3). The Topanga Formation is mapped as present at the surface in the eastern and western portions of the Project Area (Morton et al. 2004) but was documented by the geotechnical study as present only in the subsurface throughout the Project Area (Geofirm 2021). This discrepancy is likely due to the scale of the available mapping and the small size of the Project Area. The Topanga Formation is composed of marine sandstone and siltstone, with conglomerate present in some places, and dates to the middle Miocene, 20-16 Ma (Morton et al. 2004). This formation is interpreted as wave-dominated coastal deposits in the lower units that grade into fluviodeltaic deposits and fluvial deposits in the upper units (Critelli and Ingersoll 1995). Within the Project Area, the geotechnical study found the Topanga Formation to be present at depths of 1.5 feet to 7 feet bgs underlying artificial fill, and at depths of 9.5 feet to 18 feet bgs underlying artificial fill and colluvium.

6.2 PALEONTOLOGICAL POTENTIAL OF GEOLOGIC UNITS IN THE PROJECT AREA

In order to assess the potential of the geologic units present at the surface or in the subsurface to



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Figure 3. Geologic map of the Project Area after on Morton et al. (2004)

preserve fossil resources, Stantec conducted a review of the relevant scientific literature and requested a records search from the LACM (Table 1). The results of this investigation are described below for each of the geologic units in the Project Area (Table 2).

Artificial Fill (not shown in Figure 3). The geotechnical study conducted at the Project Area identified fill present at the surface in all seven borelogs, as well as mixed with slopewash debris in the test excavations (Geofirm 2021). Artificial fill has been deposited by human activity and, as such, will not preserve significant fossil resources. While artificial fill has no paleontological potential, in the Project Area it overlies slope wash deposits and the Topanga Formation, which do have paleontological potential, as described below.

Landslide Deposits (Qls in Figure 3). While mapped at the surface in the Project Area, the geotechnical study was not able to confirm the presence of landslide deposits (Geofirm 2021). Furthermore, were such deposits present, they would have low paleontological potential, as they form through the high energy deposition of destabilized sediments, a process that is not conducive to the preservation of fossil resources.

Slopewash Deposits (Qsw in Figure 3). The geotechnical study identified slope wash deposits at the surface and in the subsurface underlying artificial fill in the Project Area (Geofirm 2021). Slope wash deposits date to the Holocene (i.e., recent times to 11,500 years ago). As per the SVP, fossils are the remains of past life that are over 5,000 years in age (SVP 2010), and so this unit is too young to preserve fossil resources. Using the guidelines of the SVP, slope wash deposits can be assigned low paleontological potential. However, this unit overlies the Topanga Formation, which has high paleontological potential, as described below.

Topanga Formation (Tt in Figure 3). Geotechnical analysis identified the Topanga Formation in the subsurface throughout the Project Area (Geofirm 2021). The Topanga Formation is known to preserve numerous invertebrate (Lander 2011, Morton and Miller 2006) and vertebrate marine fossils, including sharks and bony fishes (Campbell and Yerkes 1980), birds (Kloess 2015), whales, dolphins, and seals (Boessenecker and Churchill 2015, Lander 2011, Velez-Juarbe 2017), as well as terrestrial fossils including land plants, small reptiles, and mammals (Lander 2011). One study identified the Lower Topanga Formation as among the most fossiliferous units in the Santa Monica Mountains, north of Los Angeles and the Project Area (Tweet et al. 2014). The LACM has records of several fossil localities in the Topanga Formation, the closest of which is at the head of Rim Rock Canyon, roughly 0.8 km northeast of the Project Area, where a specimen of the extinct marine mammal *Desmostylus,* was collected (LACM 2021). *Desmostylus* was an unusual large herbivorous mammal that somewhat resembled a hippopotamus but with long tusks on the upper and lower jaws and more adapted for an aquatic lifestyle. It is unclear which group of modern mammals desmostylians are most closely related to. Other localities from the Topanga Formation known to the LACM come from Cheney's Point, where invertebrates were collected, and the ridges to the east of the Project Area between Temple Hill, Niguel Hill, and Top of the World, where another *Desmostylus* as well as a member of the dugong family and invertebrates have been collected. Given the extensive record of significant fossils recovered from the Topanga Formation, this unit is assessed as having high paleontological potential.

Table 1 Summary of the records search from the LACM showing the closest fossil localities in the Miocene-aged Topanga Formation

Locality Number	Lithology	Taxa	Location	Approximate Distance and Direction from Project Area
LACM VP 4007	Unreported	Marine mammal (*Desmostylus*)	In the head of Rim Rock Canyon south of Temple Hill Drive & west of Top of the World on Temple Hill	0.8 km northeast
LACM IP 24374	Gray to brown sandstone	Invertebrates (unspecified)	In sea cliffs near Cheney's Point	1.5 km west
LACM VP 7249	Unreported	Marine mammals (Dugongidae)	Ridge between Temple Hill and Wood Canyon, south side of wash on cliff face	1.6 km east
LACM VP 3222	Brecciated conglomeratic sandstone	Marine mammal (*Desmostylus*)	Two miles north of South Laguna; in the side west of the drainage of Aliso Creek; southeast of Temple Hill	1.8 km southeast
LACM IP 24375	Buff sandstone	Invertebrates (unspecified)	Ridge between Wood Canyon and Top of the World, upcanyon from the terminus of Nestal Rd	1.8 km northeast
LACM IP 5835	Shale	Abundant mollusks and brachiopods (*Glotidia albida*)	East side of Aliso Creek bank; approximately 1 mile inland from Pacific Coast Highway; on west side of prominent spur trending northwest from Niguel Hill	3.3 km southeast

Table 2 Paleontological potential of geologic units within the Project Area

Geologic Unit	Age	Occurrence within Project Area	Paleontological Potential*
Artificial Fill	Recent	Surface	None, overlying High
Slope Wash Deposits	Recent – late Holocene	Surface and Subsurface (from 2.5 feet to 8 feet bgs)	Low, overlying High
Topanga Formation	Miocene	Subsurface (from 1.5 feet to 18 feet bgs)	High

**ranking based on the SVP (2010) classifications*

7.0 RECOMMENDATIONS AND MANAGEMENT CONSIDERATIONS

As part of the current paleontological assessment, a records search from the LACM and a review of geologic mapping, a previous geotechnical report, and the scientific literature were conducted in order to

assess the potential of the geologic units in the Project Area to preserve paleontological resources. The results of this assessment show that the following geologic units are present in the Project Area:

- Artificial Fill – surface, no paleontological potential but overlying units with high potential;
- Slope wash deposits – surface and subsurface, low paleontological potential but overlying units with high potential;
- Topanga Formation – subsurface, high paleontological potential.

Project activities include road widening, possible slope stabilization work, and the construction of a retaining wall on the north side of Bluebird Canyon Drive with excavations up to 30 feet in depth for piles, as well as temporary work areas and a possible similar retaining/debris wall on the south side of Bluebird Canyon Drive (to be constructed at a future date). The surficial slope wash and artificial fill are unlikely to preserve significant fossils, so surficial or shallow Project activities such as those planned in the temporary work area or for road widening are unlikely to impact fossil resources. The Topanga Formation is present in the subsurface as shallowly as 1.5 ft bgs; therefore, proposed activities associated with excavations for the retaining walls and slope stabilization may impact the Topanga Formation and any fossils preserved therein. Should Project-related activities encounter paleontological resources, the damage or destruction of those resources would constitute an adverse impact under CEQA. Because the Project may require special permits from the City of Laguna Beach, and in order to adhere to State and City guidelines regarding paleontological resources, Stantec recommends the following mitigation measures be implemented once the Project design is finalized:

1. A paleontologist meeting professional standards as defined by Murphey et al. (2019) shall be retained as the Project Paleontologist to oversee all aspects of paleontological mitigation, including paleontological monitoring of earthwork and ground disturbing activities into undisturbed geologic units with high paleontological potential, to be conducted by a paleontological monitor meeting industry standards (Murphey et al. 2019). Within the Project Area the Topanga Formation has high paleontological potential and is present as shallowly as 1.5 feet bgs.
2. The Project Paleontologist shall develop a Worker's Environmental Awareness Program (WEAP) training that communicates requirements and procedures for the inadvertent discovery of paleontological resources during construction to be delivered by the paleontologist or their designated representative to the construction crew prior to the onset of ground disturbance.
3. In the event that paleontological resources are encountered during construction activities, all work must stop in the immediate vicinity of the finds while the paleontological monitor documents the find. The designated Project Paleontologist shall assess the find. Should the Project Paleontologist assess the find as significant, the find shall be collected and curated in an accredited repository along with all necessary associated data and curation fees.

These recommendations meet the standards of the SVP (2010) and conform to industry best practices (e.g., Murphey et al. 2019; Scott and Springer 2003) Based on the findings in this study the proposed Project will not cause an adverse impact to paleontological resources with the incorporation of the above mitigation recommendations. Therefore, no additional paleontological resources studies are

recommended or required at this time. Should the Project location or plans change, this assessment will need to be revised to address those changes.

8.0 REFERENCES

Boessenecker, R.W. and M. Churchill. 2015. The oldest known fur seal. *Biology Letters* 11: 20140835.

Bureau of Land Management. 2016. *Potential Fossil Yield Classification (PFYC) System for Paleontological Resources on Public Lands*. Instruction Memorandum 2016-124.

Campbell, R. H. and R. F. Yerkes, 1980. *Geologic guide to the stratigraphy and structure of the Topanga Group, central Santa Monica Mountains, Southern California*. Los Angeles Basin Geological Society, 1980 Pacific Section AAPG Spring Field Trip, Guidebook Number 49, pp. 1-22.

City of Laguna Beach. 2012. *General Plan*. Available at: Accessed on April 1, 2021.

Critelli, S. and R.V. Ingersoll. 1995. Interpretation of neovolcanic versus palaeovolcanic sand grains: an example from Miocene deep-marine sandstone of the Topanga Group (Southern California). *Sedimentology* 42: 783-804.

Eisentraut, P. and J. Cooper. 2002. *Development of a model curation program for Orange County's archaeological and paleontological collections*. Prepared by California State University, Fullerton and submitted to the County of Orange Public Facilities and Resources Department/Harbors, Parks and Beaches (PFRD/HPB).

Fife, D. L., J. A. Minch, and P. J. Crampton. 1967. Late Jurassic age of the Santiago Peak Volcanics, California. *GSA Bulletin* 78: 299-304.

Geofirm. 2021. *Geotechnical Investigation for Street Widening Portion of Bluebird Canyon Road, CIP 21-9424; Laguna Beach, California*. Report No: 21-8929.

Grant, L., K. Mueller, E. Gath, H. Cheng, R. Edwards, R. Munro, G. Kennedy. 1999. Late Quaternary uplift and earthquake potential of the San Joaquin Hills, southern Los Angeles basin, California. *Geology* 27: 1031-1034.

Harden, D. 2004. *California Geology*, 2nd edition. Pearson Prentice Hall, 552 p

Kimbrough, D. L., T. E. Moore, M. Grove, R. G. Gastil A. Ortega-Rivera, and C. M. Fanning. 2001. Forearc-basin sedimentary response to rapid Late Cretaceous batholith emplacement in the Peninsular Ranges of southern and Baja California. *Geology* 29: 491-494.

Kloess, P. 2015. *Twelve million years of bird history: a specimen-based approach to reconstructing late Neogene bird communities of California*. California State University Fullerton: Master's of Science Thesis.

Lander, E. B. 2011. *Stratigraphy, biostratigraphy, biochronology, geochronology, magnetostratigraphy, and plate tectonic history of the early Middle Eocene to late Early Miocene Sespe, Vaqueros, and Lower Topanga formations, east-central Santa Monica Mountains, Los Angeles County, Southern California*. Western Association of Vertebrate Paleontologists 2011 annual meeting field trip volume and guidebook. Natural History Museum of Los Angeles County, Los Angeles, California.

McNeilan, Thomas W., Thomas K. Rockwell, and Gregory S. Resnick. 1996. Style and rate of Holocene slip, Palos Verdes fault, southern California. *Journal of Geophysical Research: Solid Earth* 101: 8317-8334.

Morton, D. 2004. Preliminary Digital Geologic Map of the Santa Ana 30' x 60' Quadrangle, Southern California. U.S. Geological Survey Open-File Report 99-172.

Morton, D. and F. Miller. 2006. Geologic map of the San Bernardino and Santa Ana 30’ x 60’ quadrangles, California. USGS Open-File Report 2006-1217. Scale 1: 100,000. U.S. Geological Survey, Reston, Virginia.

Murphey, P., G. Knauss, L. Fisk, T. Demere, and R. Reynolds. 2019. Best practices in mitigation paleontology. *Proceedings of the San Diego Society of Natural History* 47: 43 pp.

Natural History Museum of Los Angeles County (LACM). 2021. *Paleontological resources for the Bluebird Canyon Drive project (#2042611000).* Email response received on August 7, 2021.

Norris, R., and R. Webb. 1990. *Geology of California.* John Wiley and Sons, Inc., New York.

Powell, R. E. 1993. Balanced palinspastic reconstruction of pre-late Cenozoic paleogeology, southern California: Geologic and kinematic constraints on evolution of the San Andreas fault system. *GSA Memoirs* 178: 1-106.

Scott, E., and K. Springer. 2003. CEQA and fossil preservation in southern California. *The Environmental Monitor* 4-10.

Society of Vertebrate Paleontology (SVP). 2010. *Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources*. Available at https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf; Accessed on March 17, 2021.

Tan, S. and W. Edington. 1976. Geology and Engineering Geologic Aspects of the Laguna Beach Quadrangle, Orange County, California. California Division of Mines and Geology, Special Report 127; Sacramento, California.

Tweet, J. V. Santucci, and T. Connors. 2014. Documenting the paleontological resources of National Park Service areas of the Southern California coast and islands. Monographs of the Western North American Naturalist 7: 68-81.

Vedder, J. G. 1970. Summary of the geology of the San Joaquin Hills. In *Southeastern Rim of the Los Angeles Basin, Ornage County, California; Newport Lagoon – San Joaquin Hills, Santa Ana Mountains*: Field Trip Guidebook. Pacific Section, Society for Sedimentary Geology

Velez-Juarbe, J. 2017. Eotaria citrica, sp. nov., a new stem otariid from the “Topanga” formation of Southern California. PeerJ 5:e3022.

APPENDIX A

Natural History Museum of Los Angeles County
Paleontological Records Search Results

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

August 7, 2021

Stantec Consulting Services, Inc.

Attn: Alyssa Bell

re: Paleontological resources for the Bluebird Canyon Drive project (#2042611000)

Dear Alyssa:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Bluebird Canyon Drive project area as outlined on the portion of the Laguna Beach USGS topographic quadrangle map that you sent to me via e-mail on August 1, 2021. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County.

Locality Number	Location	Formation	Taxa	Depth
LACM IP 24374	In sea cliffs near Cheney's Point	Topanga Formation (Gray to brown sandstone)	Invertebrates (unspecified)	Unknown
LACM VP 4007	In the head of Rim Rock Canyon south of Temple Hill Drive & west of Top of the World on Temple Hill	Topanga Formation	Marine mammal (*Desmostylus*)	Unknown
LACM VP 3222	Two miles north of South Laguna; in the side west of the drainage of Aliso Creek; southeast of Temple Hill	Topanga Formation (brecciated conglomeratic sandstone)	Marine mammal (*Desmostylia*)	Surface
LACM IP 24375	Ridge between Wood Canyon and Top of the World, upcanyon from the terminus of Nestal Rd	Topanga Formation (Buff sandstone)	Invertebrates (unspecified)	Unknown
LACM VP 7249	Ridge between Temple Hill and Wood Canyon,	Topanga Formation	Marine mammals (Dugongidae)	Unknown

	south side of wash on cliff face			
LACM IP 5835	East side of Aliso Creek bank; approximately 1 mile inland from Pacific Coast Highway; on west side of prominent spur trending northwest from Niguel Hill	Topanga Formation (shale)	abundant mollusks and brachiopods (*Glotidia albida*)	Surface

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the Natural History Museum of Los Angeles County ("NHMLA"). It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,



Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice

Appendix F DESKTOP STUDY – HAZARDOUS MATERIALS & ENVIRONMENTAL RECORDS REVIEW REPORT

Desktop Study – Hazardous Materials & Environmental Records Review Report

Bluebird Canyon Drive at Rancho Laguna Road
Laguna Beach, California

Prepared for:
Mr. Pierre Sawaya
City of Laguna Beach
505 Forest Avenue
Laguna Beach, California 92651

Prepared by:
Stantec Consulting Services Inc.
38 Technology Drive
Irvine, California 92618-5312

Project No. **2042611001**

March 22, 2022

Sign-off Sheet

This document entitled Desktop Study – Hazardous Materials & Environmental Records Review Report was prepared by Stantec Consulting Services Inc. for the City of Laguna Beach. The material in it reflects Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

All information, conclusions, and recommendations provided by Stantec in this document have been prepared under the supervision of and reviewed by the professionals whose signatures appear below.

Author _____
(signature)

Shelby Dawson, PG, QSP/D
Associate Geologist

Reviewed by _____
(signature)

Lewis D. Simons, PG
Principal Geologist

Reviewed by _____
(signature)

Steven C. Brady, C.E.G., C.HG.
Senior Principal

Table of Contents

EXECUTIVE SUMMARY **1.1**

1.0 INTRODUCTION **1.3**
1.1 PROJECT FOOTPRINT LOCATION & DESCRIPTION 1.3

2.0 DESKTOP RECORDS REVIEW **2.4**
2.1 PHYSICAL SETTING 2.4
2.1.1 Project Footprint Topography and Surface Water Flow 2.4
2.1.2 Regional and Project Footprint Geology 2.4
2.1.3 Regional and Project Footprint Hydrogeology 2.5
2.2 FEDERAL, STATE AND TRIBAL ENVIRONMENTAL RECORDS 2.5
2.2.1 Listings for Project Footprint 2.6
2.2.2 Listings for Nearby Sites with Potential to Impact Project Footprint 2.6
2.3 LOCAL/REGIONAL ENVIRONMENTAL RECORDS 2.7
2.3.1 Local Environmental Agency Records 2.7
2.3.2 Regional Environmental Agency Records 2.8
2.4 HISTORICAL RECORDS REVIEW 2.8
2.4.1 Aerial Photographs 2.8
2.4.2 Historical City Address Directories 2.11
2.4.3 Historical Fire Insurance Maps 2.11
2.4.4 Historical Topographic Maps 2.11
2.5 ELECTRONIC DATABASES 2.13
2.5.1 State Water Resources Control Board - GeoTracker Database 2.13
2.5.2 EnviroStor 2.13
2.5.3 State of California Geologic Energy Management Division (CalGEM) 2.13

3.0 SUMMARY, CONCLUSIONS, AND RECOMENDATIONS **3.1**

4.0 LIMITATIONS & CERTIFICATION ..... ERROR! BOOKMARK NOT DEFINED.

5.0 REFERENCES **5.1**

LIST OF FIGURES

Figure 1 Site Location Map

DESKTOP STUDY – HAZARDOUS MATERIALS & ENVIRONMENTAL RECORDS REVIEW REPORT

Bluebird Canyon Drive west of Rancho Laguna Road
Laguna Hills, California
March 22, 2022

LIST OF ATTACHMENTS

Attachment A Environmental Database Radius Reports
Attachment B Historical Aerial Photographs
Attachment C Historical Maps
Attachment D Supporting Documentation (CalGEM WellFinder Records)

Executive Summary

On behalf of the City of Laguna Beach (Laguna Beach), Stantec Consulting Services Inc. (Stantec) has completed a desktop environmental records review for a linear highway widening project that extends along the north side of Bluebird Canyon Drive from Rancho Laguna Road at the eastern most boundary of the Project footprint to approximately 951 feet to the west (the "Project Footprint," **Figure 1**). The environmental review was completed in support of the proposed widening of Bluebird Canyon Road and the construction of an approximately 951-foot-long retaining wall to evaluate the possible presence of environmental impacts and hazardous materials that may be present within the project footprint as a result of current and/or historical use of Bluebird Canyon Drive or nearby surrounding properties. Stantec understands that the purpose of the widening and construction project is to facilitate emergency vehicle use in the area of Bluebird Canyon Drive.

Stantec obtained historical sources of information to ascertain the past use of the Project Footprint and surrounding area and evaluate if past uses may have had the potential to impact environmental media beneath the Project Footprint. Governmental, regulatory, and other public records were evaluated to identify potential contributors to possible adverse environmental conditions in connection with the Project Footprint. During the review of historical records, Stantec attempted to identify uses of the Project Footprint from first developed use to the present. In addition, Stantec evaluated the potential for nearby surrounding and adjacent properties to have potentially impacted the Project Footprint. The following provides our findings and key conclusions developed from the records review.

- The Project Footprint is located within the City of Laguna Hills which contains several sites with historic releases of hydrocarbons to soil and/or groundwater. However, none of the sites are within 1,750 feet (1/3 mile) of the Subject Project Footprint and therefore do not represent an environmental risk for the Project Footprint.

- The Project Footprint is located within the Laguna Beach California Oil Field. Based on a review of the CalGEM WellFinder online database, one former oil well, 'Laguna Beach Oil Association #1' (API 0405901041) was identified approximately 700 feet to the southwest of the Project Footprint. Laguna Beach Oil Association # 1 was originally drilled on November 1, 1920, and a Notice of Intent to Abandon the former oil well was prepared on February 12, 1924. Per CalGEM records, the status of the former oil well is indicated as "Plugged". Copies of the well records obtained from CalGEM for this former oil well is included in Attachment D. Based on the distance and plugged status of the former oil well, it is Stantec's opinion that the former oil well does not represent an environmental risk for the Project Footprint.

Conclusions and Recommendations

Based on the results of the environmental records review, there is a potential to encounter aerially deposited lead (ADL) and/or contaminants associated with stormwater runoff that may include oil and grease. A Limited Phase II Environmental Site Assessment is recommended to include soil sampling in the Project Footprint to evaluate the potential presence of aerially deposited lead (ADL) and stormwater-related contaminants. The results will be used to characterize soil for disposal and to help and evaluate possible considerations for construction worker safety. It should be noted that other hazardous materials may be present associated with the road surface applied (i.e., heavy metals such as arsenic in reflective striping) that may also require special handling and/or disposal considerations.

In addition, based on the soil sampling results obtained from the Limited Phase II ESA, Stantec recommends that a Soil Management Plan (SMP) approach be implemented during the implementation of the widening Project to address the potential for encountering impacted soils. The SMP would specify the roles, responsibilities, protocols, and procedures to be employed should impacted soils and/or other potentially hazardous debris are encountered. Key functions of the SMP in the event of a discovery of subsurface impacts are to specify procedures for immediate notification to local oversight agencies, provide health and safety protocols to protect workers, site occupants, and the public, and to isolate and contain suspected impacted materials while chemical analysis of preliminary samples is conducted.

1.0 Introduction

At the request of the City of Laguna Beach (Laguna Beach), Stantec Consulting Services Inc. (Stantec) is pleased to submit this report documenting the results of a desktop environmental records review conducted for the Project Footprint located at the north side of Bluebird Canyon Drive from Rancho Laguna Road to approximately 951 feet west in Laguna Beach, California (the "Project Footprint", **Figure 1**).

