Final Initial Study/Mitigated Negative Declaration

Santee Community Center

DECEMBER 2025

Prepared for:

CITY OF SANTEE
10601 Magnolia Avenue
Santee, California 92071
Contact: Sandi Sawa, AICP, Director of Planning & Building

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Contact: Caitlin Munson

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Introduction to the Final MND

This Final Mitigated Negative Declaration (MND) for the Santee Community Center is comprised of the Draft MND including Appendices A through H, comments received during public review and responses to those comments, and a Mitigation Monitoring and Reporting Program (MMRP).

Final MND

The comments received during public review did not require changes to the Draft MND. The only edit made to the Draft MND after public review was a correction to the list of appendices on page ii in the Table of Contents to add Appendix I AB 52 Letters. Appendix I was provided for public review; however, it was inadvertently not included in the list of appendices. The Draft MND has been reproduced with the date of December 2025.

Responses to Comments

The City received ten written comment letters during the 30-day public review period, which was between April 28, 2025 and May 28, 2025. The comment letters are listed below:

Number	Commenter	Date Received
S1	California Department of Transportation	May 28, 2025
O1	Viejas Band of Kumeyaay Indians	April 29, 2025
I1	Benjamin Aller	May 5, 2025
I2	Elie Arslan	May 20, 2025
I3	Kristin Archer	May 26, 2025
I4	Megan Powell	May 27, 2025
I5	Michele Abbott	May 27, 2025
I6	Hammon Dale & Nina Humphries	May 28, 2025
I7	Elie Arslan	May 28, 2025
I8	Lisa & Robert Albon	May 28, 2025

The comments are reproduced and responses are provided to each comment in a side-by-side format. Numbered brackets identify each specific comment and the corresponding response.

MMRP

As required by CEQA Guidelines Section 15074(c), an MMRP has been prepared and is included after the responses to comments. The MMRP shows the mitigation measures verbatim from the Draft MND, the entity responsible for implementing the mitigation, the entity responsible for verifying that the mitigation has been completed and the timing for implementation of the mitigation.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
City	City of Santee
CO	carbon monoxide
County	County of San Diego
dBA	A-weighted decibel
DEHQ	Department of Environmental Health and Quality
DPM	diesel particulate matter
GHG	greenhouse gas
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
kBtu	kilo-British thermal unit
kWh	kilowatt-hour
MM	Mitigation Measure
MND	mitigated negative declaration
MS4	Municipal Separate Storm System Permit
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PDF	Project Design Feature
PM_{10}	particulate matter less than or equal to 10 microns in diameter
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns in diameter
Project	Santee Community Center Project
PV	photovoltaic
RAQS	Regional Air Quality Strategy
SANDAG	San Diego Association of Governments
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SO_x	sulfur oxide
SWPPP	stormwater pollution prevention plan
TC	Town Center
VMT	vehicle miles traveled
VOC	volatile organic compound

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1 Introduction

1.1 Project Overview

The proposed Santee Community Center Project (project) would involve the construction of the Santee Community Center (Community Center) building in the City of Santee (City) (Figure 1). The Community Center building would be two stories tall and include event space, office space, and support spaces and would total 12,500 gross square feet (Figure 2, Site Plan; Figure 3, Level Plan; and Figure 4, Elevations). The Community Center would offer classes and events and would provide event spaces for the community to rent.

1.2 California Environmental Quality Act Compliance

The City is the California Environmental Quality Act (CEQA) lead agency responsible for the review and approval of the proposed project. Based on the findings of the initial study for the project, the City has determined that a Mitigated Negative Declaration (MND) is the appropriate environmental document to prepare in compliance with CEQA (California Public Resources Code Section 21000 et seq.). As stated in CEQA Section 21064.5, an MND may be prepared for a project subject to CEQA when an initial study "has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment."

This MND has been prepared for the City and complies with Section 15070(b) of the CEQA Guidelines (14 CCR 15000 et seq.). The purpose of the MND and the Initial Study Checklist (see Section 3 of this MND) is to determine any potentially significant impacts associated with the proposed project and to incorporate mitigation measures into the project design as necessary to reduce or eliminate the significant or potentially significant effects of the project.

1.3 Public Review Process

In accordance with CEQA, a good-faith effort has been made during the preparation of this MND to contact affected agencies, organizations, and persons who may have an interest in this project. In reviewing the MND, public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the project's possible impacts on the environment. A copy of the Draft MND and related documents are available for review during regular business hours at the City of Santee Planning & Building Department (Building 4) and Clerk's Office (Building 3) both located at 10601 Magnolia Avenue, Santee, CA 92071. The MND can also be reviewed at the Santee County Library located at 9225 Carlton Hills Boulevard, Santee, CA 92071.

Electronic copies of the MND can be downloaded from the City's website at:

https://www.cityofsanteeca.gov/business/active-projects-map

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Written and electronic comments (file size should be a maximum of 10MB unless a link is requested) addressing the MND will be received by mail or email at the following address for a 30-day review and comment period starting

on Monday, April 28, 2025, and ending on Wednesday, May 28, 2025 in accordance with Section 15072(a) of the CEQA Guidelines.

Sandi Sawa, AICP, Director of Planning & Building
Subject: Santee Community Center
Planning & Building Department
City Hall, Building 4
10601 Magnolia Avenue
Santee, California 92071
Telephone: (619) 258-4100, extension 167
Email: ssawa@cityofsanteeca.gov

Following the close of the public comment period, the City will consider this MND and comments in determining whether to approve the proposed project.

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2 Project Description

2.1 Project Location

The proposed project site is located in the City of Santee (City), in the southwestern portion of San Diego County (County) (Figure 1, Project Location). Nearby are the Cities of San Diego and El Cajon, as well as unincorporated areas of the County. The proposed project site comprises approximately 5.2 acres and is located in south central Santee.

2.2 Environmental Setting

The proposed project site is located at 10129 Riverwalk Drive and is accessible from California State Routes 52, 67 and 125. Vehicular access is provided via the existing south leg of the Riverwalk Drive/Canopy Park Lane intersection, which is an all-way stop-controlled intersection.

The project site is located in a developed, urban area of the City. The project site is bound by the Cameron Family YMCA and Sportsplex USA to the west; open space and Town Center Community Park East to the south; open space and Park Center Drive to the east; and Riverwalk Drive and residential uses to the north.

Events that currently occur at the nearby Town Center Community Park East site, and are likely to continue, include:

- The City's Annual 4th of July fireworks celebration
- Summer Concert series
- "Movies in the Park" during summer months
- Soccer, football and lacrosse sports events

The Woodglen Vista Creek (i.e., a tributary to the San Diego River) is the open space to the east and south of the Project. Woodglen Vista Creek contains the only native biological resources within the Project site vicinity. Historically, Woodglen Vista Creek ran through the middle of the Project site but was redirected around the site during previous grading efforts in 2006. Since the development of the parking lot, coastal sage scrub and southern cottonwood–willow riparian forest has been restored within the Woodglen Vista Creek and designated as protected open space associated with previous projects.

The project site is zoned as Town Center (TC) and has a General Plan land use designation of Town Center (TC) (City of Santee 2020 and 2017a). The proposed project is a permitted use in the TC zone and land use designation. The project site is currently developed as an asphalt parking lot with several landscape features located throughout and a grassy field in the northwest quadrant of the site. The northwest quadrant was previously graded for development of the Town Center Community Park and used for parking on the dirt and aggregate base. This area of the Project site is now a grassy field and is currently used for passive recreational activity.

2.3 Project Characteristics

2.3.1 Proposed Project

The proposed project would involve the construction of the Community Center building, which would be two stories tall and include event space, office space, and support spaces, and would total 12,500 gross square feet (Figure 2, Site Plan; Figure 3, Level Plan; and Figure 4, Elevations).

The Community Center building would include an eastern and western wing joined by the lobby and entrance area. There are two entrances planned, the south entrance and the north entrance, both of which lead to the lobby area. Entry plazas, which would include benches and landscaped areas, would be located outside of both entrances. The lobby would include a reception area, access to both wings of the building, a staircase, and an elevator. The eastern wing would be one story tall and would include event space, storage, a kitchen, utilities, and an outdoor covered dining area (located south of the event space). The service yard and biofiltration basin would be located immediately east of the eastern wing. The first floor of the western wing would include office space, restrooms, storage, and janitors' closet. The second floor would include event space, an event deck, concession space, restrooms, and storage. Amphitheater seating and bike storage would be located west of the western wing. The facility would be used as a backup emergency operations center for City Hall and would have a backup emergency generator located on the east side of the Community Center building.

The project would include several sustainability features, such as photovoltaic (PV) panels, electric vehicle (EV) charging stations, and low-flow plumbing fixtures. The proposed Community Center building is oriented to allow for ventilation from the prevailing southwest winds. Shade structures are provided in locations that would block light from the summer sun and are not located in areas where winter light is anticipated to be oriented. Portions of the building would include glass panels and sky lights to take advantage of natural light. Exterior lighting would include parking lot and building security lighting. The exterior lighting would be shielded and directed away from adjacent properties.

The project would include several features to prevent runoff into Woodglen Vista Creek. The site grading design would control runoff by directing stormwater through a piped storm drainage system and directing sheet flow over pedestrian pavement into stormwater retention basins located south and east of the Community Center building.

The project site would be modified to include sufficient parking for both the proposed Community Center building and the existing YMCA building. The existing asphalt parking lot would become the new east parking lot, and the existing grassy field would become the new west parking lot. The existing asphalt parking lot includes 270 regular stalls and 9 accessible stalls, while the new east and west asphalt parking lots would include a combined total of 275 regular stalls and 12 accessible stalls. Loading and unloading during events (i.e. deliveries and catering) would occur in the walled and gated utility yard located east of the proposed Community Center building.

The project would expand the existing driveway apron connecting to Riverwalk Drive, which would be the only off-site improvement. The driveway apron would be expanded to accommodate a secondary entrance and exit to the new west parking lot. The project would use existing on-site utility connections.

2.3.2 Proposed Operation

The Community Center would open in 2026. The project would provide event spaces for the community to rent and would require approximately four new employees. The Community Center would operate year-round, Sunday through Thursday 7:00 a.m. to 10:00 p.m. and Fridays and Saturdays 7:00 a.m. to 11:00 p.m.

The following standing events could be hosted at the Community Center:

- Gatherings for private and governmental events including business meetings, trainings, birthday parties, family celebrations, weddings, community events, conferences, town hall meetings, city council meetings, governmental meetings, car shows, festivals, emergency operations, comedy shows, movies, and other events. The majority of these events would occur indoors, with some events occurring outdoors, such as events featuring fireworks during evening hours .Events would range in size from 50 persons to 450 persons, which would use all available Community Center building space. Events using outdoor space, such as car shows in the parking lot, could increase capacity by 250 persons. Overflow parking during events that use either the new east or west parking lots would use the existing south parking lot, located across the footbridge. Anticipated time of operation for events would be Sunday through Thursday 7:00 a.m. to 10:00 p.m. and Friday and Saturday 7:00 a.m. to 11:00 p.m.

The Community Center could also host the following classes:

- Senior, youth, and general classes such as outdoor recreation, art, dance, martial arts, music, gardening, cooking, flower arranging, language, historical, and cultural classes; training classes such as CPR, fitness, safety, dog training, and babysitter training classes, and additional classes needed for the community. The average class size would be 30–60 persons per class, but a class could be as large as the occupancy load of the Community Center building if a large class was required. Anticipated time of operation for classes would be Monday through Saturday from 7:00 a.m. to 10:00 p.m.

2.4 Project Construction and Phasing

Construction of the project would include concrete removal/demolition, site preparation, grading, building construction, paving, and architectural coating. Construction is anticipated to begin August 2025 and end in September 2026, for an approximated construction duration of 14 months.[1] Construction equipment would be staged either on site or in the adjacent parking lot. Construction phasing is anticipated as follows:

- Demolition (20 days)
- Site preparation (4 days)
- Grading (10 days)
- Building construction (220 days)

[1] Timing estimates of the proposed project buildout were based on the preliminary project phasing schedule. Because CalEEMod uses real dates (e.g., January 15, 2024) to calculate construction emissions, assumptions were made as to key dates for each phase. While all dates reflected in this MND are estimates, and actual dates may differ depending on funding, weather, and other factors, this analysis represents a conservative assessment of air quality impacts because air quality regulations become more restrictive over time.

- Paving (20 days)
- Architectural coating (20 days)

Demolition would involve the removal of existing concrete located throughout the site, primarily for the existing parking lot rather than the grassy field which is located on a dirt base. Additional site clearing and rough grading would occur during the site preparation phase. Grading would require 2,000 cubic yards of import. The depth of disturbance would be approximately 7 feet. The new west parking lot would be constructed prior to the existing parking lot being disturbed for construction of the new east parking lot.

A summary of the anticipated construction equipment, quantity of equipment, hours of operation of the equipment, and worker, vendor, and haul trips per phase is included in Table 2.4-1.

Table 2.4-1. Anticipated Construction Scenario

Construction Phase	Worker Round Trips per Day	Vendor Truck Round Trips per Day	Haul Truck Trips per Day	Equipment	Quantity	Hours per Day
Demolition	16	4	14	Rubber-tired dozers	2	8
				Concrete/industrial saws	1	8
				Tractors/loaders/backhoes	3	8
Site Preparation	18	6	0	Tractors/loaders/backhoes	4	8
				Rubber-tired dozers	3	8
Grading	16	6	26	Rubber-tired dozers	1	8
				Tractors/loaders/backhoes	3	8
				Excavators	1	8
				Graders	1	8
Building Construction	20	4	0	Cranes	1	7
				Forklifts	3	8
				Tractors/loaders/backhoes	3	8
				Welders	1	8
				Generator sets	1	8
Paving	20	2	0	Pavers	1	8
				Cement and mortar mixers	2	6
				Rollers	2	6
				Tractors/loaders/backhoes	1	8
				Paving equipment	2	6
Architectural Coating	6	2	0	Air compressors	1	6

Source: See Appendix A.
Note: Water trucks were not modeled as equipment in the construction models and were instead modeled as vendor trips in the site preparation and grading phases.

2.5 Project Approvals

Table 2.5-1 provides a summary of public agency approvals and recommendations that are associated with the project. Once the the construction contract for the project is awarded by the City of Santee City Council, all required permits would be pulled by the general contractor concurrently.

Table 2.5-1. Agency Approval

Agency	Action
San Diego Regional Water Quality Control Board	Section 401 Water Quality Certification National Pollutant Discharge Elimination System Permit
San Diego Air Pollution Control District	Permit to construct
City of Santee	Building Permits Fire Sprinkler/Alarm Permits

3 Initial Study Checklist

1. **Project title:**

   Santee Community Center

2. **Lead agency name and address:**

   City of Santee
   10601 Magnolia Avenue
   Santee, California 92071

3. **Contact person and phone number:**

   Sandi Sawa, AICP, Director of Planning & Building
   10601 Magnolia Avenue
   Santee, California 92071
   (619) 258-4100 (ext. 167)

4. **Project location:**

   10129 Riverwalk Drive
   Santee, California 92071

5. **Project sponsor's name and address:**

   City of Santee
   10601 Magnolia Avenue
   Santee, California 92071

6. **General plan designation:**

   Town Center (TC)

7. **Zoning:**

   Town Center (TC)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   See Section 2, Project Description.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The project site is bound by the Cameron Family YMCA and Sportsplex USA to the west; open space and Town Center Community Park to the south; open space and Park Center Drive to the east; Riverwalk Drive and residential uses to the north. Events currently held at the Town Center Community Park include:

- The City's Annual 4th of July fireworks celebration
- Summer Concert series
- "Movies in the Park" during summer months
- Soccer, football and lacrosse sports events

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

See Section 2.5, Project Approvals.

11. 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 is subject to compliance with Assembly Bill (AB) 52 (California Public Resources Code [PRC] Section 21074), which requires consideration of impacts to Tribal Cultural Resources (TCRs) as part of the CEQA process and requires the lead agency to notify any tribal groups (who have requested notification) of the proposed Project. Pursuant to AB 52, the City of Santee (City) sent Project notification letters to tribal representatives of the Jamul Indian Village, Mesa Grande Band of Mission Indians, and Barona Band of Mission Indians on July 10, 2024 inviting each tribe to engage in tribal consultation, if desired (Appendix I). None of the tribal representatives responded to the AB-52 notification letter or requested consultation.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☒ Noise	☐ Population and Housing	☐ Public Services

☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date 11/25/25

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

2. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an

3. effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

6. c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside

8. document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

9. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

The explanation of each issue should identify:

a. the significance criteria or threshold, if any, used to evaluate each question; and

b. the mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

Less-than-Significant Impact. A scenic vista is a public viewpoint that provides expansive views of a highly valued landscape. There are no scenic vistas within the proposed project site. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Family YMCA and Sportsplex USA to the west; open space and Town Center Community Park East to the south; open space and Park Center Drive to the east; and Riverwalk Drive and residential uses to the north. According to the City's General Plan, open space areas serve as scenic vistas within the City (City of Santee 2003). As such, since the project site is located adjacent to the Woodglen Vista Creek protected open space area, the project site is located within the view corridor of a scenic vista. However, views of the open space from the project site and from public views located north of the project site are currently obstructed by existing vegetation to the east and south. Therefore, the proposed project would not impede views of the open space. The proposed project would involve the partial removal of an existing parking lot to allow for the construction of a two-story Community Center building that includes event space, office space, and support spaces, with an associated parking lot. Therefore, the proposed project would be visually consistent with the surrounding development because there are similar uses to the west of the proposed project area. Upon completion of construction, views of the proposed project site and surrounding area would be similar to existing conditions. The proposed project would have a less-than-significant impact on scenic vistas.

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 City's General Plan identifies existing scenic resources throughout the City, including the San Diego River and other waterway corridors, undeveloped hillsides and ridgelines, the Santee Town Center, Santee Lakes, and Mission Trails Regional Park. There are no designated or eligible state scenic highways within the City. The nearest state scenic highway, California State Route 52, which is designated scenic from post mile 9.5 near Santo Road to post mile 13.0 near Mast Boulevard, is approximately 1.2 miles south of the proposed project site. Intervening urban development obstructs views of the proposed project site from California State Route 52. Therefore, the project would have no impact on state scenic highways. Further, there are no significant trees, rock outcroppings, or historic buildings on the project site.

c) In non-urbanized areas, would the project 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. As defined in CEQA Section 21071 (a), an urbanized area means "an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons; (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." According to the U.S. Census Bureau, the estimated population of Santee as of July 1, 2022, was 59,051 persons. The estimated population of El Cajon as of July 1, 2022, was 104,414persons (U.S, Census Bureau 2022). Because Santee and El Cajon are contiguous cities and their combined population exceeds 100,000 persons, the proposed project site would be considered an urbanized area.

The proposed project site is zoned TC, and Community Centers are a permitted public and semi-public use in the TC zone. Implementation of the project would not conflict with applicable zoning. The project would comply with the City's lighting and landscaping requirements and all applicable zoning requirements, including heights and setbacks. The exterior material of the proposed Community Center building includes glass, steel, stone veneer, cement plaster, and fiber cement, which references civic architecture and compliments the existing YMCA building. The Community Enhancement Element of the General Plan promotes the Town Center as a "focal point and activity center for the entire City." This Element also encourages respect for the San Diego River and its tributaries. The proposed Community Center would not impact the adjacent Woodglen Vista Creek protected open space. As noted in Section 2 of this MND, the project would include specific features to protect the open space, such as defined limits of disturbance to minimize impacts and prevent additional public access to potentially sensitive biological areas, and the addition of a new trash enclosure on the east boundary of the east parking lot to reduce the potential for littering near the open space. The Community Center would include indoor and outdoor events that could educate the public about the revegetation efforts in the Woodglen Vista Creek corridor. Because the proposed Community Center would be located adjacent to similar land uses, primarily, the existing Cameron Family YMCA, public views of the site would be consistent with existing conditions. As such, the proposed project would not conflict with other regulations governing scenic quality. Impacts would be less than significant.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-Significant Impact. Existing light sources on the proposed project site include those typical of a parking lot, including lighting from night lighting standards and headlights from vehicles. The proposed project would introduce nighttime lighting that would be typical of a Community Center, and similar to the night lighting from the existing Cameron Family YMCA building to the west. Project construction would be limited to the City's allowable construction hours of 7:00 a.m. to 7:00 p.m. and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects.

Project operations would generate lighting from two primary sources: lighting from Community Center building interiors that would pass through windows and lighting from exterior sources (e.g., street lighting, parking lot lighting, vehicle lights, building illumination, security lighting, and landscape lighting). The Community Center would be open until 11 p.m. in some cases, and thus project lighting would operate until closing hours. Light spillover, trespass, and potential glare from project lighting are regulated by Section 13.30.030(B) of the Santee Municipal Code. The code requires that all lights and illuminated signs shall be shielded or directed to not cause glare on adjacent properties or motorists. Therefore, exterior lighting would be shielded and directed away from adjacent properties to avoid light spillover, trespass, and glare. Light associated with additional vehicle trips generated by the project would be similar in character to what is currently generated by vehicles traveling along the existing roadway network after dark. Although the project could operate until 11pm in some cases, vehicles exiting the property would not create a significant concentrated source of light.

Buildings with large facades constructed of reflective surfaces (e.g., brightly colored building façades, metal surfaces, and reflective glass) could increase existing levels of daytime glare. Regarding exterior glare sources for this project, glass would be one of the materials used for the Community Center building's exterior. The surface area of glass would be relatively small for the majority of the proposed building because most of the glass would be used for windows. However, the main building entrance would feature tall glass panels to provide natural light and a view of the landscaped area south of the building. A parking lot would be located between the proposed building and Riverwalk Drive. Additionally, the proposed building would be set back, so any resulting glare would be significantly reduced from public view.

The project would result in less-than-significant impacts related to light, glare, and nighttime views.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY 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 Dept. 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 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))?	☐	☐	☐	☒
d)	Result in the 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 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?***

No Impact. According to the California Important Farmland Finder database, the proposed project site is located on land classified as "Urban and Built-Up Land" (DOC 2022a). The project would not be located on land classified as Farmland pursuant to the Farmland Mapping and Monitoring Program and would therefore not convert any Farmland to non-agricultural use. No impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed project site is zoned Town Center (TC) and does not contain agricultural land (City of Santee 2020). There are no existing lands under a Williamson Act contract within the City (DOC 2022b). No impact would occur.

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. The proposed project site and surrounding areas are not zoned for and do not contain any forest land or timberland as defined by Public Resources Code Section 4526 or Government Code Section 51104(g). Therefore, the project would not conflict with or cause the rezoning or conversion of forest land or timberland. No impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The proposed project site does not contain any forest or timberland as defined by Public Resources Code Section 4526 or Government Code Section 51104(g). Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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. There are no agricultural or forest land uses within the proposed project site or surrounding areas. Therefore, the project would not result in the conversion of farmland or forest land to a non-agriculture use. No impact would occur.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less-than-Significant Impact. The San Diego Air Pollution Control District (SDAPCD) is responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the San Diego Air Basin (SDAB)—specifically, the State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS).[2] San Diego Association of Governments (SANDAG) is responsible for developing forecasts and data that are used by SDAPCD in preparing the SIP and RAQS. In November 2020, SDAPCD adopted the Air Quality Management Plan for attaining the federal 8-hour 75 parts per billion and 70 parts per billion ozone (O_3) standards, which is the air basin's input to the SIP and is required to demonstrate how SDACPD proposes to attain the federal O_3 standards. The plan anticipates attainment of the 2008 and 2015 National Ambient Air Quality Standards (NAAQS) standards by 2026 and 2032, respectively. The 2020 Air Quality Management Plan includes planning requirements for attaining the O_3 NAAQS, including on-road motor vehicle emissions budgets for transportation conformity, a vehicle miles traveled (VMT) offset demonstration, Reasonably Available Control Measures, Reasonable Further Progress, an Attainment Demonstration, and contingency measures in the event of a failure to meet a milestone or to attain by the predicted attainment date (SDAPCD 2020).

The 2022 RAQS was finalized in 2023 and addresses California planning requirements to meet California Ambient Air Quality Standards (CAAQS). The 2022 RAQS contains strategies to continue directly reducing emissions of O_3 precursors in the County and assist in reducing particulate matter and GHGs as a co-benefit. Consistent with the SDAPCD's recent reorganization pursuant to Assembly Bill (AB) 423 (Gloria, 2019), the 2022 RAQS also proposes to expand the SDAPCD's involvement as a regional agency within SDAPCD's regulatory authority, by including commitments to support research and innovation opportunities, developing new partnerships with public and private entities, convening more opportunities for engagement and education with interested parties, and integrating environmental justice and equity into all SDAPCD's actions.

The SIP and RAQS rely on information from the California Air Resources Board (CARB) and SANDAG, including mobile and area source emissions as well as information regarding projected growth in the County as a whole and the in cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their General Plans.

[2] For this discussion, the relevant federal air quality plan is the 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County (SDAPCD 2020). The 2022 Regional Air Quality Strategy is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the basin.

While SDAPCD and the City do not provide guidance regarding the analysis of impacts associated with air quality plan conformance, the County's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality does discuss conformance with the RAQS (County of San Diego 2007). The guidance indicates that if the project, in conjunction with other projects, contributes to growth projections that would not exceed SANDAG's growth projections for the City, the project would not be in conflict with the RAQS (County of San Diego 2007). If a project includes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality.

The project site is designated as Town Center (TC) in the City's General Plan and is zoned Town Center (TC). This designation is intended to provide the City with a mixed-use activity center that is oriented toward and enhances the San Diego River. This designation requires development in accordance with the Town Center Specific Plan, including community commercial, civic, park/open space, and residential uses. The TC designation specifically permits a Community Center. The intent of the Specific Plan is to provide the City with detailed land uses and appropriate development regulations that are consistent with the General Plan. The proposed project would be consistent with the land use designation and zoning and would not require a General Plan amendment or rezone.

The project is consistent with the underlying land use and zoning for the project site. Therefore, the project source emissions are not anticipated to result in air quality impacts that were not previously envisioned in the growth projections and RAQS, and implementation of the project would not result in development beyond that anticipated in local plans or increases beyond those contemplated by SANDAG. Because the proposed land uses and associated vehicle trips are anticipated in local air quality plans, the project would be consistent at a regional level with the underlying growth forecasts in the RAQS. Accordingly, the project would not conflict with and would not obstruct implementation of applicable local and regional air quality plans; 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. Past, present, and future development projects may contribute to the SDAB adverse air quality impacts on a cumulative basis. By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution to air quality. If a project's emissions would exceed the applied significance thresholds, it would have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Construction and operation of the project would result in emissions of criteria air pollutants, which may result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SDAB is designated as nonattainment under the NAAQS or the CAAQS. The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, particulate matter less than or equal to 10 microns in diameter (PM_{10}), and particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$). The following discussion quantitatively evaluates potential short-term construction and long-term operational impacts that would result from implementation of the project.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and volatile organic compound [VOC] off-gassing from architectural coatings and asphalt pavement application) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts.

Criteria air pollutant emissions associated with construction activity were quantified using the California Emissions Estimator Model (CalEEMod) (CAPCOA 2022). Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2025–2026). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the applicant or CalEEMod defaults and are intended to represent a reasonable scenario based on the best information available. Oxides of nitrogen (NO_x) and carbon monoxide (CO) emissions would primarily result from the use of construction equipment and motor vehicles.

Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading and site preparation activities. The project would be required to comply with SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) generated during grading and construction activities. To account for dust control measures in the calculations, it was assumed that the project would ensure that active sites be watered at least two times daily. To ensure compliance with the Rule 55, these specific measures have been incorporated into the project as a Project Design Feature (PDF) and will be made a condition of approval and tracked with the project's mitigation monitoring and reporting program. The application of architectural coatings, such as exterior application/interior paint and other finishes, would produce VOC emissions. The contractor would be required to comply with the requirements of SDAPCD's Rule 67.7, Cutback and Emulsified Asphalt, which would limit VOC emissions from asphalt off-gassing.

Table 3.3-1 presents the estimated maximum daily construction emissions generated during construction of the project without PDF-AQ-1, and Table 3.3-2 shows the maximum daily construction emissions during construction with PDF-AQ-1. Details of the emission calculations are provided in Appendix A, Air Quality, Energy, and Greenhouse Gas Emissions Calculations.

Table 3.3-1. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Without PDFs

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
Summer						
2025	3.39	31.90	31.10	0.05	21.22	11.41
2026	4.43	16.36	23.17	0.04	0.93	0.66
Winter						
2025	1.17	10.62	13.51	0.02	0.54	0.43

Table 3.3-1. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Without PDFs

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
2026	1.11	10.02	13.41	0.02	0.49	0.38
Maximum Daily Emissions	**4.43**	**31.90**	**31.10**	**0.05**	**21.22**	**11.41**
Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix A.
Notes: PDF = Project Design Feature; VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
Thresholds are established by the SDAPCD.

Table 3.3-2. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – With PDF-AQ-1

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
Summer						
2025	3.39	31.90	31.10	0.05	9.22	5.24
2026	4.43	16.36	23.17	0.04	0.93	0.66
Winter						
2025	1.17	10.62	13.51	0.02	0.54	0.43
2026	1.11	10.02	13.41	0.02	0.49	0.38
Maximum Daily Emissions	**4.43**	**31.90**	**31.10**	**0.05**	**9.22**	**5.24**
Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix A.
Notes: PDF = Project Design Feature; VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
Thresholds are established by the SDAPCD.

As shown in Table 3.3-1 and Table 3.3-2, maximum daily construction emissions would not exceed the SDAPCD significance thresholds for VOCs, NO_x, CO, sulfur oxide (SO_x), PM_{10}, or $PM_{2.5}$ during construction; short-term construction air quality impacts would be less than significant.

Operational Emissions

Operation of the project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicular traffic generated by employees and visitors; energy sources from natural gas usage; and area sources, including the use of landscaping equipment, consumer products, and architectural coatings. Pollutant emissions associated with long-term operations were quantified using CalEEMod, using a combination of project-specific information and CalEEMod default values.

Table 3.3-3 presents the maximum area, energy, mobile source, and stationary source emissions associated with project operation (year 2026).

Table 3.3-3. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Summer						
Mobile	5.75	3.93	40.76	0.10	8.52	2.21
Area	0.39	<0.01	0.54	<0.01	<0.01	<0.01
Energy	0.01	0.11	0.09	<0.01	0.01	0.01
Stationary	0.52	1.44	1.32	0.00	0.08	0.08
Total Daily Summer Emissions	**6.66**	**5.49**	**42.71**	**0.10**	**8.61**	**2.30**
Winter						
Mobile	5.62	4.32	38.59	0.09	8.52	2.21
Area	0.30	0.00	0.00	0.00	0.00	0.00
Energy	0.01	0.11	0.09	0.00	0.01	0.01
Stationary	0.52	1.44	1.32	0.00	0.08	0.08
Total Daily Winter Emissions	**6.44**	**5.87**	**39.99**	**0.10**	**8.60**	**2.30**
Maximum Daily Emissions	**6.66**	**5.87**	**42.71**	**0.10**	**8.60**	**2.30**
Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix A.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; <0.01 = reported value is less than 0.01.

As shown in Table 3.3-3, maximum daily operational emissions from the project would not exceed the SDAPCD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$; long-term air quality impacts would be **less than significant.**

Conclusion

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SDAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operation of the project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. However, as indicated in Table 3.3-1, Table 3.3-2, and Table 3.3-3, project-generated construction and operational emissions would not exceed the emission-based significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Construction schedules for potential future projects near the project area are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative. However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed applied thresholds. Criteria air pollutant

emissions associated with construction activity of future projects would be reduced through implementation of control measures required by SDAPCD. For example, cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SDAPCD Rule 55 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SDAB. In addition, cumulative VOC emissions would be subject to SDAPCD Rule 67.0.1 (Architectural Coatings).

Based on the project-generated construction and operational emissions of CO, SO_x, VOC, NO_x, PM_{10}, and $PM_{2.5}$, the project would not result in a cumulatively considerable net increase in emissions of nonattainment pollutants. Therefore, the project's cumulative air quality impact would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact with Mitigation Incorporated. Air quality varies as a direct function of the quantity of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts on those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, older adults, and people with cardiovascular and chronic respiratory diseases. According to the SDAPCD, sensitive receptors are those who are especially susceptible to adverse health effects from exposure to toxic air contaminants, such as children, the elderly, and the ill. Sensitive receptors include residences, schools (grades Kindergarten through 12), libraries, day care centers, nursing homes, retirement homes, health clinics, and hospitals within 2 kilometers of the facility (SDAPCD 2022a).

The nearest sensitive receptors are the residences located approximately 80 feet north of the project site's northern boundary.

Carbon Monoxide Hotspot

Mobile-source impacts occur on two scales of motion. Regionally, project-related travel would add to regional trip generation and increase the VMT within the local airshed and the SDAB. Locally, project-generated traffic would be added to the roadway system near the project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of many vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing.

CO transport is extremely limited, and CO disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors such as residents, school children, hospital patients, and the elderly. Typically, high CO concentrations are associated with urban roadways or intersections operating at an unacceptable level of service. Projects contributing to adverse traffic impacts may result in the formation of CO hotspots.

To verify that the project would not cause or contribute to a violation of the CO standards, a screening evaluation of the potential for CO hotspots was conducted using the County screening threshold of 3,000 peak trips (County of San Diego 2007). Based on the Transportation Impact Analysis prepared for the project (Appendix G), there would be approximately 96 trips during the AM peak hour and 125 trips during the PM peak hour, which would be minimal in comparison to the screening threshold of 3,000 peak trips. Therefore, the project would not result in a CO hotspot and would result in a less-than-significant impact.

Toxic Air Contaminants

Construction Health Risk

A health risk assessment (HRA) was performed to evaluate potential health risk associated with construction of the project from toxic air contaminants in the form of diesel particulate matter (DPM). The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix A.

For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on-road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction HRA, the CalEEMod scenario for the project was adjusted to reduce diesel truck one-way trip distances to 1,320 feet (0.25 miles) (SJVAPCD 2018) to estimate emissions from truck pass-by at proximate receptors. The air dispersion modeling methodology was based on SDAPCD's accepted modeling practices (SDAPCD 2022a). Air dispersion modeling was performed using the U.S. Environmental Protection Agency's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 22112 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 12.0.0. The HRA followed the Office of Environmental Health Hazard Assessment 2015 guidelines (OEHHA 2015) and SDAPCD guidance to calculate the health risk impacts at all proximate receptors, as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SDAPCD and U.S. Environmental Protection Agency guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 3.3-4.

Table 3.3-4. American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Principal Parameters

Parameter	Details
Meteorological Data	The SDAPCD was consulted to obtain the most representative meteorological data set for the project site. The SDAPCD provided meteorological data for the Lexington Elementary School meteorological station, which was located at 533 B First Street in El Cajon, approximately 4.7 miles southeast of the project site. The latest 3-year data set from the Lexington Elementary School station was for the 2019–2021 years.
Urban versus Rural Option	Urban dispersion option was selected because of the land use types within a 3-kilometer radius of the project site, in accordance with Section 4.4.1 of the OEHHA Guidance Manual (SDAPCD 2022a).

Table 3.3-4. American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Principal Parameters

Parameter	Details
Terrain Characteristics	Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated, as appropriate for the site. This accounts for complex terrain within 2 kilometers of the site. The NED dataset with resolution of 1 arc-second was used. The AERMAP terrain preprocessor, which can process U.S. Geological Survey digital elevation model data and data from the NED, was also used to generate the terrain elevations for the receptor locations. The AERMAP program generates an output file that contains the receptor pathway data for AERMOD.
Source Release Characterizations	Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix A). The construction equipment and on-site truck travel DPM emissions were modeled as a line of adjacent volume sources across the project site to represent project construction with a release height of 5 meters, plume height of 10 meters, and plume width of 10 meters (SCAQMD 2008).
Receptors	Discrete receptors were placed at the nearest residential receptor locations in all directions from the project site, and Cartesian grids of less than 50-meter spacing were placed within 0.25 miles of the project site. In addition, discrete receptors were placed at school sites and day care facilities within a 2-kilometer area surrounding the project site.

Source: See Appendix A.
Notes: SDAPCD = San Diego Air Pollution Control District; AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; OEHHA = Office of Environmental Health Hazard Assessment; NED = National Elevation Dataset; AERMAP = terrain preprocessor for AERMOD; DPM = diesel particulate matter.

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT, Version 22118). AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the emission rate of 1 gram per second. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices. There is no reference exposure level for acute health impacts from DPM, and thus, acute risk was not evaluated.

Results of the construction HRA are presented in Table 3.3-5.

Table 3.3-5. Construction Health Risk Assessment Results – Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential	Per Million	38.63	10	**Potentially Significant**
Chronic Hazard Index – Residential	Index Value	0.04	1.0	Less than Significant

Source: Appendix A.
Note: CEQA = California Environmental Quality Act.

As shown in Table 3.3-5, the DPM emissions from construction of the project would result in a maximum individual cancer risk of 38.63 in 1 million and a chronic hazard index of 0.04. The chronic hazard index

would be below the 1.0 significance threshold; however, the project would exceed the cancer risk threshold of 10 in 1 million and would be potentially significant without mitigation.

Mitigation Measure (MM) AQ-1 would require that all diesel-fueled off-road construction equipment greater than 75 horsepower be zero-emission or equipped with CARB Tier 4 Final-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations and Part 89 of Title 40 of the Code of Federal Regulations). An exemption from these requirements may be granted, at the City's discretion, if the contractor documents that the required tier is not reasonably available and that corresponding reductions in DPM are achieved from other construction equipment so that emissions remain below the applicable cancer risk threshold. Table 3.3-6 summarizes the results of the HRA for project construction after mitigation.

Table 3.3-6. Construction Health Risk Assessment Results – Mitigated

Impact Parameter	Units	Impact Level	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential	Per Million	8.20	10	Less than Significant
Chronic Hazard Index – Residential	Index Value	0.01	1.0	Less than Significant

Source: Appendix A
Notes: CEQA = California Environmental Quality Act

As shown in Table 3.3-6, mitigated project construction activities would result in a maximum individual cancer risk of 8.20 in 1 million at the maximally exposed residence, which is less than the significance threshold of 10 in 1 million. Mitigated project construction would result in a chronic hazard index of 0.01, which is below the 1.0 significance threshold. The project construction health risk impacts would be less than significant with mitigation incorporated.

Operational Health Risk

CARB identified sources of air pollution that are of primary concern when siting new sensitive receptors. Those sources include freeways, high-traffic roadways, distribution centers, large stationary sources, etc. (CARB 2005). The project involves the development of a Community Center and is not considered a sensitive receptor, nor would it be considered a source of substantial long-term air pollution, as evidenced by Table 3.3-3. Operation of the project would include a 200-kilowatt (kW) Tier 3 emergency back-up generator[3] that would be subject to permitting from SDAPCD. A screening analysis was prepared for the project using the Santa Barbara Air Pollution Control District Diesel-Fired Internal Combustion Engines (DICE) Screening Tool, which relies on meteorology data from the Santa Barbara and Santa Maria Airports. The results of the screening analysis showed a worst-case potential health risk of 2.3 in 1 million. While the meteorological conditions would be different for the proposed project, it should be noted that the wind rose for the project shows the predominant wind direction to be away from the nearest sensitive receptors and toward non-sensitive commercial uses (see Appendix A). A prioritization screening was also prepared for the project using the San Joaquin Valley Air Pollution Control District (SJVAPCD) prioritization calculator.

[3] The emergency generator is currently specified as a Kohler Tier 3 U.S. Environmental Protection Agency-certified model 200REOZJF, which is powered by a John Deere engine model number 606HFG85A, which has a horsepower (hp) rating of 315 hp. 200 kilowatts equates to 268 hp. The analysis assumed the 315 hp to provide a conservative estimate.

The SJVAPCD prioritization calculator is a spreadsheet model that uses emissions and pollutant potency, which provides a conservative estimate of risks. The results of the prioritization showed a risk of 3.01 in 1 million for receptors at a distance of 100 meters (see Appendix A).

As previously noted, the project's emergency generator would be subject to permitting from the SDAPCD, which would involve application submittal and agency review of emissions and potential DPM impacts to sensitive receptors in the form of an HRA to determine risks for the maximally exposed individual resident, the maximally exposed individual worker, the maximally exposed short-term receptor (if different than the maximally exposed individual resident or worker), and nearby sensitive receptors. Pursuant to SDAPCD Rule 1200, permitting of the project would be contingent on achieving a cancer risk of less than 10 in 1 million. Permit conditions may require the use of Toxic-Best Available Control Technology in the form of additional emission controls or higher-tiered engines, if applicable. Pursuant to permitting, the project would not exceed a risk of 10 in 1 million, and the operational health risk impact would be less than significant.

Health Effects of Criteria Air Pollutants

As determined in Section 3.3(b) of this MND, project construction and operation would not exceed significance thresholds for VOC, NO_x, CO, SO_x, $PM_{10,}$ or $PM_{2.5}$. VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location, allowing time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 CAAQS/NAAQS tend to occur between April and October, when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of reliable and meaningful quantitative methods to assess this impact. The project would not exceed the significance thresholds for VOC or NO_x; therefore, implementation of the project would contribute minimally to regional O_3 concentrations and the associated health effects.

In addition to O_3, NO_x emissions contribute to potential exceedances of the NAAQS and CAAQS for nitrogen dioxide (NO_2) (because NO_2 is a constituent of NO_x). Health effects that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, as shown in Appendix A, CARB air quality monitoring shows existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Because project generated NO_x emissions would not exceed the significance threshold, the project would not result in potential health effects associated with NO_2 and NO_x.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and was determined to be a less-than-significant impact. Furthermore, the SDAPCD Annual Air Quality Monitoring Network Report for 2022 shows that CO concentrations have decreased in the San Diego region over the last 20 years and are well below the NAAQS and CAAQS standards (SDAPCD 2022b). Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the project would also not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SDAB from coming into attainment for these pollutants. Additionally, the project would implement dust control strategies and be required to comply with SDAPCD Rule 55, Fugitive Dust Control, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction and operation, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

Conclusion

The project would not result in any potentially significant contribution to local or regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Impacts would be less than significant with implementation of MM-AQ-1. Furthermore, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and there are currently no modeling tools that could provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, and impacts are determined to be less than significant with implementation of MM-AQ-1.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less-than-Significant Impact. Construction and operation of the project would result in various emissions. Criteria air pollutants, fugitive dust, and toxic air contaminants are addressed under Sections 3.3(b) and 3.3(c) above, and as such, this impact analysis is focused on the potential for an odor impact to occur. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from the tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not propose and would not engage in any of these activities or other potential activities that would generate operational odors. As discussed in Section 2.3.2, the proposed Community Center would be used for private and government events and gatherings and classes for the general public and would not create any new sources of substantial odors during operation. Therefore, impacts related to odors are determined to be less than significant.

Project Design Features

PDF-AQ-1 Fugitive Dust Control. Standard construction practices would be employed to reduce fugitive dust emissions and include watering of the active sites and exposed surfaces up to two times per day, depending on weather conditions; watering unpaved roads; and limiting vehicle speeds on unpaved roads. Construction of the project would be subject to SDAPCD Rule 55 – Fugitive Dust Control. Compliance with Rule 55 would limit fugitive dust that may be generated during grading and construction activities.

Mitigation Measures

MM-AQ-1 Tier 4 Final Construction Equipment. Prior to the commencement of construction activities for the project, the applicant shall require its construction contractor to demonstrate that all 75-horsepower or greater diesel-powered equipment is powered with California Air Resources Board-certified Tier 4 Final engines.