The environmental review was completed in support of the proposed widening of Bluebird Canyon Road and the construction of an approximately 951-foot-long retaining wall to evaluate the possible presence of environmental impacts and hazardous materials that may be present within the project footprint as a result of current and/or historical use of Bluebird Canyon Drive or nearby surrounding properties. Stantec understands that the purpose of the widening and construction project is to facilitate emergency vehicle use in the area of Bluebird Canyon Drive. All work was completed in accordance with the Work Authorization from Laguna Beach dated January 8, 2019.

1.1 PROJECT FOOTPRINT LOCATION & DESCRIPTION

The Subject Project Footprint, identified by Los Angeles County Assessor Identification Numbers 644-361-02 and 644-361-03, is a highway widening project that extends along the north side of Bluebird Canyon Drive from Rancho Laguna Road at the eastern most boundary of the Project footprint to approximately 951 feet to the west (the "Project Footprint," Figure 1). The adjoining land-use along the Project Footprint to the north of Bluebird Canyon is largely undeveloped with the slope of the canyon extending to the south of bluebird Canyon Road.

2.0 DESKTOP RECORDS REVIEW

The objective of consulting historical sources of information was to evaluate if current or past uses of Bluebird Canyon Drive and/or adjoining nearby properties have resulted in the potential presence of hazardous materials within the Project Footprint. Physical setting records were also evaluated to determine if the physical setting may have contributed to adverse environmental conditions in connection with the Project. During the review of historical records, Stantec attempted to identify uses of the Project Footprint from the present to the first developed use of the Project Footprint and surrounding properties. Stantec's research included the reasonably ascertainable and useful records described in this section.

2.1 PHYSICAL SETTING

A summary of the physical setting of the Project Footprint is provided in the table below with additional details in the following subsections

Topography:	The topographic gradient in the vicinity of the Project Footprint is toward the coast to the west. The Project Footprint is located at approximately 260 feet above mean sea level (ft. amsl).
Soil/Bedrock Data:	The Project Footprint and surrounding area are classified as urban land. Unconsolidated alluvium consists of silt, clay, and silty sand. Bedrock consists of volcanic and marine and non-marine sedimentary rocks of the San Joaquin Hills.
Estimated Depth to Groundwater/ Estimated Direction of Gradient:	The depth to groundwater may vary from approximately 10 to 30 feet below ground surface (bgs), with gradient direction to the west.
Note: Site-specific groundwater direction and depth can only be determined by conducting site-specific testing, which Stantec has not conducted.	

2.1.1 Project Footprint Topography and Surface Water Flow

The Subject Project Footprint is situated at an elevation approximately 260 ft. amsl. Based on the topography and existing surface conditions, general surface water flow direction is to the west.

2.1.2 Regional and Project Footprint Geology

The Subject Project Footprint is situated in the San Joaquin Hills at the coastal southwestern edge of the Peninsular Ranges Geomorphic Province of California. The San Joaquin Hills are low mountain range along the California coast extending from Newport Beach to the northwest to

San Juan Capistrano in the southeast. The hills were uplifted along the San Joaquin Hills blind thrust which lies eight miles below the hills. The Project Footprint bedrock is the Topanga Formation, a coarse-grained sandstone, conglomerate, and breccia. Unconsolidated sediment at the Project Footprint includes artificial fill, gravel, sand, and silt.

2.1.3 Regional and Project Footprint Hydrogeology

According to the California Department of Water Resources (DWR) Bulletin 118, the Subject Project Footprint lies within the Coastal Plain of Orange County which occupies a 350 square mile area of northeastern Orange County. The Coastal Plain of Orange County is bounded by consolidated rocks exposed on the north in the Puente and Chino Hills, on the East by the Santa Ana Mountains, and on the south in the San Joaquin Hills. The basin in bound by the Pacific Ocean on the southwest and by a low topographic divide approximated by the Orange County – Los Angeles County line on the northwest. The basin underlies the lower Santa Ana River watershed.

The Orange County Basin is dominated by a deep structural depression containing a thick accumulation of fresh water-bearing interbedded marine and continental sand, silt, and clay deposits (DWR, 2020). The proportion of fine material generally increases toward the coast, dividing the basin into forebay and pressure areas. Consequently, most surface waters recharge through the more course, more interconnected and permeable forebay deposits. Strata in this basin area faulted and folded and may show rapid changes in ground size. The Newport-Inglewood fault zone parallels the coastline and generally forms a barrier to groundwater flow. Erosional channels filled with permeable alluvium break this barrier at the =Alamitos and Talbert gaps, providing an opportunity for saline water to flow inland (DWR, 2020).

Local depth to groundwater was evaluated through a review of the Regional Water Quality Control Board's (RWQCB's) Geotracker database. According to the most recent groundwater monitoring report for the site located at 439 Forest Avenue (Live Wire Cleaners), approximately 1.3 miles northwest of the Project Footprint and at a lower elevation, groundwater was gauged at depths ranging from 7 to 9 feet below ground surface (bgs) in January 2021 with a flow direction to the west.

2.2 FEDERAL, STATE AND TRIBAL ENVIRONMENTAL RECORDS

A regulatory agency database search report was obtained from Environmental Data Resources Inc. (EDR), a third-party environmental database search firm. Stantec evaluated the information listed within the database relative to potential impact to the Project Footprint, assessing the potential for impacts based in part on the physical setting. A complete copy of the database search report, including the date the report was prepared, the date the information was last updated, and the definition of databases searched, is provided in **Attachment A**.

2.2.1 Listings for Project Footprint

The Subject Project Footprint address (north side of Bluebird Canyon Road west of Rancho Laguna Road) was listed as not mapped in the Certified Sanborn Map in Appendix C.

2.2.2 Listings for Nearby Sites with Potential to Impact Project Footprint

Stantec assessed data presented in the environmental agency database search report to evaluate the potential for conditions associated with neighboring properties to have impacted the Project Footprint. Based on this evaluation, the following individual facilities were identified as the most likely potential sources of releases that could possibly impact the Project Footprint.

Listed Facility Name/Address	Database Listing	Distance/Direction from Project Footprint	Potential to impact the Subject Project Footprint? (YES/NO)
Bob Burnham 1211 Starlit Dr. Laguna Beach, CA	RCRA NONGEN / NLR	750 feet / 0.014 miles northeast of and upgradient from the Project Footprint	No
The site is the private residence of an attorney listed as a non-generator of hazardous material. No further information was provided.			
Frank Daniel 1125 Summit Dr. Laguna Beach, CA	RCRA NONGEN / NLR	232 feet / 0.044 miles south of and upgradient from the Subject Project Footprint	No
The site is the private residence of a non-generator of hazardous material employed at an environmental remediation company. No further information was provided.			
Pump Station #6 Pearl St. and Ocean Way Laguna Beach, CA	NOTIFY 65	390 feet / 0.0738 miles southwest of and downgradient from the Subject Project Footprint	No
A sewage pump station was at this location in 2012. The presence of chemicals known by the State of California to cause cancer or reproductive toxicity may have been reported at this location in accordance with California Proposition 65. No further information was provided.			
Anita St. and Gaviota Dr. Laguna Beach, CA	NOTIFY 65	290 feet / 0.055 miles east/southeast (cross-gradient to the Subject Project Footprint)	No
In the past, the presence of chemicals known by the State of California to cause cancer or reproductive toxicity may have been reported at this residential location in accordance with California Proposition 65. No further information was provided.			

2.3 LOCAL/REGIONAL ENVIRONMENTAL RECORDS

Stantec checked the following sources to obtain information pertaining to the Project Footprint and to evaluate any indications of releases that might have had the potential to have impacted the Project Footprint. It should be noted that the Project consists of a linear highway widening project, therefore no specific "Target Address" could be searched. Stantec's research did however, include an evaluation of the adjoining and surrounding properties:

2.3.1 Local Environmental Agency Records

Agency Name Contact Information	Finding
Orange County Fire Authority Iris Vicent CRTK@ocfa.org November 30, 2021	A written request subject to the FOIA was submitted to the Orange County Fire Authority to review their files regarding the Project Footprint. The information requested included active and inactive hazardous materials file information, active/inactive UST files, and any records that indicate environmental concern at the Subject Project Footprint. A response was received on November 30, 2021, indicating that after a thorough search, no records pursuant to the requests were identified.
City of Los Angeles Department of Building and Safety 201 N Figueroa St, Los Angeles, CA 90012	Stantec conducted a database search for building permits issued for the Project Footprint address. The records reviewed included 14 building department records and permits issued between 1965 and 1996 for the Project Footprint. In August 1996, a Request for Change of Address from 1515 N. Vermont to 1517 N. Vermont was approved for the Project Footprint. The project descriptions on the permit applications appeared to apply to the office building (1515 N. Vermont) rather than the parking garage (1517 N. Vermont) and included minor modifications, upgrades, partitioning, and remodeling. The most recent permits were issued to Kaiser Foundation Hospitals. No activities related to hazardous materials or potential environmental conditions were noted in the permit applications reviewed.
City Clerk City of Laguna Beach	Stantec submitted a written public records request for hazardous materials files, notices of violation, permits,

Ann Marie McCay amckay@lagunabeachcity.net November 30, 2021	plans, complaints, design drawings, and storage of hazardous materials to the City of Laguna Beach City Clerk's office. A response was received on November 30, 2021 indicating that the parcels are owned by Laguna Beach, the local fire department conducts annual weed abatement on them, no further records pursuant to the request were identified.

2.3.2 Regional Environmental Agency Records

Agency Name, Contact Information	Findings
Custodian of Records, Department of Toxic Substances Control Jone Barrio 5769 Corporate Avenue Cypress, California 90630 November 24, 2021	A written request subject to the FOIA was submitted to the Department of Toxic Substances Control, Cypress Regional Office to review their files regarding the Project Footprint. The information requested included file information regarding permits, hazardous materials, waste, complaints, violations, underground or aboveground storage tanks, remedial action, and case closure documentation, or any records that indicate environmental concern at the Project Footprint. A response was received on November 24, 2021 indicating that after a thorough search, no records pursuant to the requests were identified.

2.4 HISTORICAL RECORDS REVIEW

2.4.1 Aerial Photographs

Stantec reviewed historical aerial photographs of the Project Footprint. The general type of activity on a Project Footprint and land use changes can often be discerned from the type and layout of structures visible in the photographs. However, specific elements of a facility's operation usually cannot be discerned from aerial photographs alone. The following table summarizes Stantec's observations of the reviewed historical aerial photographs. The aerial photographs are provided in **Attachment B**.

Year	Scale	Observations, Project Footprint and Adjoining Properties
1938	1" = 500'	Bluebird Canyon Road is present in its present-day orientation. Adjoining properties to the north are undeveloped and sparsely

Year	Scale	Observations, Project Footprint and Adjoining Properties
		vegetated at this time. Residential neighborhoods are just north of the Project Footprint and at the southwestern region of the photograph. Orchards are present north and south of Bluebird Canyon Road to the west of the Project Footprint. A water tank is present at present-day Summit Way. Present-day Temple Hills Drive is in the northwestern corner of the photograph and several narrow dirt roads transect the rest of the, at this point, undeveloped land.
1946	1" = 500'	The Project Footprint appears primarily unchanged from the previous photograph. The vicinity of the Subject Project Footprint is more densely vegetated than in the previous photograph. Residential neighborhoods to the north of the Subject Project Footprint and in the southwestern region of the photograph are more densely populated. Orchards along Bluebird Canyon Road to the west of the Project Footprint have been expanded and a structure, a possible residence, has been erected in the orchard south of Bluebird Canyon Road. Present-day Rim Rock Canyon Road and Temple Hills Drive are present in the northwestern region of the photograph. The region between the two roads appears to have been recently graded. The rest of the area in the photograph remains undeveloped.
1952	1" = 500'	The Project Footprint appears primarily unchanged from the previous photograph. Bluebird Canyon Road to the west of the Project Footprint is still surrounded by orchards but homes have been built on the road itself. More structures have also been built on present day Rim Rock Canyon Road and Temple Hills Drive in the northwest. New roads have been constructed in areas including the vicinity of present-day Oriole Drive in the west, the vicinity of present day Del Mar Avenue in the south, and the vicinity of Morningside Drive in the northeast.
1963	1" = 500'	The Project Footprint remains primarily unchanged from the previous photograph. New homes have been constructed in the northwest, northeast, and south where roads first appeared on the last photograph. Recent grading is apparent on the land in the vicinity of present-day Morningside Drive in the northeast area of the photograph. Present-day Zell Drive and Bernard Court are barely visible at the photograph's northeastern corner. A swath of land extending from the northeast corner of the photograph and much of the area in the west remain undeveloped.
1967	1" = 500'	The Project Footprint remains primarily unchanged from the previous photograph. A water tank has been constructed just northwest of the Subject Project Footprint. The area north of

Year	Scale	Observations, Project Footprint and Adjoining Properties
		Bluebird Canyon Road west of the Project Footprint appears to no longer be an orchard. The orchard remains at the area south of Bluebird Canyon Road at this location. Residential neighborhoods have generally become more densely populated with homes. Roads just south of present-day Del Mar Road are present in the southeast corner of the photograph. The undeveloped areas in the north and west remain mostly unchanged.
1972	1" = 500'	The Project Footprint and most of the region remain primarily unchanged from the previous photograph. Recent grading is apparent along present-day Morningside Drive in the northeast. Most of the southern area in previous photographs is absent or obscured in this photograph.
1977	1" = 500'	The Project Footprint remains primarily unchanged from the previous photograph. New residences are present on present-day Morningside Drive in the northeast, on roads south of present-day Del Mar Avenue in the southeast, and on Zell Drive and/or Bernard Court at the northeast corner of the photograph. Rancho Laguna Road and Morningside Drive appear to have been widened east of the Project Footprint.
1985	1" = 500'	The Project Footprint and immediately surrounding land uses appear similar to the previous photograph.
1989	1" = 500'	The Subject Project Footprint and adjoining properties appear similar to the previous photograph. There are much fewer trees in the orchard south of Bluebird Canyon Road west of the Subject Project Footprint.
1994	1" = 500'	The Project Footprint and adjoining properties appear similar to the previous photograph.
2002	1" = 500'	The Project Footprint and adjoining properties appear similar to those in the previous photograph.
2005	1" = 500'	The Project Footprint and adjoining properties appear similar to those in the previous photograph.
2009	1" = 500'	The Project Footprint and adjoining properties appear similar to those in the previous photograph.
2012	1" = 500'	The Project Footprint and adjoining properties appear similar to those in the previous photograph.
2016	1" = 500'	The Project Footprint and adjoining properties appear similar to those in the previous photograph.

Aerial photograph source: The EDR Aerial Photo Decade Package

2.4.2 Historical City Address Directories

Stantec retained EDR to research available reverse city directories for the Project Footprint, in approximately five-year intervals, if available. EDR searched directories published by several sources between the years 1920 and 2014 for the subject Project Footprint addresses, and adjacent/adjoining addresses along Sunset Boulevard and the major cross streets. The following is a summary of Stantec's review of the address directory listings:

Street Address	Year	Project Footprint Listings
1085 Bluebird Canyon Drive	1973	Calvert, Steven and Hopkins, Warren
	1976	Hopkins, Warren
	1982	Chamber, Jack; Hopkins, Warren; and Jones, Noel
	1985	Chamber, Jack and Hopkins, Warren
	1992	Chambers, Jack and Hopkins, Warren
	1995	Chambers, Jack; Hopkins, Warren; and Jones, Noel
	2000	Hopkins, Warren
	2005	Honsberger, William T.
	2010	Honsberger, William T.
	2014	Occupant unknown
1085 ½ Bluebird Canyon Drive	1985	Jones, Noel

2.4.3 Historical Fire Insurance Maps

Fire insurance maps were developed for use by insurance companies to depict facilities, properties, and their uses for many locations throughout the United States. These maps provide information on the history of prior land use and are useful in assessing whether there may be potential environmental contamination on or near the Project Footprint. These maps, which have been periodically updated since the late 19th century, often provide valuable insight into historical Project Footprint uses. However, specific facility details on the maps can be difficult to interpret and labels and notes often contain abbreviations.

The Project Footprint is listed as an unmapped Project Footprint. Certified Sanborn results of our inquiry are provided in **Attachment C.**

2.4.4 Historical Topographic Maps

Stantec reviewed historical USGS 7.5-Minute Topographic Maps (scale 1:24,000 and 1:62,500) of the Laguna Beach and San Juan Capistrano Quadrangles to help identify past Project Footprint usage and areas of potential environmental concern. Copies of the historical maps are provided in **Attachment C**. The following table summarizes the maps reviewed and observations.

Year	Scale	Observations, Project Footprint and Adjoining Properties
1896 1901	1:62,500 1:62,500	The Project Footprint is in a canyon in Laguna. No roads lead to the Project Footprint in the referenced maps. The only roads on the maps are at the present-day locations of Laguna Canyon Road and Pacific Coast Highway.
1902	1:125,000	Dirt roads approximating the present-day Aliso Water District Road and Lower Wood Canyon Road are present on the eastern side of the map. The Project Footprint status and the region in general remain unchanged from the previous maps.
1942	1:62,500	The 1942 map is the first indication of development in the vicinity of the Project Footprint, including the first occurrence of Bluebird Canyon Road itself as well as several apparently residential streets just north of the Project Footprint. Development of residential and commercial properties is evident along the present-day Pacific Coast Highway and a road is present at the location of the present-day Temple Hills Drive. Several dirt roads emerge from the north and west and converge with Temple Hill Drive at the present-day Top of the World.
1948	1:24,000	The area just south of the Project Footprint is designated wooded/vegetated and the orchard south of Bluebird Canyon Road west of the Project Footprint is shown on the map as a series of green dots.
1949	1:24,000	The Project Footprint status and the region in general remain unchanged from the previous map.
19658, 1968	1:24,000	New structures are shown in the vicinity of Temple Hills Drive and Laguna Hills Drive north of the Project Footprint and Summit Drive and Del Mar Avenue to the south.
1972	1:24,000	The eastern portion of this map is marked "unmapped". Park Avenue in the north and Balboa Avenue and roads in the vicinity in the south, all previously dirt roads, are now paved and new structures are shown in their vicinities.
1981	1:24,000	New structures on Laguna Canyon Road at the north-most region on the map.
2012	1:24,000	No details regarding structures are provided on this map. No development is apparent on the Project Footprint. No features of environmental concern are noted on or near the Project Footprint.

Name of maps and source: EDR Historical Topo Map Report

2.5 ELECTRONIC DATABASES

Publicly accessible electronic databases were searched by Stantec to better understand subsurface conditions in the vicinity of the Project Footprint and identify potential sources of impacts to soil and groundwater that could exist in the area of the Project Footprint.

2.5.1 State Water Resources Control Board - GeoTracker Database

GeoTracker is a publicly accessible database operated by the California Environmental Protection Agency State Water Resources Control Board (SWRCB). The searchable database is utilized by State and local oversight agencies to track and archive data related to releases of hazardous substances. Using GeoTracker, Stantec found that no sites having at least one release of a hazardous material are within approximately 1,750-foot radius (1/3 mile) of the Project Footprint.

Subject Project Footprint
No listed sites or facilities shown.

Open Leaking Underground Storage Tank (LUST) / Cleanup Program Sites
No open LUST/Cleanup Program sites were identified within a 1/3-mile radius of the Site.

Closed LUST/Cleanup Program Sites
No closed LUST/Cleanup Program sites were identified within a 1/3-mile radius of the Site.

Permitted Underground Storage Tank
No USTs permitted through the Los Angeles County Fire Department have been identified within a 1/3-mile radius of the Site:

2.5.2 EnviroStor

EnviroStor is a publicly accessible database operated by the State of California Department of Toxic Substances Control (DTSC). The searchable database contains information related to sites with contamination and/or sites where the DTSC's environmental oversight has been requested or required. Stantec utilized EnviroStor to obtain information relating to identified DTSC sites located within 1,750-foot radius of the Project Footprint.

No sites are listed in EnviroStor within the search radius.

2.5.3 State of California Geologic Energy Management Division (CalGEM)

The Project Footprint is located within the Laguna Beach California Oil Field. Based on a review of the CalGEM WellFinder online database, one former oil well, 'Laguna Beach Oil Association #1' (API 0405901041) was identified approximately 700 feet to the southwest of the Project Footprint. Laguna Beach Oil Association # 1 was originally drilled on November 1, 1920, and a Notice of

Intent to Abandon the former oil well was prepared on February 12, 1924. Per CalGEM records, the status of the former oil well is indicated as "Plugged". Copies of the well records obtained from CalGEM for this former oil well is included in Attachment D. Based on the distance and plugged status of the former oil well, it is Stantec's opinion that the former oil well does not represent an environmental risk for the Project Footprint.

3.0 SUMMARY, CONCLUSIONS, AND RECOMENDATIONS

On behalf of the City of Laguna Beach (Laguna Beach), Stantec Consulting Services Inc. (Stantec) has completed a desktop environmental records review for a linear highway widening project that extends along the north side of Bluebird Canyon Drive from Rancho Laguna Road at the eastern most boundary of the Project footprint to approximately 951 feet to the west (the "Project Footprint," **Figure 1**). The environmental review was completed in support of the proposed widening of Bluebird Canyon Road and the construction of an approximately 951-foot-long retaining wall to evaluate the possible presence of environmental impacts and hazardous materials that may be present within the project footprint as a result of current and/or historical use of Bluebird Canyon Drive or nearby surrounding properties. Stantec understands that the purpose of the widening and construction project is to facilitate emergency vehicle use in the area of Bluebird Canyon Drive.

Stantec obtained historical sources of information to ascertain the past use of the Project Footprint and surrounding area and evaluate if past uses may have had the potential to impact environmental media beneath the Project Footprint. Governmental, regulatory, and other public records were evaluated to identify potential contributors to possible adverse environmental conditions in connection with the Project Footprint. During the review of historical records, Stantec attempted to identify uses of the Project Footprint from first developed use to the present. In addition, Stantec evaluated the potential for nearby surrounding and adjacent properties to have potentially impacted the Project Footprint. The following provides our findings and key conclusions developed from the records review.

- The Project Footprint is located within the City of Laguna Hills which contains several sites with historic releases of hydrocarbons to soil and/or groundwater. However, none of the sites are within 1,750 feet (1/3 mile) of the Subject Project Footprint and therefore do not represent an environmental risk for the Project Footprint.

- The Project Footprint is located within the Laguna Beach California Oil Field. Based on a review of the CalGEM WellFinder online database, one former oil well, 'Laguna Beach Oil Association #1' (API 0405901041) was identified approximately 700 feet to the southwest of the Project Footprint. Laguna Beach Oil Association # 1 was originally drilled on November 1, 1920, and a Notice of Intent to Abandon the former oil well was prepared on February 12, 1924. Per CalGEM records, the status of the former oil well is indicated as "Plugged". Copies of the well records obtained from CalGEM for this former oil well is included in Attachment D. Based on the distance and plugged status of the former oil well, it is Stantec's opinion that the former oil well does not represent an environmental risk for the Project Footprint.

3.1 RECOMMENDATIONS

Based on the results of the environmental records review, there is a potential to encounter aerially deposited lead (ADL) and/or contaminants associated with stormwater runoff that may include oil and grease. A Limited Phase II Environmental Site Assessment is recommended to include soil sampling in the Project Footprint to evaluate the potential presence of aerially deposited lead (ADL) and stormwater-related contaminants. The results will be used to characterize soil for disposal and to help and evaluate possible considerations for construction worker safety. It should be noted that other hazardous materials may be present associated with the road surface applied (i.e., heavy metals such as arsenic in reflective striping) that may also require special handling and/or disposal considerations.

In addition, based on the soil sampling results obtained from the Limited Phase II ESA, Stantec recommends that a Soil Management Plan (SMP) approach be implemented during the implementation of the widening Project to address the potential for encountering impacted soils. The SMP would specify the roles, responsibilities, protocols, and procedures to be employed should impacted soils and/or other potentially hazardous debris are encountered. Key functions of the SMP in the event of a discovery of subsurface impacts are to specify procedures for immediate notification to local oversight agencies, provide health and safety protocols to protect workers, site occupants, and the public, and to isolate and contain suspected impacted materials while chemical analysis of preliminary samples is conducted.

4.0 LIMITATIONS & CERTIFICATION

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional environmental consulting practices existing at the time this report was prepared and applicable to the location of the Project Footprint. It was prepared for the exclusive use of Kaiser, for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third party information, but Stantec cannot guarantee the completeness or accuracy of this information. No other warranties, expressed or implied are made by Stantec.

5.0 REFERENCES

California Department of Toxic Substances Control (DTSC) – Envirostor Database, 2021.

California Department of Water Resources (DWR) Bulletin 118, California's Groundwater, 2020.

California State Water Resources Control Board, Geotracker database, 2021.

California Geologic Energy Management Division (CalGEM), WellFinder Online Database, 2021/2.

Environmental Data Resources (EDR), 2021, EDR Radius Map Report, October 20, 2021.

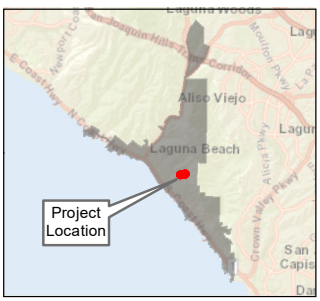
Environmental Data Resources (EDR), 2021, EDR Historical Topo Map Report, October 20, 2021.

Environmental Data Resources (EDR), 2021, Certified Sanborn Map Report, October 20, 2021.

United States Geological Survey (USGS) 7.5-Minute Topographic Series Maps, Laguna Beach Quadrangle and San Juan Capistrano Quadrangle.

FIGURES





Project Location

0 125 250 Feet

(At original document size of 8.5x11)
1:3,000

N

Stantec

Project Location
Bluebird Canyon Drive,
Orange County, California

Prepared by DL on 2021-12-14
TR by SET on 2021-12-14
IR by SD on 2021-12-14

Client/Project
2042611000
City of Laguna Beach
Bluebird Canyon Drive Retaining Wall
Environmental Desktop Review Report

Figure No.
1

Title
Project Location

Notes
1. Coordinate System: NAD 1983 StatePlane California VI FIPS 0406 Feet
2. Data Sources: Stantec 2021.
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

\\Us0300-pafss01\workgroup\2042\active\2042611000\gis\Figure1_EnvironmentalDesktopReviewReport_ProjectLocationMap12142021.mxd Revised: 2021-12-16 By: dalaw

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

ATTACHMENT A

Bluebird Canyon Drive Retaining Wall
Bluebird Canyon Drive
Laguna Beach, CA 92651

Inquiry Number: 6712812.2s
October 20, 2021

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	9
Orphan Summary	16
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-12
Physical Setting Source Map Findings	A-14
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 2020 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

BLUEBIRD CANYON DRIVE
LAGUNA BEACH, CA 92651

COORDINATES

Latitude (North):	33.5367600 - 33° 32' 12.33''
Longitude (West):	117.7612110 - 117° 45' 40.35''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	429322.2
UTM Y (Meters):	3710861.2
Elevation:	268 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641300 LAGUNA BEACH, CA
Version Date:	2012
Northeast Map:	5641316 SAN JUAN CAPISTRANO, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140514, 20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
BLUEBIRD CANYON DRIVE
LAGUNA BEACH, CA 92651

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	BOB BURNHAM	1211 STARLIT DR	RCRA NonGen / NLR	Higher	705, 0.134, NE
2	FRANK DANIEL	1125 SUMMIT DR	RCRA NonGen / NLR	Higher	1224, 0.232, South
3	PUMP STATION # 6 (PE	PEARL ST. & OCEAN WA	Notify 65	Lower	3896, 0.738, SW
A4		ANITA ST & GAVIOTA	Notify 65	Lower	4479, 0.848, West
A5		ANITA ST & GAVIOTA	Notify 65	Lower	4479, 0.848, West

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-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

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

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
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
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
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
CERS HAZ WASTE ---------- CERS HAZ WASTE
US CDL ---------- National Clandestine Laboratory Register
PFAS ---------- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST ---------- SWEEPS UST Listing
HIST UST ---------- Hazardous Substance Storage Container Database
CERS TANKS ---------- California Environmental Reporting System (CERS) 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
Orange Co. Industrial Site ---------- List of Industrial Site Cleanups
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
HAZNET - Facility and Manifest Data
ICE - ICE
HIST CORTESE - Hazardous Waste & Substance Site List
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
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
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)
MINES MRDS - Mineral Resources Data System
HWTS - Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto---------- EDR Exclusive Historical Auto Stations
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.

ADDITIONAL ENVIRONMENTAL RECORDS

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 09/13/2021 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOB BURNHAM EPA ID:: CAC003031215	1211 STARLIT DR	NE 1/8 - 1/4 (0.134 mi.)	1	9
FRANK DANIEL	1125 SUMMIT DR	S 1/8 - 1/4 (0.232 mi.)	2	11

Notify 65: 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.

A review of the Notify 65 list, as provided by EDR, and dated 03/12/2021 has revealed that there are 3 Notify 65 sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PUMP STATION # 6 (PE	PEARL ST. & OCEAN WA	SW 1/2 - 1 (0.738 mi.)	3	14
Not reported	ANITA ST & GAVIOTA	W 1/2 - 1 (0.848 mi.)	A4	14

EXECUTIVE SUMMARY

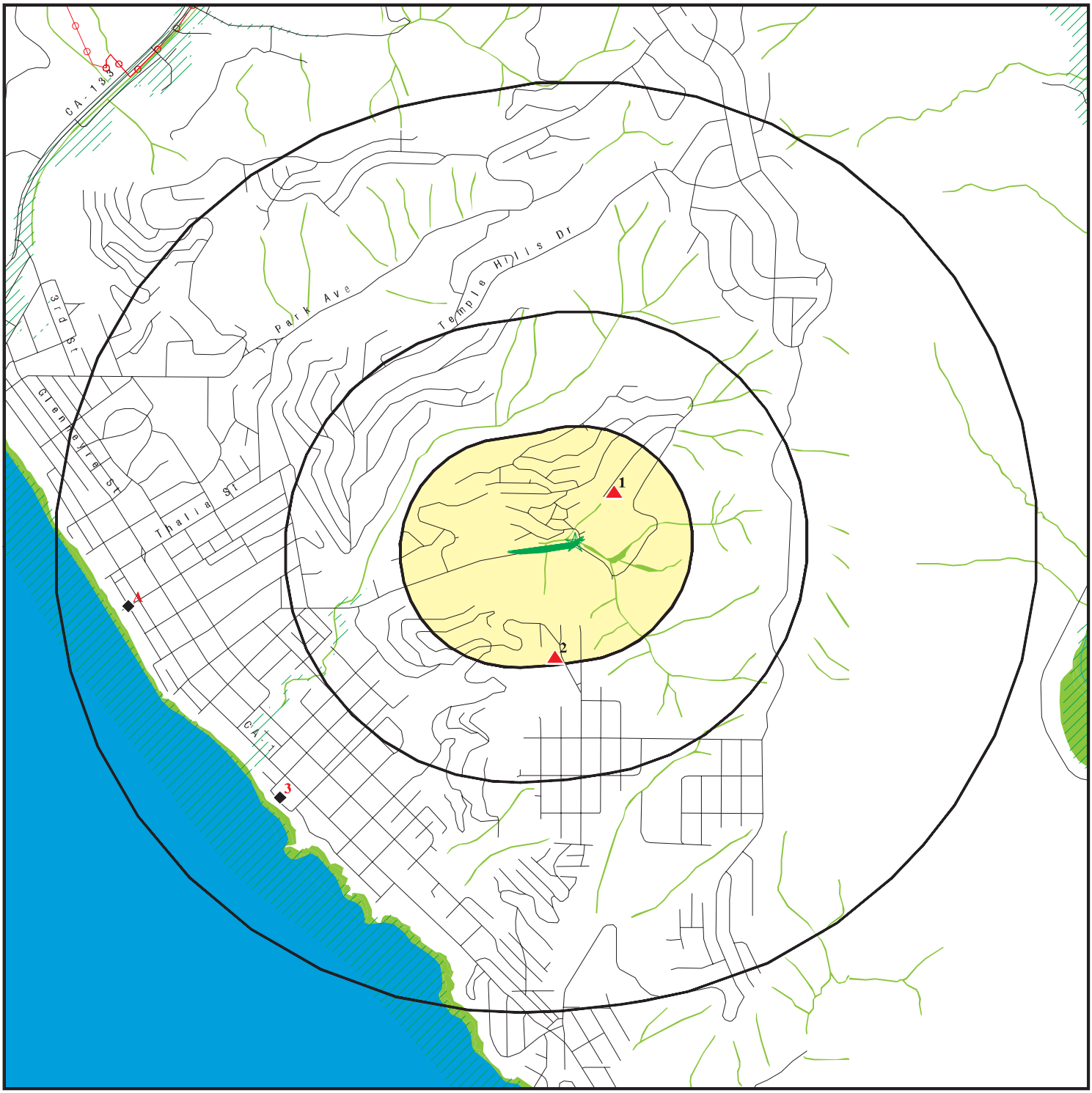
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	ANITA ST & GAVIOTA	W 1/2 - 1 (0.848 mi.)	A5	14

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 7 records.

Site Name	Database(s)
LAGUNA BMW	LUST, HAZNET, HWTS
ARCO #83031	LUST
TICES RENTALS	LUST
CHEVRON	LUST
LAGUNA AUTO SERVICE	LUST
UNOCAL	LUST
31401 MAR VISTA AVENUE	CPS-SLIC

OVERVIEW MAP - 6712812.2S



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

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

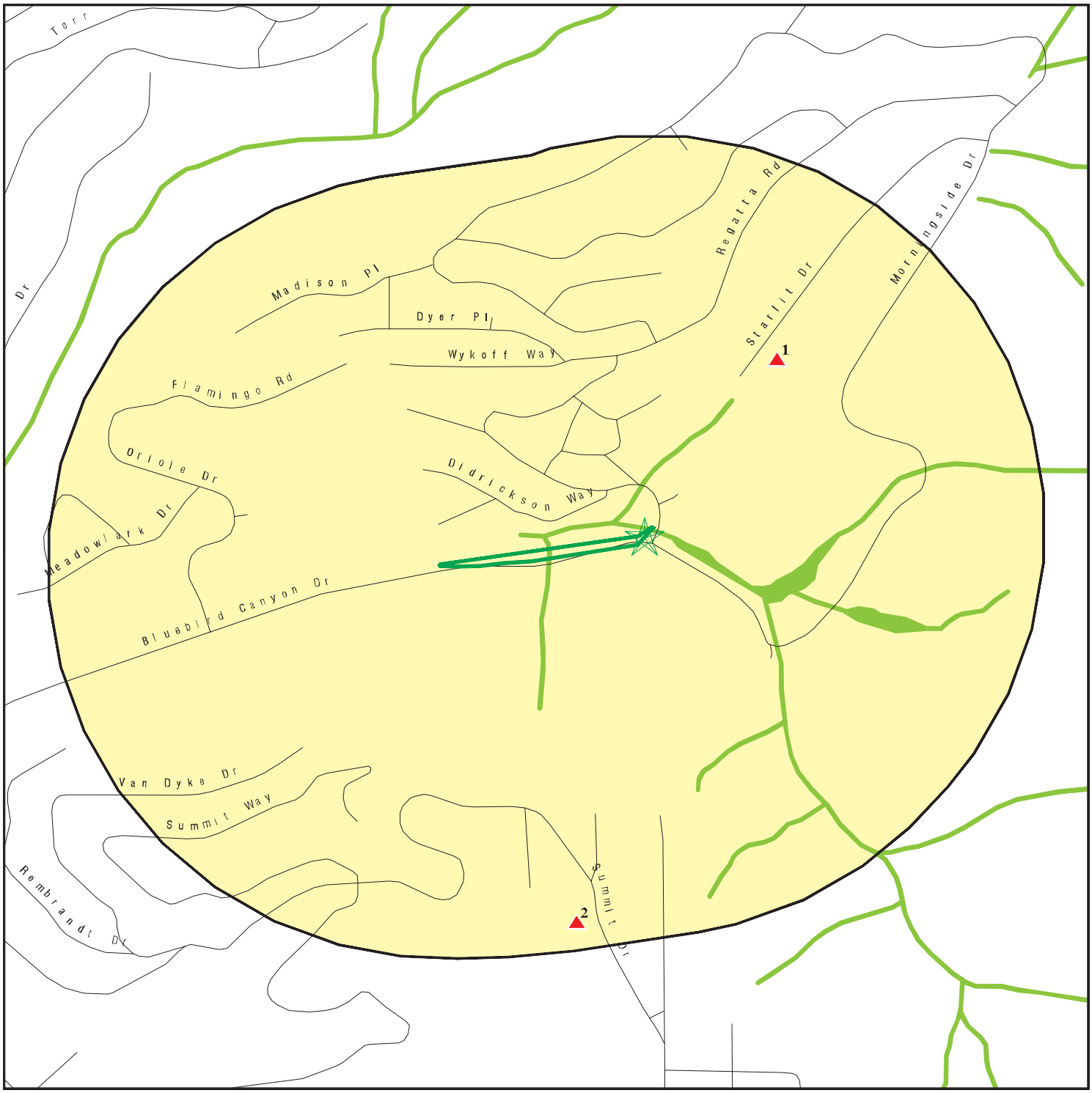
N

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:	Bluebird Canyon Drive Retaining Wall	CLIENT:	Stantec
ADDRESS:	Bluebird Canyon Drive Laguna Beach CA 92651	CONTACT:	Shelby Dawson
LAT/LONG:	33.53676 / 117.761211	INQUIRY #:	6712812.2s
		DATE:	October 20, 2021 4:46 pm

Copyright © 2021 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 6712812.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

N

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:	Bluebird Canyon Drive Retaining Wall	CLIENT:	Stantec
ADDRESS:	Bluebird Canyon Drive Laguna Beach CA 92651	CONTACT:	Shelby Dawson
LAT/LONG:	33.53676 / 117.761211	INQUIRY #:	6712812.2s
		DATE:	October 20, 2021 4:47 pm

Copyright © 2021 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-VSQG	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 CONTROLS	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		0	0	0	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
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
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
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	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
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	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		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
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
Orange Co. Industrial Site	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
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

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
CUPA Listings	0.250		0	0	NR	NR	NR	0
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		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
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	3	NR	3
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
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
MINES MRDS	TP		NR	NR	NR	NR	NR	0
HWTS	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		0	NR	NR	NR	NR	0
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 --		0	0	2	0	3	0	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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
NE
1/8-1/4
0.134 mi.
705 ft.

BOB BURNHAM
1211 STARLIT DR
LAGUNA BEACH, CA 92651

RCRA NonGen / NLR

1025851102
CAC003031215

Relative:
Higher

Actual:
321 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20190827
Handler Name:	BOB BURNHAM	
Handler Address:		1211 STARLIT DR
Handler City,State,Zip:		LAGUNA BEACH, CA 92651-3035
EPA ID:		CAC003031215
Contact Name:		BOB BURNHAM
Contact Address:		1211 STARLIT DR
Contact City,State,Zip:		LAGUNA BEACH, CA 92651-3035
Contact Telephone:		949-494-4357
Contact Fax:		Not reported
Contact Email:		OCABATEMENT@GMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1211 STARLIT DR
Mailing City,State,Zip:		LAGUNA BEACH, CA 92651-3035
Owner Name:		BOB BURNHAM
Owner Type:		Other
Operator Name:		BOB BURNHAM
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

BOB BURNHAM (Continued) **1025851102**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190910
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	BOB BURNHAM
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1211 STARLIT DR
Owner/Operator City,State,Zip:	LAGUNA BEACH, CA 92651-3035
Owner/Operator Telephone:	949-494-4357
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BOB BURNHAM
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1211 STARLIT DR
Owner/Operator City,State,Zip:	LAGUNA BEACH, CA 92651-3035
Owner/Operator Telephone:	949-494-4357
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

BOB BURNHAM (Continued) **1025851102**

Historic Generators:
- Receive Date: 20190827
- Handler Name: BOB BURNHAM
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

2
South
1/8-1/4
0.232 mi.
1224 ft.

FRANK DANIEL **RCRA NonGen / NLR** **1026474015**
1125 SUMMIT DR **CAC003079703**
LAGUNA BEACH, CA 92651

Relative:
Higher

Actual:
594 ft.

RCRA NonGen / NLR:
- Date Form Received by Agency: 20200817
- Handler Name: FRANK DANIEL
- Handler Address: 1125 SUMMIT DR
- Handler City,State,Zip: LAGUNA BEACH, CA 92651
- EPA ID: CAC003079703
- Contact Name: FRANK DANIEL
- Contact Address: 1125 SUMMIT DR
- Contact City,State,Zip: LAGUNA BEACH, CA 92651
- Contact Telephone: 949-939-6280
- Contact Fax: Not reported
- Contact Email: GENEVADEGUIRE@ALLIANCE-ENVIRO.COM
- Contact Title: Not reported
- EPA Region: 09
- Land Type: Not reported
- Federal Waste Generator Description: Not a generator, verified
- Non-Notifier: Not reported
- Biennial Report Cycle: Not reported
- Accessibility: Not reported
- Active Site Indicator: Not reported
- State District Owner: Not reported
- State District: Not reported
- Mailing Address: 1125 SUMMIT DR
- Mailing City,State,Zip: LAGUNA BEACH, CA 92651
- Owner Name: FRANK DANIEL

FRANK DANIEL (Continued) **1026474015**

Owner Type:	Other
Operator Name:	FRANK DANIEL
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200904
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

FRANK DANIEL (Continued) **1026474015**

Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	FRANK DANIEL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1125 SUMMIT DR
Owner/Operator City,State,Zip:	LAGUNA BEACH, CA 92651
Owner/Operator Telephone:	949-939-6280
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	FRANK DANIEL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1125 SUMMIT DR
Owner/Operator City,State,Zip:	LAGUNA BEACH, CA 92651
Owner/Operator Telephone:	949-939-6280
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200817
Handler Name: FRANK DANIEL	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

3
SW
1/2-1
0.738 mi.
3896 ft.

PUMP STATION # 6 (PEARL ST.)
PEARL ST. & OCEAN WAY
LAGUNA BEACH, CA 90101

Database(s): Notify 65
EDR ID Number: S100178484
EPA ID Number: N/A

Relative:
Lower

Actual:
48 ft.

NOTIFY 65:

Name:	PUMP STATION # 6 (PEARL ST.)
Address:	PEARL ST. & OCEAN WAY
City,State,Zip:	LAGUNA BEACH, CA 90101
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

A4
West
1/2-1
0.848 mi.
4479 ft.

ANITA ST & GAVIOTA
LAGUNA BEACH, CA 90101
Site 1 of 2 in cluster A

Database(s): Notify 65
EDR ID Number: S100178427
EPA ID Number: N/A

Relative:
Lower

Actual:
36 ft.

NOTIFY 65:

Name:	Not reported
Address:	ANITA ST & GAVIOTA
City,State,Zip:	LAGUNA BEACH, CA 90101
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

A5
West
1/2-1
0.848 mi.
4479 ft.

ANITA ST & GAVIOTA
LAGUNA BEACH, CA 90101
Site 2 of 2 in cluster A

Database(s): Notify 65
EDR ID Number: S100178428
EPA ID Number: N/A

Relative:
Lower

Actual:
36 ft.