An exemption from these requirements may be granted by the City of Santee (City) if the applicant documents that equipment with the required tier is not reasonably available and that equivalent reductions in PM_{10} exhaust emissions are achieved from other combinations of construction equipment. Before an exemption may be considered by the City, the applicant shall be required to demonstrate that three construction fleet owners/operators in the San Diego region were contacted and that those owners/operators confirmed Tier 4 equipment could not be located within the San Diego region. The City shall review the exemption request and provide a determination within 10 business days from receipt of the request.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact 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 Wildlife 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, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐

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 Wildlife or U.S. Fish and Wildlife Service?***

Direct Impacts

No special-status plant or wildlife species were observed within the Project site during surveys, and due to lack of habitat, none are expected to occur (Appendix B). Therefore, no direct impacts would occur to special-status plant or wildlife species with Project implementation.

Direct impacts to nesting birds, protected under Section 3503 of the California Fish and Game Code, could occur within areas of the Project site containing ornamental trees as part of the current development's landscaping. Project implementation of Mitigation Measure (MM) BIO-1 (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to nesting birds to a less-than-significant level through performance of a nesting bird survey if construction occurs during the nesting season. Additionally, all trees removed as part of Project implementation, that could potentially provide nesting habitat for birds, would be replaced as directed by MM-BIO-4 (Tree Replacement, Encroachment, and Preservation). Therefore, no significant direct impacts are anticipated with Project implementation to nesting birds or their habitat.

Glass windows and tall glass panels would be used for the Community Center building's exterior, which could potentially result in an increase in bird strikes. Project design feature PDF-1 would require incorporation of glazing treatments along the north and south sides of the building to ensure that large

areas of glass are visible to birds. Therefore, no significant direct impacts to birds from building strikes are anticipated with implementation of PDF-1.

The Project site does not occur within federally designated critical habitat for plant or wildlife species. Therefore, no direct impacts would occur to critical habitat with Project implementation.

Indirect Impacts

Project implementation has the potential to result in indirect impacts to special-status wildlife species, specifically least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped garter snake, Townsend's big-eared bat, and western yellow bat, as well as special-status plant species occurring within the Project site's buffer area that overlaps Woodglen Vista Creek.

Construction-Related (Short-term): Potential short-term or temporary indirect impacts to least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped garter snake, Townsend's big-eared bat, western yellow bat, and special-status plant species resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts would be potentially significant absent mitigation.

Project implementation of MM-BIO-1 (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts from construction noise to a less-than-significant level through performance of a nesting bird survey if construction occurs during the nesting season. If nesting least Bell's vireo, yellow-breasted chat, and/or yellow warbler are identified, an adequate buffer will be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) will minimize indirect impacts to least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped garter snake, Townsend's big-eared bat, western yellow bat, and special-status plant species through biological monitoring, requiring a Worker Environmental Awareness Training that will cover the special-status resources and mitigation requirements for the Project, delineating Project boundaries, requiring that all vehicles and equipment be serviced in designated staging areas, and ensuring that construction will not be conducted at night. Project construction would be limited to the City's allowable construction hours of 7:00 a.m. to 7:00 p.m. and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects (MM-BIO-2).

Implementation of MM-BIO-1 (Pre-Construction Nesting Bird Survey) and MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of construction-related indirect impacts to special-status plant and wildlife species to less than significant with mitigation incorporated.

Long-Term: Potential long-term, indirect impacts that could result from Project implementation to suitable foraging and nesting habitat for least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped garter snake, Townsend's big-eared bat, western yellow bat, and special-status plants include chemical releases, such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts would be potentially significant absent mitigation.

The Project site is currently developed as a parking lot with landscaped features (i.e. planted trees) located throughout and a grassy field used for passive recreational activities. The proposed Project will also include landscaping (i.e. planted trees) surrounding the parking lot and Community Center, which shall be included in the Project's Landscape Plan. Therefore, the Project's proposed landscaping and subsequent irrigation needs would be similar to the site's existing conditions. However, the proposed Project will convert the existing grassy recreation field into an additional parking lot resulting in an increase in the amount of impervious surfaces, which would likely reduce the amount of irrigation when compared with existing conditions and increase the amount of stormwater runoff. Increased moisture associated with irrigation and runoff can attract invasive species such as Argentine ants (*Linepithema humile*), which can displace native ants that are potential pollinators and seed dispersers for special-status plant species, displace native insects that are the main prey base for many special-status wildlife species, and possibly help promote other non-native invertebrates such as earwigs and sowbugs. However, because the Project's landscaping irrigation would be similar to or reduced as compared to the existing conditions and the proposed project would include a series of catch basins, roof drainages and biofiltration basins to manage stormwater runoff, an increase in the potential indirect impacts to special-status species from Argentine ants is not anticipated.

Because the Project site is located within the City's Town Center zone, there are existing ambient noise levels resulting from surrounding recreation activities (e.g., traffic, baseball fields, outdoor events). Project-related operational noise levels would be associated with increased traffic, HVAC systems, emergency generator, and indoor and outdoor events. Most of the proposed operational events would occur indoors and, according to Table 3.13-4 of this document, are predicted to be less than 60 A-weighted decibels (dBA) (Leq) along the edge of the Project site adjacent to Woodglen Vista Creek, which is typically used by the Wildlife Agencies (i.e. USFWS and CDFW) as the noise threshold for wildlife species. Occasionally there will be certain outdoor events (e.g. 4th of July fireworks show) that could result in noise levels exceeding the 60 dBA (leq)) threshold for a brief portion of the 24-hour day. However, special-status wildlife species are already being subjected to these types of occasional ambient noise levels from surrounding activities (e.g. the City's 4th of July fireworks show, Summer Concerts, and outdoor movie events occurring immediately south of the Project site at the Town Center Community Park East site would also result in a similar noise level within Woodglen Vista Creek). Therefore, long-term operational noise impacts are less than significant.

The Project site and surrounding area contain existing sources of artificial nighttime light that are typical of an existing parking lot (e.g., streetlights, exterior building lights) and recreation fields (e.g., baseball field). Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts from proposed lighting as it would be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code, which states that lighting shall be shielded, or recessed, and directed downward and away from adjoining properties. Therefore, long-term lighting impacts are less than significant.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts to special-status plant and wildlife species by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to open space areas associated with

Woodglen Vista Creek. Therefore, long-term indirect impacts to special-status species would be reduced to less than significant with mitigation incorporated.

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, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

Less-than-Significant Impact with Mitigation. The following analysis considers direct and indirect impacts associated with the project:

Direct Impacts

A total of 5.20 acres of urban/developed land cover would be permanently impacted with Project implementation (Appendix B). Communities listed by CDFW as high priority for inventory (i.e., State Rank 1, 2, or 3) are considered sensitive and typically require mitigation (CDFW 2023). There are no sensitive vegetation communities with CDFW state rankings of 1, 2, or 3 within the Project site and therefore no impacts would occur to sensitive vegetation communities with Project implementation.

Indirect Impacts

Project implementation has the potential to result in indirect impacts to sensitive vegetation communities occurring adjacent to the Project site.

Construction-Related (Short-term): Sensitive vegetation communities may be indirectly impacted during construction of the proposed Project. Potential short-term or temporary indirect impacts to sensitive vegetation communities resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and the adverse effect of invasive plant species. These potential construction-related, indirect impacts to sensitive vegetation communities would be potentially significant absent mitigation.

Implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of construction-related indirect impacts to sensitive vegetation communities to less than significant with mitigation incorporated.

Long-Term: Potential long-term, indirect impacts that could result from development near sensitive vegetation communities include chemical releases, such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to sensitive vegetation communities would be potentially significant absent mitigation.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize long-term indirect impacts by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, preparation of landscaping plans that will emphasize native species and not include species from the

California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to open space areas associated with Woodglen Vista Creek. Therefore, long-term indirect impacts to sensitive vegetation communities would be less than significant with mitigation incorporated.

c) ***Would the project 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?***

Less-than-Significant Impact with Mitigation. The following analysis considers direct and indirect impacts associated with the project:

Direct Impacts

No jurisdictional aquatic resources, including state or federally protected wetlands, occur within the Project site (Appendix B). Therefore, no direct impacts to state or federally protected wetlands are anticipated with Project implementation, and no permits under Sections 401 or 404 of the CWA or under Sections 1600–1616 of the California Fish and Game Code are required.

Indirect Impacts

Project implementation has the potential to result in indirect impacts to jurisdictional aquatic resources occurring adjacent to the Project site associated with Woodglen Vista Creek.

Construction-Related (Short-term): Jurisdictional aquatic resources of the United States/state may be indirectly impacted during construction. Potential short-term or temporary indirect impacts to jurisdictional aquatic resources resulting from construction activities include the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and unintentional clearing, trampling, or grading outside of the proposed construction zone. Construction-related indirect impacts to jurisdictional aquatic resources would be potentially significant absent mitigation.

Implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize construction-related indirect impacts through biological monitoring, requiring a Worker Environmental Awareness Training that will cover the special-status resources and mitigation requirements for the Project, delineating Project boundaries, implementing standard dust control measures, developing a stormwater pollution prevention plan, and requiring all vehicles and equipment to be serviced in designated staging areas. Therefore, construction-related indirect impacts to jurisdictional aquatic resources would be less than significant with mitigation incorporated.

Long-Term: Potential long-term indirect impacts that could result from development near jurisdictional aquatic resources of the United States/state include pollutants that could degrade water quality and habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. Long-term indirect impacts to jurisdictional aquatic resources would be potentially significant absent mitigation.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize long-term indirect impacts by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with state and federally protected waterways. Therefore, long-term indirect impacts to jurisdictional aquatic resources would be less than significant with mitigation incorporated.

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 with Mitigation. The following analysis considers direct and indirect impacts associated with the project:

Direct Impacts

The Project site is currently developed as a parking lot and is not mapped as a core area or habitat linkage under the MSCP (City of San Diego 1998). Therefore, the Project site does not function as a wildlife corridor or habitat linkage. Therefore, no direct impacts are anticipated to wildlife corridors and/or habitat linkages with Project implementation.

Indirect Impacts

Project implementation has the potential to result in indirect impacts to Woodglen Vista Creek, which occurs adjacent to the Project site and may function as a local wildlife corridor with connectivity to the San Diego River. However, Woodglen Vista Creek is surrounded by urban portions of the City so it is only a marginally valuable, local wildlife corridor (e.g. used by local populations of common species such as coyote, raccoon, striped skunk, and Virginia opossum).

Construction-Related (Short-term): The Woodglen Vista Creek wildlife corridor may be indirectly impacted during construction of the proposed Project. Potential short-term or temporary indirect impacts to biological resources within the Woodglen Vista Creek wildlife corridor resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and the adverse effects of invasive plant species. These potential construction-related, indirect impacts to the Woodglen Vista Creek wildlife corridor would be potentially significant absent mitigation.

Implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of construction-related indirect impacts to the Woodglen Vista Creek wildlife corridor to less than significant with mitigation incorporated. Project construction would be limited to the City's allowable construction hours of 7:00 a.m. to 7:00 p.m. and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects (MM-BIO-2).

Long-Term: Potential long-term, indirect impacts that could result from development near the Woodglen Vista Creek wildlife corridor include chemical releases such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; nighttime lighting; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to the Woodglen Vista Creek wildlife corridor would be potentially significant absent mitigation.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts to the Woodglen Vista Creek wildlife corridor by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to open space areas associated with Woodglen Vista Creek. Therefore, long-term indirect impacts to wildlife corridors would be reduced to less than significant with mitigation incorporated.

Because the Project site is located within the City's Town Center zone, there are existing ambient noise levels resulting from surrounding recreation activities (e.g., traffic, baseball fields, outdoor events). Project-related operational noise levels would be associated with increased traffic, HVAC systems, emergency generator, and indoor and outdoor events. Most of the proposed operational events would occur indoors and, according to Table 3.13-4 of this document, are predicted to be less than 60 dBA (leq) along the edge of the Project site adjacent to Woodglen Vista Creek, which is typically used by the Wildlife Agencies (i.e. USFWS and CDFW) as the noise threshold for wildlife species. Occasionally there will be certain outdoor events (e.g. 4th of July fireworks show) that could result in noise levels exceeding the 60 dBA (leq)) threshold for a brief portion of the 24-hour day. However, special-status wildlife species are already being subjected to these types of occasional ambient noise levels from surrounding activities (e.g. the City's 4th of July fireworks show, Summer Concerts, and outdoor movie events occurring immediately south of the Project site at the Town Center Community Park East site would also result in a similar noise level within Woodglen Vista Creek). Therefore, long-term operational noise impacts are less than significant.

The Project site contains sources of artificial nighttime light that are typical of an existing parking lot (e.g., streetlights, exterior building lights). Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts from the Project's lighting as it would be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code, which states that lighting shall be shielded, or recessed, and directed downward and away from adjoining properties. Therefore, long-term lighting impacts are less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less-than-Significant Impact with Mitigation. The City's Urban Forestry Ordinance contains tree-related policies, regulations, and generally accepted standards for planting, trimming, and removing trees on public property and public rights-of-way (Santee Municipal Code, Section 8.06 [City of Santee 2020]). The ordinance gives the City control of all trees, shrubs, and other plantings in any street, park, public right-of-

way, landscape maintenance district or easement, or other City-owned property. City staff review of development plans for the City-owned and maintained property would ensure that the proposed landscaping and maintenance requirements conform to the Urban Forestry Ordinance. The proposed site plan would require removal of existing City-owned trees. As such, tree replacement would occur at a 1:1 mitigation ratio with 15-gallon trees, as directed by MM-BIO-4 (Tree Replacement, Encroachment, and Preservation). Additionally, measures to minimize damage to the encroachment and preserved trees, as well as recommendations for long-term maintenance and care for trees that will be retained on site, would be included in the Project's Landscape Plan. Therefore, the proposed Project would comply with the Urban Forestry Ordinance, and impacts would be less than significant with mitigation incorporated.

In the Conservation Element of the City of Santee General Plan, biological resources are discussed, and specific objectives and policies are presented (City of Santee 2003). The proposed Project does not conflict with any objectives or policies as presented in the Conservation Element of the General Plan. Therefore, impacts to local policies and ordinances would be less than significant, 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?

Less-than-Significant Impact with Mitigation. The Project site is within the boundaries of the MSCP Plan (City of San Diego 1998). The Draft Santee MSCP Subarea Plan would serve as a habitat conservation plan under the MSCP Plan (City of San Diego 1998) pursuant to Section 10(a)(1)(B) of FESA, and as a Natural Community Conservation Plan pursuant to the California Natural Community Conservation Planning Act of 1991. The Draft Santee MSCP Subarea Plan, once finalized, will contribute to the regional MSCP for preservation, mitigation for impacts, and conservation of sensitive biological resources within San Diego County. The Draft Santee MSCP Subarea Plan is also intended to provide cumulative mitigation for impacts to covered species within the City's jurisdiction, as long as projects are consistent with and covered by provisions of the Santee MSCP Subarea Plan, and to ensure sufficient biological resources are conserved to assist in the conservation and recovery of covered species under the MSCP.

Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City. All Project impacts would occur outside of the Draft Santee MSCP Subarea Plan Preserve area. Additionally, MM-BIO-1 through MM-BIO-3 are proposed to prevent any direct or indirect impacts to special-status species, sensitive vegetation communities, and/or jurisdictional aquatic resources. Furthermore, Project implementation would not conflict with the provisions of the MSCP Plan or Draft Santee MSCP Subarea Plan, nor would it prevent the Draft Santee MSCP Subarea Plan from being approved or compromise continued implementation of the MSCP in San Diego County. Therefore, impacts to habitat conservation plans would be less than significant with mitigation incorporated.

Project Design Feature

PDF-BIO-1 Bird Safe Buildings. All new building development shall provide bird-safe building design features in order to reduce the potential for bird strikes. Project design features include incorporating glazing treatments on the building façade to ensure that large areas of glass are visible to birds.

Mitigation Measures

MM-BIO-1 Pre-Construction Nesting Bird Survey. Construction within all potential nesting resource areas within the Project site (i.e., ornamental trees) and areas of the Project site within 500 feet of the Woodglen Vista Creek should be avoided during the migratory bird nesting season (typically January 1 through September 30). If construction activities (i.e., grading, tree removal, external construction involving heavy equipment generating noise in excess of 60 A-weighted decibels [dBA] (leq)) must occur during the bird nesting season, an avian nesting survey of all potential nesting resource areas (e.g., ornamental trees) within the Project site and areas of the Woodglen Vista Creek within 500 feet of all impact areas must be conducted to determine the presence/absence of special-status species, protected migratory birds, and active nests. If least Bell's vireo (*Vireo bellii pusillus*), yellow-breasted chat (*Icteria virens*), and/or yellow warbler (*Setophaga petechia*) are identified during the surveys, then noise attenuation measures shall be required to ensure that noise levels from construction do not exceed a 60 dBA hourly average per hour at the edge of the riparian habitat or to the ambient noise level if it exceeds 60 dBA prior to construction. Construction noise monitoring shall be required to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA hourly average unless an analysis completed by a qualified acoustician shows that noise generated by construction activities would not exceed 60 dBA hourly average at the edge of occupied habitat.

The avian nesting survey shall be performed by a qualified wildlife biologist within 14 days prior to the start of construction and one more survey pass within 24 hours of initiation of construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If construction activities are on hold for more than 30 days, then pre-construction surveys would need to be reinitiated. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species), existing nearby conditions (e.g., natural habitat versus roads or existing noisy activities), existing buffering features (e.g., topography, tall and dense trees, buildings), legal status of species (i.e., listed versus non-listed), general sensitivities of the species (e.g., disturbance tolerant or urban versus non disturbance tolerant), and other variables. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged and the nest is no longer active.

MM-BIO-2 Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans shall include the following to address potential indirect

impacts to special-status species occurring within all suitable habitat associated with the Woodglen Vista Creek (i.e., within 500 feet of the Project site):

- **Biological Monitoring.** A qualified Project biologist approved by the City of Santee shall monitor ground-disturbing and vegetation-clearing activities for the duration of the Project construction to ensure that practicable measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources outside the Project footprint. Once ground-disturbing and vegetation-clearing activities are complete, the Project biologist shall conduct weekly checks to inspect construction fencing and ensure that all applicable requirements from the mitigation measures are being upheld until construction is completed.
- **Worker Environmental Awareness Training.** Prior to grading, a pre-construction meeting shall be required that includes a training session for Project personnel by a qualified biologist. The training shall include (1) a description of the species of concern and its habitats; (2) the general provisions of the applicable regulations pertaining to biological resources, including the Endangered Species Act and the Clean Water Act; (3) the need to adhere to the provisions of the Endangered Species Act, the Clean Water Act, and other applicable regulations; (4) the penalties associated with violating the provisions of the Endangered Species Act, Clean Water Act, and other applicable regulations; (5) the general measures that are being implemented to conserve the species of concern as they relate to the Project; and (6) the access routes to and Project site boundaries within which the Project activities must be accomplished. Additionally, the training shall include the measures and mitigation requirements for the applicable resources. Copies of the mitigation measures and any required permits from the resource agencies shall be made available to construction personnel.
- **Delineation of Property Boundaries.** Before beginning activities that would cause impacts, the contractor shall, in consultation with the biological monitor, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. In addition, any avoided environmental resources shall be clearly delineated. Prior to implementing construction activities, the biological monitor shall verify that the flagging clearly delineates the construction limits and any sensitive environmental resources to be avoided.
- **Standard Dust Control Measures.** Standard dust control measures as per the San Diego County Air Pollution Control District shall be implemented to reduce impacts on nearby plants and wildlife. Measures include controlling speed to 15 miles per hour or less on unpaved roads, replacing ground cover in disturbed areas as quickly as possible, frequently watering active work sites, installing shaker plates, and suspending excavation and grading operations during periods of high winds.
- **Stormwater Pollution Prevention Plan.** Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, the Contractor shall submit a stormwater pollution prevention plan (SWPPP) to the City of Santee that specifies best management practices to prevent all construction pollutants from

contacting stormwater, with the intent of keeping sedimentation or any other pollutants from moving off site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Best management practice categories employed on site shall include erosion control, sediment control, and non-stormwater good housekeeping. Best management practices recommended for the construction phase shall include, but not be limited to, the following:

- Limiting grading to the minimum area necessary for construction, operation, and decommissioning of the Project
- Limiting vegetation disturbance/removal to the maximum extent practicable
- Implementing fiber rolls and sandbags around drainage areas and the site perimeter
- Stockpiling and disposing of demolition debris, concrete, and soil properly
- Installing a stabilized construction entrance/exit and stabilizing disturbed areas
- Installing proper protections for fueling and maintaining equipment and vehicles
- Managing waste, aggressively controlling litter, and implementing sediment controls
- Stabilizing soil in disturbed areas through revegetation

The following water quality measures shall be included in the SWPPP:

- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- The Project shall be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern, as feasible. Project activities that cannot be conducted without placing equipment or personnel in sensitive habitats shall be timed to avoid the breeding season of riparian species.
- Water pollution and erosion control plans shall be developed and implemented in accordance with the Regional Water Quality Control Board.
- **Minimize Spills of Hazardous Materials.** All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly handled and disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area. The staging area will be located on the south side of the Project site, away from Woodglen Vista Creek, and no stockpiles will be allowed adjacent to Woodglen Vista Creek.
- **Wildlife Hazards.** The following measures shall be implemented to ensure that wildlife do not become trapped, entangled, injured, or poisoned by construction activities:

  - Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape.
  - Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist or allowed to move off of the Project site on its own.
  - Nets and mesh shall be made of loose weave material that is not fused at the intersections of the weave because nets with welded weaves present an entanglement risk.
  - Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day.

- **Invasive Weeds.** To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/).
- **Night Work.** All construction activities shall be conducted during the daytime, and lights shall not be kept on overnight in the construction area, as practicable. If night lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that will prevent light spillage or glare into the adjacent open space.

MM-BIO-3 Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with Woodglen Vista Creek (i.e., within 500 feet of the Project site):

- **Runoff.** Future development within 500 feet of suitable habitat for special-status species shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System, to ensure that the quantity and quality of runoff discharged is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into open space or suitable habitat for special-status species. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes. This can be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operation of runoff control systems.
- **Lighting.** Project lighting would be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code. Night lighting shall be directed away from open space and/or suitable habitat for special-status species to protect

species from direct night lighting. Shielding shall be incorporated in Project designs to ensure that ambient lighting is not increased.

- **Invasive Species.** Landscape Plans shall incorporate native species that occur in the region. Invasive, non-native plant species listed on the most recent California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/) with a rating of moderate or high shall not be included in landscaping.
- **Barriers.** The proposed Project shall incorporate barriers, where appropriate, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in open space and/or suitable habitat for special-status wildlife (e.g., Woodglen Vista Creek). Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.

MM-BIO-4 Tree Replacement, Encroachment, and Preservation. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans and the Project's Landscape Plan shall include the following to address tree removal, encroachment into protected zone, and retained trees:

- **Replacement.** The proposed site plan would require removal of City of Santee–owned trees. Tree replacement shall occur at a 1:1 mitigation ratio with 15-gallon trees and be included in the Project's Landscape Plan, which shall also include recommendations for long-term maintenance and care for regulated trees that will be retained on site.
- **Encroachment into Protected Zone and Retained Trees.** Additionally, tree protection measures shall be provided in the Project's Landscape Plan and designed to mitigate impacts from construction encroachment into the protected zone of any preserved and/or encroached upon City of Santee–owned trees. These tree protection measures shall be consistent with best management practices for tree protection on construction sites and would help minimize impacts to any preserved and/or encroached City of Santee–owned trees. These measures shall be implemented prior to, during, and following construction. This includes measures such as exclusion fencing and worker training to avoid direct impacts to trees, and measures such as irrigation and monthly inspections by a Certified Arborist to promote the long-term health of retained trees.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. The term "historical resources" applies to any such resource that is at least 50 years old and is listed or determined eligible for listing in the California Register of Historical Resources. The project site is currently developed as a parking lot with several landscape features located throughout and a grassy field used for passive recreational activity. As detailed in the Archaeological Resources Inventory Report (Appendix C), between 2005 and 2009, the project area[4] was graded and developed into the parking lot for the YMCA. Additionally, the surrounding area was also disturbed by mass grading activities for development of the Town Center Community Park. Further, no historic structural resources have historically been located or are currently located on the project site (see Appendix C, Archaeological Resources Inventory Report). No significant prehistoric or historic cultural resources have been previously recorded within or immediately adjacent to the project area. Therefore, the project would not affect a known historical resource, resulting in no impact.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less-than-Significant Impact with Mitigation. As detailed in the Archaeological Resources Inventory Report (Appendix C), Dudek performed a California Historical Resources Information Systems records search of the project area and a 1-mile radius at the South Coastal Information Center on October 10, 2022. The records search results revealed that 71 previous archaeological resources studies have been conducted within 1-mile of the project area. Of the 71 previous studies, 4 studies intersect the project area. Overall, the entire project area has been previously studied and resulted in negative results in the project area. This includes the 2007 monitoring reports (SD-11189 and SD-11190) for the Town Center Community Park Mass Grading, which includes all of the project area. No archaeological resources were found during this monitoring. The South Coastal Information Center records search and the site visit did not identify any archaeological resources within the project area; however, 14 archaeological resources were identified within the 1-mile radius. The review of aerial photographs also reveals the project area has been disturbed by mass grading activities. The previous development of the project area for the Town Center Community Park was monitored for cultural resources and yielded negative results. Additionally, Dudek performed a pedestrian survey of the proposed project area on November 7, 2022, that confirmed the project area has been completely developed and did not identify any archaeological resources.

[4] The project area in Appendix C includes an earlier version of the project boundary, which was only 1.1 acres of the current 5.2 acres project site. However, the Archaeological Resources Inventory Report included a 1-mile radius records search and discusses the conditions of the surrounding area, therefore covering the current project boundary.

Although the project site is currently developed, there is still the potential for buried and/or surface prehistoric and historic resources to be encountered. Therefore, the project will also adhere to MM-CUL-2, which states that a qualified archaeologist and Native American monitor shall be present during ground disturbing activities. Further, the project will adhere to MM-CUL-1, which states that in the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all work within the vicinity of the find must stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the significance of the find. Construction activities may continue in other areas but should be redirected a safe distance from the find. If the new discovery is evaluated and found to be significant under CEQA and avoidance is not feasible, additional work such as data recovery may be warranted. A data recovery plan shall be developed by the qualified archaeologist in consultation with the City and Native American representatives, if applicable. Ground disturbance can continue only after the resource has been properly mitigated and with approval by the City. With the inclusion of MM-CUL-1 and MM-CUL-2, potential project impacts to any previously undiscovered archaeological resources would be mitigated to a less-than-significant level.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less-than-Significant Impact with Mitigation. While there are no formal cemeteries or recorded burials in the vicinity of the project area, prehistoric burials are possible. In the unlikely event that unknown human burials are encountered during project grading and construction, they would be handled in accordance with procedures of Public Resources Code Section 5097.98, California Government Code Section 27491, and Health and Safety Code Section 7050.5. These regulations detail specific procedures to follow in the event of a discovery of human remains. Compliance with these regulations would reduce impacts to a level of less than significant. Implementation of MM-CUL-2 would further reduce impacts to a level of less than significant.

Mitigation Measures

MM-CUL-1 Unanticipated Discovery of Archaeological Resources. If potential archaeological resources are uncovered during grading, the Applicant shall be required to halt all construction work occurring within 100 feet of the find until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the material to determine whether it is a "unique cultural resource" as defined in Section 21083.2 (g) of the CEQA Statutes. If the new discovery is evaluated and found to be significant under CEQA and avoidance is not feasible, additional work such as data recovery may be warranted. A data recovery plan shall be developed by the qualified archaeologist in consultation with the City and Native American representatives, if applicable. round disturbance can continue only after the resources has been properly mitigated and with approval by the City.

MM-CUL-2 Archaeological Monitoring. The qualified archaeologist, or an archaeological monitor (working under the direct supervision of the qualified archaeologist), shall observe all initial ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The qualified archaeologist, in coordination with the applicant and the City, may reduce or discontinue monitoring if it is determined by the qualified archaeologist that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological

monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the project site. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed below). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City and any Native American groups who request a copy. A copy of the final report shall be filed at the South Coastal Information Center (SCIC).

A Native American Monitor of Kumeyaay descent shall be present for any pre-construction meeting and for all ground disturbing activities associated with the project. Should any cultural or tribal cultural resources be discovered, no further grading shall occur in the area of the discovery until the City Planner, or designee, with concurrence from the Native American Monitor, are satisfied that treatment of the resource has occurred. In the event that a unique archaeological resource or tribal cultural resource is discovered, and in accordance with Public Resources Code Section 21083.2(b)(1), (2), and (4), the resource shall be moved and buried in an open space area of the Project site, such as slope areas, which will not be subject to further grading activity, erosion, flooding, or any other ground disturbance that has the potential to expose the resource. The on-site area to which the resource is moved shall be protected in perpetuity as permanent open space. No identification of the resource shall be made on-site; however, the Applicant shall plot the new location of the resource on a map showing latitudinal and longitudinal coordinates and provide that map to the Native American Heritage Commission (NAHC) for inclusion in the Sacred Lands File (SLF). Disposition of the resources shall be at the discretion of the City of Santee, but in accordance with the foregoing.

In the event of the unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within 100 feet) of the discovery until it can be evaluated by the qualified archaeologist in consultation with the Native American monitor. Construction shall not resume until the qualified archaeologist has conferred with the applicant and the City on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the applicant and the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and the City shall consult with appropriate Native American representatives in determining treatment for

prehistoric or Native American resources to ensure cultural values ascribed to the resources, beyond those which are scientifically important, are considered.

If human remains are encountered, all work shall halt in the vicinity (within 100 feet) of the discovery and the San Diego County Coroner will be contacted in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. The applicant and the City will also be notified. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate a Most Likely Descendant (MLD) for the remains per PRC Section 5097.98. The MLD shall complete the inspection of the site within 48 hours of being granted access and shall provide recommendations for the treatment of the remains. Until the landowner has conferred with the MLD, the applicant will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact 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 Impact. The project would result in an increase in energy consumption during construction and operation, which are addressed separately below.

Construction Emissions

Electricity Usage

Temporary electric power for as-necessary lighting and electronic equipment, such as computers inside temporary construction trailers, would be provided by San Diego Gas and Electric. The electricity used for such activities would be temporary, would be substantially less than that required for project operation, and would therefore have a negligible contribution to the project's overall energy consumption.

Natural Gas Usage

Natural gas is not expected to be required during project construction. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the following subsection Petroleum Usage. Any minor amounts of natural gas that may be consumed because of project construction would be temporary and negligible, and would not have an adverse effect; therefore, impacts would be less than significant.

Petroleum Usage

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities and haul trucks involved in relocating dirt around the project site are assumed to use diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction (approximately 14 months). It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of several types would be used during project construction. CalEEMod was used to estimate construction equipment usage; results are included in Appendix A. The estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks is estimated at 32,886 gallons of diesel fuel. The total fuel usage associated with worker vehicles is estimated at 1,531 gallons of gasoline. Project construction would represent a “single-event” petroleum demand and would not require ongoing or permanent commitment of petroleum resources for this purpose. The Project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy efficient than that found at comparable construction sites in the region or state. Therefore, the impacts would be less than significant.

Operational Emissions

Electricity Usage

The operational phase would require electricity for multiple purposes, including Community Center building heating and cooling, lighting, and electronics, and EV charging stations. CalEEMod was used to estimate project emissions from electricity uses (see Appendix A). Default electricity generation rates in CalEEMod were used based on the proposed land use and climate zone. Note that the project would include installing solar PV systems sized to meet the Sustainable Santee Action Plan Project Consistency Checklist item of 2 kW per 2,000 square feet.

Title 24 of the California Code of Regulations serves to enhance and regulate California building standards. The most recent amendments to Title 24, Part 6, referred to as the 2022 standards, became effective on January 1, 2023. According to CalEEMod estimates, the proposed project would consume 266,720 kilowatt-hours (kWh) per year during operation. The project would include solar PV systems pursuant to the Sustainable Santee Action Plan that generate at least 2 kW per square foot of building area for a total of 18.75 kW of solar PV based on 12,500 sq. ft./ (2,000 sq. ft./3 kW) (City of Santee 2019). The project would generate a minimum of 32,228 kWh of electricity per year (NREL 2023). For context, in 2022,

California used approximately 288 billion kWh of electricity (CEC 2024a). In 2022, total electricity demand in the County was approximately 20.2 billion kWh (CEC 2024a).

The project would involve the operation of a Community Center reflecting contemporary energy efficient/ energy conserving designs and operational programs. Uses proposed by the project are not inherently energy intensive, and the project electricity demands in total would be comparable to other projects of similar scale and configuration. Additionally, the project would be required to comply with the applicable Title 24 standards, which would further ensure that the project energy demands would not be inefficient, wasteful, or otherwise unnecessary, and impacts would be less than significant.

Natural Gas Usage

The operation would require natural gas for various purposes, including water heating and natural gas appliances. Natural gas consumption associated with operation is based on the CalEEMod outputs presented in Appendix A; CalEEMod default values for natural gas usage were assumed for the project. This analysis provides a conservative estimate of natural gas usage.

As previously explained, Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards, and 2022 standards are the current standards. According to CalEEMod estimates, the proposed project would consume 400,287 kilo-British thermal units (kBtus) per year. For context, in 2022, California consumed approximately 1,171 trillion kBtus of natural gas (CEC 2024b). In 2021, residential and non-residential uses in the County consumed about 52 trillion kBtu of natural gas (CEC 2024b). As supported by the preceding discussions, project natural gas consumption would not be considered inefficient, wasteful, or otherwise unnecessary, and impacts would be less than significant.

Petroleum Usage

During operations, most of the project's fuel consumption would involve the use of motor vehicles traveling to and from the project site by employees and visitors.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of the VMT due to project operation. As shown in Appendix A, the annual VMT attributable to the proposed project were estimated based on project-specific trip generation information and CalEEMod default values for the proposed land use. Like the construction worker and truck trips, fuel consumption from those utilizing the Community Center and employees is estimated by converting the total carbon dioxide emissions from operation of the project to gallons using the conversion factors for carbon dioxide to gallons of gasoline or diesel. Based on the annual fleet mix provided in CalEEMod, approximately 81% of the fleet are assumed to run on gasoline, while the remaining 19% are assumed to run on diesel. In the first year of assumed operations (2026), the proposed project would consume approximately 144,784 gallons of gasoline and 30,601 gallons of diesel from vehicle travel.

Trip generation and VMT generated by the project are consistent with other community uses of similar scale and configuration. That is, the project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT or associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions and the related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would decrease future gasoline fuel demands per VMT. The project would implement sidewalks, facilitating and encouraging pedestrian access. As supported by the preceding discussions, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary, and impacts would be less than significant.

Renewable Energy Potential

Regarding solar power, the project would install solar PV systems, consistent with the CAP requirements, on the 12,500-square-foot building area. Based on the CAP requirements, the system would be sized to generate 32,228 kWh per year. While battery storage for the project has not been proposed at this time, the project does not preclude installation of battery storage in the future, if determined to be a feasible and compatible land use of the site.

The project would use renewable energy on site as determined to be feasible and would not result in wasteful, inefficient, or unnecessary consumption of energy resources, including electricity, natural gas, or petroleum during project construction or operation. Impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less-than-Significant Impact. The project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24 establishes energy efficiency standards for residential and nonresidential buildings constructed in California to reduce energy demand and consumption. The proposed project would also be subject to Part 11 of Title 24, also known as the CALGreen building standards. Furthermore, the project would be consistent with the City's CAP Consistency Checklist measures, such as through its implementation of PV panels, which would further reduce operational energy use. The proposed project would be built and operated in accordance with all existing applicable regulations at the time of construction. For the reasons stated, the proposed project would result in a less-than-significant impact associated with the potential to conflict with energy standards and regulations.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact 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:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
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 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?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project 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? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

Less-than-Significant Impact. The proposed project site, like all of southern California, is located within a seismically active region that contains major active faults. The project would likely be exposed to seismic ground shaking should a seismic event occur in the region. The intensity of ground shaking at any specific

location within the region depends on the characteristics of the earthquakes, the distance from the earthquake epicenter, and the local geologic and soil conditions. The Alquist-Priolo Earthquake Zoning Act (Alquist-Priolo Act) requires the delineation of fault zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces to reduce hazards associated with fault rupture. The proposed project site is not located in an Alquist-Priolo Earthquake Fault Zone. The closest known active fault is the Mission Gorge Fault located approximately 6.5 miles away from the project site (Appendix D, Geotechnical Report). The proposed project would include the construction of a Community Center, which would be designed in accordance with all applicable provisions established in the current California Building Code, which sets forth specific engineering requirements to ensure structural integrity during a seismic event. Compliance with these requirements would reduce the potential risk to both people and structures with respect to strong seismic activity. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact with Mitigation. Liquefaction occurs when partially saturated soil loses its effective stress and enters a liquid state, which can result in the soil's inability to support structures above. Liquefaction can be induced by ground-shaking events and is dependent on soil saturation conditions. The project site is mapped within a liquefaction zone identified by the City on the Geotechnical/Seismic Hazard Map in the General Plan (City of Santee 2003). The Geotechnical Investigation Report (see Appendix D) prepared for the proposed project determined the project site is considered to have a moderate to high liquefaction potential because potentially liquefiable soils are present at the site between a depth of 14.5 and 28 feet below ground surface that could result in approximately 4 inches of liquefaction-induced settlement and a seismic differential settlement on the order of 2 inches. The Geotechnical Investigation Report recommends measures including post-tension slabs, mat foundations, and ground improvement to mitigate the potential effects of the total and differential settlements. Implementation of MM-GEO-1, which would require compliance with all applicable recommendations of the Geotechnical Investigation Report and the latest adopted version of the California Building Code, would reduce impacts associated with seismic-related ground failure, including liquefaction, to a less-than-significant level. Additionally, MM-GEO-1 would be consistent with the provisions of Municipal Code 15.58.120, which requires compliance with the recommendations of the geotechnical investigation.

iv) Landslides?

Less-than-Significant Impact with Mitigation. The project site is mapped as marginally susceptible to landslide based on the City of Santee General Plan Geotechnical/Seismic Hazard Map (Appendix D). The project site has an elevation of approximately 345 feet above mean sea level. The southern and eastern limits of the property have slopes approximately 7 feet high that descend into the San Diego River. Implementation of MM-GEO-1 would reduce impacts associated with landslides and/or rockfall to a level less than significant

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-than-Significant Impact. Prior to construction, the project applicant shall prepare a site-specific stormwater pollution prevention plan (SWPPP) consistent with the State Water Resources Control Board Construction General Permit as a condition of approval. The SWPPP shall describe best management practices (BMPs) to be used during construction to prevent discharge of sediment and other pollutants in stormwater runoff from the project site. Typical construction BMPs include silt fencing, fiber rolls, and

sweeping. Specific BMPs would be determined by the project contractor and engineer based on site-specific conditions. As part of the project, the contractor will monitor the construction BMPs, including conducting routine inspections of disturbed areas to ensure that the BMPs remain intact and effective. Adherence to these BMPs would ensure that the construction would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

The proposed project would also include post-construction, permanent BMPs, such as a series of catch basins, roof drainages and biofiltration basins located throughout the site and would use the existing earthen swale along the site's eastern and southern perimeter to manage stormwater runoff (Appendix F). These post-construction BMPs would meet the City's requirements and would be consistent with the County's 2020 BMP Design Manual. The City would be responsible for monitoring the effectiveness of the permanent BMPs in accordance with the Stormwater Management Plan. Implementation of the post-construction BMPs and adherence to these requirements would be adequate to reduce potential impacts related to erosion or loss of topsoil during operation. Thus, impacts would be less than significant.

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 with Mitigation. As discussed in response to Threshold 3.7 (a) iii) and iv), implementation of MM-GEO-1 would reduce impacts associated with potential geologic hazards related to landslide, lateral spreading, subsidence, liquefaction, or collapse to a level less than significant.

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

Less-than-Significant Impact with Mitigation. Moderately expansive soils are present on the project site (Appendix D). To limit the potential effects on project-related infrastructure, MM-GEO-1 would be implemented. MM-GEO-1 would require the project to employ all applicable recommendations in the Geotechnical Investigation Report and provisions and standard engineering protocols established in the current California Building Code, including remedial grading to remove expansive materials, or alternatively, designing the foundation to resist these expansion pressures. Therefore, impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Implementation of the project would not require a septic tank or alternative wastewater disposal system. The project would be served by existing public sewers within the Padre Dam Municipal Water District's sewer system. Thus, no impact would result.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-than-Significant Impact with Mitigation. Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These resources are valued for the information they yield about the earth's history and its past ecological settings. The potential for fossil

occurrence depends on the rock type exposed at the surface in a given area. In general, the project site is underlain at depth by early Cretaceous age undivided tonalite and granodiorite (Map Symbol – Kgr, referred to as Granitic Rock in this report) covered by Holocene young alluvial deposits (Map Symbol – Qya) (Appendix D). While it is possible that paleontological resources could be discovered during construction activities, it is unlikely due to the previous disturbance and development that have occurred in the project area. Consequently, it is unlikely that paleontological resources would be located beneath the project site. However, with the inclusion of MM-GEO-2, potential project impacts to any previously undiscovered paleontological resources would be mitigated to a less-than-significant level. Therefore, the project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and impacts would be less than significant with mitigation.

Mitigation Measures

MM-GEO-1 Geotechnical/Geological Engineering Recommendations. Prior to any ground-disturbing construction activities, the project applicant shall incorporate the recommendations of the geotechnical/geological engineering studies prepared by Group Delta Consultants Inc. (March 18, 2022) into project plans related to the proposed project. The project's building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the latest adopted version of the California Building Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.

MM-GEO-2 Inadvertent Discovery. Prior to ground-disturbing activities, the qualified paleontologist shall conduct a WEAT (worker environmental awareness training) for the construction crew members informing them of the potential to inadvertently encounter paleontological resources and the proper procedures to be enacted in the event of an inadvertent discovery. A qualified project paleontologist is a person with a doctorate or master's degree in paleontology or related field and who has knowledge of the County of San Diego paleontology and documented experience in professional paleontological procedures and techniques. The applicant shall ensure that construction personnel attend the training and sign an attendance acknowledgement form. The applicant shall retain documentation demonstrating attendance. The qualified paleontologist shall observe all initial ground disturbing activities including grading and excavation. The qualified paleontologist, in coordination with the applicant and the City, may reduce or discontinue monitoring if it is determined by the qualified paleontologist that the possibility of encountering buried paleontological resources is low based on observations of soil stratigraphy or other factors. In the unlikely event that paleontological resources (i.e., fossils) are exposed during construction activities, all construction work occurring within 50 feet of the find shall immediately stop and the lead agency representative contacted. The qualified vertebrate paleontologist meeting the Society of Vertebrate Paleontology standards, shall be assigned to review the unanticipated find to determine the significance. If the discovery proves potentially significant under CEQA as determined by the qualified vertebrate paleontologist, and the area cannot be feasibly avoided, additional work, such as preparation of a

Paleontological Resources Impact Mitigation Program and paleontological monitoring shall be warranted.