NOTIFY 65:

Name:	Not reported
Address:	ANITA ST & GAVIOTA
City,State,Zip:	LAGUNA BEACH, CA 90101
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported

(Continued) **S100178428**

Status: Not reported

Count: 7 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LAGUNA BEACH	S108054501	31401 MAR VISTA AVENUE	31401 MAR VISTA AVENUE	92651	CPS-SLIC
LAGUNA BEACH	S120834635	ARCO #83031	105 N PACIFIC COAST HWY	92651	LUST
LAGUNA BEACH	S120834886	TICES RENTALS	1705 S PACIFIC COAST HWY	92651	LUST
LAGUNA BEACH	S120834875	CHEVRON	1251 N PACIFIC COAST HWY	92651	LUST
LAGUNA BEACH	S120834843	LAGUNA AUTO SERVICE	1779 S PACIFIC COAST HWY	92651	LUST
LAGUNA BEACH	S120834781	UNOCAL	1369 N PACIFIC COAST HWY	92651	LUST
LAGUNA BEACH	S112917563	LAGUNA BMW	1009 S PACIFIC COAST HWY	92651	LUST, HAZNET, HWTS

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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/24/2022
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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/24/2022
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: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly 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). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 05/10/2021
Date Data Arrived at EDR: 05/13/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 82

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/05/2021
Next Scheduled EDR Contact: 11/22/2021
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: 05/17/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/23/2021
Next Scheduled EDR Contact: 12/06/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

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: 05/17/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/23/2021
Next Scheduled EDR Contact: 12/06/2021
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: 06/14/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 61

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/21/2021
Next Scheduled EDR Contact: 01/03/2022
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: 07/22/2021
Date Data Arrived at EDR: 07/22/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
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: 07/22/2021
Date Data Arrived at EDR: 07/22/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
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: 05/10/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 77

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/22/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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 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: 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 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 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 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 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: 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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Quarterly

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: 05/27/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 05/17/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/27/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 05/27/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 06/01/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 11/01/2021
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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Semi-Annually

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: 05/20/2021
Date Data Arrived at EDR: 06/04/2021
Date Made Active in Reports: 08/30/2021
Number of Days to Update: 87
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/08/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

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: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
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: 05/27/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 05/27/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 05/17/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/27/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 06/01/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
Data Release Frequency: Varies

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: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

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: 07/22/2021
Date Data Arrived at EDR: 07/22/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

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: 06/17/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/13/2021
Number of Days to Update: 88

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/21/2021
Next Scheduled EDR Contact: 01/03/2022
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: 06/10/2021
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/14/2021
Next Scheduled EDR Contact: 12/27/2021
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: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/04/2021
Date Data Arrived at EDR: 06/04/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 84

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 11/22/2021
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: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
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: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
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: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
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: 05/18/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 77
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
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: 07/22/2021
Date Data Arrived at EDR: 07/22/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
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: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/17/2022
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

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: 07/15/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Quarterly

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: 05/18/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 77

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
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: 06/04/2021
Date Data Arrived at EDR: 06/04/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2021
Next Scheduled EDR Contact: 12/20/2021
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

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: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/14/2021
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: 07/15/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
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: 05/27/2021
Date Data Arrived at EDR: 05/28/2021
Date Made Active in Reports: 08/20/2021
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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: 05/28/2021
Date Data Arrived at EDR: 05/28/2021
Date Made Active in Reports: 08/20/2021
Number of Days to Update: 84
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
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: 09/12/2021
Date Data Arrived at EDR: 09/13/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 15
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/13/2021
Next Scheduled EDR Contact: 01/03/2022
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: 06/30/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 05/04/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 85

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 11/29/2021
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: 10/15/2021
Next Scheduled EDR Contact: 01/24/2022
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: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
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: 08/06/2021
Next Scheduled EDR Contact: 11/22/2021
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: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
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: 08/06/2021
Next Scheduled EDR Contact: 11/15/2021
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: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/17/2021
Next Scheduled EDR Contact: 12/27/2021
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: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 11/29/2021
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: 07/19/2021
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 85

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/19/2021
Next Scheduled EDR Contact: 11/01/2021
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: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 12/13/2021
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: 05/07/2021
Date Data Arrived at EDR: 05/13/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
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: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/05/2021
Number of Days to Update: 50
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 11/15/2021
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: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/17/2022
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: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
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: 03/08/2021
Date Data Arrived at EDR: 03/11/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 61
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/03/2021
Next Scheduled EDR Contact: 12/13/2021
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: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
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: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/06/2021
Next Scheduled EDR Contact: 11/15/2021
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: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/27/2021
Next Scheduled EDR Contact: 01/10/2022
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: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/23/2021
Next Scheduled EDR Contact: 11/08/2021
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: 06/30/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 07/16/2021
Number of Days to Update: 2

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
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: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/15/2021
Next Scheduled EDR Contact: 01/03/2022
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: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
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: 07/23/2021
Next Scheduled EDR Contact: 11/15/2021
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: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/12/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 08/31/2021
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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: 05/03/2021
Date Data Arrived at EDR: 05/25/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 78

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/06/2021
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 89

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 09/09/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Quarterly

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: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/26/2021
Next Scheduled EDR Contact: 12/06/2021
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: 08/26/2021
Next Scheduled EDR Contact: 12/06/2021
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: 06/15/2021
Date Data Arrived at EDR: 06/16/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 62

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/14/2021
Next Scheduled EDR Contact: 12/20/2021
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: 05/05/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 91

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/07/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/26/2021
Next Scheduled EDR Contact: 12/06/2021
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: 06/26/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 89
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
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: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 81
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/29/2021
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: 06/17/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/21/2021
Next Scheduled EDR Contact: 01/03/2022
Data Release Frequency: Quarterly

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: 08/13/2021
Next Scheduled EDR Contact: 11/22/2021
Data Release Frequency: Varies

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: 05/18/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 08/05/2021
Number of Days to Update: 78

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
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: 05/25/2021
Date Data Arrived at EDR: 05/28/2021
Date Made Active in Reports: 08/20/2021
Number of Days to Update: 84

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Annually

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: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 08/18/2021
Number of Days to Update: 84

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
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: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/17/2021
Next Scheduled EDR Contact: 12/27/2021
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: 04/16/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/13/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/31/2022
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: 05/13/2021
Date Data Arrived at EDR: 05/13/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 74

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 11/22/2021
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: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 74

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/29/2021
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: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/29/2021
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: 07/01/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 05/06/2021
Date Data Arrived at EDR: 05/28/2021
Date Made Active in Reports: 08/20/2021
Number of Days to Update: 84
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/22/2021
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: 05/28/2021
Date Data Arrived at EDR: 05/28/2021
Date Made Active in Reports: 08/20/2021
Number of Days to Update: 84
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/04/2021
Date Data Arrived at EDR: 06/04/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 84
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2021
Next Scheduled EDR Contact: 12/20/2021
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: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 08/26/2021
Next Scheduled EDR Contact: 12/27/2021
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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/25/2021
Number of Days to Update: 83
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/17/2022
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 09/14/2021
Next Scheduled EDR Contact: 01/03/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 06/07/2021
Date Data Arrived at EDR: 06/07/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/08/2021
Next Scheduled EDR Contact: 12/20/2021
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: 05/19/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 08/12/2021
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
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: 07/15/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/24/2021
Number of Days to Update: 82
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
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: 06/03/2021
Date Data Arrived at EDR: 06/03/2021
Date Made Active in Reports: 08/25/2021
Number of Days to Update: 83
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29
Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/26/2021
Next Scheduled EDR Contact: 12/06/2021
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
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: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/22/2021
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 08/05/2021
Date Data Arrived at EDR: 08/06/2021
Date Made Active in Reports: 09/17/2021
Number of Days to Update: 42

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
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: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/15/2021
Date Data Arrived at EDR: 06/16/2021
Date Made Active in Reports: 07/02/2021
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/14/2021
Next Scheduled EDR Contact: 01/03/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
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: 07/20/2021
Date Data Arrived at EDR: 07/20/2021
Date Made Active in Reports: 10/11/2021
Number of Days to Update: 83

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 07/23/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 77

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 75

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
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: 04/09/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 09/17/2021
Number of Days to Update: 86

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
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: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/06/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 10/07/2021
Number of Days to Update: 56

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/06/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 08/18/2021
Number of Days to Update: 6

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/15/2021
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: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 09/07/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 75

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/06/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
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: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/08/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/09/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/24/2022
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: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/24/2022
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: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/24/2021
Next Scheduled EDR Contact: 01/03/2022
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: 02/04/2021
Date Data Arrived at EDR: 04/16/2021
Date Made Active in Reports: 04/21/2021
Number of Days to Update: 5
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/24/2022
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: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/24/2021
Next Scheduled EDR Contact: 01/03/2022
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: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/24/2021
Next Scheduled EDR Contact: 01/03/2022
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: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/24/2022
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: 10/06/2021
Next Scheduled EDR Contact: 01/24/2022
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: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
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: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
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: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 09/23/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/24/2021
Date Data Arrived at EDR: 04/07/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 78
Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/13/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 73

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/09/2021
Next Scheduled EDR Contact: 11/28/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/23/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 1

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/23/2021
Next Scheduled EDR Contact: 01/10/2022
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: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
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: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 07/15/2021
Number of Days to Update: 77

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/09/2021
Date Data Arrived at EDR: 07/29/2021
Date Made Active in Reports: 10/19/2021
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/15/2021
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: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
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: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
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: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 14
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 14
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
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: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/28/2021
Next Scheduled EDR Contact: 01/10/2022
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: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/25/2021
Number of Days to Update: 85
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
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: 05/19/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 06/07/2021
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
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: 05/28/2021
Date Data Arrived at EDR: 05/28/2021
Date Made Active in Reports: 08/20/2021
Number of Days to Update: 84

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/31/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
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: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
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: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

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: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
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: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
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: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/10/2021
Next Scheduled EDR Contact: 12/20/2021
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: 08/31/2021
Next Scheduled EDR Contact: 12/20/2021
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 11/29/2021
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: 08/17/2021
Next Scheduled EDR Contact: 12/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/22/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 09/17/2021
Number of Days to Update: 86

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/09/2021
Next Scheduled EDR Contact: 12/12/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/14/2021
Next Scheduled EDR Contact: 01/03/2022
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: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/14/2021
Next Scheduled EDR Contact: 01/03/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/17/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 78

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/06/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 08/18/2021
Number of Days to Update: 84

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 12/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/14/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/24/2021
Next Scheduled EDR Contact: 11/15/2021
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: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
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: 05/26/2021
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 81

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
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: 09/23/2021
Next Scheduled EDR Contact: 01/10/2022
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: 08/04/2021
Next Scheduled EDR Contact: 11/22/2021
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: 05/26/2021
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 10/07/2021
Number of Days to Update: 80

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
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: 05/26/2021
Date Data Arrived at EDR: 06/04/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 84

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/08/2021
Next Scheduled EDR Contact: 12/20/2021
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: 06/22/2021
Date Data Arrived at EDR: 06/28/2021
Date Made Active in Reports: 09/21/2021
Number of Days to Update: 85

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/23/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/20/2021
Date Data Arrived at EDR: 07/20/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 80

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
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: 03/24/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/28/2021
Number of Days to Update: 78

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/22/2021
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: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
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: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/07/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/11/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/01/2021
Next Scheduled EDR Contact: 12/20/2021
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
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 Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

BLUEBIRD CANYON DRIVE RETAINING WALL
BLUEBIRD CANYON DRIVE
LAGUNA BEACH, CA 92651

TARGET PROPERTY COORDINATES

Latitude (North):	33.53676 - 33° 32' 12.34''
Longitude (West):	117.761211 - 117° 45' 40.36''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	429322.2
UTM Y (Meters):	3710861.2
Elevation:	268 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641300 LAGUNA BEACH, CA
Version Date:	2012
Northeast Map:	5641316 SAN JUAN CAPISTRANO, 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).

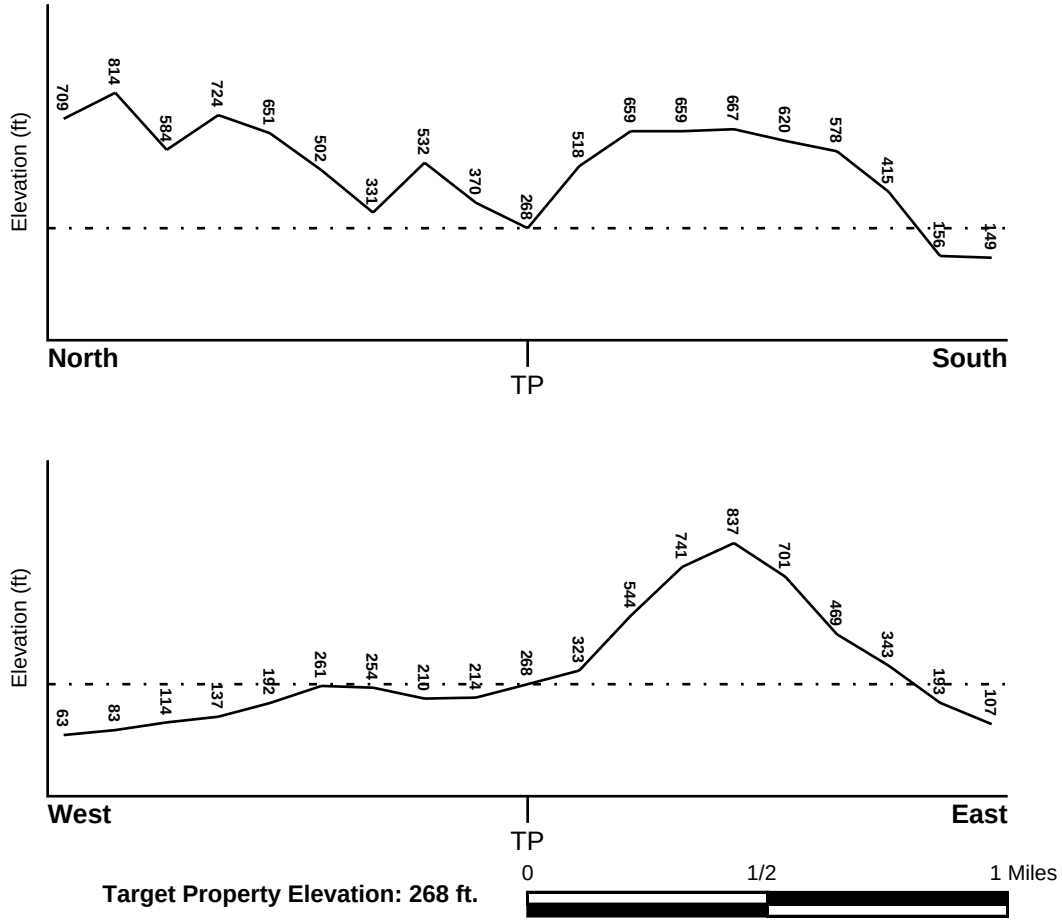
TOPOGRAPHIC INFORMATION

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 WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 268 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
06059C0417J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06059C0436J	FEMA FIRM Flood data
06059C0419J	FEMA FIRM Flood data
06059C0438J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LAGUNA BEACH	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

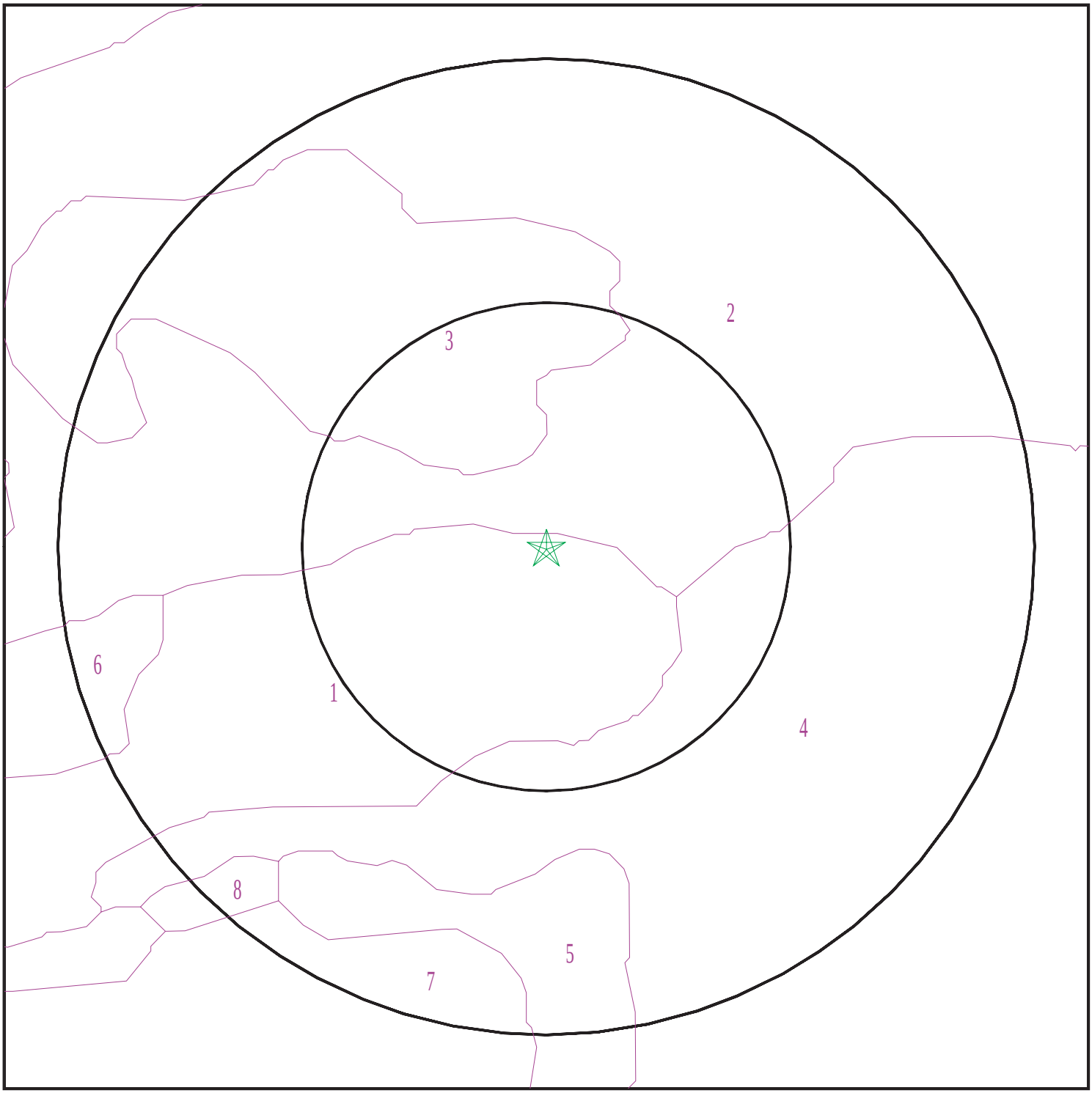
Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified 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 - 6712812.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Bluebird Canyon Drive Retaining Wall	CLIENT:	Stantec
ADDRESS:	Bluebird Canyon Drive Laguna Beach CA 92651	CONTACT:	Shelby Dawson
LAT/LONG:	33.53676 / 117.761211	INQUIRY #:	6712812.2s
		DATE:	October 20, 2021 4:47 pm

Copyright © 2021 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: ANAHEIM

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well 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	25 inches	clay loam	Not reported	Not reported	Max: Min:	Max: Min:
2	25 inches	29 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 2

Soil Component Name: BALCOM

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well 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	29 inches	clay loam	Not reported	Not reported	Max: Min:	Max: Min:
2	29 inches	33 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: BALCOM

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well 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	33 inches	clay loam	Not reported	Not reported	Max: Min:	Max: Min:
2	33 inches	38 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: ANAHEIM

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well 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	20 inches	clay loam	Not reported	Not reported	Max: Min:	Max: Min:
2	20 inches	25 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 5

Soil Component Name: MARINA

Soil Surface Texture: loamy 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: Low

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	33 inches	loamy sand	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	33 inches	59 inches	sand	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.6
3	59 inches	79 inches	sand	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.6

Soil Map ID: 6

Soil Component Name: ANAHEIM

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well 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	25 inches	clay loam	Not reported	Not reported	Max: Min:	Max: Min:
2	25 inches	29 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 7

Soil Component Name: SOPER

Soil Surface Texture: gravelly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well 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	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
2	9 inches	29 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
3	29 inches	33 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 8

Soil Component Name: CIENEBA

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	16 inches	sandy loam	Not reported	Not reported	Max: Min:	Max: Min:
2	16 inches	20 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

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 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
A1	CAEDF0000014788	1/2 - 1 Mile SW
A2	CAEDF0000048294	1/2 - 1 Mile SW
A3	CAEDF0000115496	1/2 - 1 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

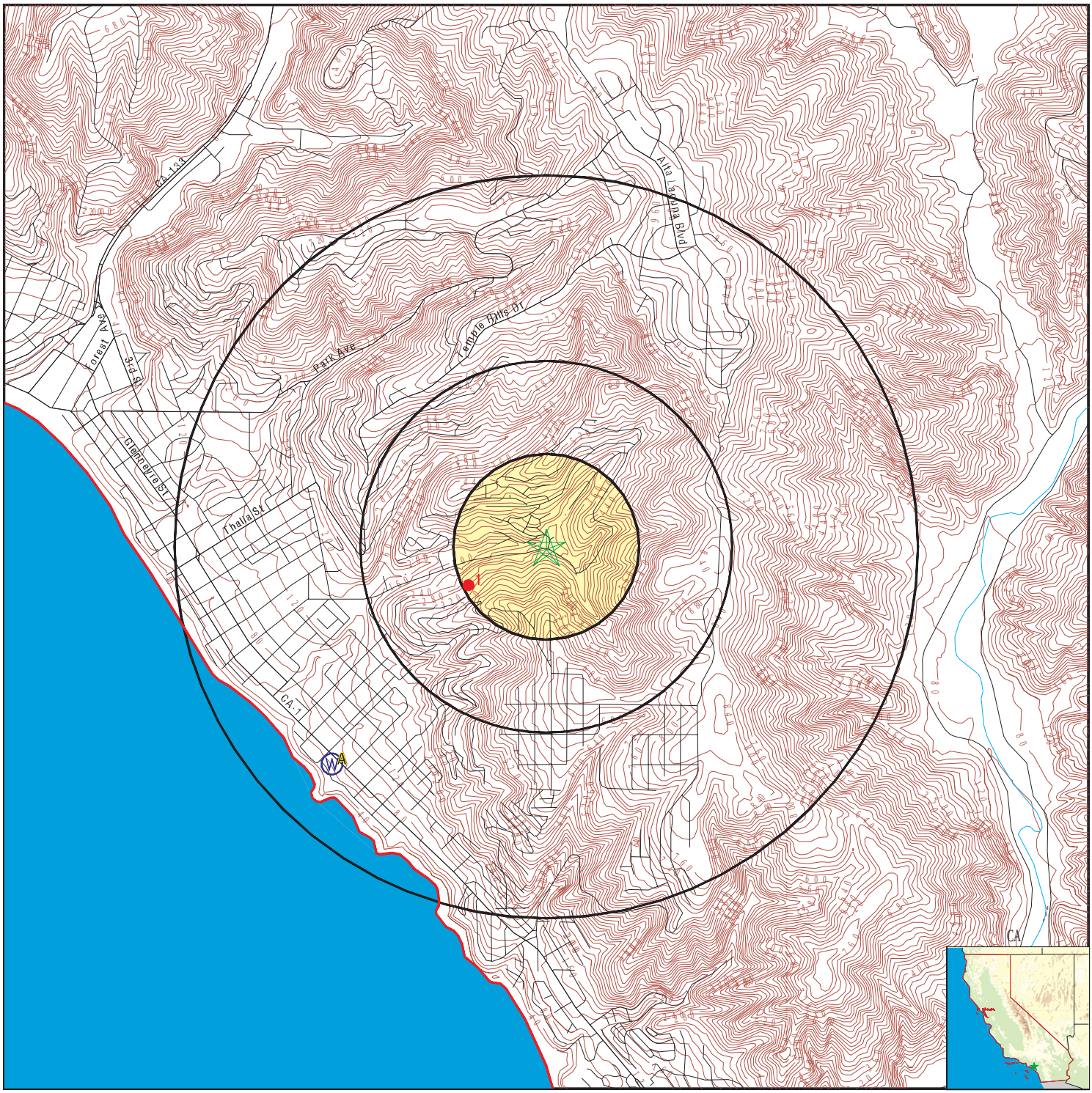
MAP ID	WELL ID	LOCATION FROM TP
A4	CAEDF0000128276	1/2 - 1 Mile SW
A5	CAEDF0000097798	1/2 - 1 Mile SW
A6	CAEDF0000031219	1/2 - 1 Mile SW
A7	CAEDF0000116239	1/2 - 1 Mile SW
A8	CAEDF0000017794	1/2 - 1 Mile SW
A9	CAEDF0000064588	1/2 - 1 Mile SW
A10	CAEDF0000137901	1/2 - 1 Mile SW
A11	CAEDF0000106854	1/2 - 1 Mile SW
A12	CAEDF0000006472	1/2 - 1 Mile SW
A13	CAEDF0000142163	1/2 - 1 Mile SW
A14	CAEDF0000142456	1/2 - 1 Mile SW
A15	CAEDF0000009852	1/2 - 1 Mile SW
A16	CAEDF0000119858	1/2 - 1 Mile SW
A17	CAEDF0000022681	1/2 - 1 Mile SW
A18	CAEDF0000041643	1/2 - 1 Mile SW
A19	CAEDF0000096488	1/2 - 1 Mile SW
A20	CAEDF0000103687	1/2 - 1 Mile SW
A21	CAEDF0000088505	1/2 - 1 Mile SW
A22	CAEDF0000101369	1/2 - 1 Mile SW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG14000006110	1/8 - 1/4 Mile WSW

PHYSICAL SETTING SOURCE MAP - 6712812.2s



- 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
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Bluebird Canyon Drive Retaining Wall	CLIENT:	Stantec
ADDRESS:	Bluebird Canyon Drive Laguna Beach CA 92651	CONTACT:	Shelby Dawson
LAT/LONG:	33.53676 / 117.761211	INQUIRY #:	6712812.2s
		DATE:	October 20, 2021 4:47 pm

Copyright © 2021 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000014788**
A2 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000048294**
A3 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000115496**
A4 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000128276**
A5 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000097798**
A6 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000031219**
A7 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000116239**
A8 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000017794**
A9 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000064588**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
A10 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000137901**
A11 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000106854**
A12 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000006472**
A13 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000142163**
A14 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000142456**
A15 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000009852**
A16 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000119858**
A17 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000022681**
A18 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000041643**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
A19 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000096488**
A20 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000103687**
A21 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000088505**
A22 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**CAEDF0000101369**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
WSW **OIL_GAS** **CAOG14000006110**
1/8 - 1/4 Mile

API #:	0405901041	Well #:	1
Well Status:	Idle	Well Type:	Oil & Gas
Lease Name:	Lease by Laguna Beach Oil Assn.		
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	Spud Date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92651	46	2

Federal EPA Radon Zone for ORANGE 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 ORANGE COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.763 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.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

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.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
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

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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.

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.

ATTACHMENT B

Bluebird Canyon Drive Retaining Wall

Bluebird Canyon Drive

Laguna Beach, CA 92651

Inquiry Number: 6712812.8

October 20, 2021

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

10/20/21

Site Name:

Bluebird Canyon Drive Retainir
Bluebird Canyon Drive
Laguna Beach, CA 92651
EDR Inquiry # 6712812.8

Client Name:

Stantec
9179 Aero Drive
San Diego, CA 92123
Contact: Shelby Dawson

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
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: September 13, 1985	USDA
1977	1"=500'	Flight Date: January 18, 1977	EDR Proprietary Brewster Pacific
1972	1"=500'	Flight Date: October 30, 1972	USGS
1967	1"=500'	Flight Date: May 07, 1967	USGS
1963	1"=500'	Flight Date: February 28, 1963	USGS
1952	1"=500'	Flight Date: December 12, 1952	USDA
1946	1"=500'	Flight Date: December 29, 1946	USGS
1938	1"=500'	Flight Date: June 21, 1938	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.

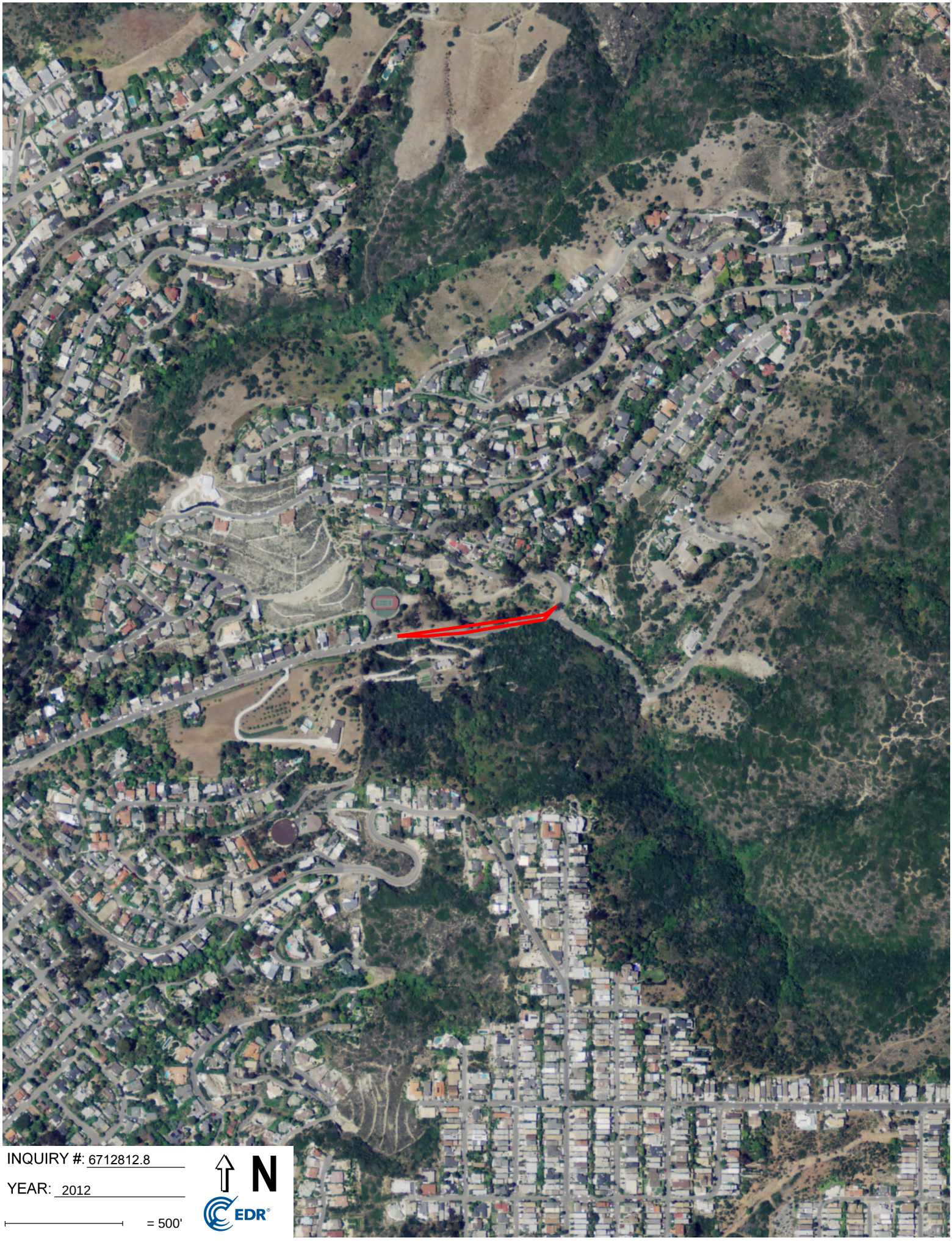
Disclaimer - Copyright and Trademark Notice

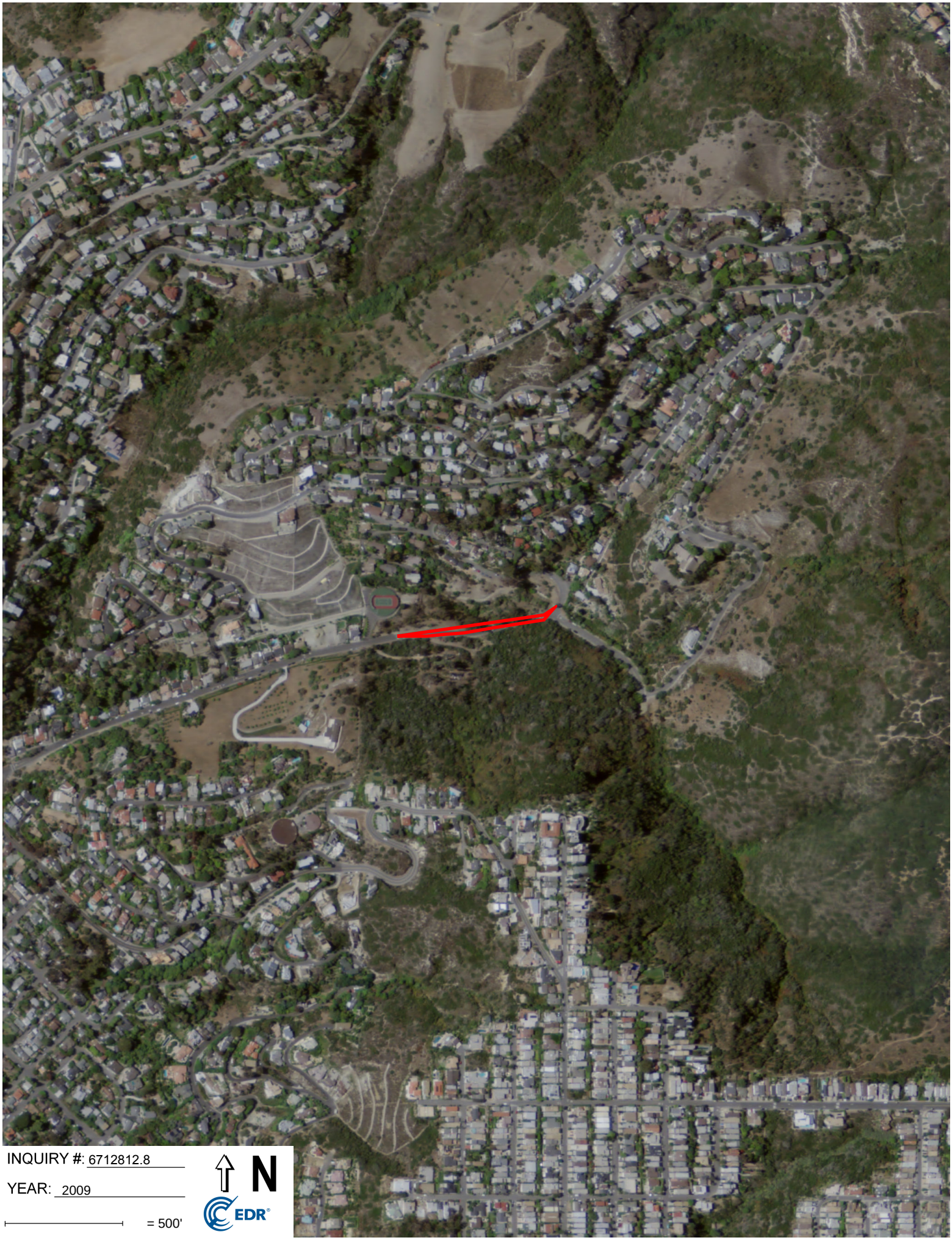
This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY 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 2021 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.

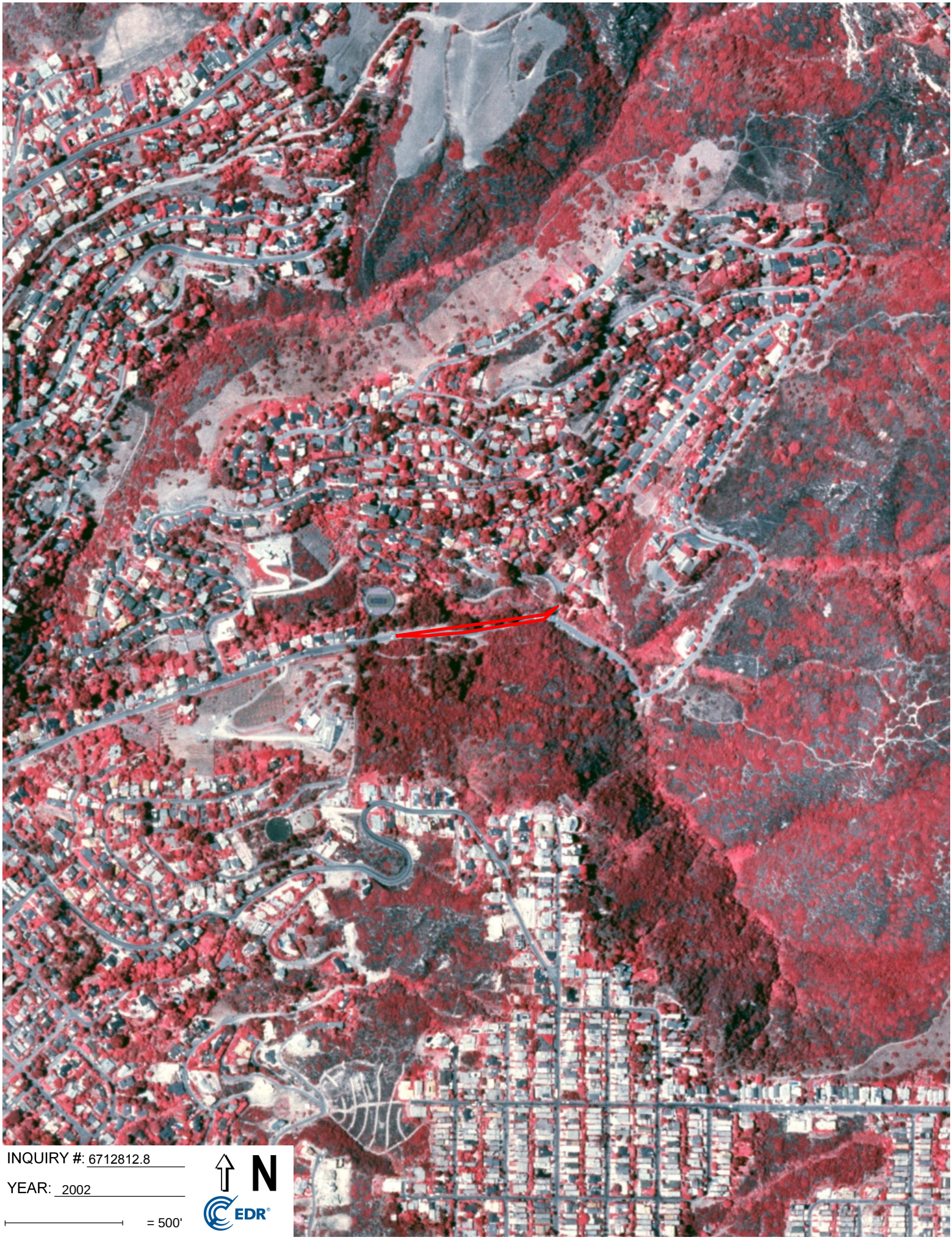
EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.


INQUIRY #: 6712812.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 6712812.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 6712812.8
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 6712812.8
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 6712812.8
YEAR: 2002
= 500'
N
EDR



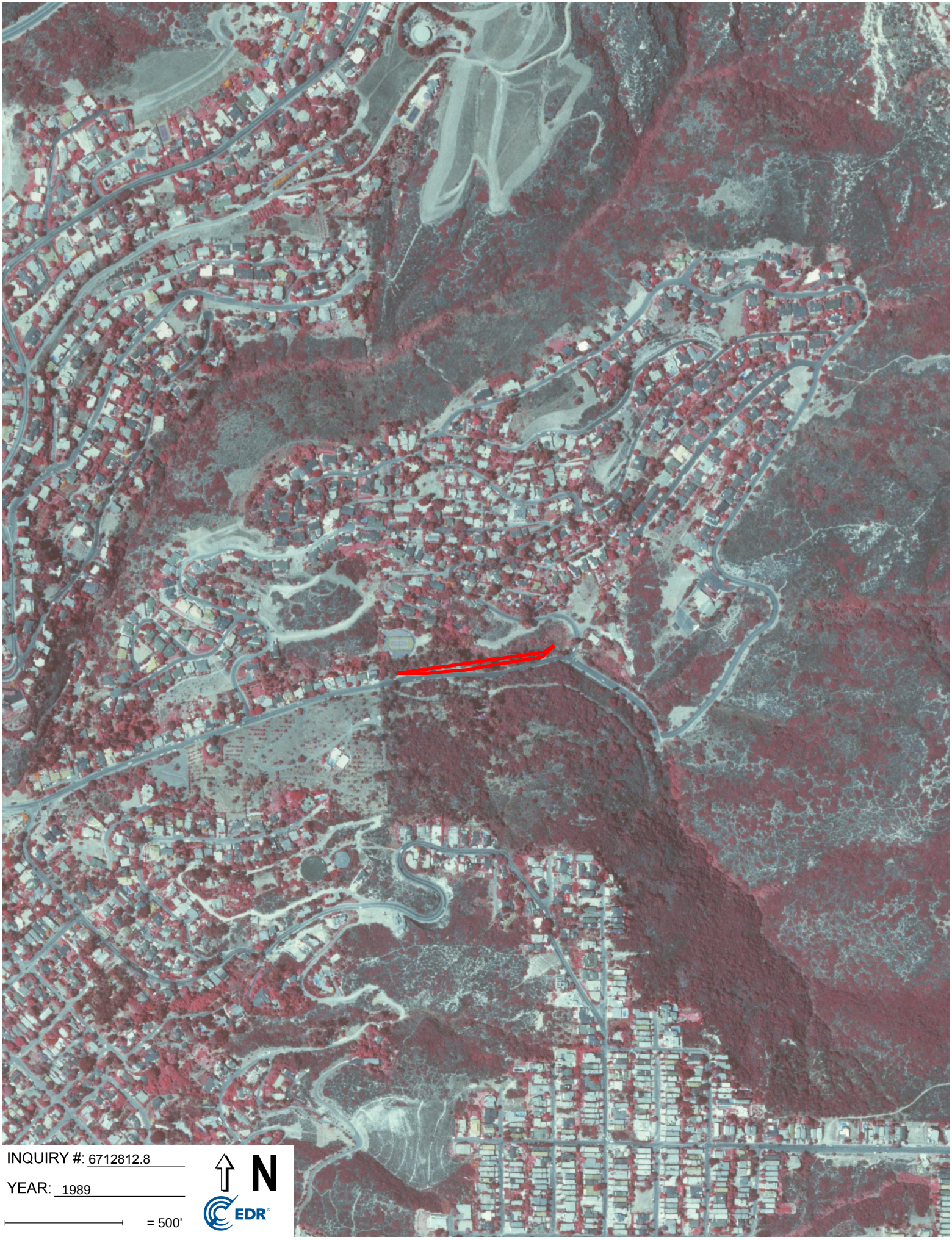
INQUIRY #: 6712812.8

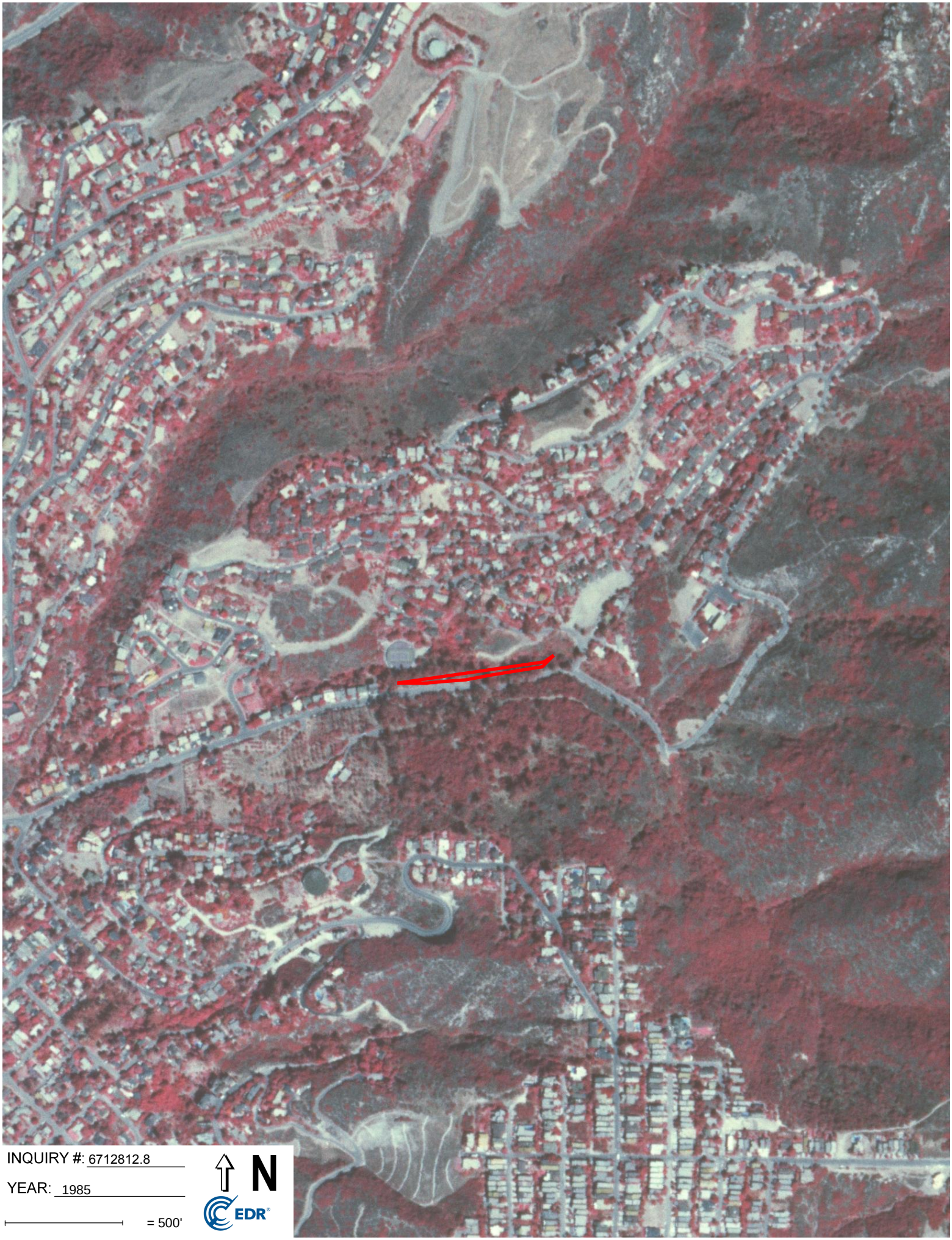
YEAR: 1994

= 500'

N

EDR


INQUIRY #: 6712812.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 6712812.8
YEAR: 1985
= 500'
N
EDR



INQUIRY #: 6712812.8

YEAR: 1977

= 500'

N

EDR



INQUIRY #: 6712812.8

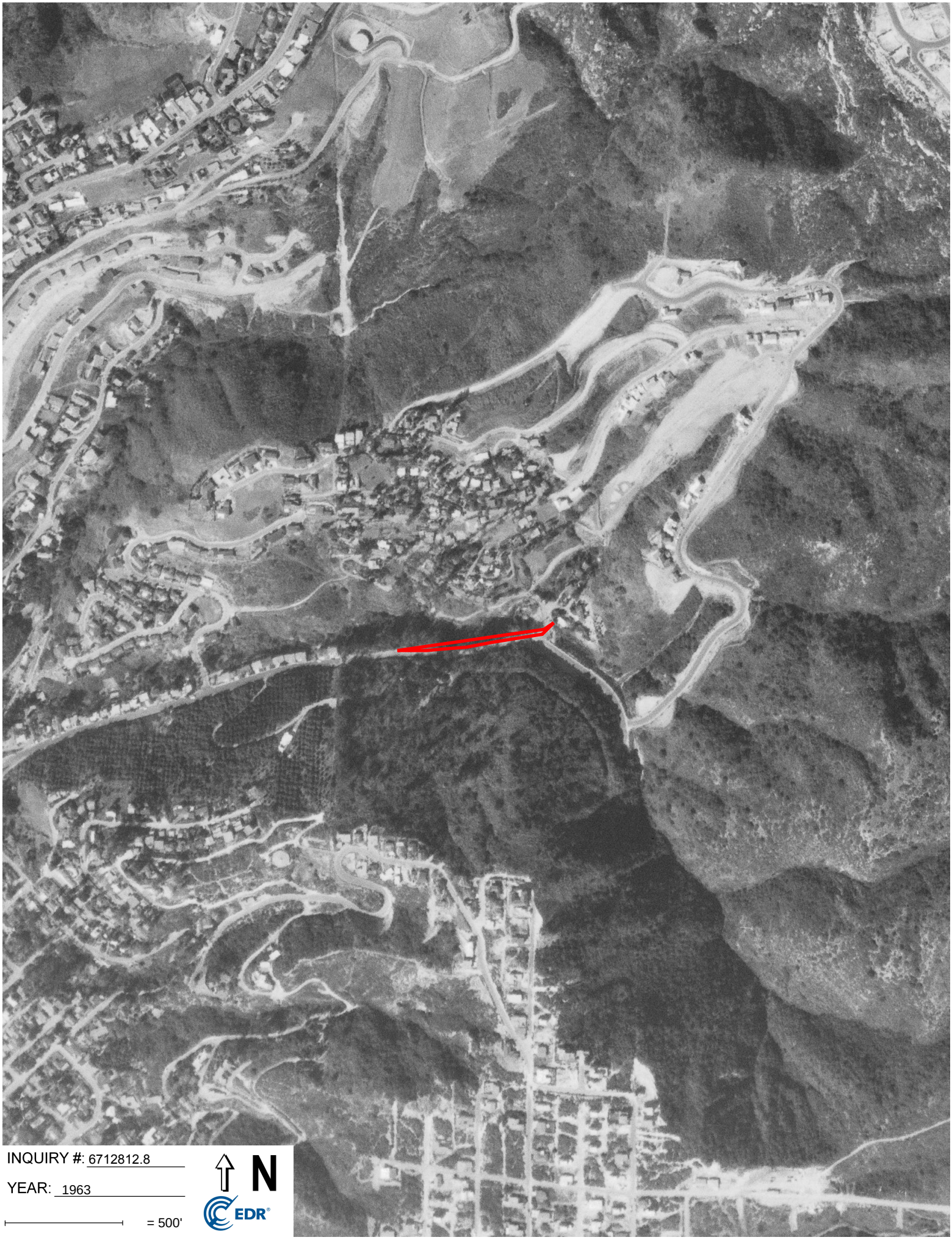
YEAR: 1972

= 500'

N

EDR


INQUIRY #: 6712812.8
YEAR: 1967
= 500'
N
EDR



INQUIRY #: 6712812.8

YEAR: 1963

= 500'

N

EDR



INQUIRY #: 6712812.8

YEAR: 1952

= 500'

N

EDR



INQUIRY #: 6712812.8

YEAR: 1946

= 500'

N

EDR


INQUIRY #: 6712812.8
YEAR: 1938
= 500'
N
EDR

ATTACHMENT C

Bluebird Canyon Drive Retaining Wall

Bluebird Canyon Drive

Laguna Beach, CA 92651

Inquiry Number: 6712812.3

October 20, 2021

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/20/21

Site Name:

Bluebird Canyon Drive Retainir
Bluebird Canyon Drive
Laguna Beach, CA 92651
EDR Inquiry # 6712812.3

Client Name:

Stantec
9179 Aero Drive
San Diego, CA 92123
Contact: Shelby Dawson

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Stantec 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 # 3DA8-412C-883A

PO # 2042611001.200.3.6.2

Project Bluebird Cyn Dr Retaining Wall

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 #: 3DA8-412C-883A

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

Stantec (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 2021 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.