3.8 Greenhouse Gas Emissions

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

The Sustainable Santee Action Plan Project Consistency Checklist is intended to be a tool for development projects to demonstrate consistency with the City's Sustainable Santee Plan (City of Santee 2019), which is a GHG emissions reduction plan in accordance with CEQA Guidelines Section 15183.5. Therefore, the Checklist is used to determine significance in accordance with CEQA Guidelines Section 15183.5, and the Checklist was used to evaluate the project's significance with respect to GHG emissions. Construction and operational GHG emissions are quantified herein for informational purposes only.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-than-Significant Impact. The Sustainable Santee Action Plan Project Consistency Checklist is used to determine significance in accordance with CEQA Guidelines Section 15183.5; therefore, the Checklist was used to evaluate the project's significance with respect to GHG emissions. The City's General Plan designates the project site for Town Center (TC) and is zoned Town Center (TC) pursuant to the City's Municipal Code. The proposed project would be consistent with Chapter 13.18 of the City's Municipal Code, which states that this designation is intended to provide the City with a mixed-use activity center that is oriented toward and enhances the San Diego River (City of Santee 2019). The City processed an update to its Town Center Specific Plan, and the proposed project would also be consistent with the Town Center Specific Plan Update's intent to incorporate community-serving, civic/institutional, and public uses within City-owned properties to become focal points in Santee for residents and visitors to enjoy. Table 3.8-1 includes the applicable Checklist items and the related project consistency analysis. Please see the Sustainable Santee Action Plan Project Checklist in Appendix A for complete details.

Table 3.8-1. Sustainable Santee Action Plan Project Checklist

Checklist Item	Project Consistency
Measure 4.1. New commercial units meet or exceed California Green Building Standards Tier 2 Voluntary Measures such as obtain green building ratings including: LEED, Build it Green, or Energy Star Certified buildings certification in scoring development and explain the measures implemented.	**Consistent.** The project will meet or exceed CALGreen Tier 2 Standards in effect at the time of the building permit application. Documentation shall be provided to the City demonstrating that the project meets this requirement prior to the issuance of the building permit.
Measure 5.1 Project utilizes tree planting for shade and energy efficiency such as tree planting in parking lots and streetscapes.	**Consistent.** Landscaping will be installed in the parking area, around portions of the building, and around site frontages, including trees, shrubs, and cover. The project would include the planting of 33 new trees.
Measure 5.2. Project uses light-reflecting surfaces such as enhanced cool roofs on commercial buildings.	**Consistent.** Roof structures shall be designed to include "cool roofs" materials with a minimum reflectance and thermal emittance values equal to or greater than the current CALGreen Table A5.106.11.3, Tier 1.
Measure 6.1 Proposed project streets include sidewalks, crosswalks, and other infrastructure that promotes non-motorized transportation options.	**Consistent.** The project would include street, sidewalk, and landscape improvements to encourage pedestrian travel to the site.
Measure 6.2. Proposed project installs bike paths to improve bike transit.	**Consistent.** While the project would not include a new dedicated bicycle path onsite, there is an existing dedicated bicycle path on Riverwalk Drive adjacent to the project site that could be used to travel to the site. Further, the project would include a new bicycle parking area with space for 16 bicycles.
Measure 7.1 Install electric vehicle chargers in all new residential and commercial developments.	**Consistent.** The project includes 35 new EVCSs in the new east parking lot and 25 new EVCSs in the new west lot for a total of 60 EVCSs (EV-capable stall with EVSE).
Measure 8.1 Implement traffic flow improvement program.	**Consistent.** No traffic improvements were required.
Measure 9.1. Reduce waste at landfills.	**Consistent.** The project will include storage areas for recyclables, green waste, and food waste. Further, construction of the project would include a salvage and recycling rate of at least 80 percent for nonhazardous waste, or would comply with local construction and demolition waste management ordinances in place at the time of construction.
Measure 10.1 c. On commercial buildings, install at least 2 kW [of solar PV] per square foot of building area (e.g., 2,000 sq. ft. = 3 kW) unless the installation is infeasible due to poor solar resources.	**Consistent.** The project will include 18.75 kW of solar PV based on 12,500 sq. ft./ (2,000 sq. ft./3 kW)

Source: Sustainable Santee Action Plan Consistency Checklist in Appendix A.
Note: LEED = Leadership in Energy and Environmental Design; CALGreen = California Green Building Standards Code; EVCS = electric vehicle charging station; EVSE = electric vehicle supply equipment; kW = kilowatts; PV = photovoltaic; sq. ft. = square feet.

As shown in Table 3.8-1, the project is consistent with the Checklist adopted by the City to ensure that the emission targets identified in the Sustainable Santee Action Plan are achieved. The Sustainable Santee Action Plan determined that a project consistent with the Checklist would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, the project would not generate GHG emissions that may have a significant impact on the environment; impacts would be less than significant.

Construction Emissions

Construction of the project would result in GHG emissions, which are primarily associated with the use of off-road construction equipment, haul trucks, on-road vendor trucks, and worker vehicles.

Construction of the project is anticipated to commence in August 2025 and would last approximately 14 months, ending in September 2026. On-site sources of GHG emissions include off-road equipment and off-site sources including vendor trucks and worker vehicles. Table 3.8-2 presents construction emissions for the project in 2025 through 2026 from on-site and off-site emission sources.

Table 3.8-2. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2025	160.98	<0.01	<0.01	0.03	162.62
2026	188.39	<0.01	<0.01	0.02	189.44
Total	**349.37**	**0.01**	**0.01**	**0.05**	**352.07**
				Amortized Emissions (30 years)	*11.74*

Source: CalEEMod Version 2022. See Appendix A for complete results.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent; <0.01 = reported value is less than 0.01.

As shown in Table 3.8-2, the estimated total GHG emissions from construction of the project would be 352.07 MT CO_2e. When amortized over 30 years[5], the estimated annual GHG emissions from construction of the project would be approximately 11.74 MT CO_2e per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operational Emissions

Operation of the project would generate GHG emissions through vehicle trips by residents, employees, customers, and visitors to and from the project site; landscape maintenance equipment operation; energy use (natural gas and generation of electricity consumed by the project); solid waste disposal; and

[5] The operation of the project is anticipated to be for 30 years or longer. Construction emissions are amortized for 30 years to combine construction emissions and operational emissions, thus accounting for the whole of the project's emissions. This analysis conservatively amortizes the construction emissions for 30 years, thus providing a higher emissions estimate than if the project were to operate for a longer duration.

generation of electricity associated with water supply, treatment, and distribution, and wastewater treatment. The estimated operational project-generated GHG emissions are shown in Table 3.8-3.

Table 3.8-3. Summary of Estimated Annual Greenhouse Gas Emissions

Emissions Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	1577.80	0.08	0.07	2.37	1601.90
Area	0.18	<0.01	<0.01	N/A	0.18
Energy	92.50	0.01	<0.01	N/A	92.80
Water and Wastewater	6.01	0.08	<0.01	N/A	8.61
Solid Waste	6.36	0.64	0.00	N/A	22.24
Refrigeration	N/A	N/A	N/A	0.01	0.01
Stationary	6.24	<0.01	<0.01	0.00	6.26
				Subtotal	*1,732.01*
				Amortized Construction Emissions (30 years)	11.74
				Total Project Emissions	***1,743.75***

Source: See Appendix A for complete results.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent; <0.01 = reported value is less than 0.01; N/A = not applicable.

As shown in Table 3.8-3, estimated annual project-generated GHG emissions would be approximately 1,732.01 MT CO_2e per year as a result of project operation; with amortized construction emissions of approximately 11.74 MT CO_2e per year, total project emissions would be approximately 1,743.75 MT CO_2e per year.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site that 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 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?	☐	☐	☒	☐

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

Less-than-Significant Impact. Construction and operations associated with the project would involve the transport, storage, use, and/or disposal of limited quantities of hazardous materials, such as fuels, solvents, degreasers, and paints. These materials are not considered extremely hazardous and are used routinely throughout urban environments for construction projects. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials, including the California Occupational Safety and Health Administration, California Department of Transportation, and the California Department of Environmental Health Hazardous Materials Division. All hazardous materials are required to be utilized and transported in accordance with their labeling pursuant to federal and state law. With adherence to state and local regulations, impacts associated with routine transport, use, and disposal of hazardous materials would be less than significant.

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. As discussed in response to Threshold 3.9 a), construction and operations would involve the use of limited quantities of commonly used hazardous materials, such as fuels, solvents, degreasers, and paints. These materials are not considered acutely hazardous and are used routinely

throughout urban environments for both construction and operation of projects. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials.

A review of regulatory databases was conducted as part of the Hazardous Materials Assessment for the Santee Community Center (Appendix E, Hazardous Materials Assessment). The project site was not listed on the Cortese List databases. Other online databases that provide environmental information on release and cleanup cases in California were also reviewed, including the California Environmental Protection Agency, Department of Toxic Substance Control EnviroStor, Regional Water Quality Control Board GeoTracker, and the San Diego County Department of Environmental Health and Quality (DEHQ) online database. The project site was identified in the San Diego DEHQ database (DEHQ 2024). Various permit records were identified for the adjoining property, the Cameron Family YMCA, dating from December 2002 to January 2022. The permits and records were in relation to facility remodeling, pool installation, and resurfacing and modifications of the facility's pools. No records were identified that would indicate a potential impact of hazardous waste or materials to the project site. Therefore, impacts are less than significant.

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?

Less-than-Significant Impact. The proposed project site is located within 0.25 miles of Rio Seco School, located approximately 0.23 miles to the west. While the project would be within 0.25 miles of an existing school and could involve the use of small quantities of potentially hazardous materials such as fuels, solvents, degreasers, and paints during construction and small amounts of commercially available janitorial and landscaping supplies during operation, such materials would not be used in quantities sufficient to cause a potential hazard to nearby schools. Therefore, impacts related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of existing or proposed schools would be less than significant.

d) Would the project be located on a site that 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?

Less-than-Significant Impact. Government Code Section 65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List, maintained by the Department of Toxic Substance Control. A review of regulatory databases was conducted as part of the Hazardous Materials Assessment for the Santee Community Center (Appendix E, Hazardous Materials Assessment). The project site was not listed on the Cortese List databases. Other online databases that provide environmental information on release and cleanup cases in California were also reviewed, including the California Environmental Protection Agency, Department of Toxic Substance Control EnviroStor, Regional Water Quality Control Board GeoTracker, and the San Diego County Department of Environmental Health and Quality (DEHQ) online database. The project site was identified in the San Diego DEHQ database (DEHQ 2024). Various permit records were identified for the adjoining property, the Cameron Family YMCA, dating from December 2002 to January 2022. The permits and records were in relation to facility remodeling, pool installation, and resurfacing and modifications of the facility's pools. No records were identified that would indicate a potential impact of hazardous waste or materials to the project site. Therefore, there are no

cases adjacent to the project site that could have potentially impacted the project site, and impacts would be less than significant.

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?

Less-than-Significant Impact. Gillespie Field is located approximately 1.5 miles south of the proposed project site. According to the Gillespie Field Airport Land Use Compatibility Plan, with respect to safety hazards, the proposed project site is not located within a safety zone and, with respect to noise, the proposed project site lies outside the 60-decibel Community Noise Equivalent Level noise exposure contour (ALUC 2010). Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. Impacts would be less than significant.

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 project site is located in an existing developed area with access to major roadways that would allow for emergency evacuation. The project would comply with all design recommendations and requirements for construction and operations, including large events, as provided by the Santee Fire Department to ensure that emergency access meets City standards. Therefore, the project would not impair implementation of or physically interfere with emergency response, and impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less-than-Significant Impact. Wildland fires present a significant threat in the City, particularly in the summer months when temperatures are high and precipitation is limited. Areas in the City that are particularly susceptible to fires are designated as Very High Hazard or High Hazard areas and are delineated on the Very High Fire Hazard Severity Zones for Local Responsibility Areas as recommended by the California Department of Forestry and Fire Protection. The project site is not located within land mapped as a Fire Hazard Severity Zone (CAL FIRE 2024). The closest Very High Hazard area is located 1.4 miles northeast of the project site. The project site is located in a generally flat area where urban development currently exists, and it is not susceptible to the threat of wildfire. While there is vegetation to the south and east, this area does not represent a significant source of wildfire risk, and the proposed project itself is not located within a fire hazard area. As such, in the unlikely event of a wildfire in the areas proximate to the proposed project site, all occupants at the proposed project site would evacuate the area as directed by local fire officials. Therefore, impacts would be less than significant.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐
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 or otherwise substantially degrade surface or ground water quality?

Less-than-Significant Impact. The proposed project would involve earthwork activities and soil disturbance over the course of construction that could expose soils to the effects of wind and water erosion, and sedimentation and other pollutants associated with construction activity could be released from accidental spills or unauthorized releases. Standard construction management practices, as required

through the City and the statewide National Pollutant Discharge Elimination System (NPDES) Construction General Permit, would minimize construction-related impacts on water quality. The Construction General Permit would require implementation of a SWPPP to address potential construction-related impacts on water quality. The SWPPP must specify the location, type, and maintenance requirements for BMPs necessary to prevent stormwater runoff from carrying construction-related pollutants into the City's municipal storm drain system and into the adjacent Woodglen Vista Creek protected open space.

Redevelopment of the project site would involve changes to existing drainage patterns and would result in an increase in impervious surfaces from 45.7% to 77% (Appendix F). However, the project would not alter the course of a stream or river with the addition of impervious surfaces. Nonetheless, as a result, the proposed changes to the site use could become a source of pollution from incidental spills of vehicle oils and other pollutants that can be conveyed by storm and landscape irrigation flows. However, all proposed improvements would be required to adhere to existing drainage control requirements including the Municipal Separate Storm System (MS4) NPDES Permit and the City's drainage control requirements (Municipal Code Chapter 9.06). Prior to issuance of a building permit, the project applicant would be required to submit drainage control plans to the City for review and approval. As part of these requirements, the plans would identify post-construction BMPs that are consistent with Low Impact Development requirements and meet all applicable MS4 Permit and City requirements. The proposed project would include a series of catch basins, roof drainages and biofiltration basins located throughout the site and would use the existing earthen swale along the site's eastern and southern perimeter to manage stormwater runoff (Appendix F). There would be five biofiltration basins located south and east of the proposed building and three biofiltration basins located in the new west parking lot. These post-construction BMPs would meet the City's requirements and would be consistent with the County's 2020 BMP Design Manual. Adherence to these drainage control requirements would be adequate to protect the water quality of stormwater discharged off site. Therefore, compliance with these existing regulatory requirements for drainage control design measures would reduce potential impacts related to water quality standards and waste discharge requirements to a less-than-significant level.

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. There are no groundwater extraction wells currently on the project site, and no extraction wells are proposed as part of the project. The underlying groundwater basin, the San Diego River Valley Groundwater Basin, is considered by the Department of Water Resources to be a low-priority basin and not subject to the requirements of the Sustainable Groundwater Management Act (Appendix F).

The proposed project may require dewatering activities during construction due to groundwater levels reported at 14.5 feet below ground surface during the geotechnical investigation (Appendix D). However, even if considered necessary for completion of construction for foundations or utility corridors, the dewatering would be temporary and would likely involve only relatively small quantities of groundwater.

The proposed project would be served by the Padre Dam Municipal Water District, which sources the majority of its water from the San Diego County Water Authority. The San Diego County Water Authority obtains its water from imported surface waters (California State Water Project water and Colorado River water) and desalinated water from the Carlsbad Desalination Plant. Groundwater is only used to supplement the recycled water system (Carollo Engineers 2021). In addition, according to the 2020 Urban Water Management Plan for the Padre Dam Municipal Water District, Padre Dam Municipal Water District

can meet projected water demands out to 2045 under normal, single dry year, and multiple 5-year scenarios (Carollo Engineers 2021).

Therefore, while the project would increase the water demand at the site, the proposed project would not contribute to depletion of groundwater or interfere with recharge of a managed groundwater supply source. Impacts would be less than significant.

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:

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

Less-than-Significant Impact. The statewide NPDES Construction General Permit would require implementation of a SWPPP to address potential construction-related impacts on water quality. As such, prior to construction, a site-specific SWPPP consistent with the State Water Resources Control Board Construction General Permit would be prepared as a condition of approval. The SWPPP shall describe BMPs to be used during construction to prevent discharge of sediment and other pollutants in stormwater runoff from the project site. Typical construction BMPs include silt fencing, fiber rolls, and sweeping. Specific BMPs would be determined by the project contractor and engineer based on site-specific conditions. As part of the project, the contractor would monitor the construction BMPs, including conducting routine inspections of disturbed areas to ensure that the BMPs remain intact and effective. Adherence to these BMPs would ensure that project construction would not result in substantial soil erosion.

The proposed project would also include post-construction, permanent BMPs, such as a series of catch basins, roof drainages and biofiltration basins located throughout the site and would use the existing earthen swale along the site's eastern and southern perimeter to manage stormwater runoff (Appendix F). Specifically, there would be three biofiltration basins in the northwestern parking lot, and there would be five biofiltration basins along the southern and eastern site boundaries, adjacent to the Woodglen Vista Creek open space area. These post-construction BMPs would meet the City's requirements and would be consistent with the County's 2020 BMP Design Manual. The City would be responsible for monitoring the effectiveness of the permanent BMPs in accordance with the Stormwater Management Plan. Implementation of the post-construction BMPs and adherence to these requirements would be adequate to reduce potential impacts related to erosion or siltation during operation. Thus, impacts would be less than significant.

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

Less-than-Significant Impact. The 100-year, 6-hour peak flow rate is approximately 22.4 cfs under existing conditions and 26.2 cfs under proposed project conditions (Appendix F). The impact of this increase in peak flow would be minimized by the stormwater design of the proposed project. Stormwater runoff on the project site currently occurs as sheet flow in the existing parking lot toward the southern end of the parking lot, where it is conveyed via existing earthen swales, and occurs as runoff in the grassy field toward existing grate inlets, where it is conveyed via storm drainpipes. However, the proposed project would control runoff by directing stormwater through a piped storm drainage system and directing sheet flow over pedestrian pavement into stormwater retention basins located south and east of the Community Center

building. Drainage from parking lot areas would be routed around the Community Center building via a concrete gutter that directs the flows to the existing earthen swale and continue to match existing flow conditions. Catch basins would be located in the outdoor event areas of the proposed project to collect surface flows away from the building entryways. Drainage of the proposed project conveys water to the biofiltration basins and discharges into Woodglen Vista Creek.

Implementation of the eight biofiltration basins would provide both water quality and flow attenuation consistent with City requirements. Therefore, with adherence to the MS4 Permit and local City drainage control requirements (Municipal Code Chapter 9.06), the proposed changes to drainage patterns would not result in on- or off-site flooding or other adverse effects related to stormwater quantity or quality post-project. Furthermore, the project site is not located in a flood hazard zone (FEMA 2024). Therefore, the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site, and impacts would be less than significant.

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?

Less-than-Significant Impact. As described in Threshold 3.10.c.ii, the proposed project would include eight biofiltration basins to provide both water quality and flow attenuation consistent with the City requirements. As such, with adherence to the MS4 Permit and local City drainage control requirements (Municipal Code Chapter 9.06), the proposed changes to drainage patterns would not result in on- or off-site flooding or other adverse effects related to stormwater quantity or quality post-project. Therefore, project runoff would not exceed the capacity of stormwater drainage systems and would not provide substantial sources of polluted runoff, and impacts would be less than significant.

iv) Impede or redirect flood flows?

Less-than-Significant Impact. The project site is not located in a flood hazard zone (FEMA 2024) and is therefore not at threat for impeding or redirecting flood flows. Therefore, the project would not impede or redirect flood flows, and impacts would be less than significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. The proposed project site is not located near any coastal areas that are subject to tsunamis. Additionally, the project site is located approximately 17 miles inland from the Pacific Ocean, and therefore is not subject to risk associated with tsunamis. Risk of a tsunami affecting the proposed project site is therefore low. A seiche is a standing wave in a completely or partially enclosed body of water that can be caused by high winds, seismic activity, or changes in atmospheric pressure. The proposed project site is not located adjacent to any standing bodies of water; therefore, seiche risk is low. Finally, according to the Federal Emergency Management Agency flood maps, the proposed project site is not located within a flood hazard area (FEMA 2024). Therefore, the proposed project would not risk release of pollutants due to project inundation from flooding. The project would have no impact because the project location is not within a flood hazard, tsunami, or seiche zone.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-than-Significant Impact. The proposed project would prepare a SWPPP to address potential construction-related impacts on water quality. The proposed Project would include eight biofiltration basins to provide both water quality and flow attenuation consistent with the City requirements. The proposed project would comply with the San Diego River water quality improvement plan. The proposed project does not propose to extract groundwater and thus does not have the potential to decrease local groundwater supplies. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact 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 proposed project would include the construction of a Community Center, which is consistent with the zoning and land use designation in the General Plan. The proposed project would not develop new roads or infrastructure. Development of the site is planned and would not induce substantial growth. No impact would occur.

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 site currently consists of a parking lot with several landscape features located throughout. The project site is zoned as Town Center (TC) and has a General Plan land use designation of Town Center (TC) (City of Santee 2020 and 2017a), which permits the construction of a Community Center subject to the appropriate review and permits.

As discussed in Section 3.9, Hazards and Hazardous Material, according to the Gillespie Field Airport Land Use Compatibility Plan, the proposed project site is not located within a safety zone and lies outside the 60-decibel Community Noise Equivalent Level noise exposure contour (ALUC 2010). Therefore, the project would not conflict with the Airport Land Use Compatibility Plan.

Project implementation would not conflict with any land use plan, policy, or regulation. No impact would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact 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 Conservation Element of the General Plan documents that known mineral resources within the City include sand, gravel, and crushed rock, which are collectively referred to as aggregate (City of Santee 2003). These resources have been identified within the floodplain of the San Diego River. As identified in the California Department of Conservation Mineral Lands Classification Map (DOC 1996), the project site is classified as MRZ-2, which is defined as areas that contain known mineral deposits that could qualify as mineral resources. The project site is surrounded by commercial, residential, and roadway uses that would preclude the type of extraction operations typically associated with aggregate minerals (i.e., large-scale pits or quarries). Therefore, extraction of mineral resources is not a viable use of the site. No impact would occur.

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. As discussed in response to Threshold 3.12 a), extraction of mineral resources is not a viable use of the site. No impact would occur.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐

Thresholds of Significance

Appendix G of the California Environmental Quality Act Guidelines (14 CCR 15000 et seq.) will be used to determine the significance of potential noise and vibration impacts.

In light of the Appendix G significance criteria, this analysis uses the following standards to evaluate potential noise and vibration impacts.

- Construction noise – The distance between the closest residential uses (to the north, along Riverwalk Drive) and the West Lot is approximately 80 feet, or approximately 250 feet between the closest residential uses and the Community Center. Edgemoor Hospital, located northeast of the project site, is approximately 515 feet from the Community Center, or approximately 760 feet from the West Lot; thus, the nearest and "worst-case" source-to-receiver distances are studied (i.e., the distance from the closest residential uses to the north, approximately 80 feet and 250 feet from the construction of the West Lot and Community Center, respectively). Most construction equipment and vehicles on a project site do not operate continuously. Therefore, consistent with the FTA guidance, this analysis will use 80 dBA L_{eq} over an 8-hour period as the construction noise impact criterion during daytime hours (7:00 a.m. to 7:00 p.m.) (FTA 2018). Additionally, with respect to construction activities near the Woodglen Vista Creek protected open space area to the south, the closest source-to-receiver distance would be approximately 25 feet to the proposed Community Center. Thus, project construction activities would be considered significant if construction noise levels at the Woodglen Vista Creek protected open space area exceed a limit of

60 dBA 1-hour $L_{eq,}$ per the Significance Guideline 4.1.H of the County of San Diego's Guidelines for Determining Significance for Biological Resources (County of San Diego 2010).

- Off-site project-attributed transportation noise – A noise impact due to transportation noise would be considered significant if predicted noise levels with the proposed project will exceed the Federal Interagency Committee on Noise (FICON) thresholds noted below (FICON 1992).:
    - Outdoor ambient sound level without the project is less than 60 dBA L_{dn}, then a project-attributed increase of 5 dBA or more would be considered significant;
    - Outdoor ambient sound level without the project is between 60 and 65 dBA L_{dn}, project-attributed increase of 3 dBA or more would be considered significant; and
    - Outdoor ambient sound level without the project is greater than 65 dBA L_{dn}, then project-attributed increase of 1.5 dBA or more would be considered significant.
- Off-site project-attributed stationary noise – The Noise Element of the City's General Plan (City of Santee 2003) includes a Noise / Land Use Compatibility Guide which sets forth the compatible/acceptable levels for various land use categories. The Noise / Land Use Compatibility Guide sets a limitation of 65 dBA L_{dn} for the following noise-sensitive land uses representative of those within the project area: 1) residential – low-density single-family, duplex, mobile homes; 2) residential – multi-family ; 3) transient lodging – motels, hotels; 4) schools, libraries, churches, hospitals, nursing homes; and 5) sports arena, outdoor spectator sports. The nearest noise-sensitive land uses are residential single- and multi-family, located offsite to the north of the project along Riverwalk Drive, as close as 80 feet from the West Lot. A noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning (HVAC), other electro-mechanical systems (including emergency generator testing), vehicle movement in the proposed parking lots, indoor events at the Community Center, and outdoor events (i.e., fireworks) associated with the proposed project exceeded 65 dBA L_{dn} at the closest residential land uses to the project site.
- Construction vibration – Guidance from Caltrans indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants within the receiving structure (Caltrans 2013). As for the receiving structure itself, aforementioned Caltrans guidance recommends that a vibration level of 0.3 ips PPV would represent the threshold for building damage risk.

a) Would the project result in 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?

Less-than-Significant Impact with Mitigation Incorporated. The project site is currently developed as an asphalt parking lot with several landscape features located throughout and a grassy field in the northwest quadrant. The northwest quadrant was previously graded for development of the Town Center Community Park and used for parking on the dirt and aggregate base. This area of the Project site is now a grassy field and is currently used for passive recreational activity, and as indicated in Table 3.13-1, the site does not currently generate substantial noise. Noise-sensitive receptors near the project include single-

family residences to the north along Riverwalk Drive and to the east along Cottonwood Avenue, Edgemoor Hospital to the northeast, and the Woodglen Vista Creek protected open space area immediately south and east.

Represented by locations ST1, ST2, ST3, and ST4 in Table 3.13-1, the existing outdoor ambient sound environment of the proposed project site and nearby noise-sensitive receptors was sampled during a field survey conducted on February 10, 2025. Collected sample sound pressure level measurements at these locations, along with documented investigator observations regarding perceived or witnessed acoustical contributors to this baseline or pre-project noise environment, also appear in Table 3.13-1. These locations are intended to be representative of the existing single-family homes to the north and east of the project, as well as the Woodglen Vista Creek protected open space area. Measurement locations are shown in Figure 5, Baseline Outdoor Ambient Sound Level Measurements, and photographs, tagged survey positions, and instrument details can be found in Appendix H.

Table 3.13-1. Measured Samples of Existing Outdoor Ambient Sound Level

Survey Position	Description/Address	Time	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	Notes (Perceived Sound Sources)
ST1	North of proposed project West Lot on the north side of Riverwalk Drive	2:30 p.m.–2:45 p.m.	55.1	66.8	47.5	Traffic, birds, distant aircraft, distant conversations/yelling
ST2	North/northeast of proposed project site on the north side of Riverwalk Drive	2:50 p.m.–3:05 p.m.	50.7	62.1	43.5	Traffic, birds, distant aircraft, distant conversations/yelling
ST3	East of proposed project site along Cottonwood Avenue	3:32 p.m.–3:47 p.m.	42.6	44.8	41.1	Traffic, birds, distant aircraft, distant conversations/yelling, distant dog barking
ST4	South of the proposed Community Center, adjacent to the Woodglen Vista Creek protected open space area	3:11 p.m. – 3:26 p.m.	48.9	53.0	46.0	Aircraft, birds, distant conversations/yelling, distant dog barking, distant traffic, rustling leaves

Source: Appendix H
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval; L_{min} = minimum sound level during the measurement interval.

The measured outdoor energy-equivalent sound level (L_{eq}) values appearing in Table 3.13-1 range from 42.6 dBA at ST3 to 55.1 dBA at ST1. Measured values are higher at ST1 and ST2 due to the proximity of the measurement locations to moderately trafficked roadways (i.e., Riverwalk Drive). At ST3, measured sound levels were lower as traffic was less frequent along Cottonwood Avenue, a local roadway accessing residential uses. At ST4, measured sound levels adjacent to the Woodglen Vista Creek open space area are consistent with existing recreational and parking lot activity at Town Center Park East to the southwest and the Cameron Family YMCA.

Construction

Construction of the project would result in the temporary generation of noise at the project site, involving the use of heavy equipment and machinery, such as dozers, excavators, loaders, cranes, temporary generators, rollers, and other equipment. Construction would generate levels of noise that can vary from hour to hour and day to day depending on the equipment in use, the operations being performed, and the distance between the source and receptor. Typically, construction equipment operates in alternating cycles of full power and low power, producing average noise levels less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Aggregate noise emission from proposed project construction activities, broken down by sequential phase, was predicted at two evaluation distances to the nearest existing noise-sensitive receptors: 1) from the nearest position of the construction site boundary and 2) from the geographic center of the construction site, which serves as the time-averaged location or geographic *acoustical centroid* of active construction equipment for the phase under study. The intent of the former distance is to help evaluate anticipated construction noise from equipment or vehicle activity expected to be at the boundary for some period of time, which would be most appropriate for phases such as site preparation, grading, and paving. The latter distance is used in a manner similar to the general assessment technique as described in the FTA guidance for construction noise assessment, when the location of individual equipment for a given construction phase is uncertain over some extent of (or the entirety of) the construction site area. In this studied scenario, because of the equipment location uncertainty, the loudest piece of equipment for a construction phase is assumed to operate at the nearest position of the construction site boundary to the nearest noise-sensitive receptor, and the rest of the equipment is assumed to operate from the acoustical centroid position.

Table 3.13-2 presents the estimated construction noise level (8-hour L_{eq}) for each anticipated phase of project construction activity at two receptors: a single-family home to the north of the project site, and the Woodglen Vista Creek protected open space area immediately south of Community Center building. Construction activities could occur at a nearest distance of approximately 80 feet from the project site boundary to the single-family residential noise-sensitive receptor to the north, or a nearest distance of approximately 25 feet from the project site boundary to the Woodglen Vista Creek to the south. The acoustical centroid distance at both noise-sensitive receptors was modeled to be approximately 250 feet.

Details of these predictions in Appendix H show the expected acoustical contribution from each type of operating construction equipment at various distances for each phase and noise-sensitive receptor.

Table 3.13-2. Estimated Per-Phase Construction Noise Levels

Project Construction Activity Phase	Predicted 8-hour L_{eq} (dBA) at Nearest Distance to Single-Family Residence	Measured Outdoor Ambient Sound Level at Corresponding Location (dBA L_{eq})	Exceed FTA-Based Construction Noise Threshold of 80 dBA 8-hour L_{eq}? (Yes/No)	Predicted 8-hour L_{eq} (dBA) at Nearest Distance to Woodglen Vista Creek	Exceed Sensitive Habitat Construction Noise Threshold of 60 dBA 1-hour L_{eq}? (Yes/No)	Measured Outdoor Ambient Sound Level at Corresponding Location (dBA L_{eq})
Demolition	73.7	55.1 @ ST1	No	74.0	Yes	48.9 @ ST4
Site Preparation	73.4	55.1 @ ST1	No	73.7	Yes	48.9 @ ST4
Grading	76.0	55.1 @ ST1	No	76.0	Yes	48.9 @ ST4
Building Construction	68.3	55.1 @ ST1	No	72.2	Yes	48.9 @ ST4
Paving	68.3	55.1 @ ST1	No	69.6	Yes	48.9 @ ST4
Architectural Coating	67.4	55.1 @ ST1	No	69.6	Yes	48.9 @ ST4

Note: L_{eq} = energy-equivalent sound level; dBA = A-weighted decibel

The predicted aggregate noise levels for the studied construction activity phases occurring closest to the single-family residential noise-sensitive receptor to the north could be up to 20.9 dBA higher than the sampled baseline outdoor ambient sound levels appearing in Table 3.13-1 at ST1, and would represent an audible change to the environment; however, these predicted levels would be temporary, and are less than the 80 dBA 8-hour L_{eq} FTA-based standard. Thus, the noise produced from the construction of the proposed project at the nearest single-family residential noise-sensitive receptor to the north would result in a less-than-significant impact.

However, at the Woodglen Vista Creek protected open space area immediately south of the project site, the predicted aggregate noise levels for the studied construction activity phases would exceed the 60 dBA 1-hour L_{eq} construction noise limit for sensitive habitat by up to 16 dBA, and could be up to 27.1 dBA higher than the sampled baseline outdoor ambient sound levels appearing in Table 3.13-1 at ST4.

Thus, MM-NOI-1 would require the Applicant, or its designee, to implement certain noise reduction measures as site conditions warrant. Proper implementation of MM-NOI-1 would reduce noise levels by up to 16 dB if a 12-foot-tall temporary construction noise barrier is implemented during each construction phase on the southern and eastern project boundaries, which would correspondingly reduce the highest predicted estimated non-mitigated construction noise level from 76.0 to 60.0 dBA L_{eq} during the grading phase, which would be within the applicable 60 dBA threshold.

Table 3.13-3 shows the predicted aggregate noise levels for construction activities when a 12-foot-tall temporary construction noise barrier described in MM-NOI-1 is implemented during the six (6) studied construction phases, strategically placed along the southern and eastern boundaries of the project site.

Table 3.13-3. Estimated Per-Phase Construction Noise Levels With Noise Barrier

Project Construction Activity Phase	Predicted 8-hour L_{eq} (dBA) at Nearest Distance to Woodglen Vista Creek	Exceed Sensitive Habitat Construction Noise Threshold of 60 dBA 1-hour L_{eq}? (Yes/No)
Demolition	58.9	No
Site Preparation	58.5	No
Grading	60.0	No
Building Construction	57.2	No
Paving	54.7	No
Architectural Coating	55.0	No

Note: L_{eq} = energy-equivalent sound level; dBA = A-weighted decibel

As shown in Table 3.13-3, with the implementation of a 12-foot-tall temporary construction noise barrier placed along the southern and eastern boundaries of the project site (MM-NOI-1), the predicted aggregate noise levels at the Woodglen Vista Creek protected open space area for the studied construction activity phases would equal or be below the 60 dBA 1-hour Leq construction noise limit for sensitive habitat. While construction noise levels could be up to 11.1 dBA higher than the sampled baseline outdoor ambient sound levels appearing in Table 3.13-1 at ST4, these predicted levels would be temporary. Thus, with the implementation of a 12-foot-tall temporary construction noise barrier, the noise produced from the construction of the proposed project at the Woodglen Vista Creek protected open space area would result in a less-than-significant impact with mitigation incorporated.

Operation

Stationary Operation

The existing project site and surrounding uses (i.e., YMCA building, parking lot, Sportsplex USA, and Town Center Park East) feature operational noise from onsite HVAC, public gatherings, private events, sports events, etc. The following list describes existing noise-producing events that occur:

- The existing YMCA has special events in the parking lot, outdoor pools and other related noise generators.
- The City's annual 4th of July fireworks celebration south of the site at the Town Center Community Park East.
- The City holds the Summer Concert series at the amphitheater in Town Center Community Park East site every Thursday from Memorial Day through Labor Day.
- "Movies in the Park" events are held at the amphitheater during summer months at Town Center Community East Site.
- Soccer, football and lacrosse sports events are held at the Town Center East Site.
- Sportsplex USA west of the site holds softball tournaments and indoor soccer tournaments.

Upon completion of construction, the proposed project would feature operational noise from onsite HVAC systems associated with the Community Center, along with increased vehicle presence onsite associated with the parking lot expansion. Also associated with the Community Center would be gatherings for private and governmental events including business meetings, trainings, birthday parties, family celebrations, weddings, community events, conferences, town hall meetings, city council meetings, governmental meetings, car shows, festivals, emergency operations, comedy shows, movies, and other events. The majority of these events would occur indoors, with some events occurring outdoors, such as events featuring fireworks during evening hours. Additionally, an emergency generator would be located outside along the eastern wall of the Community Center building, which would undergo scheduled testing producing additional operational noise.

On this basis, five (5) operational scenarios, each representing one full hour of onsite activities of the proposed project were modeled, as outlined below:

- A daytime (7:00 a.m. to 10:00 p.m.) scenario featuring normal operating conditions, including onsite HVAC systems associated with the Community Center and increased vehicle presence onsite associated with the parking lot expansion;
- A nighttime (10:00 p.m. to 7:00 a.m.) scenario featuring only onsite HVAC system operations;
- A scenario featuring an outdoor event at the Community Center patio and amphitheater, also including onsite HVAC systems associated with the Community Center and increased vehicle presence onsite associated with the parking lot expansion;
- A scenario featuring onsite emergency generator testing, also including onsite HVAC systems associated with the Community Center and increased vehicle presence onsite associated with the parking lot expansion; and
- A scenario of an outdoor event featuring a fireworks display.

Table 3.13-4 presents the predicted stationary source operation noise levels for four (4) modeled scenarios at six (6) noise-sensitive receptors: R1 – R5 represent single-family residences to the north and east of the project site, and R6 represents a nearest-receptor position to the project site within the Woodglen Vista Creek protected open space area. The studied noise-sensitive receptors encompass the nearest and "worst-case" source-to-receiver distances; additional noise-sensitive receptors in the area would be further from the project and thus experience lower predicted noise levels than those discussed below.

At the nearest noise-sensitive land uses, the City's operational noise threshold is set forth as a 65 dBA Day-Night Noise Level (L_{dn}), which calculates a 24-hour dBA L_{dn} noise level by applying a +0 dBA penalty to 1-hour dBA L_{eq} noise levels during daytime hours (7:00 a.m. to 10:00 p.m.) and a +10 dBA L_{eq} penalty to 1-hour dBA L_{eq} noise levels during nighttime hours (10:00 p.m. to 7:00 a.m.).

Thus, the "Normal Operating Conditions Scenario" represents a combined calculation of the daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) scenarios, and the "Outdoor Event Scenario" considers an event occurring for a few hours during a daytime period and considers predicted operational noise levels from both the daytime and nighttime scenarios when an outdoor event is not taking place. Both the "Emergency Generator Test Scenario" and "Fireworks Event Scenario" assume the mentioned activities,

respectively, occur during a 1-hour period, where for other 23 hours in a day, the site is operating under "Normal Conditions" during both daytime and nighttime hours.

Table 3.13-4. Predicted Stationary Source Operation Noise Levels

Receptor ID	Receptor Description	Normal Operating Conditions Scenario – Day-Night Noise Level (dBA L_{dn})	Outdoor Event Scenario – Day-Night Noise Level (dBA L_{dn})	Emergency Generator Test Scenario – Day-Night Noise Level (dBA L_{dn})	Fireworks Event Scenario – Day-Night Noise Level (dBA L_{dn})
R1	Residence – Northwest of Project Site	35.5	37.6	35.5	62.4
R2	Residence – North of Project Site	36.8	39.8	36.8	63
R3	Residence – North of Project Site	36.5	39.4	36.6	63.2
R4	Residence – North/Northeast of Project Site	35.9	38.3	35.9	62.8
R5	Residence – East of Project Site	20.8	31.6	21.5	57.1
R6	Woodglen Vista Creek – Nearest Position	37.3	59.5	38.1	62.8

Note: L_{dn} = day-night noise level; dBA = A-weighted decibel

Source: Appendix H; Figures 6 – 10. Figures 6 – 10 display calculated dBA 1-hour L_{eq} noise levels.

The predicted project stationary operational noise levels in dBA L_{dn} as shown in Table 3.13-4 were calculated using the resulting dBA 1-hour L_{eq} levels generated from the operational noise models. Figures 6 through 10 illustrate the predicted aggregate sound pressure level (SPL) propagation solely from a 1-hour period of the operation of the proposed project's stationary sound sources associated with the scenarios described above. The color-coded annular bands of dBA 1-hour L_{eq} levels are calculated across a field parallel and five (5) feet above local grade, and the proposed Community Center building and existing Cameron Family YMCA building were rendered in the 3-D model space (see Appendix H).

Figures 6 and 7 represent predicted aggregate SPL propagation from project operations during a daytime hour and a nighttime hour, respectively; the resulting dBA L_{dn} noise levels for the "Normal Operating Conditions Scenario" were calculated using predicted dBA 1-hour L_{eq} levels from project operations during a daytime hour and a nighttime hour. Similarly, Figure 8 displays the resulting dBA 1-hour L_{eq} noise contours for an "Outdoor Event Scenario," where Table 3.13-4 presents the calculated dBA L_{dn} levels when an outdoor event takes place for 3-hours during the daytime—the other 21 hours of the 24-hour period included 12 "daytime hour" and 9 "nighttime hour" predicted dBA 1-hour L_{eq} levels. Figures 9 and 10 display an "Emergency Generator Test Scenario" and "Fireworks Event Scenario," respectively, where both unique operational occurrences take place for approximately 20 minutes within a 1-hour period, and assumes the project operates under normal conditions for the remaining 23 hours.

The results presented in Table 3.13-4 suggest that project operation noise, under each modeled operation scenario, is anticipated to be less than 65 dBA L_{dn} at the nearest existing noise-sensitive receptors and thereby comply with the operational noise threshold (65 dBA L_{dn}) established in Section 5.04.090 of the City's Noise Ordinance. Therefore, impacts from onsite operational noise would be less than significant.

Off-Site Traffic Noise Exposure

The proposed project would generate additional traffic trips along existing roads in the area, particularly Riverwalk Drive, from which the staff and visitors of the proposed project would take access. Based upon traffic counts conducted at local intersections for the Transportation Analysis prepared for the proposed project (see Figures 7-2, 7-3, and 8-1 to 8-3 in the Transportation Analysis), Riverwalk Drive from Cuyamaca Street to Verde Vista Lane currently has PM peak-hour volumes of approximately 595 vehicles, 344 vehicles from Verde Vista Lane to Canopy Park Lane, and 314 vehicles from Canopy Park Lane to Park Center Drive. On Riverwalk Drive, the project is calculated to generate an additional 109 trips from Cuyamaca Street to Verde Vista Lane, 117 trips from Verde Vista Lane to Canopy Park Lane, and 94 trips from Canopy Park Lane to Park Center Drive. PM peak-hour volumes of cumulative projects near the proposed project would generate an additional 30 trips from Cuyamaca Street to Verde Vista Lane, 62 trips from Verde Vista Lane to Canopy Park Lane, and 62 trips from Canopy Park Lane to Park Center Drive.

Consistent with Caltrans guidance (Caltrans 2013), this analysis assumes 80% of the ADT occurs during daytime hours (7:00 a.m. to 7:00 p.m.), 5% during the evening (7:00 p.m. to 10:00 p.m.), and 15% during the nighttime (10:00 p.m. to 7:00 a.m.). The modeled traffic speed was assumed to be the anticipated speed limit for the studied roads, which is 25 miles per hour (mph) on Riverwalk Drive. The vehicle-mix percentages used in the noise model were 97% auto, 2% medium trucks and 1% heavy trucks.

The change in roadway noise levels at the nearest residential noise-sensitive receptors was predicted for four conditions: existing, existing plus project, cumulative conditions, and cumulative plus project. Traffic noise levels were calculated for roadway segments bounded by intersections within the project area and are listed as follows:

- Riverwalk Drive – From Cuyamaca Street to Verde Vista Lane;
- Riverwalk Drive – From Verde Vista Lane to Canopy Park Lane; and
- Riverwalk Drive – From Canopy Park Lane to Park Center Drive.

Table 3.13-5 presents the predicted off-site traffic noise exposure levels for the four conditions. Details of these predictions can be found in Appendix H.

Table 3.13-5. Predicted Off-Site Traffic Noise Exposure Levels

Street Name	From	To	Existing (dBA L_{dn})	Existing + Project (dBA L_{dn})	Noise Level Increase (dBA L_{dn})	Cumulative (dBA L_{dn})	Cumulative + Project (dBA L_{dn})	Noise Level Increase (dBA L_{dn})
Riverwalk Drive	Cuyamaca Street	Verde Vista Lane	61.4	62.1	0.7	61.6	62.3	0.7

Table 3.13-5. Predicted Off-Site Traffic Noise Exposure Levels

Street Name	From	To	Existing (dBA L_{dn})	Existing + Project (dBA L_{dn})	Noise Level Increase (dBA L_{dn})	Cumulative (dBA L_{dn})	Cumulative + Project (dBA L_{dn})	Noise Level Increase (dBA L_{dn})
Riverwalk Drive	Verde Vista Lane	Canopy Park Lane	59.0	60.3	1.3	59.8	60.9	1.1
Riverwalk Drive	Canopy Park Lane	Park Center Drive	58.6	59.8	1.1	59.6	60.5	0.9

Note: L_{dn} = day-night noise level; dBA = A-weighted decibel

Based upon the FICON thresholds presented in the Regulatory Setting above, an increase of less than 5 dBA when the ambient sound level is less than 60 dBA L_{dn}/CNEL, less than 3 dBA when the ambient sound level is between 60 and 65 dBA L_{dn}/CNEL, or less than 1.5 dBA when the ambient sound level is greater than 65 dBA L_{dn}/CNEL would not be significant. Utilizing the traffic noise modeling worksheets found in Appendix H, Table 3.13-5 shows that where ambient sound levels are below 60 dBA L_{dn}, the highest predicted change in traffic noise level would be 1.3 dBA L_{dn} on Riverwalk Drive from Verde Vista Lane to Canopy Park Lane, which is less than the FICON 5 dBA threshold when the ambient sound level is less than 60 dBA L_{dn}/CNEL, and would be considered imperceptible to the average person. Similarly, where ambient sound levels are between 60 and 65 dBA L_{dn} on Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, the highest predicted change in traffic noise level would be 0.7 dBA L_{dn}, which is less than the FICON 3 dBA threshold under such conditions. Therefore, potential impacts at existing off-site noise-sensitive land uses along roadway segments identified in Table 3.13-5 and with respect to project-generated changes to future traffic noise would be less than significant.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-than-Significant Impact. Vibration is oscillatory movement of mass (typically a solid) over time. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site have the potential to cause high vibration amplitudes.

The City's Municipal Code does not have a vibration threshold against which project construction-related ground-borne vibration impacts to the community can be assessed. For purposes of this impact assessment, a vibration velocity level of 0.2 inches per second (ips) peak particle velocity (PPV) is used as the standard for evaluating human annoyance (to perceived ground-borne vibration within an occupied structure) and the potential risk for residential building damage due to "continuous" or frequently occurring ground-borne vibration events (Caltrans 2020).

Ground-borne vibration attenuates rapidly, even over short distances. The attenuation of ground-borne vibration as it propagates from source to receptor through intervening soils and rock can be estimated with expressions found in FTA and the California Department of Transportation guidance.

For a roller operating as close as 80 feet to the nearest receiving residential land use to the north during the paving construction phase as shown in Table 3.13-2, the estimated vibration velocity would be 0.037 ips per the equation as follows (FTA 2018):

$$PPV_{rcvr} = PPV_{ref} \times (25/D)^{1.5} = 0.037 \text{ ips PPV} = 0.21 \times (25/80)^{1.5}$$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receiver position (i.e., residence), PPV_{ref} is the reference value at 25 feet from the vibration source (in this case, the roller is used because the roller's 0.21 ips PPV at 25 feet is the worst case vibration level), and D is the actual horizontal distance to the receiver from the source.

Thus, the predicted worst-case ground-borne vibration velocity PPV values associated with project construction (i.e., 0.037 ips PPV) are below the 0.2 ips PPV threshold for building occupant annoyance and 0.3 ips PPV for building damage risk. Impacts during construction would be less than significant.

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?***

Less-than-Significant Impact. The proposed project site is located approximately 1.4 miles to the north of Gillespie Field. The proposed project site lies outside the 60 dB CNEL noise exposure contour as shown in the Gillespie Field Airport Land Use Compatibility Plan. Thus, impacts would be less than significant.

Mitigation Measures

MM-NOI-1 Temporary Construction Noise Reduction. The Applicant, or its designee, shall implement one or more of the following measures, as necessary, in order to achieve on-site noise control and sound abatement that, in the aggregate, would result in a minimum construction noise reduction of approximately 16 decibels (dB) at the Woodglen Vista Creek protected open space area immediately south and east of the project:

- ***Install noise abatement*** on the site boundary fencing (or within, as practical and appropriate) in the form of sound blankets or comparable temporary solid barriers of at least 12 feet tall to occlude construction noise emission between the site (or specific equipment operation as the situation may define) and the noise-sensitive receptor(s) of concern (i.e., the Woodglen Vista Creek protected open space area).
    - By way of example, suspended sound blankets, field-erected plywood sheeting, or comparable temporary solid (or flexible but sufficiently massive) barriers (of minimum sound transmission class [STC] rating of 25, which per California Department of Transportation guidance indicates would permit up to 16 dB of expected barrier insertion loss) would occlude construction noise emission between the site (or specific equipment operation as the situation may define) and the noise-sensitive receptor(s) of concern.

- Temporary barriers shall adhere to a minimum height standard of 12 feet to serve as an effective deterrent against noise pollution and shielding for adjoining off-site receptors.

- To determine the extent/length of these temporary noise barrier(s) required for each phase of construction, see Figure 11. Appendix H includes a worksheet illustrating the predicted noise exposure levels at a nearest receptor (i.e., Woodglen Vista Creek protected open space area) as close as 15 feet to the exterior of the temporary barrier, with the listed onsite noise-producing construction equipment as close as 10 feet to the interior of the barrier. Equipment operating further away would have quieter acoustic contribution due to the increased distance, and equipment operating closer to the barrier would improve the barrier's insertion loss performance (due to greater path length difference) and thus yield lower noise exposure levels at the offsite receptor. Similarly, should the offsite receptor be more distant from the temporary barrier than 25 feet, the added overall distance to the onsite operating equipment will—due to principles of geometric divergence—attenuate the sound path and yield less noise exposure at the receptor. Such a wall should be located on the project boundary (focusing on the southern and eastern boundary), as shown in Figure 11, to reduce construction noise exposure.

- ***Administrative controls*** (e.g., reduce operating time of equipment and/or prohibit usage of equipment type[s] within certain distances to a nearest receiving occupied off-site property).

- ***Engineering controls*** (change equipment operating parameters [e.g., speed, capacity], or install features or elements that otherwise reduce equipment noise emission [e.g., upgrade engine exhaust mufflers]).

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact 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)?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 would include the construction of a Community Center, which is consistent with the zoning and land use designation in the General Plan. The project would require approximately four new employees. As such, given the scale of the employment associated with the project, the proposed project would not induce substantial direct population growth in the City. Additionally, the project does not propose any residential uses that would induce direct population growth in the City. Furthermore, the proposed project would not develop new roads or infrastructure. As such, development of the site is planned and would not induce substantial growth. No impact would occur.

b) ***Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The proposed project site is developed with a parking lot with landscape features located throughout. Project development would not result in the displacement of existing people or housing. No impact would occur.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact 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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

a) Would the project 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:

Fire protection?

Less-than-Significant Impact. The proposed project would include the construction of a Community Center. Project development would not result in a substantial unplanned population growth within the City. The proposed project site is located within an area that is adequately served by the Santee Fire Department. The closest fire station is located at 8950 Cottonwood Avenue, which is 0.7 mile southeast of the project site and approximately a 6-minute drive from the project site. The first due response time for a structure fire is 7 minutes and 33 seconds and the first due response time for rescue and emergency medical services call is 7 minutes and 27 seconds (City of Santee 2024). The project would not result in the need for new or physically altered fire protection facilities, and impacts would be less than significant.

Police protection?

Less-than-Significant Impact. The proposed project would include the construction of a Community Center. Project development would not result in a substantial unplanned population growth within the City. The proposed project site is located within an area that is adequately served by the Santee Sheriff's Station. The Santee Sheriff's Station is located at 8811 Cuyamaca Street, which is 1.0 mile southwest of the project site and approximately a 6 minute drive from the project site. In 2022, the average Sheriff response time was between 9.2 minutes and 9.59 minutes (City of Santee 2024). As such, it is anticipated that the Santee Sheriff's Station would have the resources to adequately serve the proposed project. Project implementation would not result in the need for new or physically altered police protection facilities, and impacts would be less than significant.

Schools?

Less-than-Significant Impact. The proposed project site would be located within the Santee School District and Grossmont Union High School District. The proposed project would include the construction of a Community Center and would not result in substantial unplanned population growth within the City. As such, project implementation would not result in the need for new or physically altered school facilities, and impacts would be less than significant.

Parks?

Less-than-Significant Impact. The proposed project site is located -within the boundary of Town Center Community Park. The proposed project would include the construction of a Community Center and would not result in a substantial unplanned population growth within the City. As such, project implementation would not result in the need for new or physically altered parks or recreational facilities. Impacts would be less than significant.

Other public facilities?

Less-than-Significant Impact. The proposed project would include the construction of a Community Center and would not result in substantial unplanned population growth. Project implementation would not result in the need for new or physically altered library facilities, and impacts would be less than significant.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
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?	☐	☐	☒	☐
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?

Less-than-Significant Impact. The project site is bound by recreational facilities including the Cameron Family YMCA and Sportsplex USA to the west and the Town Center Community Park to the south.

As discussed in Section 3.14, Population and Housing, the proposed project would not result in population growth within the City. The proposed project would provide event spaces for the community to rent. The Community Center would also host indoor and outdoor classes, including outdoor recreation classes with an anticipated average class size of 30 to 60 persons per class, which could increase the use of neighborhood or regional parks. However, the project would not adversely affect existing City park facilities or create the need for new park facilities, because the project would provide recreational resources to the public. The project would not result in a substantial physical deterioration of existing parks. As a result, impacts would be less than significant.

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?

Less-than-Significant Impact. Implementation of the proposed project would include the construction of recreational facilities. As such, the proposed project has the potential to have an adverse physical effect on the environment. The proposed project's environmental impacts have been evaluated throughout this document

and any potentially significant impacts would be mitigated. Therefore, impacts related to the construction of recreational facilities as a result of the proposed project would be less than significant

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact 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) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due 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 would involve the construction of the Community Center building, which is two stories tall and includes event space, office space, and support spaces, and would total 12,500 gross square feet.

Automobile and truck traffic volumes associated with project-related construction activities would vary throughout the construction phases, as different activities occur. However, project-related construction traffic would be temporary and cease upon project completion. Therefore, construction trip generation associated with the project would have a less-than-significant impact.

The City uses the regionally adopted San Diego Traffic Engineers' Council/ITE guidelines for the purposes of traffic impact analysis. The project trip generation was calculated using trip rates based on the ITE 11th Edition of the Trip Generation Manual and SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (2002). The trip rates for the recreational Community Center land use (land use code 495) from the ITE Trip Generation Manual were used. According to the Transportation Analysis prepared for the proposed project (Appendix G), the project is calculated to generate 1,441 average daily traffic, with 96 trips during the AM peak hour (63 inbound and 33 outbound) and 125 trips during the PM peak hour (59 inbound and 66 outbound). As discussed in Appendix G, the function and aspects of the proposed Community Center would fall under the category of "community parks," which is considered a local park per the City's Recreation Element. According to the City's screening criteria No. 5, Locally Serving Public Facilities, public facilities that serve the surrounding community or public facilities that are passive

use may be presumed to have a less-than-significant impact absent substantial evidence to the contrary, and the project would be considered to have a less-than-significant CEQA transportation impact and would be screened out of further analysis.

The City provides Class II bike lanes on Mast Boulevard, Cuyamaca Street, and Magnolia Avenue, and Class III bike routes on Riverwalk Drive. Per the City of Santee Mobility Element, Class III bike routes are planned along Park Center Drive between Mast Boulevard and Riverwalk Drive (City of Santee 2017b). Sidewalks are provided on both sides of the roadways within the study area with the exception of Park Center Drive south of Riverwalk Drive. In addition, a sidewalk connection is provided between the project site and the Santee Transit Center and nearby bus stops. Per the City of Santee Mobility Element, there are no plans to add or alter sidewalks within the project vicinity. Transit service is provided to the area via Metropolitan Transit Services. The nearest bus stop is located just 230 feet south of the Riverwalk Drive/Cuyamaca Street intersection, which is a walking distance of 0.5 miles from the project site. The Santee Transit Center, which serves the Green Line Trolley, is located in the Santee Trolley Square shopping mall, which is a walking distance of 1.2 miles from the project site (City of Santee 2017b). A description of the nearest transit service is shown below:

- Bus Route 832 provides bus service to the area via Cuyamaca Street, Mission Gorge Road, and Magnolia Avenue. During weekdays, headways are 1 hour for the duration of the day. During weekends, headways are 1 hour for the duration of the day.
- The Green Line Trolley runs between the Santee Transit Center and the 12th and Imperial Avenue Transit Center in Downtown San Diego. There are 27 stops along this route, with 15-minute headways on the weekdays and 30-minute headways on the weekends. During weekends, headways are 15–30 minutes during the peak periods.

The project does not propose any improvements that would impact the existing transit facilities including bike routes, sidewalks, or transit services. The project would have a less than significant VMT impact. Therefore, the project would not conflict with a program plan, ordinance, or policy addressing transit, bicycle, and pedestrian facilities, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less-than-Significant Impact. State CEQA Guidelines Section 15064.3 codifies the change from level of service to VMT as a metric for transportation impact analysis. Pursuant to Senate Bill 743, VMT analysis is the primary method for determining CEQA impacts. The State of California Office of Planning and Research has developed screening thresholds to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. Thus, lead agencies may screen out VMT impacts using project size, whether a project site is in a low-VMT area, and whether a project is in a High Quality Transit Area.

Based on the *City of Santee VMT Analysis Guidelines, April 2022*, the requirements to prepare a detailed transportation VMT analysis apply to all discretionary land development projects that are not exempt from CEQA, except those that meet at least one of the transportation screening criteria described below. A project that meets at least one of the screening criteria below would be presumed to have a less than significant VMT impact due to some aspect of the project. If evidence suggests that the project might have a significant impact despite meeting the below screening criteria, City staff reserves the discretion to request VMT analysis.

1. Projects Located in a Transit-Accessible Area: Projects located within a half-mile radius of an existing major transit stop or an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.

2. Small Projects: Projects generating 500 or fewer net new daily vehicle trips may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Trips are based on the number of vehicle trips calculated using SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region or ITE trip generation rates with any alternative modes/location-based adjustments applied.

3. Projects in a VMT Efficient Area: A VMT-efficient area is any area within the City with an average VMT/capita or VMT/employee below the thresholds as compared to the baseline City/Regional VMT for the TAZ that the project is located within.

4. Locally Serving Retail Projects: Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. Local serving retail projects less than 50,000 square feet that are expected to draw approximately 75% of customers from the local area (roughly 3-miles) are presumed to have a less than significant impact absent substantial evidence to the contrary. Retail projects that are between 50,000 square feet and 125,000 square feet with similar customer attraction (approximately 75% from local area) may also be presumed locally-serving; however, the city may require the applicant to provide a market analysis as evidence that the project is locally serving. Retail projects that are more than 125,000 square feet are required to conduct a VMT analysis unless the applicant provides market surveys to demonstrate that at least 75% of customers are attracted from the local population.

5. Locally Serving Public Facilities: Public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.

6. Redevelopment Projects with Lower Total VMT: A redevelopment project may be presumed to have a less-than-significant impact absent substantial evidence to the contrary if the proposed project's total project VMT is less than the existing land use's total VMT and the CEQA action includes closing the existing land use.

7. Infill Affordable Housing: Based on the ITE 11th Edition of the Trip Generation Manual, the affordable housing trip generation rate is approximately 30% lower than the multi-family (low-rise) rate. Adding affordable housing to infill locations generally improves jobs-housing balance, in turn, shortening commutes and reducing VMT. This suggests that it is possible to presume a blended affordable and market-rate residential project as having less than significant VMT impact.

The City uses the regionally adopted San Diego Traffic Engineers' Council/ITE guidelines for the purposes of traffic impact analysis. The project trip generation was calculated using the trip rates based on the ITE 11th Edition of the Trip Generation Manual and SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (2002). The trip rates for recreational Community Center land use (land use code 495) from the ITE Trip Generation Manual were used. According to the Transportation Analysis

prepared for the proposed project (Appendix G), the project is calculated to generate 1,441 average daily traffic, with 96 trips during the AM peak hour (63 inbound and 33 outbound) and 125 trips during the PM peak hour (59 inbound and 66 outbound). As discussed above, the function and aspects of the proposed Community Center would fall under the category of "community parks," which is considered a local park per the City's Recreation Element. According to the City's screening criteria No. 5, Locally Serving Public Facilities, public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less-than-significant impact absent substantial evidence to the contrary, and the project would be considered to have a less-than-significant CEQA transportation impact and would be screened out of further analysis. Therefore, the project would have a less than significant VMT impact.

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. Vehicular access to the project site will be provided via an existing full-access driveway, which is also the south leg of the Riverwalk Drive/Canopy Park Lane intersection. The project site is currently fronting a two-lane undivided roadway. Onsite circulation would not include dangerous intersections or hazardous geometric curves. The project does not include the use of any incompatible vehicles or equipment on the site, such as farm equipment. No project component would increase hazards to the public due to incompatible use, as the uses proposed by the project would be fully compatible with surrounding land uses. Therefore, no impact would occur.

d) Would the project result in inadequate emergency access?

Less-than-Significant Impact. The project site is located in an existing developed area with access to major roadways that would allow for emergency evacuation. The project would comply with all design recommendations and requirements for construction and operations as provided by the Santee Fire Department to ensure that emergency access meets City standards. Therefore, the project would not impact surrounding roadways in a manner resulting in impediments to emergency access, and impacts would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact 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	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?

No Impact. As discussed in Section 3.5, Cultural Resources, no historical resources listed or eligible for listing in the California Register of Historical Resources have been identified within the proposed project site. Therefore, project implementation would not result in the substantial adverse change historical resources that are either listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources. No impact would occur.

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less-than-Significant Impact with Mitigation. As mentioned, the Project is subject to compliance with AB 52 (California PRC Section 21074), which requires consideration of impacts to TCRs as part of the CEQA process and requires the lead agency to notify any tribal groups (who have requested notification) of the proposed Project. Pursuant to AB 52, the City sent Project notification letters to tribal representatives of the Jamul Indian Village, Mesa Grande Band of Mission Indians, and Barona Band of Mission Indians on July 10, 2024, inviting each tribe to engage in tribal consultation, if desired (Appendix I). None of the tribal representatives responded to the AB 52 notification letter or requested consultation.

However, as discussed in Section 3.5, Cultural Resources, although the surface of the project site has been disturbed and is currently an asphalt parking lot with several landscape features located throughout and a grassy field in the northwest quadrant of the site, there is still the potential for buried and/or surface resources to be encountered. Therefore, the project will adhere to MM-CUL-2, which states that a qualified

archaeologist and Native American monitor shall be present during ground disturbing activities. Further, the project will adhere to MM-CUL-1, which states that in the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all work within the vicinity of the find must stop until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the significance of the find. Construction activities may continue in other areas but should be redirected a safe distance from the find. If the new discovery is evaluated and found to be significant under CEQA and avoidance is not feasible, additional work such as data recovery may be warranted. A data recovery plan shall be developed by the qualified archaeologist in consultation with the City and Native American representatives, if applicable. Ground disturbance can continue only after the resource has been properly mitigated and with approval by the City. With the inclusion of MM-CUL-1 and MM-CUL-2, potential project impacts to any previously undiscovered tribal cultural resources would be mitigated to a less-than-significant level.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact 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, waste water 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 waste water 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) Would the project require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less-than-Significant Impact. The proposed project would include the construction of a Community Center. The proposed project would require connections to water, electric power, natural gas, and telecommunications facilities. The proposed project site is located adjacent to existing development served by existing facilities. Project implementation would result in a minimal increase in demand of these services and would not require the construction of new or expansion of existing water, electric power, natural gas, or telecommunications facilities. Impacts would be less than significant.

b) Would the project 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. According to the 2020 Urban Water Management Plan for the Padre Dam Municipal Water District, the Padre Dam Municipal Water District can meet projected water demands out to 2045 under normal, single dry year, and multiple 5-year scenarios (Carollo Engineers 2021). The project would be consistent with the existing land use and zoning designations. Consequently, the project would not require water service beyond what has been anticipated by regional growth projections. Therefore, the project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and impacts would be less than significant.

c) Would the project result in a determination by the waste water 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?

Less-than-Significant Impact. The project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities that would cause significant environmental effects. Existing water and sewer facilities are available adjacent to the site. Improvements would be limited to extension of pipelines onto the project site, and all impacts associated with proposed improvements have been considered within this environmental document. No new water or wastewater facilities are required to serve the project, and impacts would be less than significant.

d) Would the project 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. Solid waste generated by the project that cannot be recycled would be sent to area landfills. Based on the Five-Year Review Report of the County Integrated Waste Management Plan for the County of San Diego (County of San Diego 2022), remaining capacity at area landfills would be adequate to handle the project's solid waste disposal needs. Most of the solid waste collected in the City is disposed of at the Sycamore Sanitary Landfill, which has remaining capacity through the year 2042. Other landfills that handle waste from the Cities of San Diego and Santee include the Miramar Landfill and the Otay Landfill, which have capacity remaining. The project would also generate construction waste during the construction phase of the project. City Municipal Code Section 13.38.060 requires that a minimum of 65% of construction and demolition debris by weight be diverted from landfills by using recycling, reuse, and diversion programs. A construction and demolition debris management plan that demonstrates how the project would comply with diversion requirements is required pursuant to the Municipal Code prior to

issuance of a building or demolition permit. As a result, the project would be served by landfill(s) with sufficient permitted capacity, and impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less-than-Significant Impact. The project would comply with the City's construction and demolition recycling ordinance (Santee Municipal Code Section 13.38.060) and Solid Waste Ordinance No. 3239-A, which follow state regulations for solid waste and recycling and require a minimum of 65% of the project's construction and demolition be diverted from the landfills. As a result, impacts would be less than significant.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐
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) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-than-Significant Impact. The project site is located in an existing developed area with access to major roadways that would allow for emergency evacuation. Therefore, the project would not impair

implementation of or physically interfere with emergency response, and impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, would the project 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. Wildland fires present a significant threat in the City, particularly in the summer months when temperatures are high and precipitation is limited. Areas in the City that are particularly susceptible to fires are designated as Very High Hazard or High Hazard areas and are delineated on the Very High Fire Hazard Severity Zones for Local Responsibility Areas as recommended by the California Department of Forestry and Fire Protection. As shown on the California Department of Forestry and Fire Protection Hazard Severity Zones Map, the project site is not located within land mapped as a Fire Hazard Severity Zone. The closest Very High Hazard area is located 1.4 miles northeast of the project site. The project site is located in a generally flat area where urban development currently exists, and it is not susceptible to the threat of wildfire. While there is vegetation to the south and east, this area does not represent a significant source of wildfire risk, and the proposed project itself is not located within a fire hazard area. As such, in the unlikely event of a wildfire in the areas proximate to the proposed project site, all occupants at the proposed project site would evacuate the area as directed by local fire officials. As such, the proposed project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors. Therefore, impacts would be less than significant.

c) Would the project 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?

Less-than-Significant Impact. As described in Threshold 3.19.a), the project would not require or result in the construction of roads, fuel breaks, emergency water sources, or power lines. Additionally, the project would not require construction or maintenance of any other infrastructure facilities. Therefore, the project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk, and impacts would be less than significant.

d) Would the project 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 project site is not located in a 100-year floodplain or a flood hazard zone (FEMA 2024). With adherence to the MS4 Permit and local City drainage control requirements (Municipal Code Chapter 9.06), the proposed changes to drainage patterns would not result in on- or off-site flooding or other adverse effects related to stormwater quantity or quality. Furthermore, the project site is located in a generally flat area and surrounded by existing development on all sides. Therefore, the project would not 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, and impacts would be less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact 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 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?***

Less-than-Significant Impact with Mitigation. The proposed project would not cause any fish or wildlife species to drop below self-sustaining levels. As discussed under Section 5.4 Biological Resources, the proposed project would not result in direct impacts to special-status plant or wildlife species with Project implementation. There is potential for construction-related and long-term indirect impacts. However, potential indirect impacts would be reduced to less than significant with implementation of MM-BIO-1 through MM-BIO-3.

Additionally, as discussed in Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, there is potential for unanticipated discovery of Cultural or Tribal Cultural Resources. Impacts to archaeological and tribal cultural resources would be less than significant with the incorporation of MM-CUL-1

and MM-CUL-2. Therefore, impacts to biological and cultural resources would be less than significant with mitigation.

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 result in significant impacts unless mitigated for the following environmental issues: air quality, cultural resources, tribal cultural resources, geology and soils, noise, and biological resources. The impacts associated with these resource areas are localized and thus would not result in cumulative impacts. A mitigation program has been prepared for each of these environmental issue areas to reduce impacts to less than significant. Other development projects within the City would also be subject to these requirements and separate review under CEQA, as applicable. All other potential impacts from the project were determined either to have no impact or to be less than significant following compliance with the established regulatory framework, without the need for mitigation. Cumulatively, the proposed project would not result in any significant impacts that would substantially combine with impacts of other current or probable future impacts. Therefore, the proposed project, in conjunction with other future projects, would not result in any cumulatively considerable impacts, and no mitigation is required.

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 throughout this document, no hazardous conditions on the project site or in the surrounding area were identified that could adversely affect human beings. It is not anticipated that demolition or construction activities would create conditions that would significantly directly or indirectly impact human beings. Development of the project site would comply with all state and City regulations that would ensure the Community Center building is safe and designed to protect future occupants. The project would not result in any substantial adverse effects on human beings directly or indirectly.

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4.2 List of Preparers

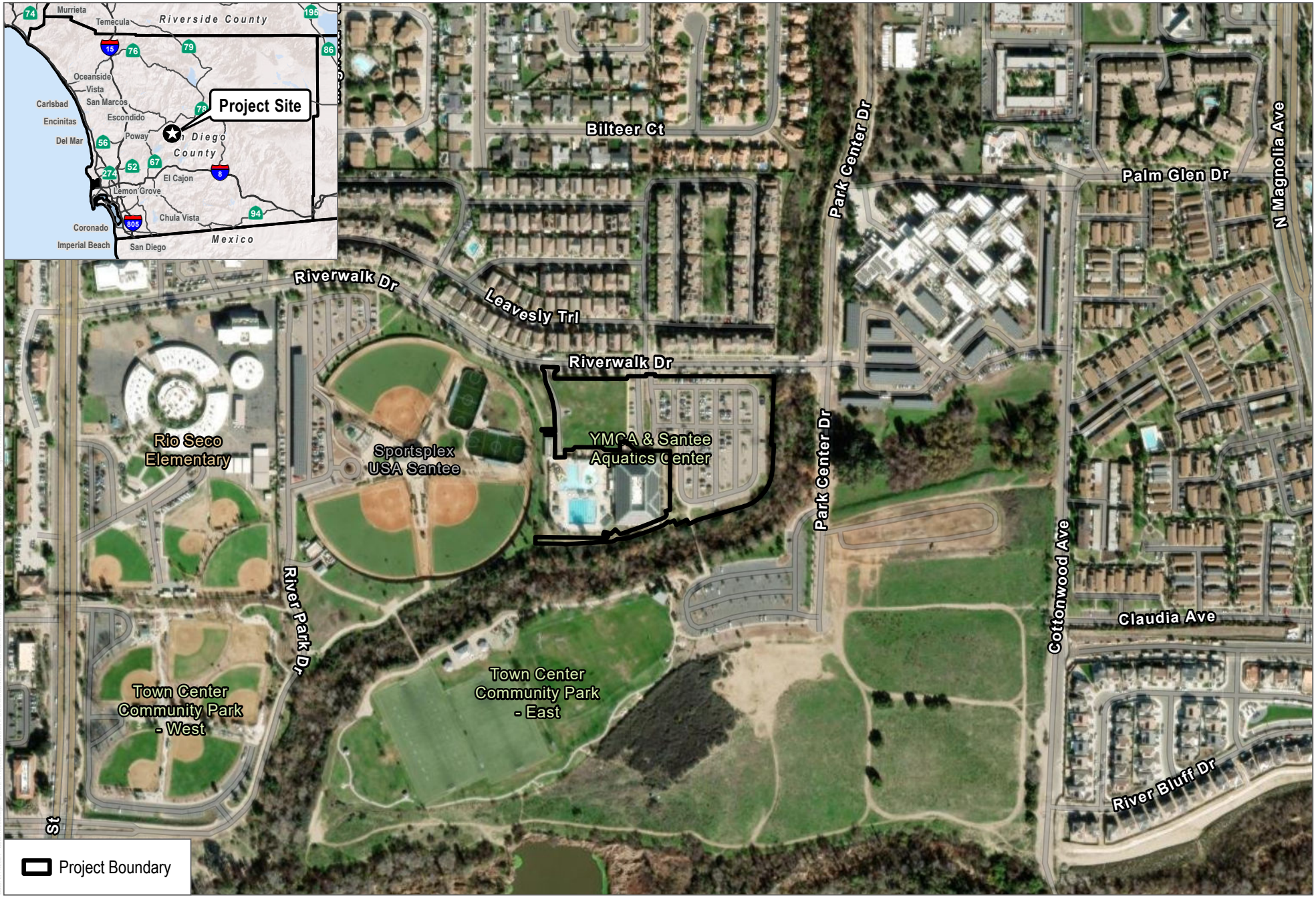
Dudek

Caitlin Munson – Project Manager
Alexandra Howard – Environmental Planner
Elysa Briens – Environmental Planner
Nick Segovia – Acoustician
Elena Nuño – Air Quality Specialist
Danielle Mullen – Biologist
Matthew DeCarlo – Archaeologist
Jessica Colston – Archaeologist
Eric Schniewind – Senior Geologist, Hydrologist, and Hazardous Materials Specialist
Audrey Herschberger, PE – Environmental Engineer

City of Santee

Sandi Sawa, Director of Planning and Building
Carl Schmitz, Director of Engineering/City Engineer
Marni Borg, Principal Environmental Planner
Steven Miller, Principal Civil Engineer

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SOURCE: Maxar 2022

El Cajon Quadrangle - Township 15S Range 1W Section 22

DUDEK

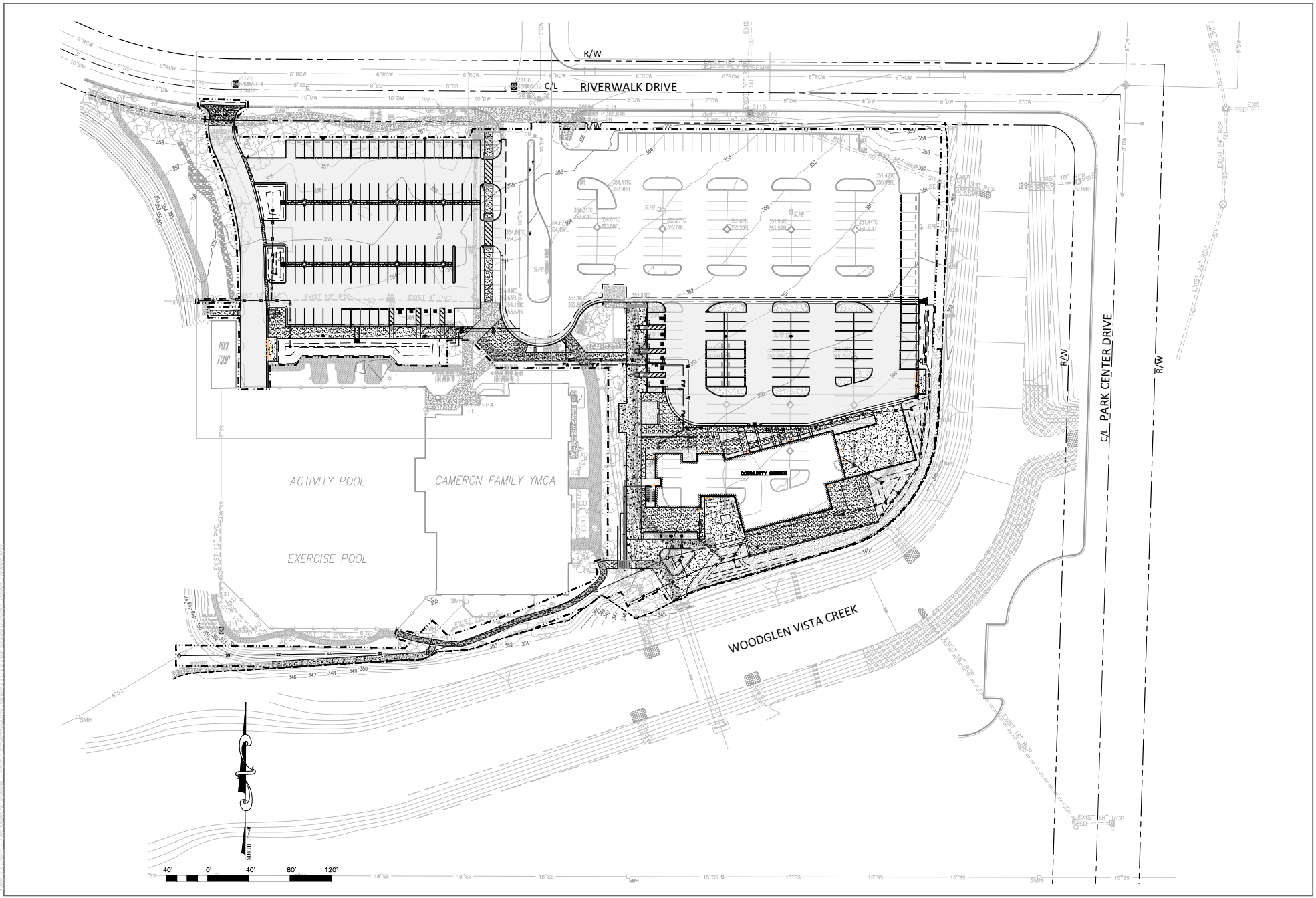
0 200 400 Feet

FIGURE 1

Project Location

Santee Community Center Initial Study/Mitigated Negative Declaration

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SOURCE: HMC Architects, 2022

FIGURE 2

Site Plan

Santee Community Center Initial Study/Mitigated Negative Declaration

DUDEK

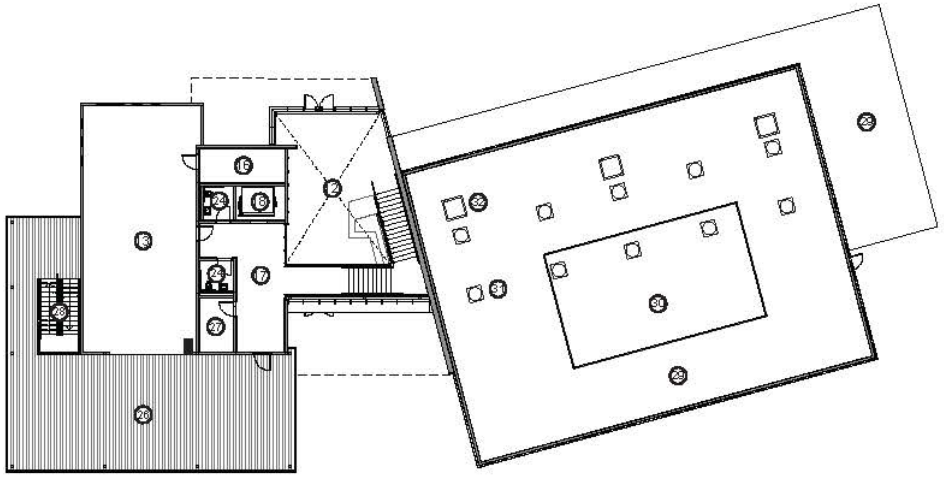
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SITE LEGEND

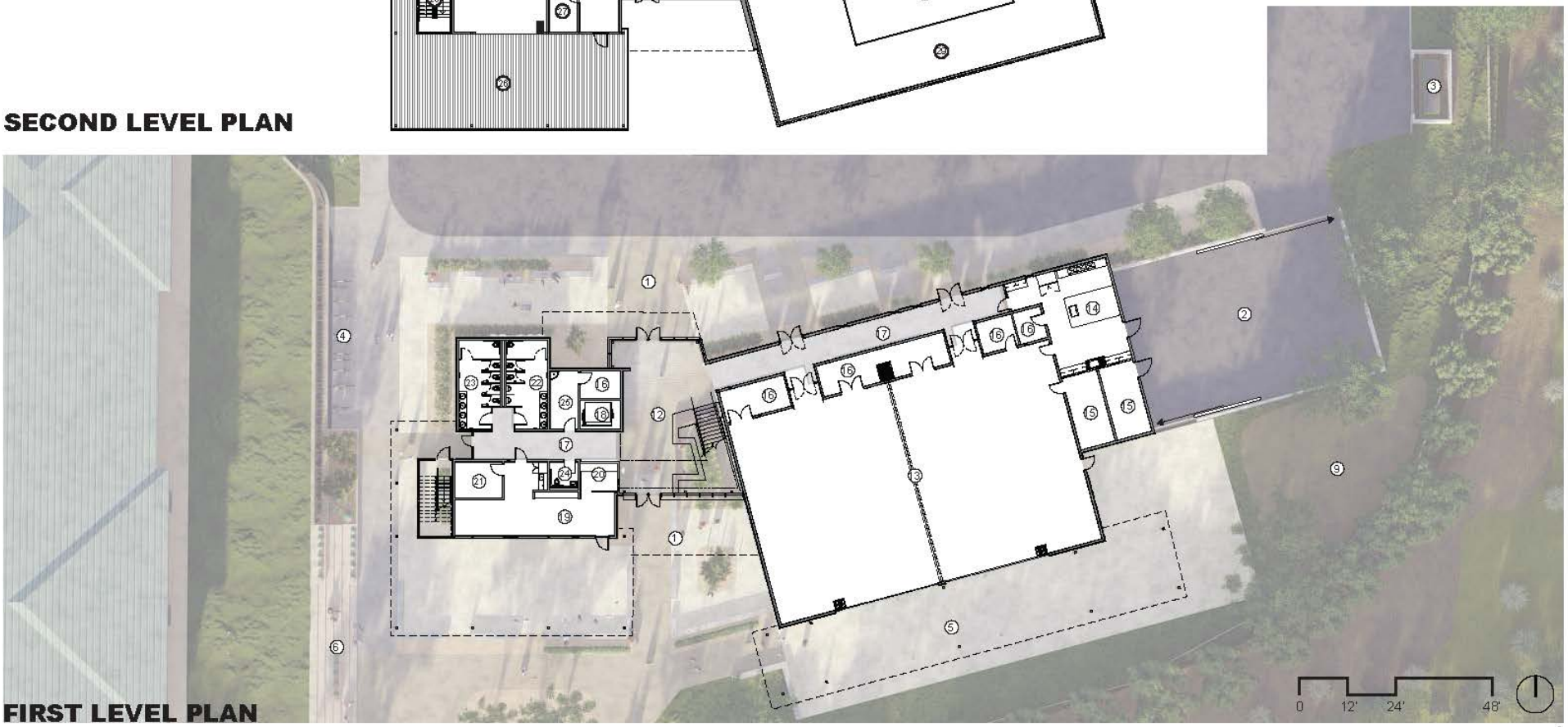
1. Entry Plaza
2. Service Yard
3. Trash Enclosure
4. Bike Storage
5. Covered Dining Area
6. Amphitheater Seating
7. Shade Canopy (Alt.)
8. Existing Foot Bridge
9. Biofiltration Basin
10. Accessible Parking
11. Charging Stations

PLAN LEGEND

12. Lobby
13. Event Space
14. Kitchen
15. Utility
16. Storage
17. Circulation
18. Elevator
19. Office Space
20. Reception
21. Office
22. Mens RR
23. Womens RR
24. Gender Neutral RR
25. Janitor
26. Event Deck
27. Concession
28. Exit Stair
29. Roof
30. Mechanical Well
31. Sky Lights
32. Roof Vents



SECOND LEVEL PLAN



FIRST LEVEL PLAN

SOURCE: HMC Architects, 2022

FIGURE 3

Level Plan

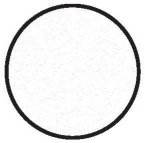
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NORTH PERSPECTIVE ELEVATION


BOARD-FORMED
CONCRETE BENCHES


FIBER CEMENT
EXTERIOR CLADDING


LIGHT SAND FLOAT
CEMENT PLASTER


STANDING SEAM
ROOF


STONE
VENEER


WIRE ROPE
GREEN SCREEN


STACKED BOND CMU
(COVERED WITH GREEN SCREEN)



SOUTH PERSPECTIVE ELEVATION

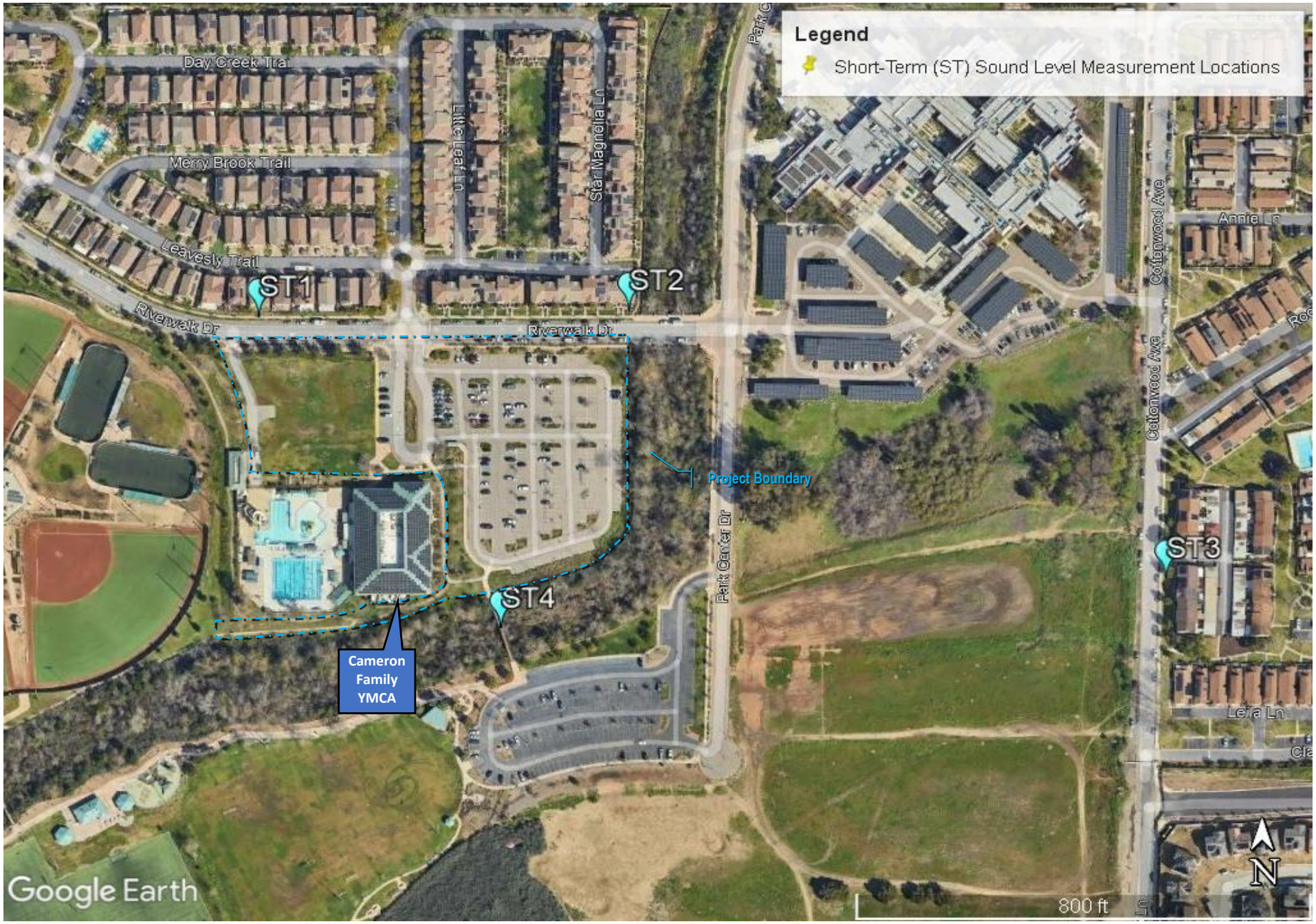
SOURCE: HMC Architects, 2022

FIGURE 4

Elevations

Santee Community Center Initial Study/Mitigated Negative Declaration

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SOURCES: Google 2025; Santee Recreation Center 2025; Dudek 2025