□□□ a□□ □□ logo□ □□□□□□□g □a□□o□□ a□□ □a□□o□□ □ a□□a□e □a□e□ a□□□ of □□□□o□□e□a□□a□a □e□o□□e□□□□□o□□□ aff□a□e□□□□o□□e□□a□e□ a□□□ □□e□ □e□e□□ a□e □□e □o□e□□□ of □□e□□□e□□□e o□□e□□□

Bluebird Canyon Drive Retaining Wall

Bluebird Canyon Drive

Laguna Beach, CA 92651

Inquiry Number: 6712812.4

October 20, 2021

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

10/20/21

Site Name:	Client Name:
Bluebird Canyon Drive Retainir	Stantec
Bluebird Canyon Drive	9179 Aero Drive
Laguna Beach, CA 92651	San Diego, CA 92123
EDR Inquiry # 6712812.4	Contact: Shelby Dawson

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Stantec 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:		*Coordinates:*	
P.O.#	2042611001.200.3.6.2	**Latitude:**	33.53676 33° 32' 12" North
Project:	Bluebird Cyn Dr Retaining Wall	**Longitude:**	-117.761211 -117° 45' 40" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	429323.71
		UTM Y Meters:	3711054.17
		Elevation:	268.06' above sea level

Maps Provided:

2012	1901
1981	1896
1972	
1965, 1968	
1949	
1948	
1942	
1902	

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 2021 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.

□□□ a□□ □□ ogo□ □□□□□□□g □a□□o□ a□□ □a□□o□ □a□□a□e □a□e□a□□ of □□□□o□□ e□a□□a a □e□o□□e□□□□□o□□ aff□a□e□□□□o□e□□a□e□ a□□ □□e□ □e□e□ a□e □□e □o□e□□ of □□e□□e□□e□□e o□□e□□

Topo Sheet Key

□□□□ □□□ □o□o □a□ □e□o□□□□ □a□e□ □□o□ □□e fo□□o□□g □□□□ □o□og□a□□□□ □a□ □□ee□□□

2012 Source Sheets



Laguna Beach
2012
7.5-minute, 24000



San Juan Capistrano
2012
7.5-minute, 24000

1981 Source Sheets



Laguna Beach
1981
7.5-minute, 24000
Aerial Photo Revised 1978



San Juan Capistrano
1981
7.5-minute, 24000
Aerial Photo Revised 1977

1972 Source Sheets



Laguna Beach
1972
7.5-minute, 24000
Aerial Photo Revised 1972

1965, 1968 Source Sheets



Laguna Beach
1965
7.5-minute, 24000
Aerial Photo Revised 1963



San Juan Capistrano
1968
7.5-minute, 24000
Aerial Photo Revised 1967

Topo Sheet Key

□□□□ □□□ □o□o □a□ □e□o□□□□ □a□e□ □□o□ □□e fo□o□□g □□□□ □o□og□a□□□□ □a□ □□ee□□□

1949 Source Sheets



San Juan Capistrano
1949
7.5-minute, 24000
Aerial Photo Revised 1946



Laguna Beach
1949
7.5-minute, 24000
Aerial Photo Revised 1946

1948 Source Sheets



San Juan Capistrano
1948
7.5-minute, 24000
Aerial Photo Revised 1946



Laguna Beach
1948
7.5-minute, 24000
Aerial Photo Revised 1946

1942 Source Sheets



SANTA ANA
1942
15-minute, 50000



SANTIAGO PEAK
1942
15-minute, 50000

1902 Source Sheets



Corona
1902
30-minute, 125000

Topo Sheet Key

□□□□ □□□ □o□o □a□ □e□o□□□□ □a□e□ □□o□ □□e fo□o□□g □□□□ □o□og□a□□□□ □a□ □□ee□□□

1901 Source Sheets



Santa Ana
1901
15-minute, 62500

1896 Source Sheets



Santa Ana
1896
15-minute, 62500

Historical Topo Map

2012



□□□□re□o□□□□□□□e□□fo□□a□o□f□o□□□e fo□o□□g□a□□ee□□□□

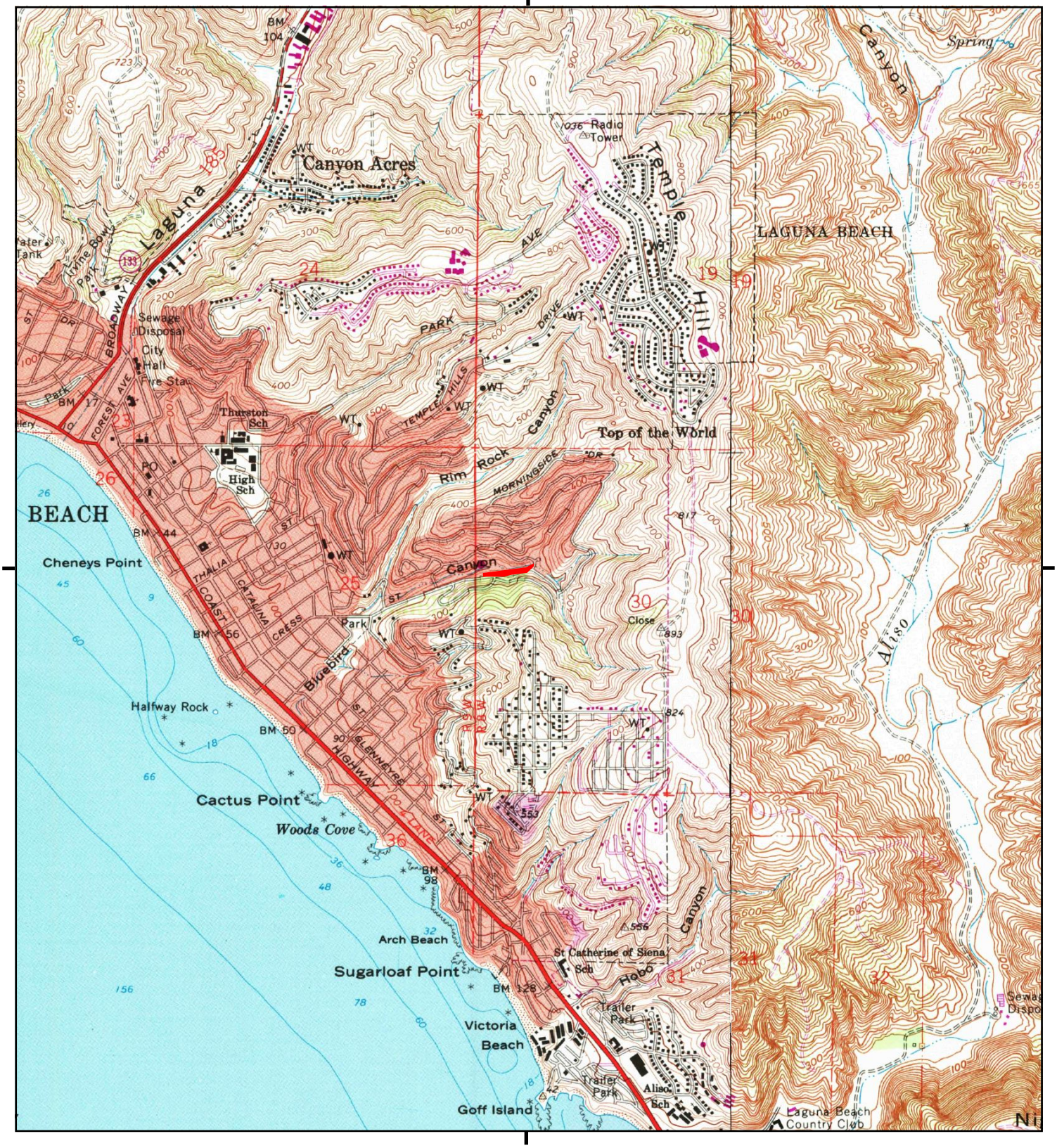
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Laguna Beach, 2012, 7.5-minute
NE, San Juan Capistrano, 2012, 7.5-minute

□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□ Stantec

N



□□□□re□o□□□□□□□e□ □□fo□□ a□o□ f□o□ □□e fo□o□□g □a□ □□ee□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Laguna Beach, 1981, 7.5-minute
NE, San Juan Capistrano, 1981, 7.5-minute

□□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□□ Stantec

N



□□□□re□o□□□□□□□e□ □□fo□□ a□o□ f□o□ □□e fo□o□□g □a□ □□ee□□□□

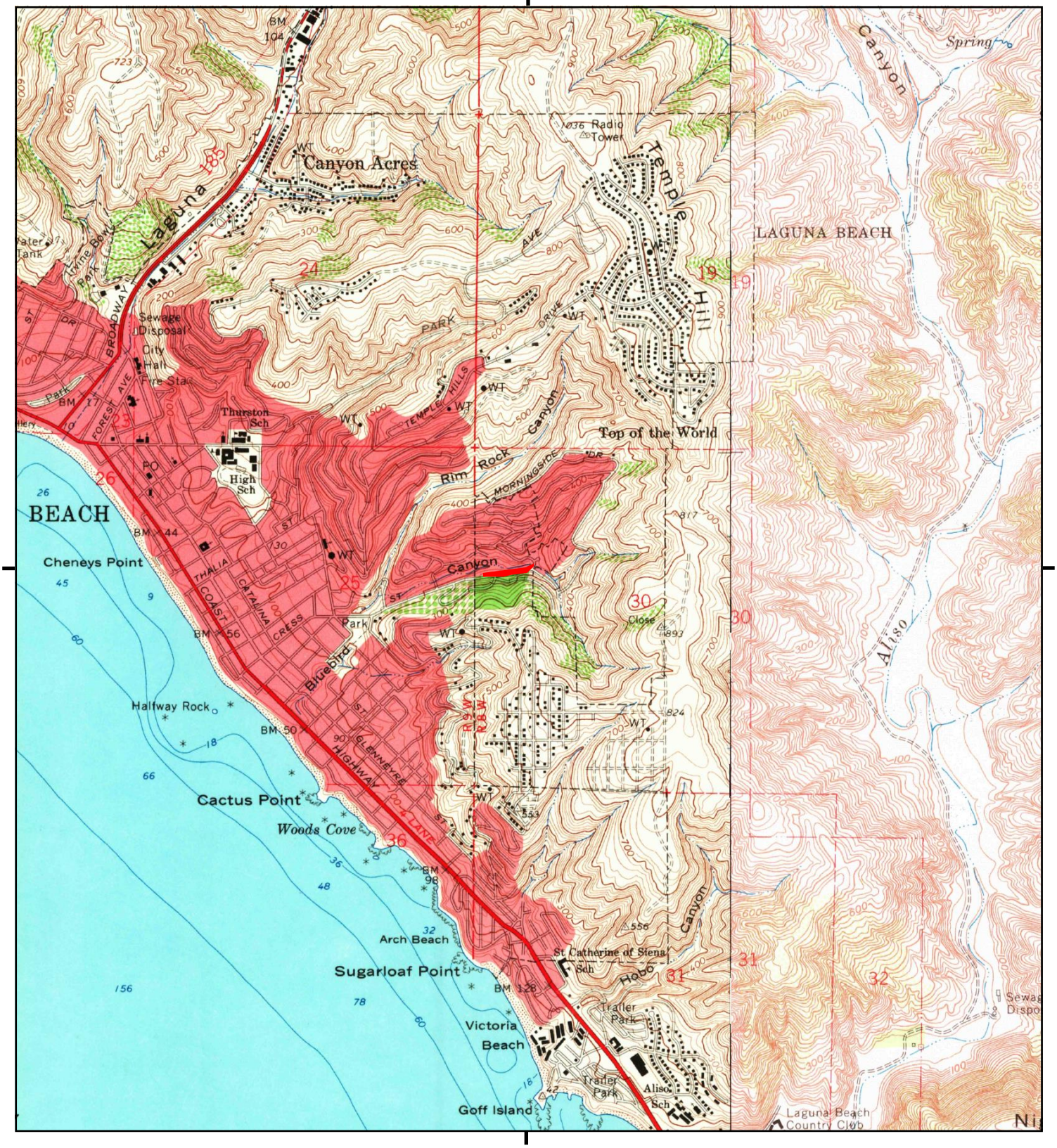
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Laguna Beach, 1972, 7.5-minute

□□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□□ Stantec

N



□□□□re□o□□□□□□□□e□ □□fo□□ a□o□ f□o□ □□e fo□o□□□g □a□ □□ee□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Laguna Beach, 1965, 7.5-minute
NE, San Juan Capistrano, 1968, 7.5-minute

□□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□□ Stantec

N



□□□□re□o□□□□□□□e□ □□fo□□a□o□f□o□ □□e fo□□o□□g □a□ □□ee□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Laguna Beach, 1949, 7.5-minute
NE, San Juan Capistrano, 1949, 7.5-minute

□□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□ Stantec

N



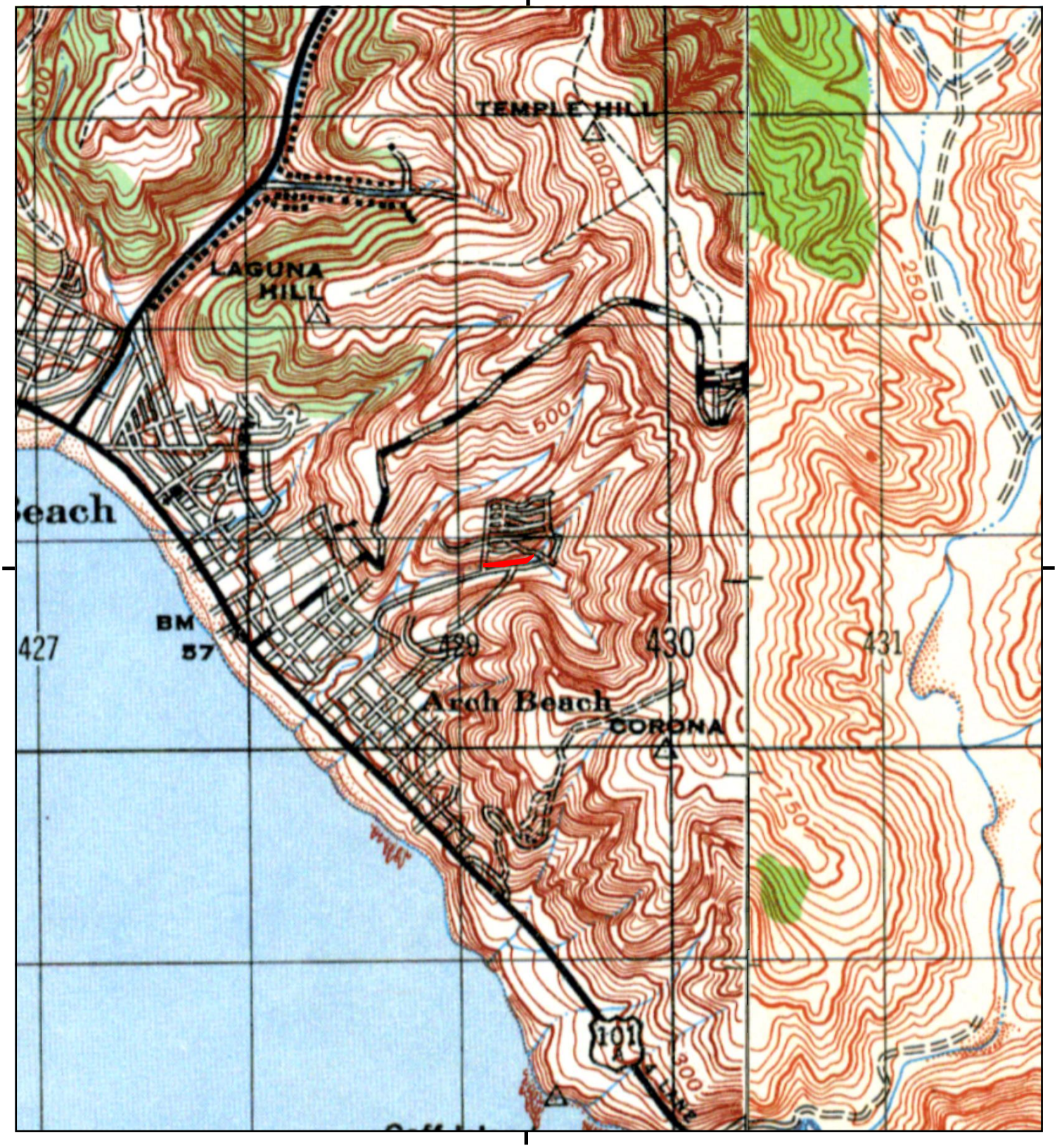
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Laguna Beach, 1948, 7.5-minute
NE, San Juan Capistrano, 1948, 7.5-minute

Bluebird Canyon Drive Retaining Wall
Bluebird Canyon Drive
Laguna Beach, CA 92651
Stantec

N



□□□□re□o□□□□□□□e□ □□fo□□ a□o□ f□o□ □□e fo□o□□g □a□ □□ee□□□□

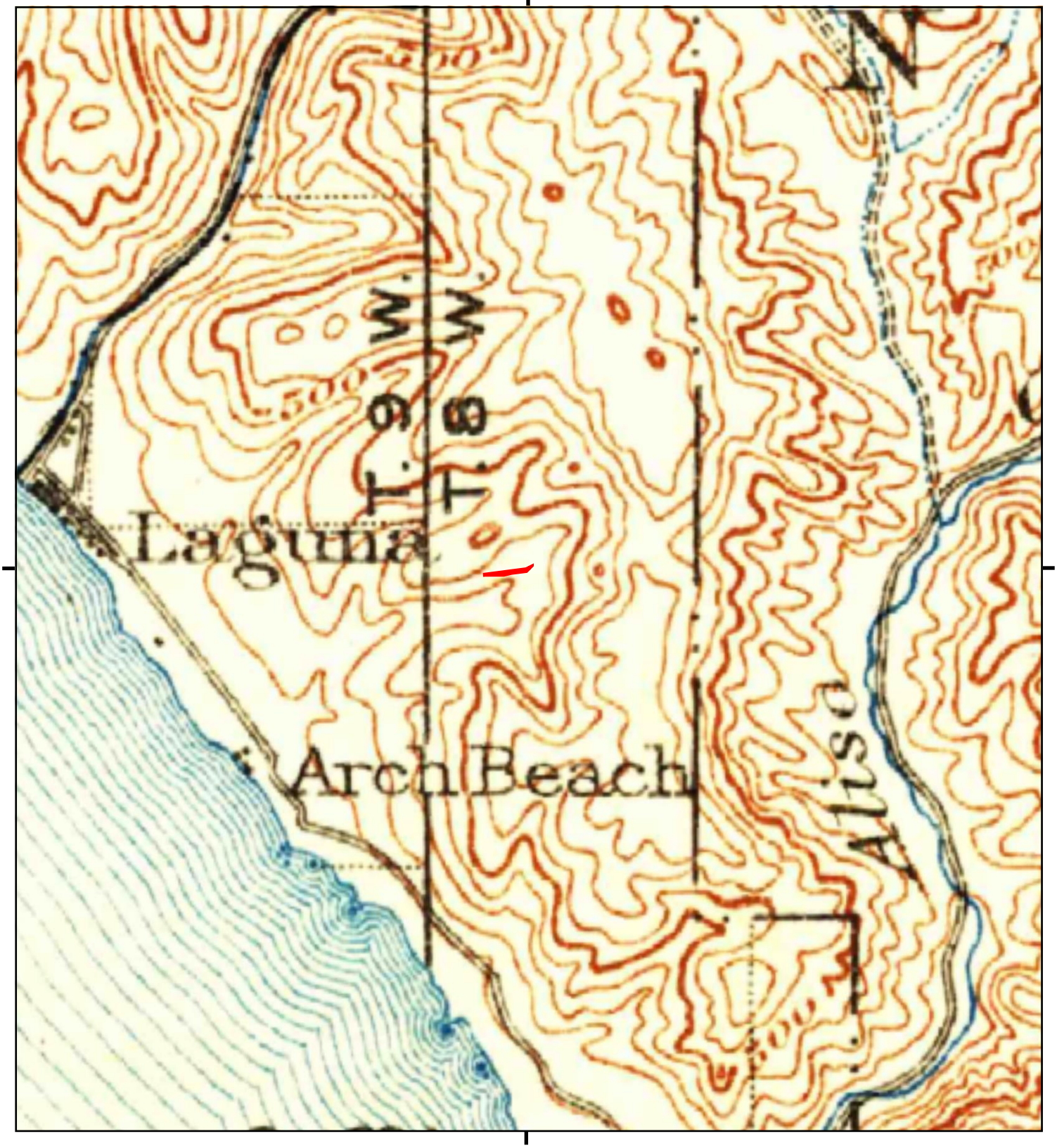
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, SANTA ANA, 1942, 15-minute
NE, SANTIAGO PEAK, 1942, 15-minute

□□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□□ Stantec

N



This report includes information for the following map sheet(s).