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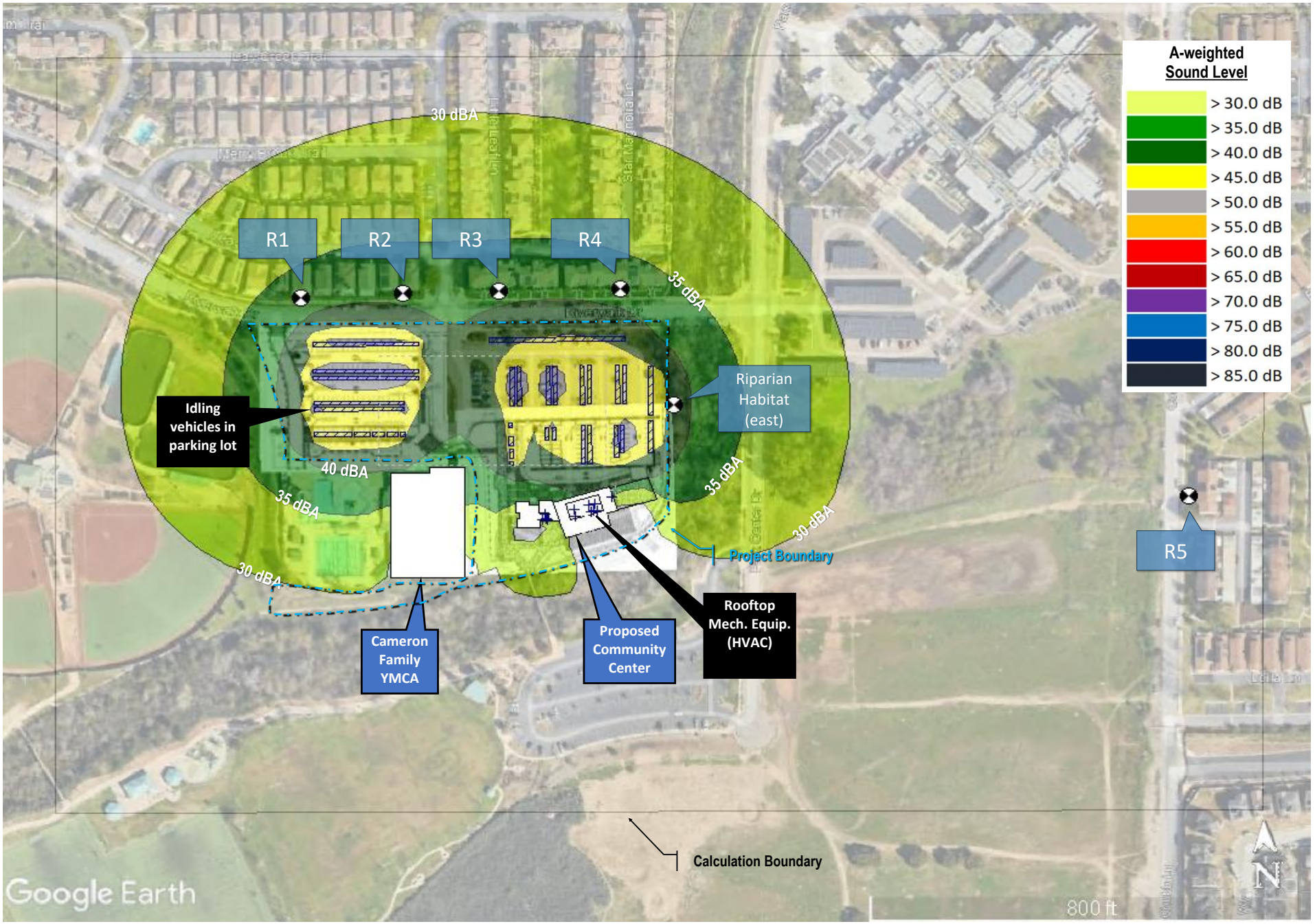
0 121.5 243 Feet

FIGURE 5

Baseline Outdoor Ambient Sound Level Measurements

Santee Recreation Center Project (Santee, CA)

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SOURCES: Google 2025; Santee Recreation Center 2025; Dudek 2025

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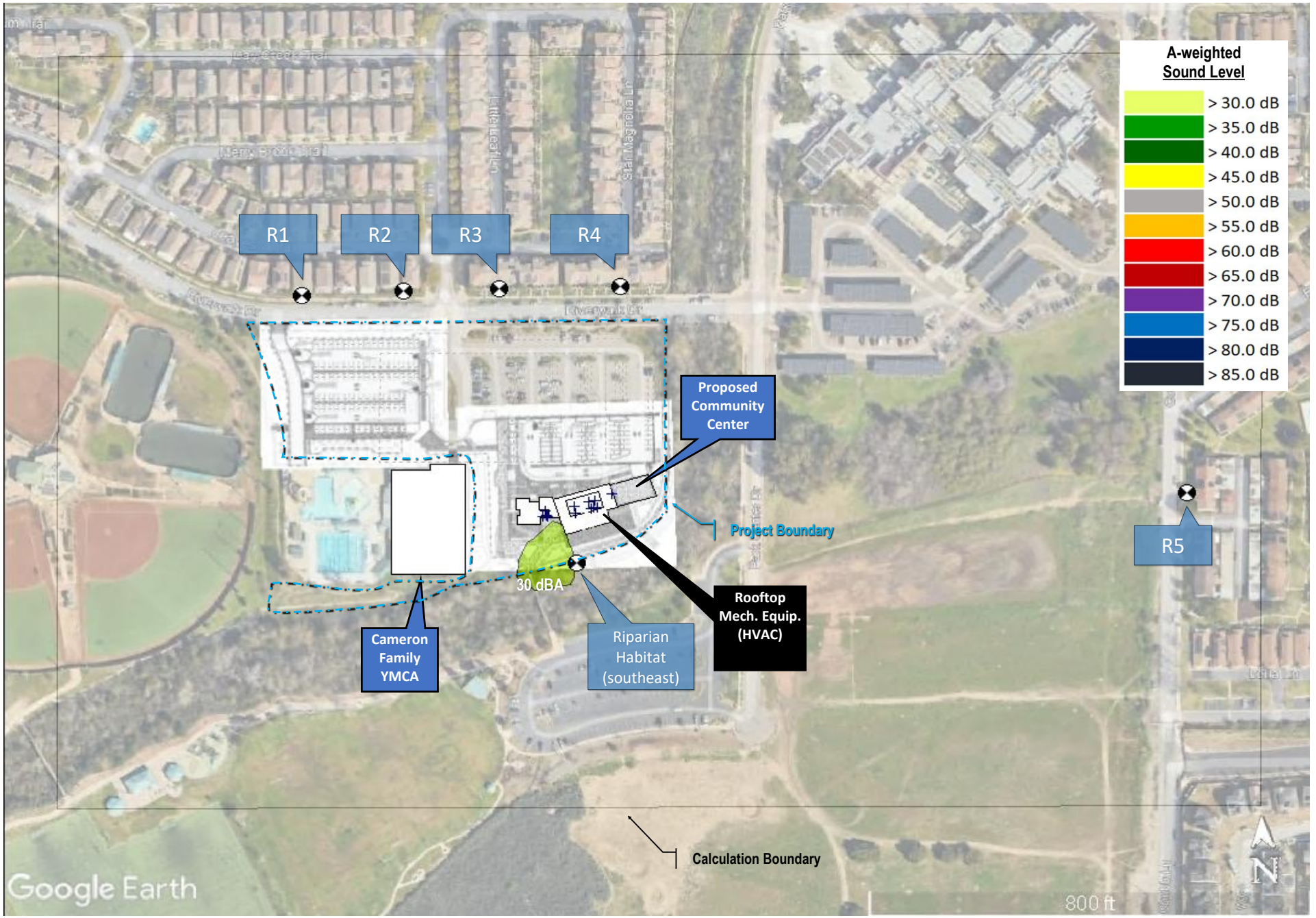
0 121.5 243 Feet

FIGURE 6

Predicted Stationary Source Operation Noise from Proposed Project - Daytime Scenario (1-Hour dBA Leq)

Santee Recreation Center Project (Santee, CA)

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SOURCES: Google 2025; Santee Recreation Center 2025; Dudek 2025

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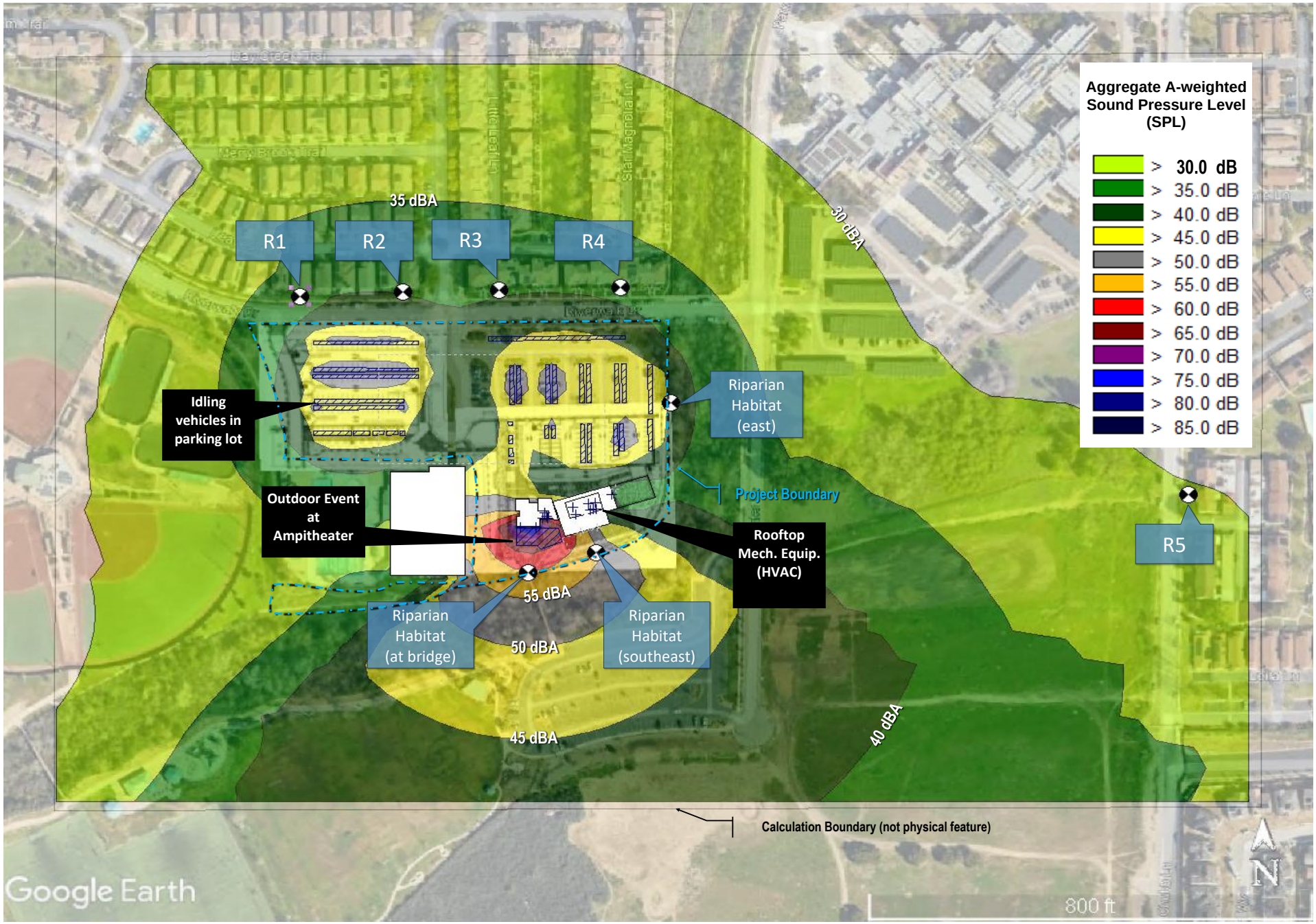
0 121.5 243 Feet

FIGURE 7

Predicted Stationary Source Operation Noise from Proposed Project - Nighttime Scenario (1-Hour dBA Leq)

Santee Recreation Center Project (Santee, CA)

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SOURCES: Google 2024; Dudek 2025

DUDEK

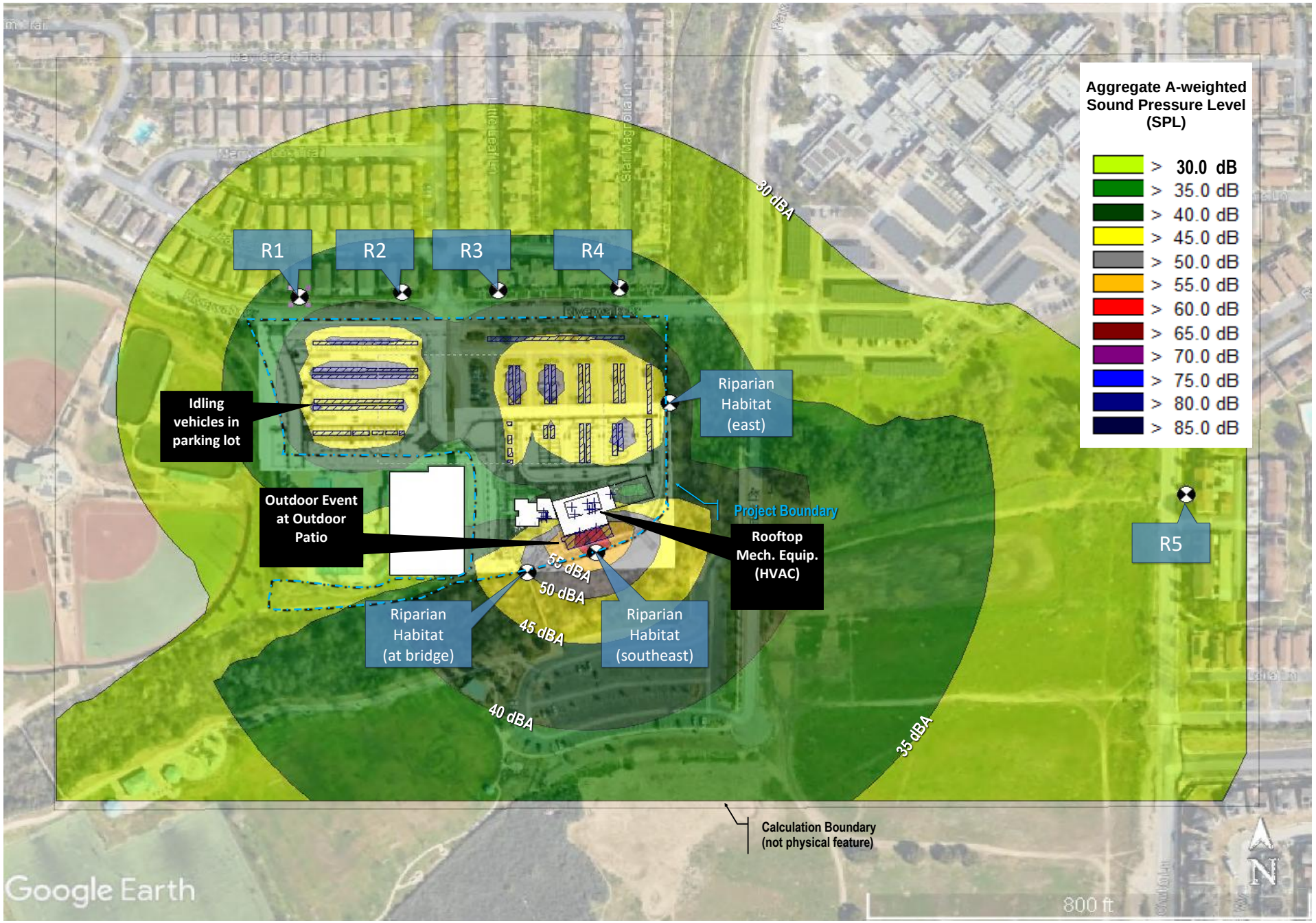
0 98.5 197 Feet

FIGURE 8A

Aggregate Project Operations Noise Prediction Results - Outdoor Event at Amphitheater Venue

Santee Recreation Center Project (Dudek No. 14169)

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SOURCES: Google 2024; Dudek 2025

DUDEK

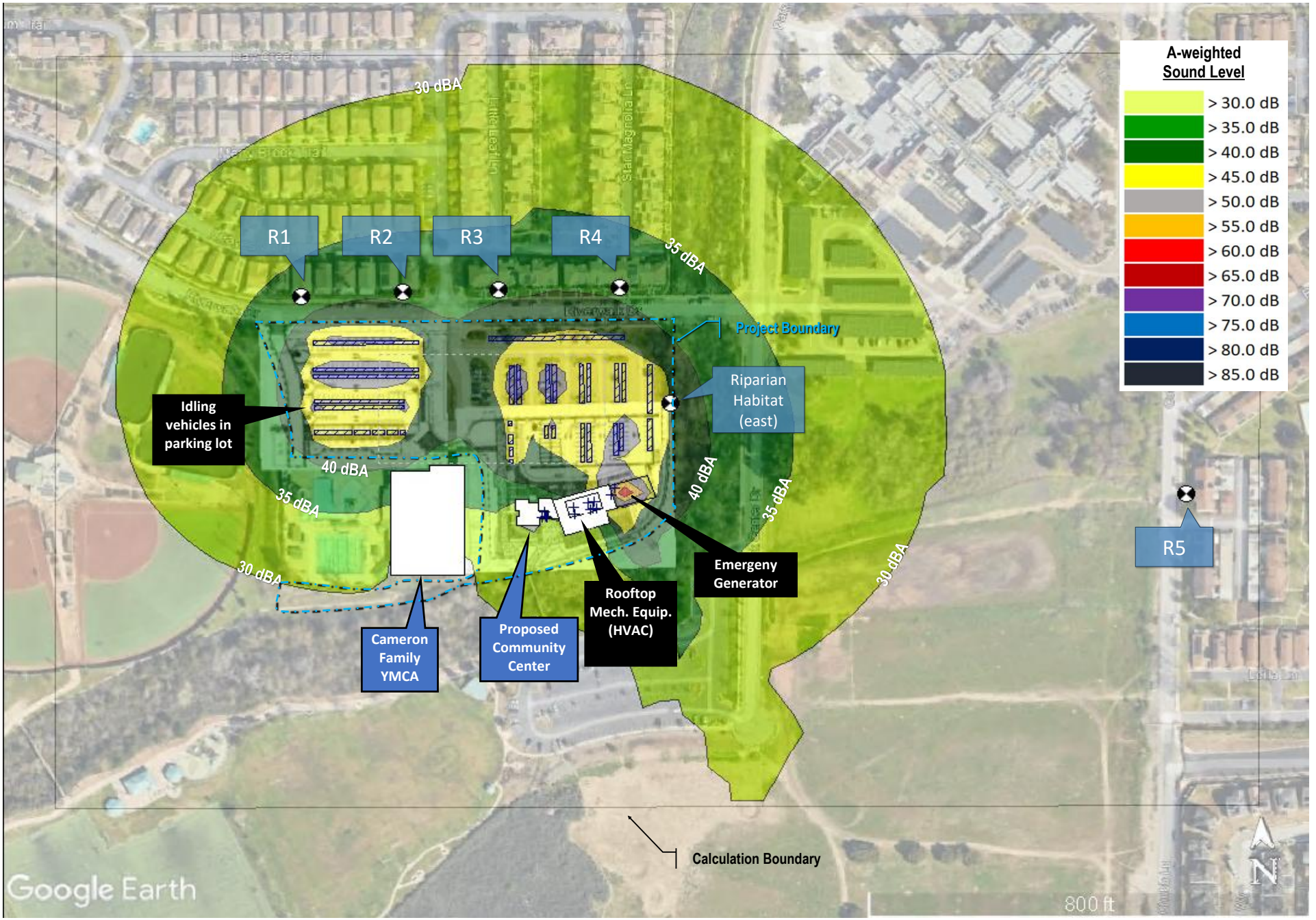
0 98.5 197 Feet

FIGURE 8B

Aggregate Project Operations Noise Prediction Results - Outdoor Event at Outdoor Patio Venue

Santee Recreation Center Project (Dudek No. 14169)

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SOURCES: Google 2025; Santee Recreation Center 2025; Dudek 2025

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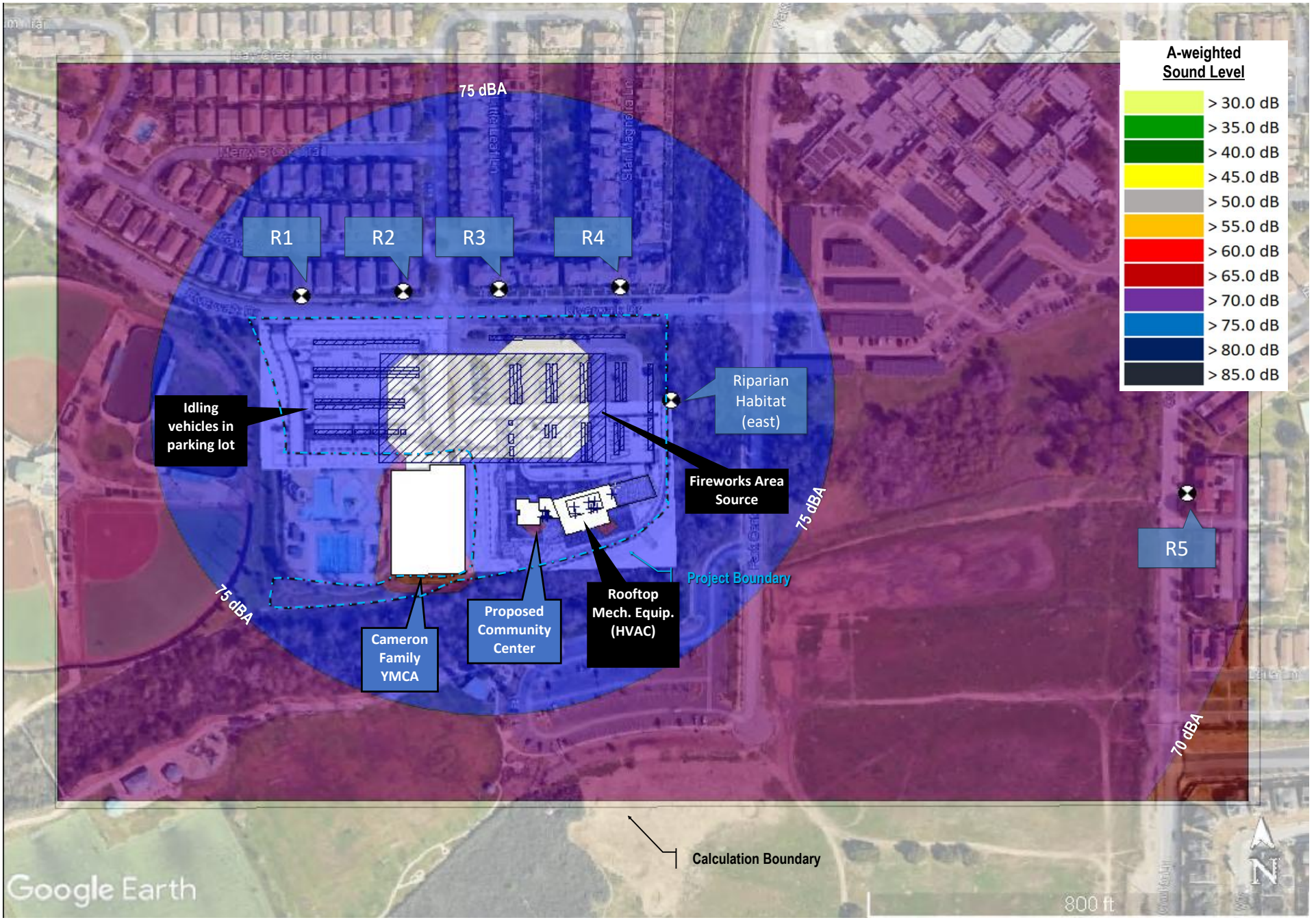
0 121.5 243 Feet

FIGURE 9

Predicted Stationary Source Operation Noise from Proposed Project - Emergency Generator Test Scenario (1-Hour dBA Leq)

Santee Recreation Center Project (Santee, CA)

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SOURCES: Google 2025; Santee Recreation Center 2025; Dudek 2025

DUDEK

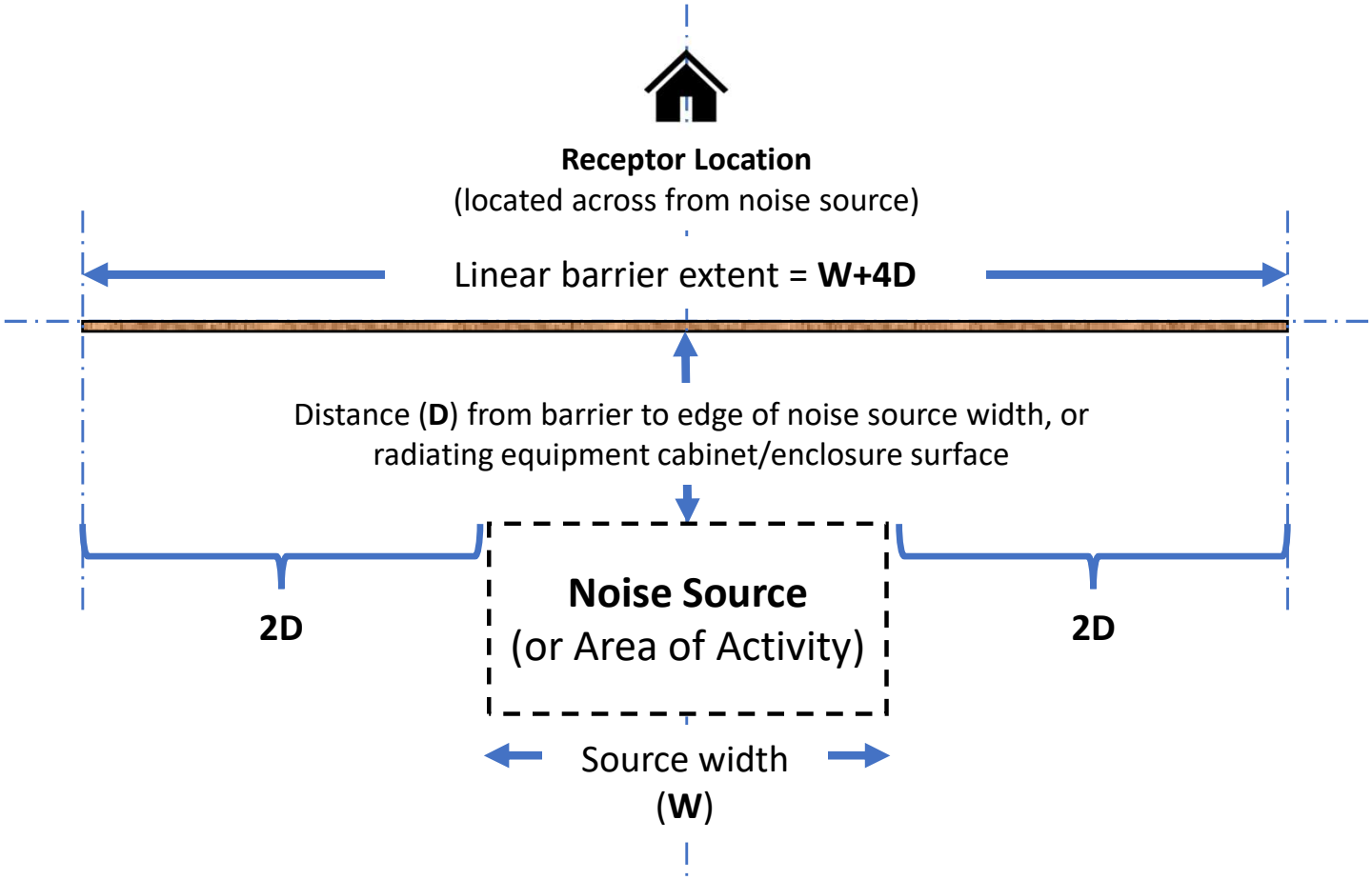
0 121.5 243 Feet

FIGURE 10

Predicted Stationary Source Operation Noise from Proposed Project - Fireworks Event Scenario (1-Hour dBA L_{eq})

Santee Recreation Center Project (Santee, CA)

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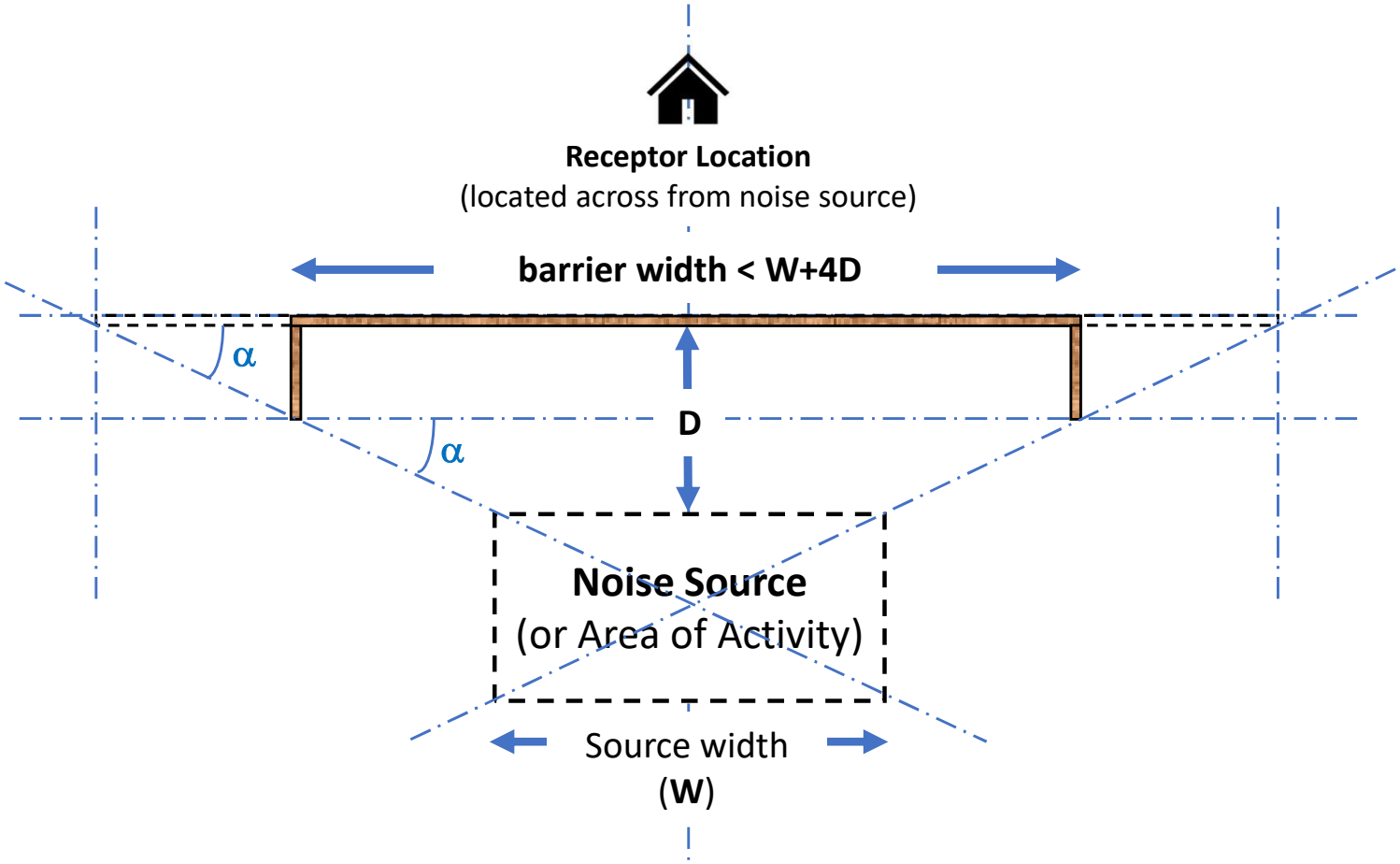


DUDEK

Source: Santee Community Center 2025; Dudek 2025

Figure 11A
Temporary Construction Noise Barrier Extent Calculations

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DUDEK

Source: Santee Community Center 2025; Dudek 2025

Figure 11B
Temporary Construction Noise Barrier Extent Calculations

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DUDEK

Source: Santee Community Center 2025; Dudek 2025

Figure 11C
Temporary Construction Noise Barrier Extent Calculations

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Comment Letter S1: California Department of Transportation, May 28, 2025

S1

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
(619) 985-1587 | FAX (619) 688-4299 TTY 711
www.dot.ca.gov

May 28, 2025

11-SD-52
PM 16.548
Santee Community Center
MND/SCH#2025041300

Ms. Sandi Sawa
Director of Planning and Building
City of Santee
10601 Magnolia Avenue
Santee, CA 92071

Dear Ms. Sawa:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Mitigated Negative Declaration (MND) for the Santee Community Center located near State Routes 52 and 67 (SR-52)(SR-67). The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

S1-1

Safety is one of Caltrans' strategic goals. Caltrans strives to make the year 2050 the first year without a single death or serious injury on California's roads. We are striving for more equitable outcomes for the transportation network's diverse users. To achieve these ambitious goals, we will pursue meaningful collaboration with our partners. We encourage the implementation of new technologies, innovations, and best practices that will enhance the safety on the transportation network. These pursuits are both ambitious and urgent, and their accomplishment involves a focused departure from the status quo as we continue to institutionalize safety in all our work.

Caltrans is committed to prioritizing projects that are equitable and provide meaningful benefits to historically underserved communities, to ultimately improve transportation accessibility and quality of life for people in the communities we serve.

We look forward to working with the City of Santee in areas where the City and Caltrans have joint jurisdiction to improve the transportation network and connections

"Improving lives and communities through transportation"

S1-1: This comment is an introduction to the comment letter describing the California Department of Transportation's (Caltrans') goals and does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft Mitigated Negative Declaration (Draft MND) for the proposed Community Center. Therefore, no further response is required.

S1-1 cont.

between various modes of travel, with the goal of improving the experience of those who use the transportation system.

Caltrans has the following comments:

Complete Streets and Mobility Network

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

S1-2

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

Bicycle, pedestrian, and public transit access during construction is important. Mitigation to maintain bicycle, pedestrian, and public transit access during construction is in accordance with Caltrans' goals and policies.

Land Use and Smart Growth

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

S1-3

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

S1-2: This comment explains Caltrans' commitment to meeting multi-modal mobility needs and encourages early coordination between the City and Caltrans for locations that may affect both agencies. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

S1-3: This comment explains Caltrans' commitment to "smart growth"-type land use planning and the application of smart growth policies and encourages coordination between the City and Caltrans for locations where both agencies have joint jurisdiction. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

S1-4

Hauling

Caltrans has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway network. Additional information is provided online at: http://www.dot.ca.gov/trafficops/permits/index.html

S1-5

Environmental

Caltrans welcomes the opportunity to be a Responsible Agency under the California Environmental Quality Act (CEQA), as we have some discretionary authority of a portion of the project that is in Caltrans' Right-of-Way (R/W) through the form of an encroachment permit process. We look forward to the coordination of our efforts to ensure that Caltrans can adopt the alternative and/or mitigation measure for our R/W. We would appreciate meeting with you to discuss the elements of the Environmental Document that Caltrans will use for our subsequent environmental compliance.

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

We recommend that this project specifically identifies and assesses potential impacts caused by the project or impacts from mitigation efforts that occur within Caltrans' R/W that includes impacts to the natural environment, infrastructure including but not limited to highways, roadways, structures, intelligent transportation systems elements, on-ramps and off-ramps, and appurtenant features including but not limited to fencing, lighting, signage, drainage, guardrail, slopes and landscaping. Caltrans is interested in any additional mitigation measures identified for the project's Final Environmental Document.

S1-4: This comment explains Caltrans' authority to issue a special use permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

S1-5: This comment explains Caltrans' role as a Responsible Agency under the California Environmental Quality Act (CEQA) and requirements for work within Caltrans' right-of-way. The proposed Community Center does not include or impact Caltrans right-of-way. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Right-of-Way

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

Additional information regarding encroachment permits may be obtained by visiting the website at https://dot.ca.gov/programs/traffic-operations/ep. Projects with the following:

S1-5 cont.

- require a Caltrans Encroachment Permit
- have completed the Caltrans Local Development Review (LDR) process
- have an approved environmental document

need to have documents submitted for Quality Management Assessment Process (QMAP) process via email to D11.QMAP.Permits@dot.ca.gov. Early coordination with Caltrans is strongly advised for all encroachment permits.

If you have any questions or concerns, please contact Mark McCumsey, LDR Coordinator, at (619) 985-4957 or by e-mail sent to Mark.McCumsey@dot.ca.gov.

Sincerely,

Kimberly D. Dodson

KIMBERLY D. DODSON, GISP
Branch Chief
Local Development Review

"Improving lives and communities through transportation"

Comment Letter O1: Viejas Band of Kumeyaay Indians, April 29, 2025

O1

From: Ray Teran <rteran@viejas-nsn.gov>
Sent: Tuesday, April 29, 2025 10:30 AM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>; Ernest Pingleton <epingleton@viejas-nsn.gov>
Subject: Community Center Project

O1-1

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the APE-DE of the proposed project.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

If you wish to utilize Viejas cultural monitors (Viejas rate is $54.15/hr. plus GSA mileage), please call Ernest Pingleton at 619-655-0410 or email, epingleton@viejas-nsn.gov, for contracting and scheduling. Thank you.

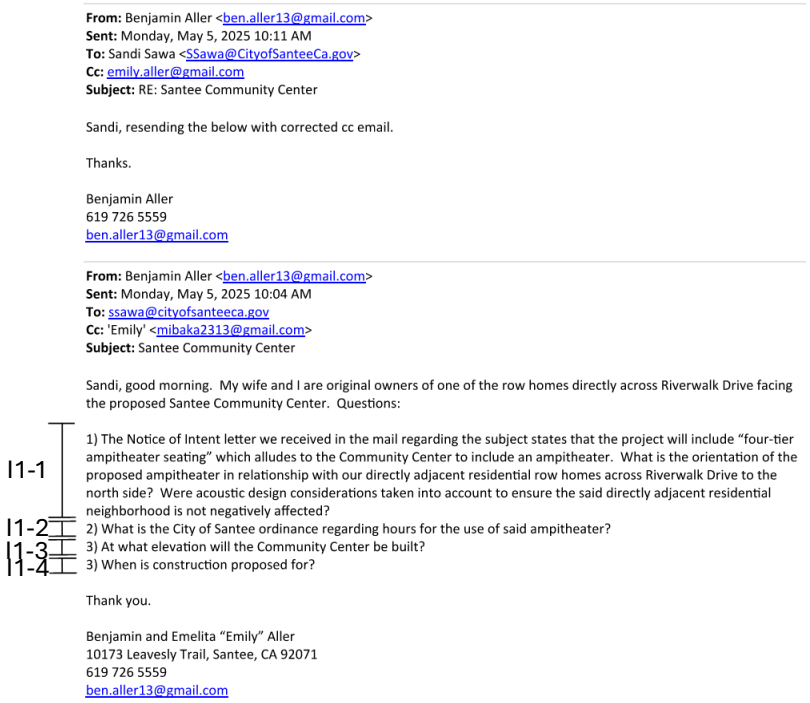
Ray Teran
Viejas Tribal Government
Resource Management Director
619-659-2312
rteran@viejas-nsn.gov



O1-1: This comment states that the proposed Community Center site has cultural significance or ties to the Viejas Band of Kumeyaay Indians (Viejas) and requests that a Kumeyaay cultural monitor be on site for ground-disturbing activities. Mitigation Measure MM-CUL-2 states: "A Native American Monitor of Kumeyaay descent shall be present for any pre-construction meeting and for all ground disturbing activities associated with the project." The mitigation measure further describes the procedures to be followed in the event of an inadvertent discovery of an archaeological resource, tribal or cultural resource, historical resource, or human remains. The City will assure compliance with this mitigation measure and will inform Viejas of any inadvertent discovery of cultural artifacts, cremation sites or human remains, as requested. This comment does not raise a significant environmental issue regarding the accuracy or adequacy of the information provided in the Draft Mitigated Negative Declaration (Draft MND) for the proposed Community Center. Therefore, no further response is required.

Comment Letter I1: Benjamin and Emelita "Emily" Aller, May 5, 2025

I1



From: Benjamin Aller <ben.aller13@gmail.com>
Sent: Monday, May 5, 2025 10:11 AM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>
Cc: emily.aller@gmail.com
Subject: RE: Santee Community Center

Sandi, resending the below with corrected cc email.

Thanks.

Benjamin Aller
619 726 5559
ben.aller13@gmail.com

From: Benjamin Aller <ben.aller13@gmail.com>
Sent: Monday, May 5, 2025 10:04 AM
To: ssawa@cityofsanteeca.gov
Cc: 'Emily' <mibaka2313@gmail.com>
Subject: Santee Community Center

Sandi, good morning. My wife and I are original owners of one of the row homes directly across Riverwalk Drive facing the proposed Santee Community Center. Questions:

I1-1 1) The Notice of Intent letter we received in the mail regarding the subject states that the project will include "four-tier ampitheater seating" which alludes to the Community Center to include an ampitheater. What is the orientation of the proposed ampitheater in relationship with our directly adjacent residential row homes across Riverwalk Drive to the north side? Were acoustic design considerations taken into account to ensure the said directly adjacent residential neighborhood is not negatively affected?

I1-2 2) What is the City of Santee ordinance regarding hours for the use of said ampitheater?

I1-3 3) At what elevation will the Community Center be built?

I1-4 3) When is construction proposed for?

Thank you.

Benjamin and Emelita "Emily" Aller
10173 Leavesly Trail, Santee, CA 92071
619 726 5559
ben.aller13@gmail.com

1

Note that the email from Benjamin Aller was received on May 5, 2025. Staff responded in writing to the questions raised in the email on Monday, May 5, 2025. Below are the responses previously provided:

I1-1: This comment raises questions pertaining to the proposed amphitheater, including the orientation and acoustic design. The "Amphitheatre" is a 3-tier seat wall (4 levels) integrated into the bank between the proposed Community Center and Cameron Family YMCA that will accommodate approximately 25-35 persons. The intent was not for concerts or large gatherings but where persons could congregate for leisure or to attend presentations/training outside. Improvement #6 shown on the "First Level Plan" in Figure 3 of the Draft Mitigated Negative Declaration (Draft MND) shows the location of the seat wall. The seat wall is also shown in Figure 4 of the Draft MND on the left side of the "South Perspective Elevation". Noise was evaluated in the Draft MND, and noise calculations are included in Appendix H to the Draft MND. All of these resources can be found at the link below:

draft-mitigated-negative-declaration.pdf

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I1-2: This comment asks about the hours of operations for the proposed Community Center's amphitheater. The hours of operations would be the same as the operations for the Community Center, which are Sunday through Thursday from 7:00 a.m. to 10:00 p.m. and Fridays and Saturdays from 7:00 a.m. to 11:00 p.m. (see Section 2.3.2, *Proposed Operation*, of the Draft MND). This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I1-3: This comment asks about the elevation of the proposed Community Center site. The pad elevation of the proposed Community Center building will be 350'. The current elevation of the site is between 348' and 350'. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I1-4: This comment asks about the start of construction of the proposed Community Center. Construction is tentatively scheduled to begin January 2026. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Comment Letter I2: Elie George Arslan, May 20, 2025

I2

From: Elie Arslan <elie_arslan@yahoo.com>
Sent: Tuesday, May 20, 2025 11:05:34 PM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>
Cc: Rose Arslan <rose.arslan@hotmail.com>
Subject: Riverwalk Resident concerns about Santee Community Center

Hello Sandi,

I2-1 My wife and I received the Notice of Intent letter in the mail regarding the Santee Community Center plan and we are not happy with the plan due to several reasons.

I2-2 The main reasons are the proximity to our house (our row home is just across the street), the noise pollution and traffic is already bad. Traffic has already got worse over the last few years when compared to 13-14 years ago, when we first purchased our home in the Riverwalk community. The parking across the street is full in the weekends and when there are events, adding a community center building will just make things worse.

I2-3 A highly concerning reason is the environmental factor (pollution generated during construction and noise). In addition, some residents work from home (work remotely) and this will be distracting. I work from home 1-2 times a week. Sometimes I have virtual TEAMS calls with the FDA, consultants and other regulatory agencies.

I2-4 Another concerning reason is traffic congestion and parking. Traffic is already bad on Riverwalk Drive in the mornings and late afternoons and parking is limited. See attached photos below which were taken on a Saturday (on a weekend).

I2-5 The last concerning reason is the view we will have from our house. Currently, the view is some of the YMCA parking and some trees. We can see some of the hills, trees etc.

I2-6 We like our community and our neighbors. I've lived in Riverwalk for almost 14 years. I suggest you re-consider another location for the Santee Community Center. If you cannot build in another location, I highly recommend you have planned measures for controlling traffic, controlling noise from construction, future noise from events (how you will mitigate and have controls) and well as minimal to no environmental impacts.

I2-7 Feel free to reach out if you have any questions.

Regards,
Mr. Elie George Arslan
Cellular Phone (909) 855-6415

I2-1: This comment acknowledges that the Notice of Intent was received and expresses the opinion of the author regarding the proposed Community Center. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft Mitigated Negative Declaration (Draft MND) for the proposed Community Center. Therefore, no further response is required.

I2-2: This comment states that traffic and noise pollution in the project vicinity is currently bad, and traffic and parking (across the street) will get worse with the proposed Community Center. Transportation is addressed in Section 3.17, *Transportation*, and Appendix G, *Transportation Analysis*, of the Draft MND. The analysis concluded that the function and aspects of the proposed Community Center would fall under the category of "community parks," which is considered a local park per the City's Recreation Element. According to the City's screening criteria, public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less-than-significant impact, absent substantial evidence to the contrary, and the project would be considered to have a less-than-significant CEQA transportation impact and would be screened out of further analysis. Therefore, the

proposed Community Center would have a less than significant VMT impact and would not be inconsistent with CEQA Guidelines Sections 15064.3 (b). Furthermore, as of July 1, 2020, auto delay, level of service (LOS) and other similar measures of vehicular roadway capacity and traffic congestion were eliminated as the basis for determining significant transportation impacts under CEQA. As such, congestion is no longer an impact under CEQA. For events that impact roadways or large-scale events, traffic control plans and temporary use permits will be required.

Noise is addressed in Section 3.13, *Noise*, and Appendix H, *Noise Supporting Documentation*, of the Draft MND. The analysis addressed short-term construction noise, off-site project-attributed transportation noise and off-site project-attributed noise from operations. The analysis concluded:

- Construction Noise: While there would be an audible change in the noise environment during construction of the proposed Community Center, the noise levels would be temporary and the predicted levels would be less than the 80 dBA 8-hour L_{eq} Federal Transit Administration (FTA)-based standard (see Table 3.13-2 in the MND). Noise produced from the construction of the proposed Community Center at the nearest single-

family residential noise-sensitive receptor to the north (approximately 80 feet from the project boundary) would result in a less than-significant impact. Construction noise at the Woodglen Vista Creek protected open space immediately south of the project site was also evaluated. The analysis concluded that the construction noise levels for the construction activity phases would exceed the 60 dBA 1-hour Leq construction noise limit for sensitive habitat, and therefore mitigation was required. Section 5.04 of the Municipal Code (MC), *Noise Abatement and Control*, limits the hours and days of construction and prohibits construction on Sundays or City recognized holidays. Construction violations can be reported to the City's Planning, Building and Engineering Department (619-258-4100) or a Service Request can be entered on the City's website (https://www.cityof santeeca.gov).

- Transportation Noise: The change in roadway noise levels at the nearest residential noise-sensitive receptors was predicted for four conditions: existing, existing plus project, cumulative conditions, and cumulative plus project. Traffic noise levels were calculated for roadway segments bounded by intersections within the project area including Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, Riverwalk Drive from Verde Vista Lane to Canopy

Park Lane and Riverwalk Drive from Canopy Park Lane to Park Center Drive. Where ambient sound levels are below 60 dBA Ldn, the highest predicted change in traffic noise level would be 1.3 dBA Ldn on Riverwalk Drive from Verde Vista Lane to Canopy Park Lane, which is less than the Federal Interagency Committee on Noise (FICON) 5 dBA threshold and would be considered imperceptible to the average person ["Federal Agency Review of Selected Airport Noise Analysis Issues", Federal Interagency Committee on Noise, August 1992]. On Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, the highest predicted change in traffic noise level would be 0.7 dBA Ldn, which is less than the FICON 3 dBA threshold. Potential impacts from project-generated changes to future traffic noise at existing off-site noise-sensitive land uses along Riverwalk Drive between Cuyamaca Street and Park Center Drive would be less than significant.

- Operational Noise: Noise impacts from several operational scenarios, each representing one full hour of on-site activities at the proposed Community Center were studied at six sensitive receptor sites (See Table 3.13-4 and Figures 6 through 10 of the Draft MND). Of these sensitive receptor sites, five represent residences to the north and east of the site. The results presented in Table 3.13-4 indicate that project operation noise,

under each modeled operation scenario, is anticipated to be less than 65 dBA Ldn at the nearest existing noise-sensitive receptors and thereby comply with the operational noise threshold (65 dBA Ldn) established in Section 5.04.090 of the City's Noise Ordinance. Therefore, impacts from onsite operational noise would be less than significant.

With regard to parking, the proposed Community Center would reconfigure the existing parking lot into the new "east" parking lot, and the existing field north of the Cameron Family YMCA building would become the new "west" parking lot. Section 2.3.1, *Proposed Project*, of the Draft MND indicates that there would be a combined total of 275 regular stalls and 12 accessible stalls between the two parking lots. Currently, the Cameron Family YMCA parking lot is underutilized, and is only at capacity with large events. With the 62 parking spaces added along Park Center Drive through a restriping program approved at City Council on April 9, 2025, there would be a net gain of 81 parking spaces. In addition, there are other underutilized parking areas within the Town Center, including the 206-space overflow parking lot south of the community center, which is directly connected to the Community Center via a pedestrian bridge. Therefore, there will be adequate parking to

accommodate the proposed Community Center along with the Cameron Family YMCA.

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I2-3: This comment raises a concern about pollution during construction and noise. Section 3.3, *Air Quality*, and Tables 3.3-1 and 3.3-2 of the Draft MND address construction emissions. The analysis concludes that maximum daily construction emissions would not exceed the San Diego Air Pollution Control District (SDAPCD) significance thresholds for volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide (CO), sulfur oxide (SOx), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM10), or less than 2.5 microns (PM2.5) during construction; short-term construction air quality impacts would be less than significant. See response to comment I2-2 and Section 3.13, *Noise*, and Appendix H, *Noise Supporting Documentation*, of the Draft MND with respect to construction noise. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the

proposed Community Center. Therefore, no further response is required.

I2-4: This comment raises a concern about traffic congestion and parking. These topics are addressed in response to comment I2-2. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I2-5: This comment raises concern about the private views from the commenter's house. Aesthetics is addressed in Section 3.1, *Aesthetics*, of the Draft MND. The California Environmental Quality Act (CEQA) significance thresholds address visual quality or character of public views in non-urbanized areas and urbanized areas. Since this site is in an urbanized area, the significance threshold focuses on whether or not the project would "conflict with applicable zoning or other regulations governing scenic quality" (see threshold (c) in Section 3.1 of the Draft MND). As addressed under this threshold, the proposed Community Center site is zoned Town Center (TC), and Community Centers are a permitted use in this zone. Implementation of the project would not conflict with applicable zoning. Therefore, impacts would be less than significant. This comment does not raise a significant environmental issue regarding the

adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I2-6: This comment suggests that this project be built in another location, and if this is not possible, then there should be measures to control traffic, control noise from construction, control noise from future events as well as have no environmental impacts. Traffic, noise from construction and noise from future on-site events are addressed in response to comment I2-2. As noted in response to comment I2-2, for events that impact roadways or large-scale events, traffic control plans and temporary use permits will be required.

With respect to an alternative location, the City of Santee owns the site, and the proposed Community Center is consistent with the site's TC zoning and land use designation. Furthermore, the original location for the proposed Community Center was the grass field located north of the Cameron Family YMCA. However, the location for the proposed Community Center was moved south, adjacent to the east side of the Cameron Family YMCA, to be further away from the adjacent residential developments.

The Draft MND identified environmental impacts related to air quality, biological resources, cultural resources, geology, paleontological resources and

noise. These environmental impacts will be reduced to below significance with implementation of the proposed mitigation measures (i.e., MM-AQ-1, MM-BIO-1, BIO-2, BIO-3 and BIO-4, MM-CUL-1 and CUL-2, MM-GEO-1 and GEO-2, and MM-NOI-1). This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I2-7: This comment is a conclusion and offers to answer any questions. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Comment Letter I3: Kristin Archer, May 27, 2025

From: Kristin Archer <karcher1006@gmail.com>
Sent: Monday, May 26, 2025 3:15:44 PM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>
Subject: Santee Community Center

I3

Dear Planning & Building Department of the City of Santee,

I3-1 My family and fellow residents of the Riverwalk housing community strongly oppose the project to build a community center located in the current Cameron Family YMCA parking lot.

I3-2 This large parking lot is needed for day to day use for the YMCA facility and overflow event parking for the Town Center Park. Town Center Park hosts many events year round and needs this parking area. Additionally, if this parking lot is lost, then the YMCA will be forced to convert their large grass area into a parking lot for their facility. The grass area is where the YMCA hosts school break and summer camps that support the children of the community. Losing both the parking lot and summer camp area will be a major detriment for our community that relies on the YMCA summer camp program and will create an even larger parking issue than we currently already have.

I3-3 Resident safety is another concern as the large parking lot provides safe, well lit parking that was ample for overnight resident parking. Riverwalk Dr. street parking near the Edgemoor hospital is a

I3-4 hangout area for hospital patients and the transient/homeless that gather to exchange and partake in drug use and is not safe. Vehicles that have to park at this end of the street have been vandalized and broken into.

I3-5 Please consider these comments and concerns and build a community center elsewhere.

Respectfully,

Kristin Archer
10139 Little Leaf Lane
Santee, CA 92071

I3-1: This comment expresses the opinion of the author regarding the proposed Community Center. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft Mitigated Negative Declaration (Draft MND) for the proposed Community Center. Therefore, no further response is required.

I3-2: This comment expresses concern over the loss of parking and conversion of the grass lot north of the Cameron Family YMCA, thereby eliminating an area used for the Cameron Family YMCA's summer camp program. The proposed Community Center would reconfigure the existing parking lot into the new "east" parking lot, and the existing field north of the Cameron Family YMCA building would become the new "west" parking lot. Section 2.3.1, *Proposed Project*, of the Draft MND indicates that there would be a combined total of 275 regular stalls and 12 accessible stalls between the two parking lots. Currently, the Cameron Family YMCA parking lot is underutilized, and is only at capacity with large events. With the 62 parking spaces added along Park Center Drive through a restriping program approved at City Council on April 9, 2025, there would be a net gain of 81 parking spaces. In addition, there are other underutilized parking areas within the Town Center, including the 206-space

overflow parking lot south of the community center, which is directly connected to the Community Center via a pedestrian bridge. Therefore, there will be adequate parking to accommodate the proposed Community Center along with the Cameron Family YMCA.

As stated in Section 2.2, *Environmental Setting*, of the Draft MND, the northwest quadrant of the site (i.e., the grassy field) was previously graded for development of the Town Center Community Park and was a temporary gravel parking lot for the Cameron Family YMCA when it was constructed in 2003. As part of the Town Center Community Park Phase 2 project completed in 2010, the gravel parking lot was converted into a grassy field when the current permanent parking lot was constructed. The grassy field was originally planned to be the location for the proposed Community Center. However, the location for the proposed Community Center was moved south, adjacent to the east side of the Cameron Family YMCA, to be further away from adjacent residential developments. The grassy field is owned by the City of Santee and zoned Town Center (TC). The proposed use including parking is allowed by the zone and land use designation of the site.

Santee's Community Services Department is working with the Cameron Family YMCA to identify alternative

locations for the summer camps. As discussed in Section 2.3.2 of the MND, the proposed Community Center will offer event space that will benefit the community including senior, youth, and general classes such as outdoor recreation, art, dance, martial arts, music, gardening, cooking, flower arranging, language, historical, and cultural classes; training classes such as CPR, fitness, safety, dog training, and babysitter training classes, and other classes needed for the community.

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I3-3: This comment states that the large parking lot provides safe, well-lit parking which is used for overnight resident parking. The reconfigured new "east" parking lot and the new "west" parking lot will be landscaped and lit at night. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I3-4: This comment states that street parking on Riverwalk Drive near the Edgemoor hospital is a gathering

location for hospital patients and the transient/homeless that exchange and partake in drug use in this area, and vehicles in this area have been vandalized. The proposed project will provide lighting improvements such as upgraded LED parking lot lighting. In addition, CCTV security cameras and programmed events through the daytime and evening hours will all help with security. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I3-5: This comment represents a conclusion to the letter, requests consideration of the comments and requests the proposed Community Center be located elsewhere. In accordance with Section 15074(b) of the CEQA Guidelines, the Santee City Council shall consider the Draft MND together with any comments received during public review during its decision-making process for the proposed Community Center. With respect to an alternative location, the City of Santee owns the site, and the proposed Community Center is consistent with the site's TC zoning and land use designation. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Comment Letter I4: Megan Powell, May 27, 2025

I4

-----Original Message-----
From: Megan Powell <megan.brook.powell@gmail.com>
Sent: Tuesday, May 27, 2025 12:29 PM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>
Subject: Santee Community Center

to: The Planning & Building Department of the City of Santee

I4-1 I am a homeowner in Riverwalk who faces the parking lot of the YMCA. I wanted to express my concern over the proposed Santee community center plan. I have only lived here for about one year and when I saw the plan it seemed concerning. From the year I have lived here, I have noticed quite a bit of traffic from events that are already taking place. The street parking is full most of the time I think it would be a shame to get rid of the grass area in front of the YMCA for more parking. The community uses that grass area to play with their dogs or families playing frisbee or kicking around the soccer ball. In addition, there are no bus lines close by for people to get to this community center. From my experience, this is a very congested area already with so much happening at the Sportsplex, YMCA, and all of the sporting events behind the YMCA. Currently, the YMCA parking lot seems to be an overflow from all of those sporting events. To add a community center on top of that would create more congestion in the parking lots and along the street.

I4-2
I4-3
I4-4

I4-5 I'm also concerned about an emergency plan because Riverwalk is a 2 lane road leading to all of these different events/sports. If there was a large event at this community center, what is the plan for the evacuation of all of the homes in Riverwalk as well as for the people attending these events?

I4-6 I would not vote for this community center in that location.

Thank you for your time,
Megan Powell

I4-1: This comment addresses concern over traffic from existing events. Sections 2.2, *Environmental Setting*, and 3.13, *Noise*, of the Draft Mitigated Negative Declaration (Draft MND) acknowledge that there are existing events that currently occur in the project vicinity, and are likely to continue, including:

- The City's Annual 4th of July fireworks celebration in the Town Center Community Park East site
- Summer Concert series in the Town Center Community Park East site
- "Movies in the Park" during summer months in the Town Center Community Park East site
- Soccer, football and lacrosse sports events in the Town Center Community Park East site
- Existing Cameron Family YMCA special events
- Sportsplex USA's softball tournaments and indoor soccer tournaments

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I4-2: This comment addresses parking and the loss of the grass field north of the Cameron Family YMCA. With regard to parking, the proposed Community Center would reconfigure the existing parking lot into the new "east" parking lot, and the existing field north of the Cameron Family YMCA building would become the new "west" parking lot. Section 2.3.1, *Proposed Project*, of the Draft MND indicates that there would be a combined total of 275 regular stalls and 12 accessible stalls between the two parking lots. Currently, the Cameron Family YMCA parking lot is underutilized, and is only at capacity with large events. With the 62 parking spaces added along Park Center Drive through a restriping program approved at City Council on April 9, 2025, there would be a net gain of 81 parking spaces. In addition, there are other underutilized parking areas within the Town Center, including the 206-space overflow parking lot south of the community center, which is directly connected to the Community Center via a pedestrian bridge. Therefore, as stated in Section 2.3.1 of the Draft MND, there will be sufficient parking to accommodate the proposed Community Center along with the Cameron Family YMCA.

With respect to the grass area that will be converted to parking, as stated in Section 2.2, *Environmental Setting*, of the Draft MND, the northwest quadrant of

the project site (i.e., the grassy field) was previously graded for development of the Town Center Community Park and was a temporary gravel parking lot for the Cameron Family YMCA when it was constructed in 2003. As part of the Town Center Community Park Phase 2 project completed in 2010, the gravel parking lot was converted into a grassy field when the current permanent parking lot was constructed. The grassy field was originally planned to be the location for the proposed Community Center. However, the location for the proposed Community Center was moved south, adjacent to the east side of the Cameron Family YMCA, to be further away from adjacent residential developments.

The grassy field is owned by the City of Santee and zoned Town Center (TC). The proposed use including parking is allowed by the zone and land use designation of the site. Santee's Community Services Department is working with the Cameron Family YMCA to identify alternative locations for the summer camps. As discussed in Section 2.3.2 of the MND, the proposed Community Center will offer event space that will benefit the community including senior, youth, and general classes such as outdoor recreation, art, dance, martial arts, music, gardening, cooking, flower arranging, language, historical, and cultural classes; training classes such as CPR, fitness,

safety, dog training, and babysitter training classes, and other classes needed for the community.

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I4-3: This comment states that there are no bus lines close to the proposed Community Center site. Section 3.17, *Transportation*, of the Draft MND addresses public transportation. As stated under threshold (a), transit service is provided to the area via Metropolitan Transit Services. The nearest bus stop is located just 230 feet south of the Riverwalk Drive/Cuyamaca Street intersection, which is a walking distance of 0.5 mile from the project site. The Santee Transit Center, which serves the Green Line (now Copper Line) Trolley, is located in the Santee Trolley Square shopping mall, which is a walking distance of 1.2 miles from the project site. A description of the nearest transit service is shown below:

- The Green Line (now Copper Line) Trolley runs between the Santee Transit Center and El Cajon then connects to the 12th and Imperial Avenue Transit Center in Downtown San Diego. There are 27 stops along this route, with 15-minute

headways on the weekdays and 30-minute headways on the weekends. During weekends, headways are 15–30 minutes during the peak periods.

In addition to public transit, the City provides Class II bike lanes on Mast Boulevard, Cuyamaca Street, and Magnolia Avenue, and Class III bike routes on Riverwalk Drive. Per the City's Mobility Element, Class III bike routes are planned along Park Center Drive between Mast Boulevard and Riverwalk Drive. Sidewalks are provided on both sides of the roadways within the study area with the exception of Park Center Drive south of Riverwalk Drive. In addition, a sidewalk connection is provided between the project site and the Santee Transit Center and nearby bus stops.

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I4-4: This comment addresses existing congestion in parking lots and along the street from events at the Sportsplex, Cameron Family YMCA and behind the YMCA. See responses to I4-1 and I4-2. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information

provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I4-5: This comment asks about the emergency evacuation plan for event attendees and residents along Riverwalk Drive with existing events and a large event at the proposed Community Center. As addressed in threshold (f) of Section 3.9, *Hazards and Hazardous Materials*, of the Draft MND, the project site is located in an existing developed area with access to major roadways that would allow for emergency evacuation. Riverwalk Drive and Park Center Drive are built to City standards that accommodate emergency access. Riverwalk Drive leads to Cuyamaca Street to the west and Park Center Drive to the east of the project site. Both Cuyamaca Street and Park Center Drive connect to Mast Boulevard and eventually to Magnolia Avenue which are anticipated evacuation routes. Further, the proposed Community Center would comply with all design recommendations and requirements for construction and operations, including large events, as provided by the Santee Fire Department to ensure that emergency access meets City standards. Therefore, the proposed Community Center would not impair implementation of or physically interfere with emergency response, and impacts would be less than significant. This comment does not raise a significant environmental issue regarding the adequacy or

accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I4-6: This comment does not support the Community Center in the proposed location. With respect to an alternative location, the City of Santee owns the site, and the proposed Community Center is consistent with the site's TC zoning and land use designation. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Comment Letter I5: Michele Abbott, May 27, 2025

I5

-----Original Message-----
From: Michele Abbott <abbottsgang@gmail.com>
Sent: Tuesday, May 27, 2025 1:22 PM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>
Subject: Santee Community Center

I5-1

I am writing to oppose the current projected location of the Santee Community Center. Riverwalk Dr is already congested enough with traffic from the numerous events held within this vicinity that negatively impact those of us that reside in the Riverwalk Community. I have lived in this community over 17 years and the green spaces just keep dwindling. My requests for much needed speed bumps on Riverwalk Dr have been declined. Crossing any intersection on foot here continues to be dangerous with all the speeding vehicles that either blow through stop signs or slow and gun it without a full stop. Our son has been hit by a hit and run driver in a crossing when the driver failed to stop at the stop sign. This center only brings more traffic and noise to this already congested area and we loose what little grass area we have left when they turn the green area in front of the YMCA into a parking lot.

R/

Michele Abbott

I5-1: This comment presents opposition to the proposed Community Center based on traffic, noise and the loss of the grass area north of the Cameron Family YMCA. Transportation is addressed in Section 3.17, *Transportation*, and Appendix G, *Transportation Analysis*, of the Draft Mitigated Negative Declaration (Draft MND). As of July 1, 2020, auto delay, level of service (LOS) and other similar measures of vehicular roadway capacity and traffic congestion were eliminated as the basis for determining significant transportation impacts under CEQA. The intersection analyses in the MND use LOS for informational purposes. Table 6-1 of Appendix G shows that all the study area intersections are calculated to operate at Level of Service (LOS) D or better during both the AM and PM peak hours. The four intersections along Riverwalk Drive currently operate at LOS C or better. According to Table 9-1 of Appendix G, under the Existing + Cumulative Projects (projects in the study area that could be constructed and occupied between January 2024 and projected opening year of the project (Fall of 2026)) + Project Conditions, all study area intersections are calculated to operate at LOS D or better during the morning and afternoon peak hours. LOS D is considered an acceptable level of intersection operation per the City of Santee's Mobility Element. Further, the existing

intersection at Riverwalk Drive and Park Center Drive is stop-controlled and has appropriate signage and roadway striping. Based on the above intersection analyses conclusions, the roads adjacent to the project site will operate at acceptable levels of service.

Noise is addressed in Section 3.13, *Noise*, and Appendix H of the Draft MND. The analysis addressed short-term construction noise, off-site project-attributed transportation noise and off-site project-attributed noise from operations. The analysis concluded:

- Construction Noise: While there would be an audible change in the noise environment during construction of the proposed Community Center, the noise levels would be temporary and the predicted levels would be less than the 80 dBA 8-hour L_{eq} Federal Transit Administration (FTA)-based standard (see Table 3.13-2 in the MND). Noise produced from the construction of the proposed Community Center at the nearest single-family residential noise-sensitive receptor to the north (approximately 80 feet from the project boundary) would result in a less than-significant impact. Construction noise at the Woodglen Vista Creek protected open space immediately south of the project site was also evaluated. The analysis concluded that the construction noise levels for

the construction activity phases would exceed the 60 dBA 1-hour Leq construction noise limit for sensitive habitat, and therefore mitigation was required. Section 5.04 of the Municipal Code (MC), *Noise Abatement and Control*, limits the hours and days of construction and prohibits construction on Sundays or City recognized holidays. Construction violations can be reported to the City's Planning, Building and Engineering Department (619-258-4100) or a Service Request can be entered on the City's website (https://www.cityof santeeca.gov).

- Transportation Noise: The change in roadway noise levels at the nearest residential noise-sensitive receptors was predicted for four conditions: existing, existing plus project, cumulative conditions, and cumulative plus project. Traffic noise levels were calculated for roadway segments bounded by intersections within the project area including Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, Riverwalk Drive from Verde Vista Lane to Canopy Park Lane and Riverwalk Drive from Canopy Park Lane to Park Center Drive. Where ambient sound levels are below 60 dBA Ldn, the highest predicted change in traffic noise level would be 1.3 dBA Ldn on Riverwalk Drive from Verde Vista Lane to Canopy Park Lane, which is less than the Federal Interagency Committee on Noise (FICON) 5 dBA threshold and would be

considered imperceptible to the average person ["Federal Agency Review of Selected Airport Noise Analysis Issues", Federal Interagency Committee on Noise, August 1992]. On Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, the highest predicted change in traffic noise level would be 0.7 dBA Ldn, which is less than the FICON 3 dBA threshold. Potential impacts at existing off-site noise-sensitive land uses along Riverwalk Drive between Cuyamaca Street and Park Center Drive and with respect to project-generated changes to future traffic noise would be less than significant.

- Operational Noise: Noise impacts from several operational scenarios, each representing one full hour of on-site activities at the proposed Community Center were studied at six sensitive receptor sites (See Table 3.13-4 and Figures 6 through 10 of the Draft MND). Of these sensitive receptor sites five represent residences to the north and east of the site. The results presented in Table 3.13-4 suggest that project operation noise, under each modeled operation scenario, is anticipated to be less than 65 dBA Ldn at the nearest existing noise-sensitive receptors and thereby comply with the operational noise threshold (65 dBA Ldn) established in Section 5.04.090 of the City's Noise Ordinance. Therefore, impacts from on-site operational noise would be less than significant.

With respect to the grassy areas north of the Cameron Family YMCA, as stated in Section 2.2, *Environmental Setting*, of the Draft MND, the northwest quadrant of the site (i.e., the grassy field) was previously graded for development of the Town Center Community Park and was a temporary gravel parking lot for the Cameron Family YMCA when it was constructed in 2003. As part of the Town Center Community Park Phase 2 project completed in 2010, the gravel parking lot was converted into a grassy field when the current permanent parking lot was constructed. The grassy field was originally planned to be the location for the proposed Community Center. However, the location for the proposed Community Center was moved south, adjacent to the east side of the Cameron Family YMCA, to be further away from adjacent residential developments.

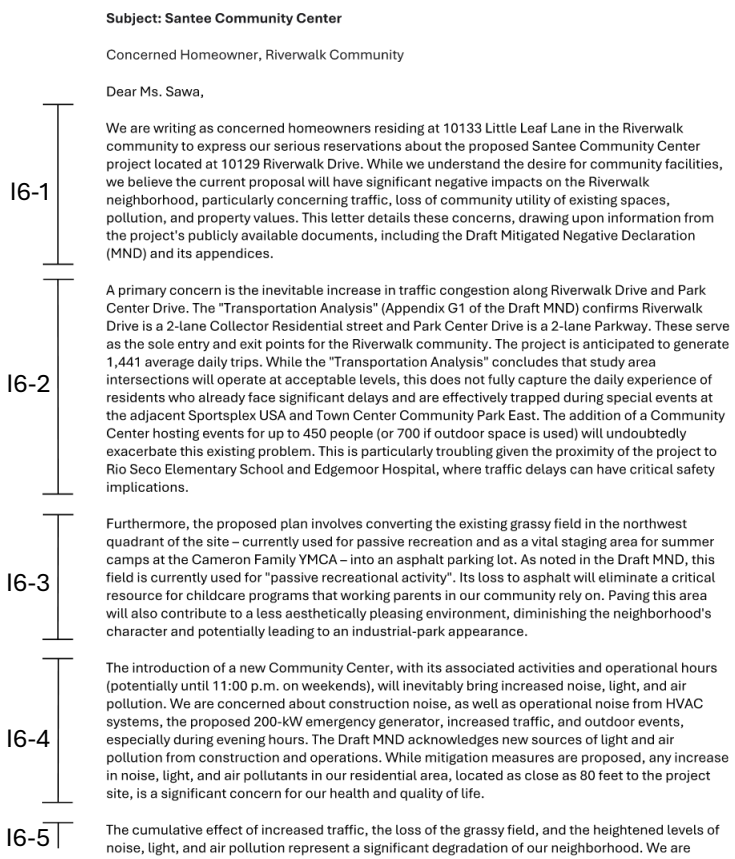
The grassy field is owned by the City of Santee and zoned Town Center (TC). The proposed use including parking is allowed by the zone and land use designation of the site. Santee's Community Services Department is working with the Cameron Family YMCA to identify alternative locations for the summer camps. As discussed in Section 2.3.2 of the MND, the proposed Community Center will offer event space that will benefit the community including senior, youth, and general classes such as outdoor

recreation, art, dance, martial arts, music, gardening, cooking, flower arranging, language, historical, and cultural classes; training classes such as CPR, fitness, safety, dog training, and babysitter training classes, and other classes needed for the community.

This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Comment Letter I6: Hammon Dale and Nina Humphries, May 28, 2025

I6



Subject: Santee Community Center

Concerned Homeowner, Riverwalk Community

Dear Ms. Sawa,

I6-1 We are writing as concerned homeowners residing at 10133 Little Leaf Lane in the Riverwalk community to express our serious reservations about the proposed Santee Community Center project located at 10129 Riverwalk Drive. While we understand the desire for community facilities, we believe the current proposal will have significant negative impacts on the Riverwalk neighborhood, particularly concerning traffic, loss of community utility of existing spaces, pollution, and property values. This letter details these concerns, drawing upon information from the project's publicly available documents, including the Draft Mitigated Negative Declaration (MND) and its appendices.

I6-2 A primary concern is the inevitable increase in traffic congestion along Riverwalk Drive and Park Center Drive. The "Transportation Analysis" (Appendix G1 of the Draft MND) confirms Riverwalk Drive is a 2-lane Collector Residential street and Park Center Drive is a 2-lane Parkway. These serve as the sole entry and exit points for the Riverwalk community. The project is anticipated to generate 1,441 average daily trips. While the "Transportation Analysis" concludes that study area intersections will operate at acceptable levels, this does not fully capture the daily experience of residents who already face significant delays and are effectively trapped during special events at the adjacent Sportsplex USA and Town Center Community Park East. The addition of a Community Center hosting events for up to 450 people (or 700 if outdoor space is used) will undoubtedly exacerbate this existing problem. This is particularly troubling given the proximity of the project to Rio Seco Elementary School and Edgemoor Hospital, where traffic delays can have critical safety implications.

I6-3 Furthermore, the proposed plan involves converting the existing grassy field in the northwest quadrant of the site – currently used for passive recreation and as a vital staging area for summer camps at the Cameron Family YMCA – into an asphalt parking lot. As noted in the Draft MND, this field is currently used for "passive recreational activity". Its loss to asphalt will eliminate a critical resource for childcare programs that working parents in our community rely on. Paving this area will also contribute to a less aesthetically pleasing environment, diminishing the neighborhood's character and potentially leading to an industrial-park appearance.

I6-4 The introduction of a new Community Center, with its associated activities and operational hours (potentially until 11:00 p.m. on weekends), will inevitably bring increased noise, light, and air pollution. We are concerned about construction noise, as well as operational noise from HVAC systems, the proposed 200-kW emergency generator, increased traffic, and outdoor events, especially during evening hours. The Draft MND acknowledges new sources of light and air pollution from construction and operations. While mitigation measures are proposed, any increase in noise, light, and air pollutants in our residential area, located as close as 80 feet to the project site, is a significant concern for our health and quality of life.

I6-5 The cumulative effect of increased traffic, the loss of the grassy field, and the heightened levels of noise, light, and air pollution represent a significant degradation of our neighborhood. We are

I6-1: This comment presents opposition to the proposed Community Center project based on traffic, loss of community utility of parking spaces, pollution, and property values. The comment is introductory and specific comments are addressed in the subsequent responses. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft Mitigated Negative Declaration (Draft MND) for the proposed Community Center. Therefore, no further response is required.

I6-2: This comment addresses traffic congestion along Riverwalk Drive and Park Center Drive particularly during Community Center events, with emphasis on the critical safety implications from traffic delays near Rio Seco Elementary School and Edgemoor Hospital. Intersection analyses indicate the efficiency of the road system. As cited in the comment, traffic was addressed in Appendix G, *Transportation Analysis*, and Section 3.17, *Transportation*, of the Draft MND. Intersection analyses indicate the efficiency of the road system. Table 6-1 of Appendix G shows that all the study area intersections are calculated to operate at Level of Service (LOS) D or better during both the AM and PM peak hours. The four intersections along Riverwalk Drive currently operate at LOS C or better.

I6-5 cont. concerned that such changes, indicative of poor urban design in a residential setting, will inevitably lead to a decrease in property values for homeowners in the Riverwalk community.

I6-6 Finally, we question if this is the most prudent use of public funds. Many Santee residents would argue that existing infrastructure needs, such as the repair and upgrade of Santee's streets, or the development of currently lacking recreation facilities like indoor basketball courts, would be a more beneficial investment for the broader community at this time.

I6-7 In conclusion, while we appreciate the City's efforts to provide community resources, the Santee Community Center project at the currently proposed location, creates significant threats to the Riverwalk community's traffic flow, recreational utility of current spaces, environmental quality, and property values. We urge the Planning & Building Department to seriously reconsider the scale and design of this project, to explore alternative locations, and to prioritize the more pressing infrastructure needs of Santee.

I6-8 We thank you for your time and consideration of these concerns and am sure the Riverwalk community would welcome the opportunity for further dialogue.

Sincerely,

Hammon D. Humphries

Hammon Dale & Nina Humphries

10133 Little Leaf Lane

Santee, CA 92071

According to Table 9-1 of Appendix G, under the Existing + Cumulative Projects (projects in the study area that could be constructed and occupied between January 2024 and projected opening year of the project (Fall of 2026)) + Project Conditions, all study area intersections are calculated to operate at LOS D or better during the morning and afternoon peak hours. LOS D is considered an acceptable level of intersection operation per the City of Santee General Plan. Based on the above intersection analyses conclusions, the roads adjacent to the project site will operate at acceptable levels of service. As noted in response to comment I2-2, for events that impact roadways or large-scale events, traffic control plans and temporary use permits will be required. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I6-3: This comment states that the loss of the grassy field would impact passive recreational activity and childcare programs and would contribute to a less aesthetically pleasing environment. As stated in Section 2.2, *Environmental Setting*, of the Draft MND, the northwest quadrant of the site (i.e., the grassy field) was previously graded for development of the Town Center Community Park and was a temporary gravel

parking lot for the Cameron Family YMCA when it was constructed in 2003. As part of the Town Center Community Park Phase 2 project completed in 2010, the gravel parking lot was converted into a grassy field when the current permanent parking lot was constructed. The grassy field was originally planned to be the location for the proposed Community Center. However, the location for the proposed Community Center was moved south, adjacent to the east side of the Cameron Family YMCA, to be further away from adjacent residential developments.

The grassy field is owned by the City of Santee and zoned Town Center (TC). The proposed Community Center, including parking, is allowed by the zone and land use designation of the site. Santee's Community Services Department is working with the Cameron Family YMCA to identify alternative locations for the summer camps. As discussed in Section 2.3.2 of the MND, the proposed Community Center will offer event space that will benefit the community including senior, youth, and general classes such as outdoor recreation, art, dance, martial arts, music, gardening, cooking, flower arranging, language, historical, and cultural classes; training classes such as CPR, fitness, safety, dog training, and babysitter training classes, and other classes needed for the community.

Aesthetics is addressed in Section 3.1, *Aesthetics*, of the Draft MND. The California Environmental Quality Act (CEQA) significance thresholds address visual quality or character of public views in non-urbanized areas and urbanized areas. Since this site is in an urbanized area, the significance threshold focuses on whether or not the project would "conflict with applicable zoning or other regulations governing scenic quality" (see threshold (c) in Section 3.1). As addressed under this threshold, the proposed Community Center site is zoned TC, and Community Centers are a permitted use in this zone. Implementation of the project would not conflict with applicable zoning. Therefore, impacts would be less than significant. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I6-4: This comment raises concern over health and quality of life due to potential impacts from noise, light, air pollution and traffic. The comment notes that the Draft MND acknowledges new sources of light and air pollution from construction and operation.

Noise is addressed in Section 3.13, *Noise*, and Appendix H, *Noise Supporting Documentation*, of the Draft MND. The analysis addressed short-term

construction noise, off-site project-attributed transportation noise and off-site project-attributed noise from operations. The analysis concluded:

- Construction Noise: While there would be an audible change in the noise environment during construction of the proposed Community Center, the noise levels would be temporary and the predicted levels would be less than the 80 dBA 8-hour L_{eq} Federal Transit Administration (FTA)-based standard (see Table 3.13-2 in the MND). Noise produced from the construction of the proposed Community Center at the nearest single-family residential noise-sensitive receptor to the north (approximately 80 feet from the project boundary) would result in a less than-significant impact. Construction noise at the Woodglen Vista Creek protected open space immediately south of the project site was also evaluated. The analysis concluded that the construction noise levels for the construction activity phases would exceed the 60 dBA 1-hour Leq construction noise limit for sensitive habitat, and therefore mitigation was required. Section 5.04 of the Municipal Code (MC), *Noise Abatement and Control*, limits the hours and days of construction and prohibits construction on Sundays or City recognized holidays. Construction violations can be reported to the City's Planning, Building and Engineering

Department (619-258-4100) or a Service Request can be entered on the City's website (https://www.cityof santeeca.gov).

- Transportation Noise: The change in roadway noise levels at the nearest residential noise-sensitive receptors was predicted for four conditions: existing, existing plus project, cumulative conditions, and cumulative plus project. Traffic noise levels were calculated for roadway segments bounded by intersections within the project area including Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, Riverwalk Drive from Verde Vista Lane to Canopy Park Lane and Riverwalk Drive from Canopy Park Lane to Park Center Drive. Where ambient sound levels are below 60 dBA Ldn, the highest predicted change in traffic noise level would be 1.3 dBA Ldn on Riverwalk Drive from Verde Vista Lane to Canopy Park Lane, which is less than the Federal Interagency Committee on Noise (FICON) 5 dBA threshold and would be considered imperceptible to the average person ["Federal Agency Review of Selected Airport Noise Analysis Issues", Federal Interagency Committee on Noise, August 1992]. On Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, the highest predicted change in traffic noise level would be 0.7 dBA Ldn, which is less than the FICON 3 dBA threshold. Potential impacts from project-

generated changes to future traffic noise at existing off-site noise-sensitive land uses along Riverwalk Drive between Cuyamaca Street and Park Center Drive would be less than significant.

- Operational Noise: Noise impacts from several operational scenarios, each representing one full hour of on-site activities at the proposed Community Center were studied at six sensitive receptor sites (See Table 3.13-4 and Figures 6 through 10 of the Draft MND). Of these sensitive receptor sites five represent residences to the north and east of the site. The results presented in Table 3.13-4 suggest that project operation noise, under each modeled operation scenario, including emergency generator testing and operating heating, ventilation and air conditioning (HVAC) systems, is anticipated to be less than 65 dBA Ldn at the nearest existing noise-sensitive receptors and thereby comply with the operational noise threshold (65 dBA Ldn) established in Section 5.04.090 of the City's Noise Ordinance. Therefore, impacts from on-site operational noise would be less than significant.

Threshold (d) of Section 3.1, *Aesthetics*, of the Draft MND addresses lighting. The analysis acknowledges that the proposed Community Center would introduce nighttime lighting that would be typical of a Community Center and similar to the night lighting

from the existing Cameron Family YMCA building to the west. The analysis addresses lighting from construction, operations and traffic and proposed building materials. Project construction would be limited to the City's allowable construction hours of 7;00a.m. to 7:00 p.m. and is not expected to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects. Project operations would generate lighting from two primary sources: lighting from Community Center building interiors that would pass through windows and lighting from exterior sources (e.g., street lighting, parking lot lighting, vehicle lights, building illumination, security lighting and landscape lighting). Light spillover, trespass, and potential glare from project lighting are regulated by Section 13.30.030 (B) of the Santee Municipal Code. The code requires that all lights and illuminated signs be shielded or directed to not cause glare on adjacent properties or motorists. Exterior lighting would be shielded and directed to not cause glare on adjacent properties or motorists. With regard to lighting associated with traffic, light associated with additional vehicle trips generated by the project would be similar in character to what is currently generated by vehicles travelling along the existing roadway network after dark. Although the project could operate until 11pm in some cases, vehicles exiting the property would not create a significant concentrated source of light.

Regarding exterior glare sources (e.g., brightly colored building facades, metal surfaces, and reflective glass), glass would be used for the building's exterior. Glass windows would have a relatively small surface area. However, the main building entrance would feature tall glass panels to provide natural light. Any resulting glare from these windows would be significantly reduced from public view because the building would be set back from Riverwalk Drive and a parking lot would be located between the proposed building and the road. The analysis concluded that the project would result in less-than-significant impacts related to light, glare, and nighttime views.

With respect to pollution, Section 3.3, *Air Quality*, and Tables 3.3-1 and 3.3-2 of the Draft MND address construction emissions. The analysis concludes that maximum daily construction emissions would not exceed the SDAPCD significance thresholds for VOCs, NOx, CO, sulfur oxide (SOx), PM10, or PM2.5 during construction; short-term construction air quality impacts would be less than significant. Table 3.3-3 and 3.3.4 address maximum area, energy, mobile source, and stationary source emissions associated with project operation (year 2026). Maximum daily operational emissions from the project would not exceed the SDAPCD significance thresholds for VOC, NOx, CO, SOx, PM10, or PM2.5; long-term air quality impacts would be less than significant.

With respect to traffic, please see response to comment I6-2. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I6-5: This comment summarizes the comments raised in I6-2 through I6-4 and degradation of property values. See responses to comments I6-2 through I6-4. Property values are not an environmental issue and therefore are not required to be addressed in a CEQA document. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I6-6: This comment questions whether the proposed Community Center is the most prudent use of public funds. The proposed Community Center is funded primarily by Public Facility and Park In Lieu Developer Impact Fees, and the City already owns the site. Funding is not an environmental issue and therefore is not required to be addressed in a CEQA document. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND

for the proposed Community Center. Therefore, no further response is required.