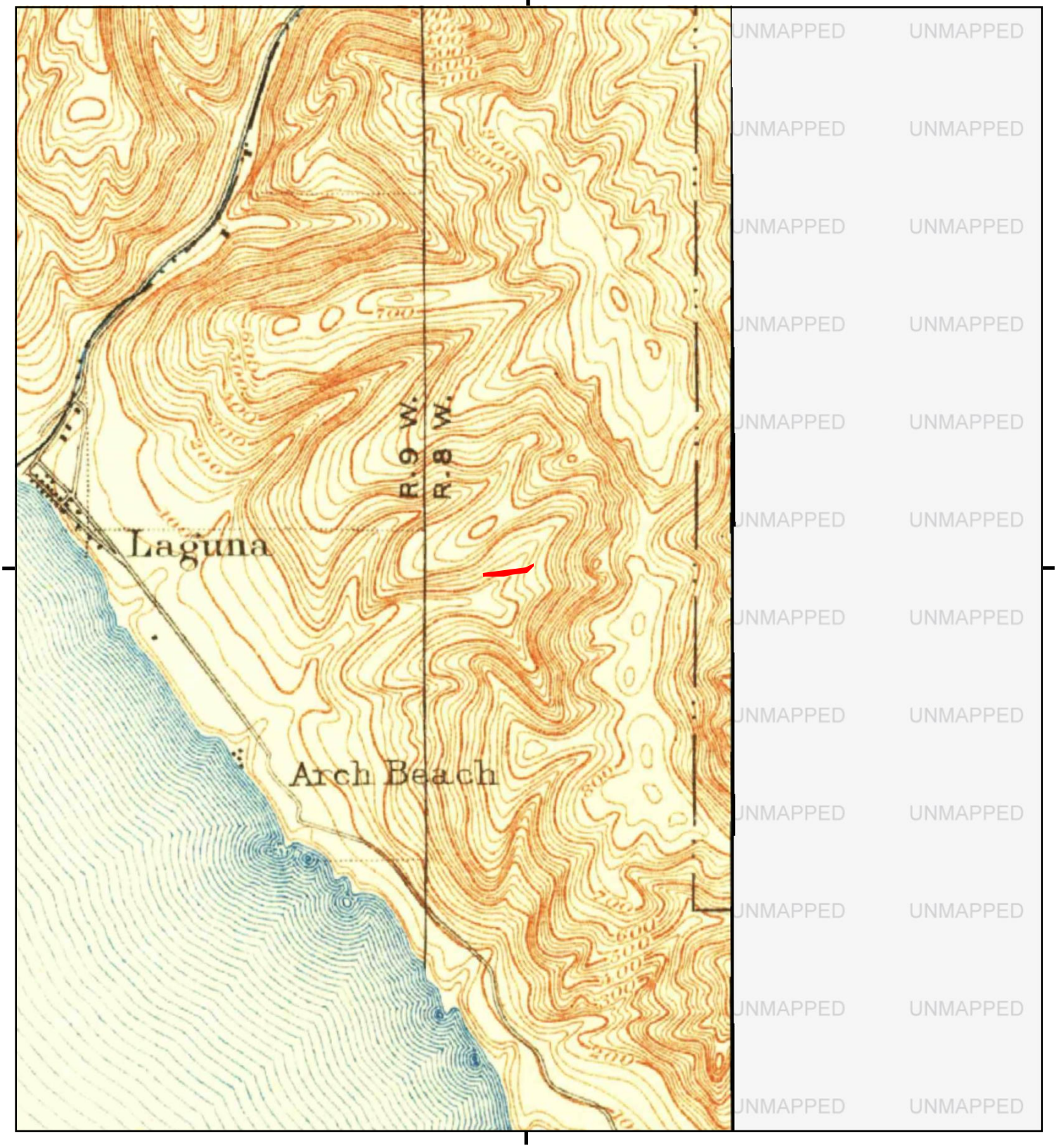
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona, 1902, 30-minute

SITE NAME: Bluebird Canyon Drive Retaining Wall
ADDRESS: Bluebird Canyon Drive
Laguna Beach, CA 92651
CLIENT: Stantec

N



□□□ re□o□□□□□□e□ □fo□□ a□o□ f□o□ □e
fo□o□□g □a□ □□ee□□□□

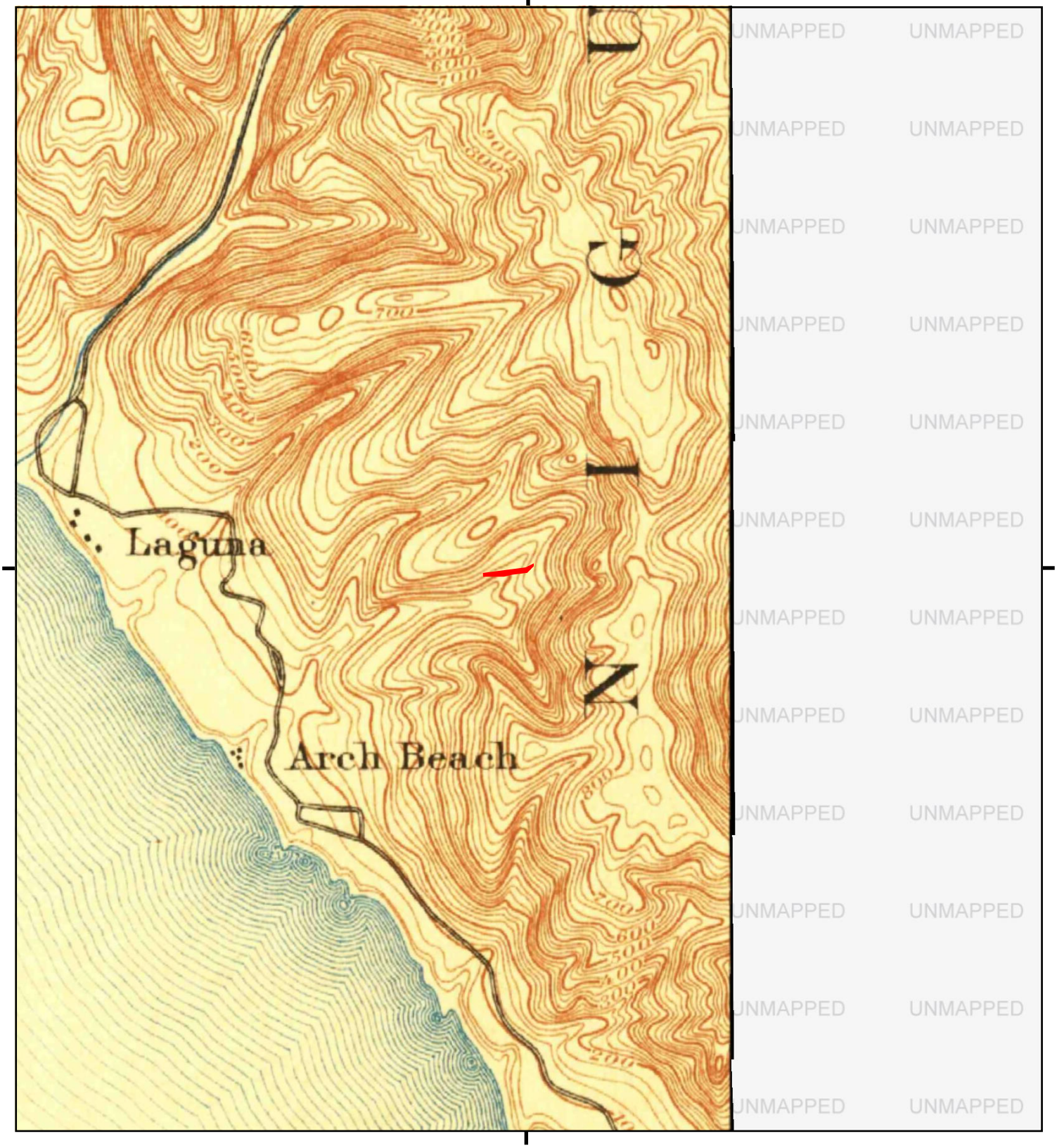
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Ana, 1901, 15-minute

□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□ Stantec

N



□□□re□o□□□□□e□ □fo□ a□o□f□o□ □e
fo□o□□g □a□ □ee□□□□

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Ana, 1896, 15-minute

□□□ □□□ □□ Bluebird Canyon Drive Retaining Wall
□□□□□□□□ Bluebird Canyon Drive
Laguna Beach, CA 92651
□□□□□□ Stantec

N

ATTACHMENT D

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST – WellStats ORPHAN WELL ENTRY PROJECT

API# 059-01041 Well Name/# 1 Operator Laguna Beach Oil Assn.

PDOX	**Entry Date - July** and August 2003	**Initials -** Dave Curtis
WellStats	**Entry Date -** 8/15/05	**Initials -** CO
Map and Map Work	**Entry Date -** 8/29/05 **Map #** W1-4	**Initials -** MS

- **Return Files(s) to Christina when Mapping is complete.**

(05183)

Form 108. 30129—2-5-18—10M

CALIFORNIA STATE MINING BUREAU

Department of Petroleum and Gas

CALIFORNIA STATE MINING BUREAU
RECEIVED
MAY 26 1924
Department of Petroleum and Gas
LOS ANGELES, CALIFORNIA.

Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin

Laguna Beach Cal. Feb. 12 th 1924

Mr. J.B.Case

Deputy State Oil and Gas Supervisor

Los Angeles Cal.

DEAR SIR:

In compliance with Section 16, Chapter 718, Statutes of 1915, notice is hereby given that it is our intention to abandon well number 1 Section 25&30 T. 7 S R. 8 W. S.B. &M. B. & M., Laguna Beach Cal. Oil Field Orange County, commencing work on the 30th. day of December 1920

The present condition of the well is as follows:

12 1/2" Casing hung up at 1134' on olamps
10 " " " Cement at 2302' 10"
8 1/4" " " " 3252' 6"
6 1/4" " " " 4352'
5" " " " 4440' 10" To Case off string of tools 126'1" Liner flush joint pipe.

Drilled onto 5000' with diamond drill 4 3/4" hole taking core all the way.

The proposed work is as follows:

To salavge all the casing possible by ripping aboue cement in each string. And plugging back as we come out.
Will test the water at 998' to 1030' to see if suffition for a water for land owners'

Bk 32 Laguna Beach

Reference to file of data

Maps	Model	Cross Section	Cards	114	121
				V	V

Respectfully yours,

Laguna Beach Oil Asso.
(Name of Company or Operator)

By A.T. Kruckeberg Agt.

Address notice to Deputy State Oil and Gas Supervisor in charge of district where well is located

Form 111. 29776 12-23 4M

CALIFORNIA STATE MINING BUREAU
DEPARTMENT OF PETROLEUM AND GAS

Report on Proposed Operations

No. P-1-8712

Los Angeles, Cal., May. 27., 1924.

Mr. Joe Skidmore
Laguna Beach, Cal.
Agent for LAGUNA BEACH OIL ASSOCIATION [redacted]

DEAR SIR:

Your abandon proposal to Well No. 1, Section 25-30, T. 7S., R. 9W., S.B. B. & M., [redacted] Oil Field, Orange County, dated Feb. 12, 1924, received May. 2., 1924, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

Your log dated Feb. 12, 1924, records a slight showing of gas in white sand from 3652' to 3684'. This was the only showing of either gas or oil that was encountered in this well. The casing record is as stated in the notice quoted below.

THE NOTICE STATES:
"The present condition of the well is as follows:
12½" Casing hung up at 1134' on clamps.
10 " " Cement at 2502' 10"
8¼" " " " 3252' 6"
6¼" " " " 4352'
5 " " " " 4440' 10" To Case off string of tools
126' 1" Liner flush joint pipe.
Drilled onto 5000' with diamond drill 4¼" hole taking core all the way."

PROPOSAL:
"The proposed work is as follows:
To salvage all the casing possible by ripping above cement in each string. And plugging back as we come out.
Will test the water at 998' to 1030' to see if suffition for a water for land owners."

RECOMMENDATION:
THE PROPOSAL IS APPROVED WITH THE FOLLOWING RECOMMENDATIONS:
1. The casings should be removed so that a continuous overlapping metal conductor will be left in the hole.
2. The hole should be filled with the heaviest mud obtainable wherever it is not plugged with cement or other plugging material.
3. All casings should be removed by ripping and not by shooting.
4. The 12½" casing should be bridged at about 1050' and plugged with cement from 1050' to 1030' prior to perforating to make a water well.
5. The casing should be securely capped at the surface if a water well is not obtained.

Upon completion of the work please file a report of abandonment in duplicate on our form 102. This should give a complete history of all the work done to abandon the well.

cc--H. M. Henshaw

R. D. BUSH,
State Oil and Gas Supervisor
By [signature] Deputy

EHM:LAS

CALIFORNIA STATE MINING BUREAU
DEPARTMENT OF PETROLEUM AND GAS

No. 4741

Laguna Beach Oil Assn., Los Angeles, Cal. 7/25/1924
Name of Company or Operator

Los Angeles
Address

This is to acknowledge the receipt of logs and similar records of wells situated on Sec. 30 & 25 *T.* 7S. *R.* 9W. *as herewith enumerated by well numbers.* on Line

Logs Core Drift - Well No. 1 - Dated 7/2/24

History

Subsequent work

R. D. BUSH
State Oil and Gas Supervisor

Per C C Thomas Deputy

Form 127. 22423 11-22 3M

Form 100. 20280 7-22 15M

SUBMIT LOG IN DUPLICATE

Fill this blank in with typewriter. Write on one side of paper only

FEB 25 1924

Department of Petroleum and G...
LOS ANGELES, CALIFORNIA.

CALIFORNIA STATE MINING BUREAU

FERRY BUILDING, SAN FRANCISCO

LOG OF OIL OR GAS WELL

FIELD Laguna Beach COMPANY Laguna Beach Oil Assn.

Township 7 S Range 9 W. S.B.B.&M. Section 30 & 25 Elevation on Line 330' Number of Well One Gn 1

In compliance with the provisions of Chapter 718, Statutes of 1915, as amended, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date Feb.12 th. 1924

Signed Laguna Beach Oil Assn.

Title H.H.Hamilton
(President, Secretary or Agent)

The summary on this page is for the ORIGINAL condition of the well

OIL SANDS

1st sand from No oil sands encountered to
2d sand from to
3d sand from to
4th sand from to
5th sand from to
6th sand from to

IMPORTANT WATER SANDS

1st sand from 325 to 400' Seepage
2d sand from 998' to 1050' Strong
3d sand from 3248' to 3262' Salt
4th sand from 3415 to 3428 Salt

CASING RECORD

Size of Casing	Where Landed	Where Cut	Weight Per Foot	Threads Per Inch	Kind of Shoe	Make of Casing	Cemented Yes	Cemented No	Number of Sacks
12 1/2	1124'	Hung up	45	10	Plain	D.B.X.		No.	Hung up
10	2302'10"	"	40	12	Baker	"	Yes		40
8 1/4	3252'6"		36	10	"	"	"		60
6 1/4	4352'		26	10	Plain	"	"		200

CEMENTING OR OTHER SHUT-OFF RECORD

Casing, Size	Sacks	Time Set	Method	Test and Result (Give water level and bailing results)
10	40	11 Days	Perkins	Bailed to 1340' stood 2hours to, water 1258'.
8 1/4	60	16 "	"	" " 1358' " 24 " 220' Water below shoe
6 1/4	200	30 "	"	Bailed to 2500' Stood 1hr. Dry

PLUGS AND ADAPTERS

Heaving Plug—Material Length Where set

Adapters —Material Size

TOOLS

Rotary Tools were used from 4450' Diamond Drill ft. to 5000' ft.

Cable Tools were used from Surface ft. to 4450' ft.

PERFORATIONS

State clearly whether a machine was used or casing was drilled in shop

From	To	Size of Holes	Number of Rows	Holes Per Foot	Machine—Shop
ft.	ft.				
ft.	ft.				
ft.	ft.				
ft.	ft.				
ft.	ft.				

Thirty days after completion well produced barrels of oil per day.

The gravity of oil was degrees Baumé. Water in oil amounted to per cent.

NAMES OF DRILLERS

L.M.Rice

Roy Hartman

W.H.Smith

NAMES OF TOOL DRESSERS

H.A.Milligan

C.E.Rice

W.B.Williams

Date drilling started Dec. 30th. 1920

Date well was completed Feb. 6th. 1924

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Name of Formation
Top of Formation	Bottom of Formation		
Surface	80	80	Yellow Clay
80	100	20	Sand
100	190	90	Blue Shale
190	205	15	Sand
205	325	120	Blue Shale
325	400	85	Grey sand with a seepage of water 3Bbl. in 6hr.
400	406	6	Hard sand stone
406	435	29	Blue shale
435	445	10	Hard sand
445	470	25	Blue shale
470	480	10	Grey sand drilled open hole to 480'. Put in 12 1/2"
480	495	15	Tough Blue shale
495	645	150	Sandy blue shale
645	650	5	Hard shell
650	660	10	" Grey sand
660	735	75	Sandy blue shale with hard streaks in it.
735	740	5	Hard shell
740	752	12	Tough blue shale
752	770	18	Hard sand caving in from above so had to ream and case drilled open hole from 480' to 780'
770	790	20	Blue shale
790	799	9	Rotten shale
799	805	6	Hard shell
805	825	20	" sand
825	835	10	Blue shale
835	845	10	Brown shale ?
845	855	10	Hard shell
855	905	50	Stieky blue shale
905	912	7	Sand shell
912	920	8	Tough blue shale
920	925	5	Shell
925	990	65	Tough blue shale balls up on bit
990	998	8	Hard shell
998	1050	52	Course hard sand with water, raised up 90' or sumpped
1050	1040	10	Tough blue shale
1040	1045	5	Hard shell
1045	1137	90	Dark blue shale 12 1/2" 45Lb. Hung 1134'
1137	1245	108	Light blue shale
1245	1250	5	Shell
1250	1263	13	Sand dry stands up
1263	1395	132	Light blue shale some sandy and little shellin &
1395	1405	10	Hard sand
1405	1475	70	Very hard dark blue shale
1475	1480	5	Hard shell
1480	1520	40	Blue shale dark
1520	1525	5	Hard shell
1525	1565	40	Blue shale
1565	1570	5	Shell
1570	1640	70	Blue shale
1640	1650	10	White marts sand with white cementy stuff init
1650	1660	10	Tough blue shale

Laguna Beach Oil Assc.
Log Well No.1 Continued

35 -	1695	White Quartz sand
5 -	1700	Blue Shale
48 -	1748	White quartz sand runs in some
10 -	1758	Shell
2 -	1760	Soft light blue shale
8 -	1768	white cement sand
47 -	1815	Blue Shale
10 -	1825	Hard white sand
25 -	1850	Blue ghale
10 -	1860	White,sand
10 -	1870	Blue shale
15 -	1885	White sand
25 -	1810	Blue shale sticky
15 -	1925	Hard white sand
15 -	1940	Blue shale
15 -	1955	Hard white sand
10 -	1965	Blue shale
10 -	1975	White sand
10 -	1985	Blue shale
15 -	2000	White sand
10 -	2010	Sandy Blue shale
45 -	2055	White sand runs insome
5 -	2060	Hard shell
15 -	2075	White sand
10 -	2085	Blue sandy shale
15 -	2100	White sand
2 -	2102	Red Shale
22 -	2124	White sand
11 -	2135	Hard blue shale
10 -	2145	Soft sand runs in
10 -	2155	Blue shale
5 -	2160	Hard grey sand
10 -	2170	Sticky blue shale
10 -	2180	Grey sand
20 -	2200	Sticky blue shale
15 -	2215	Grey sand
5 -	2220	Blue shale
100 -	2320	Grey sand stone and hard shells

2302' 10" 40 Lb.D.B.X. Cemented with 40 sacks Santa Crus cement.Perkins system. June 7th.1921,
Set untill June 18th.1921 Drilled out tp 2309' Bailed wate-er down to 1640' 5 P.M. June 19TH. 1921, Stood untill June 20th. 1921 2 ½ P.M. Tested by McNair top of water at 1258' reported it wet job,38 Bbls. came in, in 21 hours Dye nipple at 740' think leak is coming from their.

155 -	2475	Hard white sand . Drilled open hole to this point.
20 -	2495	Blue shale
30 -	2525	Hard blue shale
3 -	2528	" sand shell
27 -	2555	" " white
5 -	2560	Blue sandy shale
1 -	2561	Shell
9 -	2570	Blue shale
30 -	2600	Grey sand hard
40 -,	2640	Blue shale and shell

Lost 10" bit July 15th. 1921, Fished untill Aug. 8th. 1921 Put in three shoots to shoot bit out of hole, run 8" pipe Aug.12th. 1921. Pipe went by bit in good shape.

Laguna Beach Oil Asso.
Log Well No. 1 Continued.

Drilled open hole from 2320' to 2640'.

37 -	2677	Hard grey sand
3 -	2680	" Shell
6 -	2686	" grey sand
14 -	2700	Blue Shale
15 -	2715	Hard sand
10 -	2725	Blue shale
5 -	2730	Hard sand
60 -	2790	Blue shale
10 -	2800	" "
5 -	2805	Dark grey sand
5 -	2810	Sand shell
10 -	2820	" White
15 -	2835	Blue sandy shale
15 -	2850	" sticky "
53 -	2903	Hard grey sand
42 -	2945	Blue sandy shale
45 -	2990	Hard grey sand stone
5 -	2995	" Shell
42 -	3035	Sand stone softer
35 -	3070	Blue shale
6 -	3076	Hard shell
24 -	3100	Blue shale
5 -	3105	Sand shell
50 -	3155	Blue shale
35 -	3190	Grey sand
8 -	3198	Blue shale
4 -	3202	Hard shell
23 -	3225	Blue shale
5 -	3230	Sand shell
18 -	3248	Blue shale
4 -	3252	Grey Sand

Nov. 12th. 1921, Cemented 8 1/4". 36Lb. H.B.J. At 3252'6" with 60 sacks Santa Cruz cement with Perkins system. Pumped cement at 12-12 P.M. Pumped water at 12-25 P.M. Set casing down at 1-45 P.M. Casing was tested by pump by setting on bottom, Pressure went up to 100 Lbs. Nov. 28th.1921, Casing standing standing full of water when took plug out of pipe, Drilled out of pipe 5' set Pipe up with chain tongs, took 10" stubbhin pipe when set on clamps. Bailed water down 1358' water coming in 100' per hour or 6 Bbls. Per hour. Nov.30th stood over night water filled up 220' of top of hole warm and Salty in bottom of hole about 100 degrees Far.
All satisfied it is bottom water, cement job seems to be all O.K.

26 -		
16 -	3268	White salt water sand 100 degrees warm
25 -	3293	light blue shale and some pyrites in it
5 -	3298	Hard blue shale
17 -	3315	" " shell
18 -	3333	" sand

Drilled open hole to this point with 8" tools, caved in on tools had to fish them out, run 6 1/4" pipe.

20 -	3353	Hard blue shale
57 -	3415	" grey sand and shell

Laguna Beach OIL Asso.
Log Well No. 1 Continued.