I6-7: This comment summarizes the previous comments and recommends reconsideration of the scale, design and location of the proposed Community Center. Please see responses to comments I6-2 through I6-6. With respect to an alternative location, the City of Santee owns the site, and the proposed Community Center is consistent with the site's TC zoning and land use designation. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I6-8: This comment thanks the City for consideration of the concerns raised in the comment letter. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Comment Letter I7: Elie George Arslan (2), May 28, 2025

I7

From: Elie Arslan <elie_arslan@yahoo.com>
Sent: Wednesday, May 28, 2025 9:25 AM
To: Marni Borg; Sandi Sawa
Subject: Fw: Riverwalk Resident concerns about Santee Community Center
Attachments: IMG_2737.jpg; IMG_2738.jpg; IMG_2739.jpg

Hi,

I7-1

I am forwarding this email below (with its photos) to Marni as well since I haven't received any reply from Sandi Sawa.

What are you going to do with the concerns the residents have? The main concerns I listed in the email forwarded below are traffic, parking, noise and environmental factors such as pollution.

A response from the city of Santee representatives to its residents would be appreciated rather than being ignored!

Regards,
Elie Arslan

----- Forwarded Message -----
From: Elie Arslan <elie_arslan@yahoo.com>
To: ssawa@cityofsanteeca.gov <ssawa@cityofsanteeca.gov>
Cc: Rose Arslan <rose.arslan@hotmail.com>
Sent: Tuesday, May 20, 2025 at 11:05:34 PM PDT
Subject: Riverwalk Resident concerns about Santee Community Center

Hello Sandi,

My wife and I received the Notice of Intent letter in the mail regarding the Santee Community Center plan and we are not happy with the plan due to several reasons.

The main reasons are the proximity to our house (our row home is just across the street), the noise pollution and traffic is already bad. Traffic has already got worse over the last few years when compared to 13-14 years ago, when we first purchased our home in the Riverwalk community. The parking across the street is full in the weekends and when there are events, adding a community center building will just make things worse.

A highly concerning reason is the environmental factor (pollution generated during construction and noise). In addition, some residents work from home (work remotely) and this will be distracting. I work from home 1-2 times a week. Sometimes I have virtual TEAMS calls with the FDA, consultants and other regulatory agencies.

Another concerning reason is traffic congestion and parking. Traffic is already bad on Riverwalk Drive in the mornings and late afternoons and parking is limited. See attached photos below which were taken on a Saturday (on a weekend).

I7-1: This resends comment letter I2 and asks what the City will do with concerns raised by residents. Please see responses to comments I2-1 through I2-7. In addition, in accordance with Section 15074(b) of the CEQA Guidelines, the Santee City Council shall consider the Draft Mitigated Negative Declaration (Draft MND) together with any comments received during public review during its decision-making process for the proposed Community Center. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

The last concerning reason is the view we will have from our house. Currently, the view is some of the YMCA parking and some trees. We can see some of the hills, trees etc.

We like our community and our neighbors. I've lived in Riverwalk for almost 14 years. I suggest you re-consider another location for the Santee Community Center. If you cannot build in another location, I highly recommend you have planned measures for controlling traffic, controlling noise from construction, future noise from events (how you will mitigate and have controls) and well as minimal to no environmental impacts.

Feel free to reach out if you have any questions.

Regards,
Mr. Elie George Arslan
Cellular Phone (909) 855-6415

Comment Letter I8: Lisa and Robert Albon, May 28, 2025

I8

From: Lisa & Robert Albon <albons@gmail.com>
Sent: Wednesday, May 28, 2025 4:53 PM
To: Sandi Sawa <SSawa@CityofSanteeCa.gov>
Subject: Santee Community Center

Dear Sandi,

I8-1 I am writing to express my concerns over the plan to build a community center in the parking lot of the YMCA, an already busy facility pretty much every day.

I8-2 My family purchased a home in the Riverwalk community in 2009, it is the only community across from the YMCA and Sportsplex. When the Riverwalk community was planned and built, it was done so with the approval of the city of Santee. In order to accommodate more homes and make more money the streets of our community were built narrow, the majority of our three story homes don't have driveways big enough to hold vehicles and we don't have the room to put our own vehicles or for guests to park in front of the two story homes. We have many homes with more than two drivers and not enough additional spaces to accommodate their vehicles. In the past sixteen years the lack of parking space has always been an issue, resulting in residents forced to park out on Riverwalk Drive.

I8-3 My major concern is traffic, with only two lanes, one going in each direction, not only on Riverwalk Drive but also Park Center. I had an experience on Riverwalk Drive where I got stuck as the traffic wasn't moving, there was a city planned event in the parking lot in back of the YMCA and so many people showed up in their vehicles bringing the traffic to a complete stop for quite a while. That day someone in our community also had a medical emergency and had to go through an easement to be picked up and transported. If there's an emergency, such as a fire, how is everyone supposed to evacuate from our community, the YMCA, the Sportsplex and the hospital? Not to mention a community center and an additional housing in the plans behind the YMCA, with only two lane roads for the surrounding area? Does the city of Santee expect people to abandon their vehicles and just try and run out like what happened in LA?

I8-4 It's great that we have the park area and events get to be held there, but over the years more and more people from all over attend these events with more and more cars. Also all the traffic when there's a tournament going on at the Sportsplex. We make it a point to not go anywhere in our cars as these events are going on and especially wrapping up, for fear we will get stuck in the traffic as it takes quite a while to clear the area, but again what if there was an emergency? These events also typically end at a reasonable hour but there's been a few times where a situation has occurred at these large gatherings and we've had constant noise until very late at night, making it impossible to sleep. Is the community center going to make a point to close at 8pm like the YMCA? Some of the events that have been brought up at the city council meetings sound like they may go late, since it will probably be open every day/night are the people leaving going to be considerate of the Riverwalk residents across the street?

I8-5

I8-1: This comment is introductory and specific comments are addressed in the subsequent responses. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft Mitigated Negative Declaration (Draft MND) for the proposed Community Center. Therefore, no further response is required.

I8-2: This comment describes the lack of parking in the existing Riverwalk community. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I8-3: This comment explains that Riverwalk Drive and Park Center Drive are two-lane roads and questions the ability to evacuate from the community, Cameron Family YMCA, Sportsplex, Edgemoor Hospital and proposed Community Center and additional housing. As addressed under threshold (f) of Section 3.9, *Hazards and Hazardous Materials*, of the Draft MND, the project site is located in an existing developed area with access to major roadways that would allow for emergency evacuation. Riverwalk Drive and Park Center Drive are built to City standards that can

I8-6

In closing, it would seem if the city council was really concerned about how they deliver services to its residents and if in fact this community center is for its residents it should be built somewhere with more than one lane in and out that's easily accessible to all (bus lines for those that don't drive) and have the room to expand with Santee's constant growing population.

If I could offer a suggestion, the lot approved for Karl Strauss would meet the city's qualifications of being in the town center, overlooking the riverbed (might actually be less mosquitos for the patio dining) and connecting to the trails. It's also a 10,000 acre lot so there's plenty of room to add on (Mayor Minto's new library) as more funds become available.

Thank you for your time,
Lisa & Robert Albon
(619) 980-7072
10151 Little Leaf Ln
Santee, CA 92071

accommodate emergency access. Riverwalk Drive leads to Cuyamaca Street to the west and Park Center Drive to the east of the project site. Both Cuyamaca Street and Park Center Drive connect to Mast Boulevard and eventually to Magnolia Avenue, which are anticipated evacuation routes. Further, the proposed Community Center would comply with all design recommendations and requirements for construction and operations, including large events, as provided by the Santee Fire Department to ensure that emergency access meets City standards. Therefore, the project would not impair implementation of or physically interfere with emergency response, and impacts would be less than significant. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I8-4: This comment questions the ability to evacuate in an emergency. See response to comment I8-3. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I8-5: This comment addresses noise, particularly at night, and hours of operation as compared to the Cameron Family YMCA. Noise is addressed in Section 3.13, *Noise*, and Appendix H, *Noise Supporting Documentation*, of the Draft MND. The analysis addressed short-term construction noise, off-site project-attributed transportation noise and off-site project-attributed noise from operations. The analysis concluded:

- Construction Noise: While there would be an audible change in the noise environment during construction of the proposed Community Center, the noise levels would be temporary and the predicted levels would be less than the 80 dBA 8-hour L_{eq} Federal Transit Administration (FTA)-based standard (see Table 3.13-2 in the MND). Noise produced from the construction of the proposed Community Center at the nearest single-family residential noise-sensitive receptor to the north (approximately 80 feet from the project boundary) would result in a less than-significant impact. Construction noise at the Woodglen Vista Creek protected open space immediately south of the project site was also evaluated. The analysis concluded that the construction noise levels for the construction activity phases would exceed the 60 dBA 1-hour Leq construction noise limit for sensitive habitat, and therefore mitigation was

required. Section 5.04 of the Municipal Code (MC), *Noise Abatement and Control*, limits the hours and days of construction and prohibits construction on Sundays or City recognized holidays. Construction violations can be reported to the City's Planning, Building and Engineering Department (619-258-4100) or a Service Request can be entered on the City's website (https://www.cityof santeeca.gov).

- Transportation Noise: The change in roadway noise levels at the nearest residential noise-sensitive receptors was predicted for four conditions: existing, existing plus project, cumulative conditions, and cumulative plus project. Traffic noise levels were calculated for roadway segments bounded by intersections within the project area including Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, Riverwalk Drive from Verde Vista Lane to Canopy Park Lane and Riverwalk Drive from Canopy Park Lane to Park Center Drive. Where ambient sound levels are below 60 dBA Ldn, the highest predicted change in traffic noise level would be 1.3 dBA Ldn on Riverwalk Drive from Verde Vista Lane to Canopy Park Lane, which is less than the Federal Interagency Committee on Noise (FICON) 5 dBA threshold and would be considered imperceptible to the average person ["Federal Agency Review of Selected Airport Noise Analysis Issues", Federal

Interagency Committee on Noise, August 1992]. On Riverwalk Drive from Cuyamaca Street to Verde Vista Lane, the highest predicted change in traffic noise level would be 0.7 dBA Ldn, which is less than the FICON 3 dBA threshold. Potential impacts from project-generated changes to future traffic noise at existing off-site noise-sensitive land uses along Riverwalk Drive between Cuyamaca Street and Park Center Drive would be less than significant.

- Operational Noise: Noise impacts from several operational scenarios, each representing one full hour of on-site activities at the proposed Community Center were studied at six sensitive receptor sites (See Table 3.13-4 and Figures 6 through 10 of the Draft MND). Of these sensitive receptor sites five represent residences to the north and east of the site. The results presented in Table 3.13-4 suggest that project operation noise, under each modeled operation scenario, is anticipated to be less than 65 dBA Ldn at the nearest existing noise-sensitive receptors and thereby comply with the operational noise threshold (65 dBA Ldn) established in Section 5.04.090 of the City's Noise Ordinance. Therefore, impacts from on-site operational noise would be less than significant.

With respect to hours of operation, as stated in Section 2.3.2, *Proposed Operation*, of the Draft MND, the Community Center would operate year-round, Sunday through Thursday 7:00 a.m. to 10:00 p.m. and Fridays and Saturdays 7:00 a.m. to 11:00 p.m. The evening hours of operation extend past the Cameron Family YMCA's hours due to the types of events and activities that are proposed at the Community Center. See Section 2.3.2 in the Draft MND for anticipated events to be held at the Community Center. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

I8-6: This comment suggests the proposed Community Center should be located at an alternative location and suggests the Karl Strauss site, which is located at the northeast corner of Cuyamaca Street and Town Center Parkway (Assessor's Parcel Number (APN) 381-050-64-00). The City of Santee owns the proposed project site. The City does not own the Karl Strauss site. Furthermore, Community Center has always been planned for the proposed site. It was originally planned for the grassy field located north of the Cameron Family YMCA. However, the location for the proposed Community Center was moved south, adjacent to the east side of the Cameron Family

YMCA, to be further away from adjacent residential developments. This comment does not raise a significant environmental issue regarding the adequacy or accuracy of the information provided in the Draft MND for the proposed Community Center. Therefore, no further response is required.

Mitigation Monitoring and Reporting Program

Introduction

The Mitigation Monitoring and Reporting Program (MMRP) supplements the Final Mitigated Negative Declaration (MND) for the Community Center project by providing the mechanism for ensuring implementation of all mitigation measures identified in the MND.

Purpose of the MMRP

As the lead agency, the City of Santee (City) is responsible for implementing the MMRP, which has been prepared in conformance with Section 21081.6 of the California Public Resources Code, as identified below:

> (a) When making findings required by paragraph (1) of subdivision (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:
>
> > (1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.
> >
> > (2) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.

The preparation of an MMRP is also required by Section 15074(d) of the CEQA Guidelines. The MMRP consists of mitigation measures that avoid, reduce, or fully mitigate potential environmental impacts.

Mitigation Monitoring and Reporting Table

Project-specific mitigation measures have been categorized in Table 1, Mitigation Monitoring and Reporting Program. Table 1 identifies the environmental impact, specific mitigation measures, responsible party, monitoring agency, and timing of mitigation. Table 1 will serve as the basis for scheduling the implementation of and compliance with all mitigation measures.

The categories identified in Table 1 are described below:

- **Mitigation Measure.** This column provides the verbatim text of the adopted mitigation measure from the Final MND.
- **Responsible Party.** This column identifies the party responsible for implementing the action.
- **Approving Agency.** This column identifies the entity responsible for overseeing and verifying satisfactory completion of the action.
- **Time Frame of Mitigation.** This column identifies the project stage in which the mitigation shall be implemented.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
Section 3.3, Air Quality			
MM-AQ-1: Tier 4 Final Construction Equipment. Prior to the commencement of construction activities for the project, the applicant shall require its construction contractor to demonstrate that all 75-horsepower or greater diesel-powered equipment is powered with California Air Resources Board-certified Tier 4 Final engines. An exemption from these requirements may be granted by the City of Santee (City) if the applicant documents that equipment with the required tier is not reasonably available and that equivalent reductions in PM_{10} exhaust emissions are achieved from other combinations of construction equipment. Before an exemption may be considered by the City, the applicant shall be required to demonstrate that three construction fleet owners/operators in the San Diego region were contacted and that those owners/operators confirmed Tier 4 equipment could not be located within the San Diego region. The City shall review the exemption request and provide a determination within 10 business days from receipt of the request.	Applicant (City of Santee); Construction Contractor	City of Santee Engineering and Planning & Building Departments	Prior to commencement of construction activities. During all construction phases.
Section 3.4, Biological Resources			
MM-BIO-1: Pre-Construction Nesting Bird Survey. Construction within all potential nesting resource areas within the Project site (i.e., ornamental trees) and areas of the Project site within 500 feet of the Woodglen Vista Creek should be avoided during the migratory bird nesting season (typically January 1 through September 30). If construction activities (i.e., grading, tree removal, external construction involving heavy equipment generating noise in excess of 60 A-weighted decibels [dBA] (leq)) must occur during the bird nesting season, an avian nesting survey of all potential nesting resource areas (e.g., ornamental trees) within the Project site and areas of the Woodglen Vista Creek within 500 feet of all impact areas must be conducted to determine the presence/absence of special-status species, protected migratory birds, and active nests. If least Bell's vireo (*Vireo bellii pusillus*), yellow-breasted chat (*Icteria virens*), and/or yellow warbler (*Setophaga petechia*) are identified during the surveys, then noise attenuation measures shall be required to ensure that noise levels from construction do not exceed a 60 dBA hourly average per hour at the edge of the	Construction Contractor; Approved Qualified Biologist; Qualified Acoustician	City of Santee Engineering and Planning & Building Departments and Approved Qualified Biologist	Within 14 days prior to grading/construction. Within 24 hours of initiation of grading/construction. During ground-disturbing activities for the duration of the project construction. Surveys reinitiated if construction is on hold for more than 30 days.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
riparian habitat or to the ambient noise level if it exceeds 60 dBA prior to construction. Construction noise monitoring shall be required to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA hourly average unless an analysis completed by a qualified acoustician shows that noise generated by construction activities would not exceed 60 dBA hourly average at the edge of occupied habitat. The avian nesting survey shall be performed by a qualified wildlife biologist within 14 days prior to the start of construction and one more survey pass within 24 hours of initiation of construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If construction activities are on hold for more than 30 days, then pre-construction surveys would need to be reinitiated. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species), existing nearby conditions (e.g., natural habitat versus roads or existing noisy activities), existing buffering features (e.g., topography, tall and dense trees, buildings), legal status of species (i.e., listed versus non-listed), general sensitivities of the species (e.g., disturbance tolerant or urban versus non disturbance tolerant), and other variables. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged and the nest is no longer active.			
MM-BIO-2: Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans shall include the following to	Construction Contractor; Approved Qualified Biologist and Monitor	City of Santee Engineering and Planning & Building Departments; Approved Qualified Biologist	Prior to issuance of a notice to proceed to the Contractor. Prior to commencement of any grading/construction.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
address potential indirect impacts to special-status species occurring within all suitable habitat associated with the Woodglen Vista Creek (i.e., within 500 feet of the Project site): • **Biological Monitoring.** A qualified Project biologist approved by the City of Santee shall monitor ground-disturbing and vegetation-clearing activities for the duration of the Project construction to ensure that practicable measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources outside the Project footprint. Once ground-disturbing and vegetation-clearing activities are complete, the Project biologist shall conduct weekly checks to inspect construction fencing and ensure that all applicable requirements from the mitigation measures are being upheld until construction is completed. • **Worker Environmental Awareness Training.** Prior to grading, a pre-construction meeting shall be required that includes a training session for Project personnel by a qualified biologist. The training shall include (1) a description of the species of concern and its habitats; (2) the general provisions of the applicable regulations pertaining to biological resources, including the Endangered Species Act and the Clean Water Act; (3) the need to adhere to the provisions of the Endangered Species Act, the Clean Water Act, and other applicable regulations; (4) the penalties associated with violating the provisions of the Endangered Species Act, Clean Water Act, and other applicable regulations; (5) the general measures that are being implemented to conserve the species of concern as they relate to the Project; and (6) the access routes to and Project site boundaries within which the Project activities must be accomplished. Additionally, the training shall include the measures and mitigation requirements for the applicable resources. Copies of the mitigation measures and any required permits from the resource agencies shall be made available to construction personnel.			After completion of ground-disturbing and vegetation clearing, weekly checks to inspect construction fencing.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
• **Delineation of Property Boundaries.** Before beginning activities that would cause impacts, the contractor shall, in consultation with the biological monitor, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. In addition, any avoided environmental resources shall be clearly delineated. Prior to implementing construction activities, the biological monitor shall verify that the flagging clearly delineates the construction limits and any sensitive environmental resources to be avoided. • **Standard Dust Control Measures.** Standard dust control measures as per the San Diego County Air Pollution Control District shall be implemented to reduce impacts on nearby plants and wildlife. Measures include controlling speed to 15 miles per hour or less on unpaved roads, replacing ground cover in disturbed areas as quickly as possible, frequently watering active work sites, installing shaker plates, and suspending excavation and grading operations during periods of high winds. • **Stormwater Pollution Prevention Plan.** Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, the Contractor shall submit a stormwater pollution prevention plan (SWPPP) to the City of Santee that specifies best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sedimentation or any other pollutants from moving off site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Best management practice categories employed on site shall include erosion control, sediment control, and non-stormwater good housekeeping. Best management practices recommended for the construction phase shall include, but not be limited to, the following:			

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
- Limiting grading to the minimum area necessary for construction, operation, and decommissioning of the Project - Limiting vegetation disturbance/removal to the maximum extent practicable - Implementing fiber rolls and sandbags around drainage areas and the site perimeter - Stockpiling and disposing of demolition debris, concrete, and soil properly - Installing a stabilized construction entrance/exit and stabilizing disturbed areas - Installing proper protections for fueling and maintaining equipment and vehicles - Managing waste, aggressively controlling litter, and implementing sediment controls - Stabilizing soil in disturbed areas through revegetation The following water quality measures shall be included in the SWPPP: • Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks. • The Project shall be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern, as feasible. Project activities that cannot be conducted without placing equipment or personnel in sensitive habitats shall be timed to avoid the breeding season of riparian species. • Water pollution and erosion control plans shall be developed and implemented in accordance with the Regional Water Quality Control Board. • **Minimize Spills of Hazardous Materials.** All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly handled and			

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area. The staging area will be located on the south side of the Project site, away from Woodglen Vista Creek, and no stockpiles will be allowed adjacent to Woodglen Vista Creek. • **Wildlife Hazards.** The following measures shall be implemented to ensure that wildlife do not become trapped, entangled, injured, or poisoned by construction activities: ○ Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape. ○ Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist or allowed to move off of the Project site on its own. ○ Nets and mesh shall be made of loose weave material that is not fused at the intersections of the weave because nets with welded weaves present an entanglement risk. ○ Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day. • **Invasive Weeds.** To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/). • **Night Work.** All construction activities shall be conducted during the daytime, and lights shall not be kept on overnight in the construction area, as practicable. If night lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed			

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
downward in a manner that will prevent light spillage or glare into the adjacent open space.			
MM-BIO-3: Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with Woodglen Vista Creek (i.e., within 500 feet of the Project site): • **Runoff.** Future development within 500 feet of suitable habitat for special-status species shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System, to ensure that the quantity and quality of runoff discharged is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into open space or suitable habitat for special-status species. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes. This can be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operation of runoff control systems. • **Lighting.** Project lighting would be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code. Night lighting shall be directed away from open space and/or suitable habitat for special-status species to protect species from direct night lighting. Shielding shall be incorporated in Project designs to ensure that ambient lighting is not increased. • **Invasive Species.** Landscape Plans shall incorporate native species that occur in the region. Invasive, non-native plant species listed on the most recent California Invasive Plant	Construction Contractor	City of Santee Engineering and Planning & Building Departments; Approved Qualified Biologist	Prior to issuance of a notice to proceed to the Contractor. Prior to grading/construction.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/) with a rating of moderate or high shall not be included in landscaping. • **Barriers.** The proposed Project shall incorporate barriers, where appropriate, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in open space and/or suitable habitat for special-status wildlife (e.g., Woodglen Vista Creek). Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.			
MM-BIO-4: Tree Replacement, Encroachment, and Preservation. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans and the Project's Landscape Plan shall include the following to address tree removal, encroachment into protected zone, and retained trees: • **Replacement.** The proposed site plan would require removal of City of Santee–owned trees. Tree replacement shall occur at a 1:1 mitigation ratio with 15-gallon trees and be included in the Project's Landscape Plan, which shall also include recommendations for long-term maintenance and care for regulated trees that will be retained on site. • **Encroachment into Protected Zone and Retained Trees.** Additionally, tree protection measures shall be provided in the Project's Landscape Plan and designed to mitigate impacts from construction encroachment into the protected zone of any preserved and/or encroached upon City of Santee–owned trees. These tree protection measures shall be consistent with best management practices for tree protection on construction sites and would help minimize impacts to any preserved and/or encroached City of Santee–owned trees. These measures shall be implemented prior to, during, and following construction. This includes measures such as exclusion fencing and worker training to avoid direct impacts to trees, and measures such as irrigation and monthly inspections by a Certified Arborist to promote the long-term health of retained trees.	Construction Contractor; Landscape Architect	City of Santee Engineering and Planning & Building Departments; Approved Qualified Biologist	Prior to issuance of a notice to proceed to the Contractor. Prior to grading/construction. Tree protection prior to, during and following construction.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
Section 3.5, Cultural Resources			
MM-CUL-1: Unanticipated Discovery of Archaeological Resources. If potential archaeological resources are uncovered during grading, the Applicant shall be required to halt all construction work occurring within 100 feet of the find until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the material to determine whether it is a "unique cultural resource" as defined in Section 21083.2 (g) of the CEQA Statutes. If the new discovery is evaluated and found to be significant under CEQA and avoidance is not feasible, additional work such as data recovery may be warranted. A data recovery plan shall be developed by the qualified archaeologist in consultation with the City and Native American representatives, if applicable. Ground disturbance can continue only after the resources has been properly mitigated and with approval by the City.	Applicant (City of Santee); Qualified Archaeologist who meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for archaeology; City Engineering and Planning & Building Departments; Native American Monitor of Kumeyaay descent	City of Santee Engineering and Planning & Building Departments	During grading and for the duration of the proposed project or until the Qualified Archaeologist determines monitoring is no longer necessary.
MM-CUL-2: Archaeological Monitoring. The qualified archaeologist, or an archaeological monitor (working under the direct supervision of the qualified archaeologist), shall observe all initial ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The qualified archaeologist, in coordination with the applicant and the City, may reduce or discontinue monitoring if it is determined by the qualified archaeologist that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the project site. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed below). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City and any Native American groups who request a copy. A copy of the final report shall be filed at the South Coastal Information Center (SCIC).	Applicant (City of Santee); Qualified Archaeologist or Archaeological Monitor working under the direct supervision of the qualified archaeologist familiar with types of archaeological resources that could be encountered within the project site; Native American Monitor of Kumeyaay descent	City of Santee Engineering and Planning & Building Departments	During all initial ground-disturbing activities and for the duration of the proposed project or until the Qualified Archaeologist determines monitoring is no longer necessary. Post monitoring.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
A Native American Monitor of Kumeyaay descent shall be present for any pre-construction meeting and for all ground disturbing activities associated with the project. Should any cultural or tribal cultural resources be discovered, no further grading shall occur in the area of the discovery until the City Planner, or designee, with concurrence from the Native American Monitor, are satisfied that treatment of the resource has occurred. In the event that a unique archaeological resource or tribal cultural resource is discovered, and in accordance with Public Resources Code Section 21083.2(b)(1), (2), and (4), the resource shall be moved and buried in an open space area of the Project site, such as slope areas, which will not be subject to further grading activity, erosion, flooding, or any other ground disturbance that has the potential to expose the resource. The on-site area to which the resource is moved shall be protected in perpetuity as permanent open space. No identification of the resource shall be made on-site; however, the Applicant shall plot the new location of the resource on a map showing latitudinal and longitudinal coordinates and provide that map to the Native American Heritage Commission (NAHC) for inclusion in the Sacred Lands File (SLF). Disposition of the resources shall be at the discretion of the City of Santee, but in accordance with the foregoing. In the event of the unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within 100 feet) of the discovery until it can be evaluated by the qualified archaeologist in consultation with the Native American monitor. Construction shall not resume until the qualified archaeologist has conferred with the applicant and the City on the significance of the resource. If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through			

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the applicant and the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and the City shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resources, beyond those which are scientifically important, are considered. If human remains are encountered, all work shall halt in the vicinity (within 100 feet) of the discovery and the San Diego County Coroner will be contacted in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. The applicant and the City will also be notified. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate a Most Likely Descendant (MLD) for the remains per PRC Section 5097.98. The MLD shall complete the inspection of the site within 48 hours of being granted access and shall provide recommendations for the treatment of the remains. Until the landowner has conferred with the MLD, the applicant will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices.			
Section 3.7, Geology and Soils			
MM-GEO-1: Geotechnical/Geological Engineering Recommendations. Prior to any ground- disturbing construction activities, the project applicant shall incorporate the recommendations of the geotechnical/geological engineering studies prepared by Group Delta Consultants Inc. (March 18, 2022) into project plans related to the proposed project. The project's building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the latest adopted version of the California Building Code. A licensed professional	Applicant (City of Santee); Construction Contractor; licensed geotechnical engineer or certified engineering geologist	City of Santee Engineering and Planning & Building Departments	Prior to any ground-disturbing construction activities. Onsite supervision during grading/construction.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. All on-site soil engineering activities shall be conducted under the supervision of a licensed geotechnical engineer or certified engineering geologist.			
MM-GEO-2: Inadvertent Discovery. Prior to ground-disturbing activities, the qualified paleontologist shall conduct a WEAT (worker environmental awareness training) for the construction crew members informing them of the potential to inadvertently encounter paleontological resources and the proper procedures to be enacted in the event of an inadvertent discovery. A qualified project paleontologist is a person with a doctorate or master's degree in paleontology or related field and who has knowledge of the County of San Diego paleontology and documented experience in professional paleontological procedures and techniques. The applicant shall ensure that construction personnel attend the training and sign an attendance acknowledgement form. The applicant shall retain documentation demonstrating attendance. The qualified paleontologist shall observe all initial ground disturbing activities including grading and excavation. The qualified paleontologist, in coordination with the applicant and the City, may reduce or discontinue monitoring if it is determined by the qualified paleontologist that the possibility of encountering buried paleontological resources is low based on observations of soil stratigraphy or other factors. In the unlikely event that paleontological resources (i.e., fossils) are exposed during construction activities, all construction work occurring within 50 feet of the find shall immediately stop and the lead agency representative contacted. The qualified vertebrate paleontologist meeting the Society of Vertebrate Paleontology standards, shall be assigned to review the unanticipated find to determine the significance. If the discovery proves potentially significant under CEQA as determined by the qualified vertebrate paleontologist, and the area cannot be feasibly avoided, additional work, such as preparation of a Paleontological Resources Impact Mitigation Program and paleontological monitoring shall be warranted.	Applicant (City of Santee); Qualified Project Paleontologist; Qualified Vertebrate Paleontologist meeting the Society of Vertebrate Paleontology standards	City of Santee Engineering and Planning & Building Departments	Prior to ground-disturbing activities. During all initial ground-disturbing activities including grading and excavation.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
Section 3.13, Noise			
MM-NOI-1 : Temporary Construction Noise Reduction. The Applicant, or its designee, shall implement one or more of the following measures, as necessary, in order to achieve on- site noise control and sound abatement that, in the aggregate, would result in a minimum construction noise reduction of approximately 16 decibels (dB) at the Woodglen Vista Creek protected open space area immediately south and east of the project: • ***Install noise abatement*** on the site boundary fencing (or within, as practical and appropriate) in the form of sound blankets or comparable temporary solid barriers of at least 12 feet tall to occlude construction noise emission between the site (or specific equipment operation as the situation may define) and the noise-sensitive receptor(s) of concern (i.e., the Woodglen Vista Creek protected open space area). o By way of example, suspended sound blankets, field-erected plywood sheeting, or comparable temporary solid (or flexible but sufficiently massive) barriers (of minimum sound transmission class [STC] rating of 25, which per California Department of Transportation guidance indicates would permit up to 16 dB of expected barrier insertion loss) would occlude construction noise emission between the site (or specific equipment operation as the situation may define) and the noise-sensitive receptor(s) of concern. o Temporary barriers shall adhere to a minimum height standard of 12 feet to serve as an effective deterrent against noise pollution and shielding for adjoining off-site receptors. o To determine the extent/length of these temporary noise barrier(s) required for each phase of construction, see Figure 11. Appendix H includes a worksheet illustrating the predicted noise exposure levels at a nearest receptor (i.e., Woodglen Vista Creek protected open space area) as close as 15 feet to the exterior of	Applicant (City of Santee) or designee	City of Santee Engineering and Planning & Building Departments	During grading/construction.

Mitigation Measure	Responsible Party	Approving Agency	Time Frame of Mitigation
the temporary barrier, with the listed onsite noise-producing construction equipment as close as 10 feet to the interior of the barrier. Equipment operating further away would have quieter acoustic contribution due to the increased distance, and equipment operating closer to the barrier would improve the barrier's insertion loss performance (due to greater path length difference) and thus yield lower noise exposure levels at the offsite receptor. Similarly, should the offsite receptor be more distant from the temporary barrier than 25 feet, the added overall distance to the onsite operating equipment will—due to principles of geometric divergence—attenuate the sound path and yield less noise exposure at the receptor. Such a wall should be located on the project boundary (focusing on the southern and eastern boundary), as shown in Figure 11, to reduce construction noise exposure. • ***Administrative controls*** (e.g., reduce operating time of equipment and/or prohibit usage of equipment type[s] within certain distances to a nearest receiving occupied off-site property). • ***Engineering controls*** (change equipment operating parameters [e.g., speed, capacity], or install features or elements that otherwise reduce equipment noise emission [e.g., upgrade engine exhaust mufflers]).			

Appendix A

Air Quality, Energy, and Greenhouse Gas Emissions Calculations

Appendix A-1
CalEEMod Regional Emissions

Santee Community Center Regional Emissions Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santee Community Center Regional Emissions
Construction Start Date	8/4/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	7.60
Location	10123 Riverwalk Dr, Santee, CA 92071, USA
County	San Diego
City	Santee
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6529
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Government (Civic Center)	12.5	1000sqft	0.95	12,500	33,106	0.00	—	—
Parking Lot	67.7	1000sqft	1.55	0.00	0.00	0.00	—	—
Other Non-Asphalt Surfaces	30.9	1000sqft	0.71	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.03	4.43	31.9	31.1	0.05	1.37	19.8	21.2	1.26	10.1	11.4	—	5,616	5,616	0.24	0.34	5.02	5,644
Mit.	4.03	4.43	31.9	31.1	0.05	1.37	7.86	9.22	1.26	3.99	5.24	—	5,616	5,616	0.24	0.34	5.02	5,644
% Reduced	—	—	—	—	—	—	60%	57%	—	61%	54%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.40	1.17	10.6	13.5	0.02	0.43	0.11	0.54	0.40	0.03	0.43	—	2,587	2,587	0.11	0.04	0.02	2,601
Mit.	1.40	1.17	10.6	13.5	0.02	0.43	0.11	0.54	0.40	0.03	0.43	—	2,587	2,587	0.11	0.04	0.02	2,601

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.59	0.74	4.42	5.99	0.01	0.17	0.54	0.71	0.16	0.23	0.39	—	1,138	1,138	0.05	0.03	0.19	1,144
Mit.	0.59	0.74	4.42	5.99	0.01	0.17	0.29	0.46	0.16	0.11	0.26	—	1,138	1,138	0.05	0.03	0.19	1,144
% Reduced	—	—	—	—	—	—	47%	35%	—	54%	32%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.14	0.81	1.09	< 0.005	0.03	0.10	0.13	0.03	0.04	0.07	—	188	188	0.01	< 0.005	0.03	189
Mit.	0.11	0.14	0.81	1.09	< 0.005	0.03	0.05	0.08	0.03	0.02	0.05	—	188	188	0.01	< 0.005	0.03	189
% Reduced	—	—	—	—	—	—	47%	35%	—	54%	32%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	13.7	40.0	100	40.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—

Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.03	3.39	31.9	31.1	0.05	1.37	19.8	21.2	1.26	10.1	11.4	—	5,616	5,616	0.24	0.34	5.02	5,644
2026	2.23	4.43	16.4	23.2	0.04	0.64	0.29	0.93	0.59	0.07	0.66	—	4,174	4,174	0.17	0.06	1.34	4,197
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.40	1.17	10.6	13.5	0.02	0.43	0.11	0.54	0.40	0.03	0.43	—	2,587	2,587	0.11	0.04	0.02	2,601
2026	1.33	1.11	10.0	13.4	0.02	0.38	0.11	0.49	0.35	0.03	0.38	—	2,583	2,583	0.11	0.04	0.01	2,597
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.55	0.46	4.28	4.71	0.01	0.17	0.54	0.71	0.16	0.23	0.39	—	972	972	0.04	0.03	0.19	982
2026	0.59	0.74	4.42	5.99	0.01	0.17	0.06	0.23	0.15	0.01	0.17	—	1,138	1,138	0.05	0.02	0.13	1,144
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.08	0.78	0.86	< 0.005	0.03	0.10	0.13	0.03	0.04	0.07	—	161	161	0.01	< 0.005	0.03	163
2026	0.11	0.14	0.81	1.09	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	188	188	0.01	< 0.005	0.02	189

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.03	3.39	31.9	31.1	0.05	1.37	7.86	9.22	1.26	3.99	5.24	—	5,616	5,616	0.24	0.34	5.02	5,644
2026	2.23	4.43	16.4	23.2	0.04	0.64	0.29	0.93	0.59	0.07	0.66	—	4,174	4,174	0.17	0.06	1.34	4,197
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.40	1.17	10.6	13.5	0.02	0.43	0.11	0.54	0.40	0.03	0.43	—	2,587	2,587	0.11	0.04	0.02	2,601
2026	1.33	1.11	10.0	13.4	0.02	0.38	0.11	0.49	0.35	0.03	0.38	—	2,583	2,583	0.11	0.04	0.01	2,597
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.55	0.46	4.28	4.71	0.01	0.17	0.29	0.46	0.16	0.11	0.26	—	972	972	0.04	0.03	0.19	982
2026	0.59	0.74	4.42	5.99	0.01	0.17	0.06	0.23	0.15	0.01	0.17	—	1,138	1,138	0.05	0.02	0.13	1,144
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.08	0.78	0.86	< 0.005	0.03	0.05	0.08	0.03	0.02	0.05	—	161	161	0.01	< 0.005	0.03	163
2026	0.11	0.14	0.81	1.09	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	188	188	0.01	< 0.005	0.02	189

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.92	6.66	5.49	42.7	0.10	0.16	8.44	8.61	0.16	2.14	2.30	43.2	10,760	10,803	4.84	0.40	33.2	11,076
Mit.	6.92	6.66	5.49	42.7	0.10	0.16	8.44	8.61	0.16	2.14	2.30	43.2	10,708	10,751	4.84	0.40	33.2	11,024
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	6.71	6.44	5.87	40.0	0.10	0.16	8.44	8.60	0.15	2.14	2.30	43.2	10,318	10,361	4.87	0.42	0.89	10,610
Mit.	6.71	6.44	5.87	40.0	0.10	0.16	8.44	8.60	0.15	2.14	2.30	43.2	10,266	10,309	4.87	0.42	0.89	10,557
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	1%	1%	< 0.5%	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.20	5.98	4.58	39.0	0.09	0.09	8.40	8.50	0.09	2.13	2.22	43.2	10,159	10,202	4.85	0.41	14.4	10,461
Mit.	6.20	5.98	4.58	39.0	0.09	0.09	8.40	8.50	0.09	2.13	2.22	43.2	10,107	10,150	4.85	0.41	14.4	10,409
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	1%	1%	< 0.5%	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.13	1.09	0.84	7.12	0.02	0.02	1.53	1.55	0.02	0.39	0.41	7.15	1,682	1,689	0.80	0.07	2.38	1,732
Mit.	1.13	1.09	0.84	7.12	0.02	0.02	1.53	1.55	0.02	0.39	0.41	7.15	1,673	1,680	0.80	0.07	2.38	1,723
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	1%	1%	< 0.5%	< 0.5%	—	< 0.5%
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	13.7	40.0	100	40.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.24	5.75	3.93	40.8	0.10	0.08	8.44	8.52	0.07	2.14	2.21	—	9,903	9,903	0.47	0.38	33.2	10,061
Area	0.10	0.39	< 0.005	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.24
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	559	559	0.04	< 0.005	—	561
Water	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Waste	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Stationary	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	6.92	6.66	5.49	42.7	0.10	0.16	8.44	8.61	0.16	2.14	2.30	43.2	10,760	10,803	4.84	0.40	33.2	11,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.13	5.62	4.32	38.6	0.09	0.08	8.44	8.52	0.07	2.14	2.21	—	9,464	9,464	0.50	0.40	0.86	9,597
Area	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	559	559	0.04	< 0.005	—	561
Water	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Waste	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Stationary	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	6.71	6.44	5.87	40.0	0.10	0.16	8.44	8.60	0.15	2.14	2.30	43.2	10,318	10,361	4.87	0.42	0.89	10,610
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.55	4.26	38.5	0.09	0.08	8.40	8.48	0.07	2.13	2.20	—	9,530	9,530	0.49	0.40	14.3	9,676
Area	0.05	0.34	< 0.005	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.11
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	559	559	0.04	< 0.005	—	561
Water	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Waste	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Stationary	0.08	0.07	0.21	0.19	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	37.7	37.7	< 0.005	< 0.005	0.00	37.8
Total	6.20	5.98	4.58	39.0	0.09	0.09	8.40	8.50	0.09	2.13	2.22	43.2	10,159	10,202	4.85	0.41	14.4	10,461
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.11	1.01	0.78	7.02	0.02	0.01	1.53	1.55	0.01	0.39	0.40	—	1,578	1,578	0.08	0.07	2.37	1,602
Area	0.01	0.06	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	92.5	92.5	0.01	< 0.005	—	92.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.79	5.22	6.01	0.08	< 0.005	—	8.61
Waste	—	—	—	—	—	—	—	—	—	—	—	6.36	0.00	6.36	0.64	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Stationary	0.01	0.01	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.24	6.24	< 0.005	< 0.005	0.00	6.26
Total	1.13	1.09	0.84	7.12	0.02	0.02	1.53	1.55	0.02	0.39	0.41	7.15	1,682	1,689	0.80	0.07	2.38	1,732

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.24	5.75	3.93	40.8	0.10	0.08	8.44	8.52	0.07	2.14	2.21	—	9,903	9,903	0.47	0.38	33.2	10,061
Area	0.10	0.39	< 0.005	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.24
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	507	507	0.03	< 0.005	—	508
Water	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Waste	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Stationary	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	6.92	6.66	5.49	42.7	0.10	0.16	8.44	8.61	0.16	2.14	2.30	43.2	10,708	10,751	4.84	0.40	33.2	11,024
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.13	5.62	4.32	38.6	0.09	0.08	8.44	8.52	0.07	2.14	2.21	—	9,464	9,464	0.50	0.40	0.86	9,597
Area	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	507	507	0.03	< 0.005	—	508
Water	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Waste	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Stationary	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	6.71	6.44	5.87	40.0	0.10	0.16	8.44	8.60	0.15	2.14	2.30	43.2	10,266	10,309	4.87	0.42	0.89	10,557
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.55	4.26	38.5	0.09	0.08	8.40	8.48	0.07	2.13	2.20	—	9,530	9,530	0.49	0.40	14.3	9,676
Area	0.05	0.34	< 0.005	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.11
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	507	507	0.03	< 0.005	—	508
Water	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0

Waste	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Stationary	0.08	0.07	0.21	0.19	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	37.7	37.7	< 0.005	< 0.005	0.00	37.8
Total	6.20	5.98	4.58	39.0	0.09	0.09	8.40	8.50	0.09	2.13	2.22	43.2	10,107	10,150	4.85	0.41	14.4	10,409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.11	1.01	0.78	7.02	0.02	0.01	1.53	1.55	0.01	0.39	0.40	—	1,578	1,578	0.08	0.07	2.37	1,602
Area	0.01	0.06	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	83.9	83.9	0.01	< 0.005	—	84.2
Water	—	—	—	—	—	—	—	—	—	—	—	0.79	5.22	6.01	0.08	< 0.005	—	8.61
Waste	—	—	—	—	—	—	—	—	—	—	—	6.36	0.00	6.36	0.64	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Stationary	0.01	0.01	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.24	6.24	< 0.005	< 0.005	0.00	6.26
Total	1.13	1.09	0.84	7.12	0.02	0.02	1.53	1.55	0.02	0.39	0.41	7.15	1,673	1,680	0.80	0.07	2.38	1,723

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	1.12	1.12	—	0.17	0.17	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	0.01	0.01	0.57	154
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.08	0.02	1.32	0.49	0.01	0.02	0.26	0.28	0.02	0.07	0.09	—	1,006	1,006	0.06	0.16	2.19	1,057
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.92	7.92	< 0.005	< 0.005	0.01	8.04

Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.23	8.23	< 0.005	< 0.005	0.01	8.60
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.1	55.1	< 0.005	0.01	0.05	57.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.33
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.42
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.13	9.13	< 0.005	< 0.005	0.01	9.58

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	1.12	1.12	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	0.01	0.01	0.57	154
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.08	0.02	1.32	0.49	0.01	0.02	0.26	0.28	0.02	0.07	0.09	—	1,006	1,006	0.06	0.16	2.19	1,057
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.92	7.92	< 0.005	< 0.005	0.01	8.04
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.23	8.23	< 0.005	< 0.005	0.01	8.60
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.1	55.1	< 0.005	0.01	0.05	57.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.33
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.42
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.13	9.13	< 0.005	< 0.005	0.01	9.58