15 -	3428	White soft sand think it has salt water in it
12 -	3440	Hard sand stone shell
10 -	3450	White sand
25 -	3475	Light blue shale caves
10 -	3485	Sand stone grey
3 -	3488	Dark blue shale
7 -	3495	Sand stone grey
4 -	3499	Hard blue shale
15 -	3514	Sand stone grey
21 -	3535	Almost black shale
8 -	3543	Grey sand
10 -	3553	Blue shale
3 -	3556	Hard shell
10 -	3556	Blue stieky shale
7 -	3573	Coffee shale
9 -	3582	Blue shale
2 -	3584	Shell
14 -	3598	Blue shale
20 -	3618	Hard grey sand and shell
5 -	3623	Shell
4 -	3627	Blue shale soft
3 -	3630	Hard shell
5 -	3635	Blue shale
7 -	3642	Grey sand
20 -	3662	Blue shale
22 -	3684	White sand with a little gas
5 -	3689	Hard shell
23 -	3702	Blue shale
22 -	3724	Sandy blue shale
2 -	3726	Shell
4 -	3730	Slate shale and sand
7 -	3737	Blue shale tough
10 -	3747	Shell hard sand
38 -	3785	Blue shale
3 -	53788	Sand
18 -	3806	Tough blue shale
1 -	3807	Shell
4 -	3811	Sandy shale
7 -	3818	Hard sand
147 -	3825	Sandy shale
18 -	3850	Grey Sand
10 -	3860	Fine white sand
6 -	3866	Dark blue shale
3 -	3869	Shell
21 -	3890	Dark Blue shale
5 -	3895	Shell
172 -	4067	Dark blue shale
13 -	4080	" " "
1 -	4081	Shell
44 -	4125	Grey coarse-sand coarse
17 -	4142	Fine white sand
28 -	4170	Hard " "
2 -	4172	" shell yellow sand
56 -	4228	Blue shale
37 -	4265	Tough blue shale

Laguna Beach Oil Assc.
Log Well No. 1 Continued,

2 -	4267	Hard shell
15 -	4282	Blue shale
80 -	4362	" "
		Feb. 6th.1923 6 1/4" 26Lb. D.B.K. @@ 4342' with 200 sacks Santa Cruz cement. Was drilled out on March 6th. 1923 water bailed down to 3500' stood 11 hours and stood test showing cement job O.K.
20 -	4382	Grey hard sand
20 -	4402	Blue shale
12 -	4414	Dark sand
4 -	4418	Blue shale
11 -	4429	Grey sand
56 -	4485	Blue shale
		Drilled to 4450' open hole , lost tools fishing for them when rig burned March 26thJ 1923 . Put in Diamond Drill July 15th. 1923 and drilled by tools setting 136'1" 5" liner at 4440'10"" in tight hole top up in 6"pipe 27'5" or 4314'9"" 10 sacks Santa Cruz cement dumped in, 5" Pipe flush joints. Nov. 7th. 1923 after drilling out cement found we were not to bottom of old tools as was still small iron in hole fished it out untill Dec. 5th 1923 Dumped in two sacks of cement to stop any loose iron from falling in Dec. 8th 1923 took 5' cement core and 11' Blue shale core. MR.Stone took hole over at 4450' in good shape 3 P.M.
10 -	4495	White sand stone
10 -	4505	Blue shale
7 -	4512	" sand stone
12 -	4522	" sandy shale
49 -	4571	Sand stone and shale
~~5~~	~~45~~	
13 -	4584	" and Shale streaks
2 -	4586	Lime stone tested with acid no mistake
6 -	4592	Sandy lime and shale
46 -	4632	" Shale
10 -	4642	Grey sand
3 -	4645	Sandy Shale
14 -	4659	Grey sand Stone
10 -	4669	Bule shale
6 -	4675	Grey sand
16 -	4691	Blue shale caloite seams
1 -	4692	Grey hard sand shell
18 -	4710	Blue shale
2 -	4712	Hard sand shoe shell
14 -	4726	Blue shale.
1 -	4727	Grey shell
16 -	4743	Blue shale
10 -	4753	Grey sand stone
2 -	4755	Blue shale
11'8""	4766'8"	Sand stone white
4"-	4767	Blue shale
4 -	4771	White sand stone
11 -	4782	Blue shale hard
2'6"-	4784'6"	Sand stone
9'6"-	4793	Blue shale

Log of Laguna Beach Oil Assc. WellNo.1
Section 30 TWN. 7 R. 8 W.S.B.&M.
Spudded in Dec. 30th. 1920,

80 -	4813	Sand Stone
2 -	4815	Blue shale hard
15 -	4830	Sand stone white
6 -	4836	Blue shale
6" -	4836'6"	Sand stone shell hard white
6'6" -	4842	Blue shale
15 -	4857	Sand stone grey
9 -	4866	Blue shale
6" -	4866'6"	Sand shell grey
22'6" -	4890	Blue shale
5 -	4895	Sand stone grey
5 -	4900	Blue shale
12 -	4912	Sand stone grey with quartz pebbles
21 -	4933	Blue shale
2 -	4935	Sand stone grey
12 -	4947	Sandy shale
4 -	4951	Sand stone white
45 -	4996	Blue shale sandy
4 -	5000	Sand stone white

Finished to this depth 4 P.M. Feb.6th.1924.

Form 103. 26714 6-23 5M

CALIFORNIA STATE MINING BUREAU
DEPARTMENT OF PETROLEUM AND GAS

HISTORY OF OIL OR GAS WELL

FIELD Laguna Beach Cal. COMPANY Laguna Beach Oil Asso.

Township 7 *Range* 8 W.S.B.M. *Section* 25 & 30 On line *Number of Well* 1

Signed H.H.Hanshaw
(*President, Secretary or Agent*)

Date Feb. 12th. 1924 Title Agent

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Spudded in Dec.30th. 1920 12.30 P.M. Drilled open hole to 490' with 15 1/2" Bit. set in 12 1/2" casing and drilled onto 780' then had to carry pipe with us. 12 1/2" casing hung on clamps at 1134'
Parted 10" pipe at 740' put in dye nipple and left it in.
Cemented 10" June 7th; 1921 Set untill June 18th. 1921 at 2302'10" drilled below shoe 7', and bailed water down to 1640' 5P.M. June 19th. stood untill June 20th. 1921 2 P.M. found water at 1258'. reported wet by Mr. McNair 78 Bbls. Came in 21 hours think leak is coming thru dye nipple at 740'.
Drilled on with 10" bit to 2640' open hole, and lost 10" bit July 15th. 1921 Fished untill Aug. 8th. Put in 3 shoots and run 8 1/4" casing by bit. Cemented 8 1/4" at 3252'6" with 60 sacks santa Cruz cement Perkins system Nov.12th.1921 stood to Nov.28th 1921 drilled out pipe 5' Bailed water down to1358', water coming in 100' Per hour Nov. 30th.1921 stood over night filled up to 220' of surface and salty, All satisfied it is bottom water, cement job seems to be all O.K.
Drilled open hole to 3335' then put in 6 1/4" 26 Lb. casing.
March 9th. 1922 top collar pulled off and droped pipe 8' At 3700'. Pipe broke off 3' below collar leaving 230' in hole March 19th. Side tracking old pipe in hole at 3464' July 1st. 1922 lost bottom joint off. By all the old pipe and drilled to 4348' Cemented Feb. 6th.1923 With 200 sacks Santa Cruz cement and set to March 6th. 1925 drilled out of pipe and bailed water down to 2500' stood 11hours and stood test, drilled on open hole to 4450' and lost tools and was fishing for them March 26th. 1923 when rig burned down. Stood idle untill July 19th.1925 when put in Rotary Diamond drill to go buy tools.
Set 126'11" of 5" flush joint liner to e^se off the tools.
5" Pipe set at 4440'10" in tight hole top of 5" liner at 4314'9"
R Nov.7th. 1923 Cored cement out Nov.12 th. 1923.
And finished drilling with Diamond Core drill to 5000'. Feb.6th. 1924.
A dry hole at that depth.

Yours Very Truly,
Laguna Beach Oil Asso.
H.H.Hanshaw Supt.

Form 100. 20704 8-22 5M

CALIFORNIA STATE MINING BUREAU

DEPARTMENT OF PETROLEUM AND GAS

STATE MINING BUREAU
RECEIVED
FEB 27 1923
LOS ANGELES OFFICE

Notice of Test of Water Shut-off

This notice must be given at least five days before the test, and a longer time is desirable

Laguna Beach Cal. Feb. 20 1923

Mr. Deputy State Oil and Gas Supervisor
Deputy State Oil and Gas Supervisor
Los Angeles Cal Cal.

DEAR SIR:

In compliance with Section 19, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to test the shut-off of water in well number One.

Section 25 T. 7 S R. 9 W, B. & M., Laguna Beach Oil Field, Orange County, on the First day of March 1923

6 1/4" inch 26 lb. casing was landed/cemented in Blue clay (Formation) at 4342 (Depth)

on Feb 6 (Date) 1923

200 sacks of cement were used.

The Purkins Process method was used in placing the cement.

Fluid level will be bailed to a depth of _____ feet and left undisturbed for at least 12 hours before your inspection.

The well is 4350 feet deep. There is/is not a plug or bridge from 4350 feet to 4342 feet.

This Bridge between 4350 and 4342 is Maid of caving as all of this 6 1/4" hole was underreamed to 8 1/4" using grant reamer. casing is standing cemented on underreamed shoulder

Reference to file of data

Maps	Model	Cross sections	Cards	Forms 114	
				N	

Respectfully yours,

Laguna Beach Oil Association
(Name of Company or Operator)

By O. T. Evans Supt.

Address notice to Deputy State Oil and Gas Supervisor in charge of district where well is located Box. 643 Laguna Beach

STATE FILING BUREAU
RECEIVED
DEC 6 1921
LOS ANGELES OFFICE

MEMORANDUM OF TEST OF WATER SHUT-OFF
(Bailing)

Laguna Beach ...Cal. Dec. 3rd, 192 1.

Mr.....
Deputy State Oil and Gas Supervisor

..Los Angeles.....Calif.

Dear Sir:

In compliance with your ...Verbal... communication
(telegraphic, telephonic, written)
of .Dec. 2nd. .....192.1...., stating that a member of the Department of Petroleum and Gas would not be present, and authorizing me to witness test of shut-off of water at well No..1.....of ..Laguna Beach Oil Asso. Company, Sec. NE25 T..7.., R..9 W.; .....B. & M., I have witnessed the test of water shut-off and submit the following data relative thereto:

Location and kind of water tested..Between 2309' And 3252'6"..

Depth and manner of water shut-off: (..3252'6".....ft. of ..81/4"..in..36..lb.) (cemented (..........ft. of.....in.....lb.) casing was (landed

in..Top Sand (formation) at..3252'6"..ft. with..60..sacks..Santa Cruz..cement by ..Perkins..method; ..Cable (size and kind) ..41/2"..tools were used in landing water string. Casing record of well..3252'6"..36..Lb..81/4"..Casing. Total depth of hole..3252'6"..ft. Hole bridged from .....ft. to .....ft. with..... Hole cleaned out to ..3257'....ft. for this test. At time of test depth of hole measured..3252'.... ft., from which depth bailer brought up. ..Sand (formation) ..... At..7 P.M. Nov. 28th. 1921 (time and date) oil bailed to .....ft., water bailed to ..1358'....ft., and hole allowed to stand undisturbed until...1 Hour 8 A.M. Nov. 29th. (time and date), when top of oil was found at .....ft., top of ..1258'..Warm Salt (fresh, salt, sulphur, etc.) .....water was found at ..3257'....ft. On drilling ahead for this test, cement was encountered inside of the casing at ..3241'.....ft. Others present were..Geo. E. Smith Pres. J. L. Adams.....

Bottom Water.

Respectfully yours,

Laguna Beach Oil Asso.

H. F. Hoard

(position and company) Supt.

CALIFORNIA STATE MINING BUREAU

DEPARTMENT OF PETROLEUM AND GAS

Report on Proposed Operations

No. P -1-2784.

Los Angeles, Cal. December 10, 1921.

Mr. Arthur B. Clark,

Long Beach, Calif. Cal.

Agent for LAGUNA BEACH OIL ASSOCIATION

DEAR SIR:

Your supplementary proposal to drill Well No. 1, Section 25, T. 7S., R. 9E., S.B. B. & M.,

Olinda Field, Orange County, dated December 3, 1921

has been examined in conjunction with records filed in this office.

Received December 6, 1921.

Present conditions as shown by the records and the proposal are as follows:

RECORDS:

Casing: 12½" landed 1134'.
10 " cemented 2302' (water not shut off, T-1-1510).
8¼" " 3252'6" (water reported not shut off).

Total depth drilled - 3257'.

THE NOTICE STATES:

"The new conditions are as follows:
Found Salt Water in sand just under shoe of 8¼" pipe. Cemented at 3252'6". So we are drilling ahead.
Was Cemented with 60 sacks of Santa Cruz Cement found set in good shape and casing tight.
No showings of oil so far."

PROPOSAL:

"We now propose To Go ahead with drilling as far as hole will stand up with 8" hole then put in 6" casing."

Recommendation:

Your proposal as outlined above is approved.
Notify this Department:
(a) When an oil showing is encountered.
(b) Before landing or cementing any casing.

R. E. COLLOM
State Oil and Gas Supervisor

By M. W. Sampsell Deputy
M. W. S.

WWC-v.

Form 111. 13817 0-21 10M

Form 128 541 12-19 5M

STATE MINING BUREAU
RECEIVED
DEC 6 1921
LOS ANGELES OFFICE

CALIFORNIA STATE MINING BUREAU

DEPARTMENT OF PETROLEUM AND GAS

SUPPLEMENTARY NOTICE

Laguna Beach, Cal. Dec. 3rd. 1921

MR.

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

DEAR SIR:

Please be advised that our notice to you dated Nov. 25th., 1921, stating our intention to Wittiness (Drill, deepen, redrill, test, abandon) well number 1 Section 25 T. 7 R. 9 W., B. & M., Laguna Beach Oil Field, Orange County, must be amended on account of changed or recently discovered conditions.

The new conditions are as follows:

Found Salt water in sand just under shoe of 81/4" pipe ,Cemented at 3252'6"" So we are drilling ahead.
Was Cemented with 60 sacks of Santa Cruz Cement found set in good shape and casing tight.
No showings of oil so far.

We now propose

To Go ahead with drilling as far as hole will stand up with 8" hole then put in 6" casing.

Reference to file or case

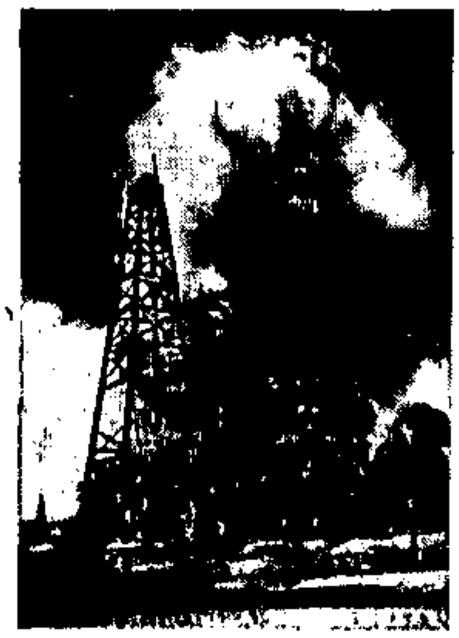
Rigs	Model	Cross Section	Cards	Forms 311	Forms 1M

Respectfully yours,

Laguna Beach Oil Asso.
(Name of Company)

By H. H. Hunsaker
Supt.

#113



H. H. HENSHAW

Laguna Beach Cal. Jen. 4th.1921

COALINGA, CALIF., 19

LOST HILLS, CALIF., 19

STATE MINING BUREAU
RECEIVED
JAN 4 - 1921
LOS ANGELES OFFICE

Irving V.Augur Deputy
State Oil and Gas Supr.
512 Union League Bldg.
Los Angeles Cal.

Dear Sir:&

Yours of Dec. 22nd. 1920 to

Laguna Beach Oil Ass'o.

The well was started Dec. 30th. 1920 and is now 185' ~~210~~' in blue shale.

Will drop in and see you some time when in town.

Yours Very Truly,

H. H. Henshaw Supt.

121

CALIFORNIA STATE MINING BUREAU

DEPARTMENT OF PETROLEUM AND GAS

Report on Test of Water Shut-off

(BAILING)

No. T-1-1510

Los Angeles, Cal. July 6, 1921.

Mr. Arthur B. Clark,

Long Beach, Cal.

Agent for LAGUNA BEACH OIL ASSN.

DEAR SIR:

Your well No. 1 Section 25, T. 7S., R. 8W., S.B. B. & M.

Signal Hill, in Orange County, was tested for shut-off of water on June 20, 1921 (Time and date) Mr. S. S. McNair,

designated by the supervisor, was present as prescribed in Section 19, Chapter 718, Statutes 1915, as amended, and there were also present Messrs. G. E. Smith, President, H. H. Henshaw, Supt., and L. M. Rice, Driller.

Location of water tested Upper and normal fluid level unknown

Depth and manner of water shut-off: { 2302 ft. of 10 in. 40 lb. / ____ ft. of ____ in. ____ lb. } casing was { cemented / mudded } in hard gray sand, Formation

at 2302 ft. with 40 sacks Santa Cruz cement by Perkins method; cable Size and kind tools

were used in landing water string. Reamed out with 10" under-reamer.

Casing record of well 12½" 50# landed 1134'; 10" as above.

Reported total depth of hole 2309 ft. Hole bridged from - ft. to - ft. Hole cleaned out to 2310 ft. for this test.

At time of test depth of hole measured 2310 ft. and bailer brought up sample of sand showing no oil, when tested with other

At 8 p.m., June 19, 1921 (Time and date) oil bailed to ~~no oil~~ ft., water bailed to 1640 ft.

At 2 p.m., June 20, 1921 (Time and date) top of oil found at ~~no oil~~, top of water found at 1258 ft.

Result of bailing test:

MR. HENSHAW REPORTED THE FOLLOWING:

1. The casing was tested for leak under 1200# pressure, prior to drilling out the cement and was found tight.
2. Upon drilling out for the water shut-off, test, 10' of hard cement was found in the casing.
3. No showings of oil or gas were encountered to the present depth.

THE INSPECTOR WITNESSED THE FOLLOWING:

382' of water entered the well in 21 hours, (equivalent to 37.8 bbl. per 24 hr.)

RECOMMENDATION:

1. The water shut-off is not approved.
2. Owing to the fact that no oil has been encountered in the well, permission is hereby given to continue drilling, providing the 8¼" casing is cemented above the first oil showing encountered.

R. E. COLLOM,
State Oil and Gas Supervisor

By M. K. Boyster Deputy

SSM-g

Form 109b. 11164 5-21 6M

Dec. 22, 1920.

LAGUNA BEACH OIL ASSOCIATION,

Dear Sirs:-

In our report No. P.1-1646, dated Nov. 3rd, 1920, we requested that weekly drilling reports be submitted from the time drilling was commenced.

Will you kindly inform us whether drilling has commenced on your well, and, if so, the present condition of the hole.

Yours truly,

Irving V. Augur

Deputy Supervisor.

M.V.C.

LVC/H.

(1)

CALIFORNIA STATE MINING BUREAU

DEPARTMENT OF PETROLEUM AND GAS

Report on Proposed Operations

No. P 1-1648

Los Angeles, Cal. Nov. 5, 1920

Mr. Arthur B. Clark,

Long Beach, Cal.

Agent for The LAGUNA BEACH OIL ASSOCIATION Company

DEAR SIR:

Your proposal to drill Well No. 1, Section 25-30 T. 7 S. R. 8 & 9 W. S. B. B. & M., San Joaquin Hills Oil Field Orange County, dated Nov. 1, 1920,

has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

PROPOSAL:

The notice gives the following information and proposal:

LOCATION: 470 feet N. from the 1/4 Cor. bet. Sec. 25-30, T. 7 S., R. 8 & 9 W.

ELEVATION: 350 feet above sea level.

ESTIMATED DEPTH OF OIL SANDS: 900 feet more or less.

PROPOSED CASING RECORD: "12½" - 40# casing cemented (rotary) at a depth of 650 feet.
10" -40# " landed (cable) at a depth of 1700 feet."

Recommendation:

Since this well is to be drilled in unproven territory it is impossible to accurately estimate the depth to oil bearing formations or the depth at which to shut off water.

Your proposal to drill is therefore approved with the recommendation that you notify this office when the first oil showing is observed and also before landing or cementing casing in the well in order that additional recommendations may be issued if necessary.

Furnish this office with report showing formations passed through, and condition of the well, at the end of each week.

R. P. McLAUGHLIN
State Oil and Gas Supervisor

By _____ Deputy

Form 111. 593 12-19 45M

059-01041

Form 105. 47750 8-19 10M

STATE MINING BUREAU
RECEIVED
NOV 1 - 1920
LOS ANGELES OFFICE

P-1-1646
Nov 3, 1920

CALIFORNIA STATE MINING BUREAU

Department of Petroleum and Gas

Notice of Intention to Drill New Well

This notice must be given before drilling begins

La Guna Beach Oil Association

Los Angeles, Cal. Nov. 1, 1920

Mr. Irving V. Augur,

Deputy State Oil and Gas Supervisor

Los Angeles, Cal.

DEAR SIR:

In compliance with Section 17, Chapter 718, Statutes of 1915, notice is hereby given that it is our intention to commence the work of drilling well number 1 Section 25-30 T. 7 S. R. 8 W. S.B. B. & M.; Laguna Beach Oil Field, Orange County.

The well is 420 feet N. ~~or S.~~, ~~and~~ ~~feet E. or W.~~ from the 1/4 cor bet Sec. 25-30-T7-R8-W
(Give location in distance from section corners or other corners of legal subdivision)
San Joaquin Hills (HBT)

The elevation of the derrick floor above sea level is 350 feet.

We propose to use the following strings of casing either cementing or landing them as here indicated:

Size of Casing, Inches	Weight, Lbs. Per Foot	New or Second Hand	Depth	Landed or Cemented
12 1/2	40		850	Cemented (Rotary)
10	40		1700	Landed (Cable)

It is understood that if changes in this plan become necessary we are to notify you if possible before cementing or landing the casing.

We estimate that productive oil or gas formation should be encountered at a depth of about 900 feet, more or less.

Respectfully yours,

The Laguna Beach Oil Assn.
(Name of Company or Operator)

By Arthur B. Clark
Manager.

Address notice to Deputy State Oil and Gas Supervisor in charge of district where well is located

Long shots 72 & 73
AMJ

Copy rec. for Security Oil Co
attached

Reference to Oil Maps

Maps	Model	Cross Section	Cards	Forms 114	Forms 191

Appendix G NOISE MODEL OUTPUTS

Report date: 5/9/2022
Case Description: Bluebird Canyon Drive Evacuation Route Project

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
994 Bluebird Canyon Drive	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	110	0
Excavator	No	40		80.7	110	0
Cold Milling Machine	No	40		83.6	110	0

Results

	Calculated (dBA)	
Equipment	Lmax	Leq
Concrete Saw	82.7	75.7
Excavator	73.9	69.9
Cold Milling Machine	76.8	72.8
Total	**84.1**	**78.2**