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.61	9.61	< 0.005	< 0.005	—	9.64
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.83	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	171	171	0.01	0.01	0.64	173
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.72
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.61	9.61	< 0.005	< 0.005	—	9.64
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.83	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	171	171	0.01	0.01	0.64	173
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.72
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	0.01	0.01	0.57	154
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.15	0.04	2.45	0.92	0.01	0.03	0.48	0.52	0.03	0.13	0.17	—	1,868	1,868	0.10	0.29	4.07	1,962
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.11	4.11	< 0.005	< 0.005	< 0.005	4.30

Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.2	51.2	< 0.005	0.01	0.05	53.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.71
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.48	8.48	< 0.005	< 0.005	0.01	8.89

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.74	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	0.01	0.01	0.57	154
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.15	0.04	2.45	0.92	0.01	0.03	0.48	0.52	0.03	0.13	0.17	—	1,868	1,868	0.10	0.29	4.07	1,962
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.11	4.11	< 0.005	< 0.005	< 0.005	4.30
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.2	51.2	< 0.005	0.01	0.05	53.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.71
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.48	8.48	< 0.005	< 0.005	0.01	8.89

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	2.06	2.58	< 0.005	0.09	—	0.09	0.08	—	0.08	—	474	474	0.02	< 0.005	—	476
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.47	< 0.005	0.02	—	0.02	0.01	—	0.01	—	78.5	78.5	< 0.005	< 0.005	—	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.46	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	94.9	94.9	< 0.005	< 0.005	0.36	96.3
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	< 0.005	0.01	0.26	105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.41	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	89.6	89.6	< 0.005	< 0.005	0.01	90.8
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	< 0.005	0.01	0.01	104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.03	18.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.02	20.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.96	2.96	< 0.005	< 0.005	0.01	3.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.28	3.28	< 0.005	< 0.005	< 0.005	3.42
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	2.06	2.58	< 0.005	0.09	—	0.09	0.08	—	0.08	—	474	474	0.02	< 0.005	—	476
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.47	< 0.005	0.02	—	0.02	0.01	—	0.01	—	78.5	78.5	< 0.005	< 0.005	—	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.46	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	94.9	94.9	< 0.005	< 0.005	0.36	96.3
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	< 0.005	0.01	0.26	105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.41	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	89.6	89.6	< 0.005	< 0.005	0.01	90.8

Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	< 0.005	0.01	0.01	104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.03	18.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.02	20.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.96	2.96	< 0.005	< 0.005	0.01	3.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.28	3.28	< 0.005	< 0.005	< 0.005	3.42
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.95	5.20	0.01	0.15	—	0.15	0.14	—	0.14	—	962	962	0.04	0.01	—	965
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.72	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	159	159	0.01	< 0.005	—	160
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	93.0	93.0	< 0.005	< 0.005	0.33	94.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.3	98.3	< 0.005	0.01	0.24	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	87.8	87.8	< 0.005	< 0.005	0.01	89.0
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.3	98.3	< 0.005	0.01	0.01	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.5	35.5	< 0.005	< 0.005	0.06	36.1
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.4	39.4	< 0.005	0.01	0.04	41.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.88	5.88	< 0.005	< 0.005	0.01	5.97

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.53	6.53	< 0.005	< 0.005	0.01	6.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.95	5.20	0.01	0.15	—	0.15	0.14	—	0.14	—	962	962	0.04	0.01	—	965
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.72	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	159	159	0.01	< 0.005	—	160
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	93.0	93.0	< 0.005	< 0.005	0.33	94.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.3	98.3	< 0.005	0.01	0.24	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	87.8	87.8	< 0.005	< 0.005	0.01	89.0
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.3	98.3	< 0.005	0.01	0.01	103
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.5	35.5	< 0.005	< 0.005	0.06	36.1
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.4	39.4	< 0.005	0.01	0.04	41.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.88	5.88	< 0.005	< 0.005	0.01	5.97
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.53	6.53	< 0.005	< 0.005	0.01	6.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.81	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.0	74.0	< 0.005	< 0.005	—	74.2
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.2	12.2	< 0.005	< 0.005	—	12.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.86	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	186	186	0.01	0.01	0.65	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.1	49.1	< 0.005	0.01	0.12	51.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.71	9.71	< 0.005	< 0.005	0.02	9.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	< 0.005	2.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.0	74.0	< 0.005	< 0.005	—	74.2
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.2	12.2	< 0.005	< 0.005	—	12.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.86	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	186	186	0.01	0.01	0.65	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.1	49.1	< 0.005	0.01	0.12	51.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.71	9.71	< 0.005	< 0.005	0.02	9.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	< 0.005	2.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	93.0	93.0	< 0.005	< 0.005	0.33	94.4

Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.1	49.1	< 0.005	0.01	0.12	51.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.85	4.85	< 0.005	< 0.005	0.01	4.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	< 0.005	2.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.82
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	93.0	93.0	< 0.005	< 0.005	0.33	94.4
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.1	49.1	< 0.005	0.01	0.12	51.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.85	4.85	< 0.005	< 0.005	0.01	4.92

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	< 0.005	2.81
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.82
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	6.24	5.75	3.93	40.8	0.10	0.08	8.44	8.52	0.07	2.14	2.21	—	9,903	9,903	0.47	0.38	33.2	10,061
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.24	5.75	3.93	40.8	0.10	0.08	8.44	8.52	0.07	2.14	2.21	—	9,903	9,903	0.47	0.38	33.2	10,061
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government	6.13	5.62	4.32	38.6	0.09	0.08	8.44	8.52	0.07	2.14	2.21	—	9,464	9,464	0.50	0.40	0.86	9,597
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.13	5.62	4.32	38.6	0.09	0.08	8.44	8.52	0.07	2.14	2.21	—	9,464	9,464	0.50	0.40	0.86	9,597
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	1.11	1.01	0.78	7.02	0.02	0.01	1.53	1.55	0.01	0.39	0.40	—	1,578	1,578	0.08	0.07	2.37	1,602
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.11	1.01	0.78	7.02	0.02	0.01	1.53	1.55	0.01	0.39	0.40	—	1,578	1,578	0.08	0.07	2.37	1,602

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	6.24	5.75	3.93	40.8	0.10	0.08	8.44	8.52	0.07	2.14	2.21	—	9,903	9,903	0.47	0.38	33.2	10,061
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.24	5.75	3.93	40.8	0.10	0.08	8.44	8.52	0.07	2.14	2.21	—	9,903	9,903	0.47	0.38	33.2	10,061
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	6.13	5.62	4.32	38.6	0.09	0.08	8.44	8.52	0.07	2.14	2.21	—	9,464	9,464	0.50	0.40	0.86	9,597
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.13	5.62	4.32	38.6	0.09	0.08	8.44	8.52	0.07	2.14	2.21	—	9,464	9,464	0.50	0.40	0.86	9,597
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	1.11	1.01	0.78	7.02	0.02	0.01	1.53	1.55	0.01	0.39	0.40	—	1,578	1,578	0.08	0.07	2.37	1,602
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.11	1.01	0.78	7.02	0.02	0.01	1.53	1.55	0.01	0.39	0.40	—	1,578	1,578	0.08	0.07	2.37	1,602

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.02	< 0.005	—	336
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	95.7	95.7	0.01	< 0.005	—	96.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	430	430	0.02	< 0.005	—	432
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	335	335	0.02	< 0.005	—	336
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	95.7	95.7	0.01	< 0.005	—	96.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	430	430	0.02	< 0.005	—	432
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	55.4	55.4	< 0.005	< 0.005	—	55.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	15.8	15.8	< 0.005	< 0.005	—	15.9

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	71.3	71.3	< 0.005	< 0.005	—	71.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.02	< 0.005	—	284
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	95.7	95.7	0.01	< 0.005	—	96.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	378	378	0.02	< 0.005	—	380
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.02	< 0.005	—	284
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	95.7	95.7	0.01	< 0.005	—	96.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	378	378	0.02	< 0.005	—	380
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	46.8	46.8	< 0.005	< 0.005	—	47.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	62.6	62.6	< 0.005	< 0.005	—	62.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.2	21.2	< 0.005	< 0.005	—	21.3
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.2	21.2	< 0.005	< 0.005	—	21.3

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	129
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.2	21.2	< 0.005	< 0.005	—	21.3
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.2	21.2	< 0.005	< 0.005	—	21.3

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	< 0.005	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.24
Total	0.10	0.39	< 0.005	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18

Total	0.01	0.06	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	< 0.005	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.24
Total	0.10	0.39	< 0.005	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18
Total	0.01	0.06	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	0.79	5.22	6.01	0.08	< 0.005	—	8.61
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.79	5.22	6.01	0.08	< 0.005	—	8.61

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.76	31.5	36.3	0.49	0.01	—	52.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	0.79	5.22	6.01	0.08	< 0.005	—	8.61
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.79	5.22	6.01	0.08	< 0.005	—	8.61

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	6.36	0.00	6.36	0.64	0.00	—	22.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	6.36	0.00	6.36	0.64	0.00	—	22.2

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government	—	—	—	—	—	—	—	—	—	—	—	6.36	0.00	6.36	0.64	0.00	—	22.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.36	0.00	6.36	0.64	0.00	—	22.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.01	0.01	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.24	6.24	< 0.005	< 0.005	0.00	6.26
Total	0.01	0.01	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.24	6.24	< 0.005	< 0.005	0.00	6.26

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Total	0.57	0.52	1.44	1.32	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	264	264	0.01	< 0.005	0.00	265
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.01	0.01	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.24	6.24	< 0.005	< 0.005	0.00	6.26
Total	0.01	0.01	0.04	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.24	6.24	< 0.005	< 0.005	0.00	6.26

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetatio	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/4/2025	9/1/2025	5.00	20.0	—
Site Preparation	Site Preparation	9/2/2025	9/5/2025	5.00	4.00	—
Grading	Grading	9/8/2025	9/19/2025	5.00	10.0	—
Building Construction	Building Construction	9/22/2025	7/24/2026	5.00	220	—
Paving	Paving	7/13/2026	8/7/2026	5.00	20.0	—
Architectural Coating	Architectural Coating	8/10/2026	9/4/2026	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	16.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.63	HHDT,MHDT
Demolition	Hauling	14.0	20.0	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.63	HHDT,MHDT
Grading	Hauling	26.0	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	10.0	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	4.00	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	2.00	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	10.0	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	16.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.63	HHDT,MHDT
Demolition	Hauling	14.0	20.0	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	6.00	7.63	HHDT,MHDT
Grading	Hauling	26.0	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	10.0	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	4.00	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT

Paving	—	—	—	—
Paving	Worker	20.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	2.00	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	18,750	6,250	5,918

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,030	—
Site Preparation	0.00	0.00	6.00	0.00	—
Grading	2,000	0.00	10.0	0.00	—

Paving	0.00	0.00	0.00	0.00	2.26

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government (Civic Center)	0.00	0%
Parking Lot	1.55	100%
Other Non-Asphalt Surfaces	0.71	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	589	0.03	< 0.005
2026	0.00	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government (Civic Center)	1,441	1,441	1,441	525,965	11,960	11,960	11,960	4,365,539
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government (Civic Center)	1,441	1,441	1,441	525,965	11,960	11,960	11,960	4,365,539
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	18,750	6,250	5,918

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government (Civic Center)	207,432	589	0.0330	0.0040	400,288
Parking Lot	59,288	589	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	589	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government (Civic Center)	175,204	589	0.0330	0.0040	400,288
Parking Lot	59,288	589	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	589	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government (Civic Center)	2,483,246	494,741
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

Government (Civic Center)	2,483,246	494,741
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government (Civic Center)	71.2	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government (Civic Center)	71.2	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government (Civic Center)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government (Civic Center)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government (Civic Center)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government (Civic Center)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	52.0	315	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.4	annual days of extreme heat
Extreme Precipitation	3.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.98	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	64.7
AQ-PM	45.1
AQ-DPM	25.7
Drinking Water	10.9
Lead Risk Housing	17.5
Pesticides	0.00
Toxic Releases	25.6
Traffic	48.6
Effect Indicators	—
CleanUp Sites	37.8
Groundwater	40.8
Haz Waste Facilities/Generators	84.7
Impaired Water Bodies	77.3
Solid Waste	9.67
Sensitive Population	—
Asthma	35.6
Cardio-vascular	30.2
Low Birth Weights	18.6
Socioeconomic Factor Indicators	—
Education	43.4
Housing	19.8
Linguistic	10.4
Poverty	16.6
Unemployment	28.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	66.11061209
Employed	1.296034903
Median HI	58.75785962
Education	—
Bachelor's or higher	47.36301809
High school enrollment	17.87501604
Preschool enrollment	14.26921596
Transportation	—
Auto Access	76.73553189
Active commuting	33.56858719
Social	—
2-parent households	27.65302194
Voting	75.72180162
Neighborhood	—
Alcohol availability	42.80764789
Park access	24.26536635
Retail density	59.4636212
Supermarket access	60.82381625
Tree canopy	8.135506224
Housing	—
Homeownership	43.19260875
Housing habitability	69.11330681
Low-inc homeowner severe housing cost burden	75.55498524
Low-inc renter severe housing cost burden	83.49801104
Uncrowded housing	47.26036186

Health Outcomes	—
Insured adults	74.51559091
Arthritis	0.0
Asthma ER Admissions	59.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	1.7
Cognitively Disabled	36.6
Physically Disabled	78.7
Heart Attack ER Admissions	49.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	48.8
Elderly	83.1
English Speaking	76.6
Foreign-born	6.0
Outdoor Workers	58.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.9
Traffic Density	49.3
Traffic Access	51.5
Other Indices	—
Hardship	31.7
Other Decision Support	—
2016 Voting	76.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	34.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant provided schedule ~ 14 mos of construction. Note: duration of construction is greater than CalEEMod default values, therefore, it represents a conservative estimate.
Land Use	Adjusted acreage so total site acreage disturbed = 3.2
Construction: Trips and VMT	Even numbers for worker, vendor, and haul trips.
Operations: Vehicle Data	Based on Transportation Analysis. 115.28 trips per thousand square feet.
Operations: Emergency Generators and Fire Pumps	Based on Project Specs

Appendix A-2

CalEEMod Construction HRA Emissions

Santee Community Center Construction HRA Detailed Report

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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santee Community Center Construction HRA
Construction Start Date	8/4/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	7.60
Location	10123 Riverwalk Dr, Santee, CA 92071, USA
County	San Diego
City	Santee
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6529
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Government (Civic Center)	15.2	1000sqft	0.95	15,171	33,106	0.00	—	—

Parking Lot	67.7	1000sqft	1.55	0.00	0.00	0.00	—	—
Other Non-Asphalt Surfaces	30.9	1000sqft	0.71	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.94	5.01	31.7	30.2	0.05	1.37	19.7	21.0	1.26	10.1	11.4	—	5,307	5,307	0.22	0.04	0.06	5,325
Mit.	0.96	5.01	5.67	28.4	0.05	0.21	19.7	19.8	0.19	10.1	10.2	—	5,307	5,307	0.22	0.04	0.06	5,325
% Reduced	76%	—	82%	6%	—	85%	—	6%	85%	—	10%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.35	1.13	10.5	13.1	0.02	0.43	< 0.005	0.43	0.40	< 0.005	0.40	—	2,405	2,405	0.10	0.02	< 0.005	2,414
Mit.	0.54	0.48	3.21	15.0	0.02	0.11	< 0.005	0.11	0.11	< 0.005	0.11	—	2,405	2,405	0.10	0.02	< 0.005	2,414
% Reduced	60%	57%	69%	-15%	—	74%	—	74%	73%	—	73%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.57	0.75	4.36	5.76	0.01	0.17	0.47	0.64	0.16	0.21	0.37	—	1,046	1,046	0.04	0.01	< 0.005	1,050
Mit.	0.24	0.49	1.45	6.59	0.01	0.05	0.47	0.51	0.05	0.21	0.25	—	1,046	1,046	0.04	0.01	< 0.005	1,050
% Reduced	57%	34%	67%	-14%	—	71%	—	21%	70%	—	33%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.14	0.80	1.05	< 0.005	0.03	0.09	0.12	0.03	0.04	0.07	—	173	173	0.01	< 0.005	< 0.005	174
Mit.	0.04	0.09	0.27	1.20	< 0.005	0.01	0.09	0.09	0.01	0.04	0.05	—	173	173	0.01	< 0.005	< 0.005	174
% Reduced	57%	34%	67%	-14%	—	71%	—	21%	70%	—	33%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	13.7	40.0	100	40.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.94	3.31	31.7	30.2	0.05	1.37	19.7	21.0	1.26	10.1	11.4	—	5,307	5,307	0.22	0.04	0.06	5,325
2026	2.10	5.01	16.2	21.8	0.04	0.64	< 0.005	0.64	0.59	< 0.005	0.59	—	3,758	3,758	0.15	0.03	0.01	3,772
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.35	1.13	10.5	13.1	0.02	0.43	< 0.005	0.43	0.40	< 0.005	0.40	—	2,405	2,405	0.10	0.02	< 0.005	2,414
2026	1.28	1.07	9.90	13.0	0.02	0.38	< 0.005	0.38	0.35	< 0.005	0.35	—	2,405	2,405	0.10	0.02	< 0.005	2,413
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.53	0.44	4.11	4.52	0.01	0.17	0.47	0.64	0.16	0.21	0.37	—	807	807	0.03	0.01	< 0.005	810
2026	0.57	0.75	4.36	5.76	0.01	0.17	< 0.005	0.17	0.15	< 0.005	0.15	—	1,046	1,046	0.04	0.01	< 0.005	1,050
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.08	0.75	0.82	< 0.005	0.03	0.09	0.12	0.03	0.04	0.07	—	134	134	0.01	< 0.005	< 0.005	134
2026	0.10	0.14	0.80	1.05	< 0.005	0.03	< 0.005	0.03	0.03	< 0.005	0.03	—	173	173	0.01	< 0.005	< 0.005	174

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.85	0.75	5.67	28.4	0.05	0.17	19.7	19.8	0.16	10.1	10.2	—	5,307	5,307	0.22	0.04	0.06	5,325
2026	0.96	5.01	5.63	24.4	0.04	0.21	< 0.005	0.21	0.19	< 0.005	0.19	—	3,758	3,758	0.15	0.03	0.01	3,772

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.54	0.48	3.21	15.0	0.02	0.11	< 0.005	0.11	0.11	< 0.005	0.11	—	2,405	2,405	0.10	0.02	< 0.005	2,414
2026	0.53	0.47	3.17	15.0	0.02	0.11	< 0.005	0.11	0.10	< 0.005	0.10	—	2,405	2,405	0.10	0.02	< 0.005	2,413
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.17	0.15	1.05	4.79	0.01	0.04	0.47	0.51	0.03	0.21	0.25	—	807	807	0.03	0.01	< 0.005	810
2026	0.24	0.49	1.45	6.59	0.01	0.05	< 0.005	0.05	0.05	< 0.005	0.05	—	1,046	1,046	0.04	0.01	< 0.005	1,050
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.03	0.03	0.19	0.87	< 0.005	0.01	0.09	0.09	0.01	0.04	0.05	—	134	134	0.01	< 0.005	< 0.005	134
2026	0.04	0.09	0.27	1.20	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	173	173	0.01	< 0.005	< 0.005	174

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	1.12	1.12	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Hauling	0.02	0.01	0.22	0.15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.4	36.4	0.01	0.01	0.03	38.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.65
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.00	2.00	< 0.005	< 0.005	< 0.005	2.11
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.74	5.39	18.4	0.03	0.17	—	0.17	0.16	—	0.16	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	1.12	1.12	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	1.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Hauling	0.02	0.01	0.22	0.15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.4	36.4	0.01	0.01	0.03	38.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.65
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.00	2.00	< 0.005	< 0.005	< 0.005	2.11
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.61	9.61	< 0.005	< 0.005	—	9.64
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.61	9.61	< 0.005	< 0.005	—	9.64
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.1	81.1	< 0.005	< 0.005	—	81.4

Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Hauling	0.03	0.02	0.41	0.28	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	67.6	67.6	0.01	0.01	0.05	71.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.86	1.86	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.36	2.21	17.8	0.03	0.08	—	0.08	0.08	—	0.08	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.49	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5

Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Hauling	0.03	0.02	0.41	0.28	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	67.6	67.6	0.01	0.01	0.05	71.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.86	1.86	< 0.005	< 0.005	< 0.005	1.96
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	2.06	2.58	< 0.005	0.09	—	0.09	0.08	—	0.08	—	474	474	0.02	< 0.005	—	476
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.47	< 0.005	0.02	—	0.02	0.01	—	0.01	—	78.5	78.5	< 0.005	< 0.005	—	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.52	7.52	< 0.005	< 0.005	0.01	7.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.57	7.57	< 0.005	< 0.005	< 0.005	7.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.49	1.49	< 0.005	< 0.005	< 0.005	1.56
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.48	3.16	15.0	0.02	0.11	—	0.11	0.11	—	0.11	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.54	0.48	3.16	15.0	0.02	0.11	—	0.11	0.11	—	0.11	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.63	2.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	474	474	0.02	< 0.005	—	476
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	78.5	78.5	< 0.005	< 0.005	—	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.52	7.52	< 0.005	< 0.005	0.01	7.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.57	7.57	< 0.005	< 0.005	< 0.005	7.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.49	1.49	< 0.005	< 0.005	< 0.005	1.56

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.95	5.20	0.01	0.15	—	0.15	0.14	—	0.14	—	962	962	0.04	0.01	—	965
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.08	0.72	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	159	159	0.01	< 0.005	—	160
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.39	7.39	< 0.005	< 0.005	0.01	7.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.45	7.45	< 0.005	< 0.005	< 0.005	7.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.98	2.98	< 0.005	< 0.005	< 0.005	3.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.52
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.19	1.25	6.00	0.01	0.04	—	0.04	0.04	—	0.04	—	962	962	0.04	0.01	—	965
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.23	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	159	159	0.01	< 0.005	—	160
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.39	7.39	< 0.005	< 0.005	0.01	7.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.45	7.45	< 0.005	< 0.005	< 0.005	7.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.98	2.98	< 0.005	< 0.005	< 0.005	3.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.52
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.0	74.0	< 0.005	< 0.005	—	74.2
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.2	12.2	< 0.005	< 0.005	—	12.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.38	2.45	9.35	0.01	0.10	—	0.10	0.09	—	0.09	—	1,350	1,350	0.05	0.01	—	1,355
Paving	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.0	74.0	< 0.005	< 0.005	—	74.2
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.2	12.2	< 0.005	< 0.005	—	12.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/4/2025	9/1/2025	5.00	20.0	—
Site Preparation	Site Preparation	9/2/2025	9/5/2025	5.00	4.00	—

Grading	Grading	9/8/2025	9/19/2025	5.00	10.0	—
Building Construction	Building Construction	9/22/2025	7/24/2026	5.00	220	—
Paving	Paving	7/13/2026	8/7/2026	5.00	20.0	—
Architectural Coating	Architectural Coating	8/10/2026	9/4/2026	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37

Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	0.00	12.0	LDA,LDT1,LDT2
Demolition	Vendor	6.00	0.25	HHDT,MHDT
Demolition	Hauling	14.0	0.25	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	0.00	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	0.25	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	0.00	12.0	LDA,LDT1,LDT2
Grading	Vendor	6.00	0.25	HHDT,MHDT
Grading	Hauling	26.0	0.25	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	12.0	LDA,LDT1,LDT2

Building Construction	Vendor	4.00	0.25	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	12.0	LDA,LDT1,LDT2
Paving	Vendor	2.00	0.25	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	0.25	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	0.00	12.0	LDA,LDT1,LDT2
Demolition	Vendor	6.00	0.25	HHDT,MHDT
Demolition	Hauling	14.0	0.25	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	0.00	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	0.25	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—

Grading	Worker	0.00	12.0	LDA,LDT1,LDT2
Grading	Vendor	6.00	0.25	HHDT,MHDT
Grading	Hauling	26.0	0.25	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	4.00	0.25	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	12.0	LDA,LDT1,LDT2
Paving	Vendor	2.00	0.25	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	0.25	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

Architectural Coating	0.00	0.00	22,757	7,586	5,918

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,030	—
Site Preparation	0.00	0.00	6.00	0.00	—
Grading	2,000	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.26

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government (Civic Center)	0.00	0%
Parking Lot	1.55	100%
Other Non-Asphalt Surfaces	0.71	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	589	0.03	< 0.005
2026	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.4	annual days of extreme heat
Extreme Precipitation	3.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	7.98	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	64.7
AQ-PM	45.1
AQ-DPM	25.7
Drinking Water	10.9
Lead Risk Housing	17.5
Pesticides	0.00
Toxic Releases	25.6
Traffic	48.6
Effect Indicators	—
CleanUp Sites	37.8
Groundwater	40.8
Haz Waste Facilities/Generators	84.7
Impaired Water Bodies	77.3
Solid Waste	9.67
Sensitive Population	—
Asthma	35.6
Cardio-vascular	30.2
Low Birth Weights	18.6
Socioeconomic Factor Indicators	—
Education	43.4
Housing	19.8
Linguistic	10.4
Poverty	16.6
Unemployment	28.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	66.11061209
Employed	1.296034903
Median HI	58.75785962
Education	—
Bachelor's or higher	47.36301809
High school enrollment	17.87501604
Preschool enrollment	14.26921596
Transportation	—
Auto Access	76.73553189
Active commuting	33.56858719
Social	—
2-parent households	27.65302194
Voting	75.72180162
Neighborhood	—
Alcohol availability	42.80764789
Park access	24.26536635
Retail density	59.4636212
Supermarket access	60.82381625
Tree canopy	8.135506224
Housing	—
Homeownership	43.19260875
Housing habitability	69.11330681
Low-inc homeowner severe housing cost burden	75.55498524
Low-inc renter severe housing cost burden	83.49801104
Uncrowded housing	47.26036186

Health Outcomes	—
Insured adults	74.51559091
Arthritis	0.0
Asthma ER Admissions	59.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	1.7
Cognitively Disabled	36.6
Physically Disabled	78.7
Heart Attack ER Admissions	49.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	48.8
Elderly	83.1
English Speaking	76.6
Foreign-born	6.0
Outdoor Workers	58.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	55.9
Traffic Density	49.3
Traffic Access	51.5
Other Indices	—
Hardship	31.7
Other Decision Support	—
2016 Voting	76.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	34.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant provided schedule ~ 14 mos of construction. Note: duration of construction is greater than CalEEMod default values, therefore, it represents a conservative estimate.
Land Use	Adjusted acreage so total site acreage disturbed = 3.2
Construction: Trips and VMT	Zeroed out worker trips for construction HRA emissions as they are not diesel-fueled. Truck trip length reduced to 0.25 miles to represent on-site emissions.

Appendix A-3

Construction Health Risk Assessment Output Files

Santee Community Center

Construction HRA

Project Construction Emissions

Year	Unmitigated DPM tons/year	Mitigated DPM tons/year
2025	0.0311	0.0064
2026	0.0306	0.0090
Total	**0.062**	**0.015**
Total Lbs	**123.320**	**30.804**
Lbs/year	**109.058**	**27.242**
Lbs/hour	**0.05**	**0.01**

MEIR Risk	Unmitigated	Mitigated
Cancer (persons in a million)	**38.63**	**8.20**
Chronic	**0.0388**	**0.0097**

Conversions:

1 ton =	2,000	lb
Construction =	8	hours/day
	2080	hours/year
	260	days/year
	12	months

AERMOD Assumptions

Source Name	Description	No. of Vol. Sources	Emission Rate g/s	Release Height m	Plume Height m	Plume Width m
SLINE1	Off-Road Equipment and Trucks	223	1.00	5.00	10.00	10.00

Receptors

Grid Sizes	Spacing
Uniform Cartesian	< 50 meters
Discrete	Nearest Sensitive Receptors

Meteorological Data

Station Name		Years	Lat	Long	Elev (m)
LES	Lexington Elementary School, El Cajon	2019-2021	32.789562°	-116.944318°	143

https://www.sdapcd.org/content/dam/sdapcd/documents/monitoring/2022-Network-Report.pdf

Other Model Assumption

Rural or Urban	Urban	
Urban Grp Pop	3,276,208	US Census 2022
Terrain Data	NED 1	https://www.census.gov/quickfacts/fact/table/sandiegocountycalifornia/PST045222
Lakes Version	12.0.0	
AERMOD Version	22112	

```
↑ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                              ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   223 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   3276208.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    223 Source(s);       1 Source Group(s); and     991 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    223 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)
```

```
 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  22112

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   143.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.7 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Santee_CommCtr_Con.err

 **File for Summary of Results:   Santee_CommCtr_Con.sum

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                        *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                          (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
```

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: LES_2019-2021_v22112.SFC
Met Version: 22112
Profile file: LES_2019-2021_v22112.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 53143 Name: LES Year: 2019

Upper air station no.: 3190 Name: UNKNOWN Year: 2019

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN

```
ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
 19 01 01   1 01   -1.2  0.036 -9.000 -9.000 -999.   17.      3.4  0.03   1.10
1.00    1.07  109.   10.0  279.8   10.0
 19 01 01   1 02   -0.4  0.018 -9.000 -9.000 -999.    6.      1.5  0.03   1.10
1.00    0.54  221.   10.0  278.4   10.0
 19 01 01   1 03   -0.4  0.020 -9.000 -9.000 -999.    7.      1.7  0.03   1.10
1.00    0.58  120.   10.0  277.3   10.0
 19 01 01   1 04   -0.9  0.029 -9.000 -9.000 -999.   12.      2.3  0.03   1.10
1.00    0.85   74.   10.0  276.5   10.0
 19 01 01   1 05   -0.6  0.024 -9.000 -9.000 -999.    9.      2.0  0.03   1.10
1.00    0.72  108.   10.0  276.0   10.0
 19 01 01   1 06   -1.1  0.032 -9.000 -9.000 -999.   14.      2.6  0.03   1.10
1.00    0.94   44.   10.0  275.4   10.0
 19 01 01   1 07   -0.7  0.024 -9.000 -9.000 -999.    9.      2.0  0.03   1.10
1.00    0.72  288.   10.0  275.5   10.0
 19 01 01   1 08   -0.5  0.024 -9.000 -9.000 -999.    9.      2.5  0.03   1.10
0.49    0.72  231.   10.0  276.0   10.0
 19 01 01   1 09   33.8 -9.000 -9.000 -9.000  154. -999. -99999.0  0.03   1.10
0.30    0.00    0.   10.0  279.9   10.0
 19 01 01   1 10   85.0  0.120  0.857  0.005  265.  100.     -1.8  0.03   1.10
0.23    1.16  332.   10.0  283.3   10.0
 19 01 01   1 11  119.9  0.189  1.381  0.005  785.  197.     -5.0  0.03   1.10
0.21    2.10  320.   10.0  285.3   10.0
 19 01 01   1 12  136.4  0.238  1.521  0.005  922.  278.     -8.8  0.03   1.10
0.20    2.82   18.   10.0  286.5   10.0
 19 01 01   1 13  133.6  0.307  1.572  0.005 1039.  409.    -19.4  0.03   1.10
0.20    3.93   12.   10.0  286.8   10.0
 19 01 01   1 14  112.1  0.313  1.524  0.005 1127.  419.    -24.3  0.03   1.10
0.21    4.07   26.   10.0  286.8   10.0
 19 01 01   1 15   72.7  0.324  1.339  0.005 1180.  443.    -41.9  0.03   1.10
0.24    4.38   62.   10.0  286.8   10.0
 19 01 01   1 16   18.5  0.316  0.851  0.005 1191.  426.   -152.4  0.03   1.10
0.33    4.51   44.   10.0  285.8   10.0
 19 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.03   1.10
0.61    4.02   71.   10.0  284.5   10.0
 19 01 01   1 18  -21.6  0.194 -9.000 -9.000 -999.  205.     30.1  0.03   1.10
1.00    3.67   76.   10.0  283.2   10.0
 19 01 01   1 19   -8.3  0.088 -9.000 -9.000 -999.   69.      7.2  0.03   1.10
1.00    2.59   53.   10.0  282.6   10.0
 19 01 01   1 20   -4.6  0.065 -9.000 -9.000 -999.   40.      5.3  0.03   1.10
1.00    1.92   93.   10.0  280.8   10.0
 19 01 01   1 21   -2.7  0.050 -9.000 -9.000 -999.   27.      4.1  0.03   1.10
1.00    1.48   85.   10.0  278.6   10.0
 19 01 01   1 22   -1.2  0.033 -9.000 -9.000 -999.   14.      2.7  0.03   1.10
1.00    0.98   82.   10.0  277.5   10.0
 19 01 01   1 23   -4.0  0.061 -9.000 -9.000 -999.   36.      4.9  0.03   1.10
1.00    1.79   85.   10.0  276.5   10.0
 19 01 01   1 24   -5.3  0.070 -9.000 -9.000 -999.   44.      5.7  0.03   1.10
```

1.00   2.06 100.   10.0 276.4   10.0

 First hour of profile data
 YR MO DY HR HEIGHT F WDIR   WSPD AMB_TMP sigmaA sigmaW sigmaV
 19 01 01 01   10.0 1 109.   1.07   279.9   38.0 -99.00   0.58

 F indicates top of profile (=1) or below (=0)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

                                       *** THE SUMMARY OF MAXIMUM PERIOD (26304
HRS) RESULTS ***

                                    ** CONC OF PM_10   IN MICROGRAMS/M**3
             **

                       NETWORK
GROUP ID   AVERAGE CONC   RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG) OF TYPE GRID-ID
- -
- - - - - - - - - - - - - - - - - - -

ALL   1ST HIGHEST VALUE IS   123.63995 AT (502134.10, 3634860.84,   109.52,
  109.52,   0.00) DC
          2ND HIGHEST VALUE IS   120.43456 AT (502155.96, 3634861.95,   109.66,
  109.66,   0.00) DC
          3RD HIGHEST VALUE IS   120.00321 AT (502118.16, 3634861.58,   109.42,
  109.42,   0.00) DC
          4TH HIGHEST VALUE IS   119.00154 AT (502173.74, 3634860.84,   109.79,
  109.79,   0.00) DC
          5TH HIGHEST VALUE IS   114.08114 AT (502091.20, 3634721.35,   108.22,
  108.22,   0.00) DC
          6TH HIGHEST VALUE IS   113.21348 AT (502186.34, 3634861.21,   109.88,
  109.88,   0.00) DC
          7TH HIGHEST VALUE IS   108.72371 AT (502085.18, 3634862.32,   109.24,
  109.24,   0.00) DC
          8TH HIGHEST VALUE IS   101.79984 AT (502204.13, 3634861.95,   109.93,
  109.93,   0.00) DC
          9TH HIGHEST VALUE IS   100.26111 AT (502070.73, 3634863.06,   109.70,
  109.70,   0.00) DC
         10TH HIGHEST VALUE IS   93.37478 AT (502211.77, 3634864.08,   109.91,
  109.91,   0.00) DC

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE	CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE	GRID-ID
ALL	HIGH	1ST HIGH VALUE IS	520.47821	ON 19120316: AT (502134.10, 3634860.84, 109.52, 109.52, 0.00)	DC	

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   1 Warning Message(s)

```
 A Total of         5244 Informational Message(s)

 A Total of        26304 Hours Were Processed

 A Total of         4177 Calm Hours Identified

 A Total of         1067 Missing Hours Identified (  4.06 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 MX W403     570       PFLCNV: Turbulence data is being used w/o ADJ_U* option
SigA Data
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 2/5/2024
** File: C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Con\Santee_CommCtr_Con.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 3276208 San_Diego_County_Census
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL Santee_CommCtr_Con.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Offroad Equipment and Trucks
** PREFIX
** Length of Side = 10.00
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 10.00
** SZINIT = 4.65
** Nodes = 47
** 502132.759, 3634710.415, 107.13, 5.00, 4.65
** 502200.459, 3634717.082, 105.32, 5.00, 4.65
** 502211.229, 3634735.546, 105.95, 5.00, 4.65
```

```
** 502211.742, 3634828.890, 107.70, 5.00, 4.65
** 502021.465, 3634825.812, 109.12, 5.00, 4.65
** 502031.722, 3634770.934, 108.13, 5.00, 4.65
** 502032.235, 3634770.422, 108.12, 5.00, 4.65
** 502123.527, 3634768.370, 107.85, 5.00, 4.65
** 502126.605, 3634719.134, 107.35, 5.00, 4.65
** 502195.843, 3634722.724, 105.85, 5.00, 4.65
** 502204.562, 3634743.239, 106.05, 5.00, 4.65
** 502204.562, 3634822.222, 107.77, 5.00, 4.65
** 502032.748, 3634820.684, 108.92, 5.00, 4.65
** 502038.903, 3634781.192, 108.11, 5.00, 4.65
** 502038.390, 3634777.602, 108.10, 5.00, 4.65
** 502133.785, 3634775.550, 107.34, 5.00, 4.65
** 502134.298, 3634729.391, 107.07, 5.00, 4.65
** 502189.176, 3634731.443, 106.25, 5.00, 4.65
** 502196.869, 3634747.855, 106.24, 5.00, 4.65
** 502195.330, 3634812.478, 107.28, 5.00, 4.65
** 502045.057, 3634812.478, 108.63, 5.00, 4.65
** 502047.621, 3634788.372, 108.10, 5.00, 4.65
** 502138.401, 3634785.295, 107.48, 5.00, 4.65
** 502141.991, 3634785.295, 107.46, 5.00, 4.65
** 502141.478, 3634742.213, 106.83, 5.00, 4.65
** 502140.965, 3634738.623, 106.79, 5.00, 4.65
** 502183.021, 3634740.162, 106.32, 5.00, 4.65
** 502189.176, 3634750.419, 106.58, 5.00, 4.65
** 502187.124, 3634805.810, 107.16, 5.00, 4.65
** 502054.802, 3634805.297, 108.33, 5.00, 4.65
** 502054.802, 3634797.091, 108.04, 5.00, 4.65
** 502055.315, 3634795.553, 108.04, 5.00, 4.65
** 502145.581, 3634794.527, 107.53, 5.00, 4.65
** 502149.171, 3634794.527, 107.52, 5.00, 4.65
** 502147.120, 3634746.316, 106.83, 5.00, 4.65
** 502181.482, 3634748.368, 106.32, 5.00, 4.65
** 502184.047, 3634763.754, 106.74, 5.00, 4.65
** 502180.457, 3634800.681, 107.16, 5.00, 4.65
** 502154.813, 3634800.681, 107.39, 5.00, 4.65
** 502154.300, 3634756.061, 106.96, 5.00, 4.65
** 502173.276, 3634756.574, 106.84, 5.00, 4.65
** 502176.866, 3634767.857, 106.86, 5.00, 4.65
** 502174.815, 3634796.065, 107.25, 5.00, 4.65
** 502160.454, 3634794.527, 107.29, 5.00, 4.65
** 502160.967, 3634765.293, 106.92, 5.00, 4.65
** 502166.609, 3634764.780, 106.90, 5.00, 4.65
** 502167.122, 3634787.859, 107.22, 5.00, 4.65
** ------------------------------------------------------------------
   LOCATION L0000001     VOLUME   502137.735 3634710.905 107.01
   LOCATION L0000002     VOLUME   502147.687 3634711.885 106.55
   LOCATION L0000003     VOLUME   502157.639 3634712.865 106.41
   LOCATION L0000004     VOLUME   502167.591 3634713.845 106.27
   LOCATION L0000005     VOLUME   502177.542 3634714.825 106.09
```

```
LOCATION L0000006     VOLUME   502187.494 3634715.806 105.91
LOCATION L0000007     VOLUME   502197.446 3634716.786 105.72
LOCATION L0000008     VOLUME   502203.972 3634723.105 105.75
LOCATION L0000009     VOLUME   502209.011 3634731.743 106.03
LOCATION L0000010     VOLUME   502211.260 3634741.143 106.30
LOCATION L0000011     VOLUME   502211.315 3634751.143 106.49
LOCATION L0000012     VOLUME   502211.370 3634761.143 106.68
LOCATION L0000013     VOLUME   502211.425 3634771.143 106.79
LOCATION L0000014     VOLUME   502211.480 3634781.143 106.82
LOCATION L0000015     VOLUME   502211.535 3634791.142 106.85
LOCATION L0000016     VOLUME   502211.590 3634801.142 106.96
LOCATION L0000017     VOLUME   502211.645 3634811.142 107.20
LOCATION L0000018     VOLUME   502211.700 3634821.142 107.43
LOCATION L0000019     VOLUME   502209.490 3634828.853 107.63
LOCATION L0000020     VOLUME   502199.491 3634828.691 107.45
LOCATION L0000021     VOLUME   502189.493 3634828.530 107.45
LOCATION L0000022     VOLUME   502179.494 3634828.368 107.55
LOCATION L0000023     VOLUME   502169.495 3634828.206 107.65
LOCATION L0000024     VOLUME   502159.497 3634828.045 107.74
LOCATION L0000025     VOLUME   502149.498 3634827.883 107.84
LOCATION L0000026     VOLUME   502139.499 3634827.721 108.02
LOCATION L0000027     VOLUME   502129.501 3634827.560 108.29
LOCATION L0000028     VOLUME   502119.502 3634827.398 108.56
LOCATION L0000029     VOLUME   502109.503 3634827.236 108.61
LOCATION L0000030     VOLUME   502099.504 3634827.074 108.64
LOCATION L0000031     VOLUME   502089.506 3634826.913 108.71
LOCATION L0000032     VOLUME   502079.507 3634826.751 108.91
LOCATION L0000033     VOLUME   502069.508 3634826.589 109.11
LOCATION L0000034     VOLUME   502059.510 3634826.428 109.11
LOCATION L0000035     VOLUME   502049.511 3634826.266 109.02
LOCATION L0000036     VOLUME   502039.512 3634826.104 108.95
LOCATION L0000037     VOLUME   502029.514 3634825.942 108.97
LOCATION L0000038     VOLUME   502021.823 3634823.895 108.94
LOCATION L0000039     VOLUME   502023.660 3634814.066 108.69
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SRCPARAM L0000127     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000128     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000129     0.0044843049      5.00      4.65      4.65
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SRCPARAM L0000130     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000131     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000132     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000133     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000134     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000135     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000136     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000137     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000138     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000139     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000140     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000141     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000142     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000143     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000144     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000145     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000146     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000147     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000148     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000149     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000150     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000151     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000152     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000153     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000154     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000155     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000156     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000157     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000158     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000159     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000160     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000161     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000162     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000163     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000164     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000165     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000166     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000167     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000168     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000169     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000170     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000171     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000172     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000173     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000174     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000175     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000176     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000177     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000178     0.0044843049      5.00      4.65      4.65
SRCPARAM L0000179     0.0044843049      5.00      4.65      4.65
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   SRCPARAM L0000180     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000181     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000182     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000183     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000184     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000185     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000186     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000187     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000188     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000189     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000190     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000191     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000192     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000193     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000194     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000195     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000196     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000197     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000198     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000199     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000200     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000201     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000202     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000203     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000204     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000205     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000206     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000207     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000208     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000209     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000210     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000211     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000212     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000213     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000214     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000215     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000216     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000217     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000218     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000219     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000220     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000221     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000222     0.0044843049      5.00      4.65      4.65
   SRCPARAM L0000223     0.0044843049      5.00      4.65      4.65
** ------------------------------------------------------------------------
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
```

```
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Santee_CommCtr_Con.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE LES_2019-2021_v22112.SFC
   PROFFILE LES_2019-2021_v22112.PFL
   SURFDATA 53143 2019 LES
   UAIRDATA 3190 2019
   SITEDATA 1022 2019
   PROFBASE 143.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST Santee_CommCtr_Con.AD\01H1GALL.PLT 31
   PLOTFILE PERIOD ALL Santee_CommCtr_Con.AD\PE00GALL.PLT 32
   SUMMFILE Santee_CommCtr_Con.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            1 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***
```

```
    ********   WARNING MESSAGES   ********
 MX W403     570       PFLCNV: Turbulence data is being used w/o ADJ_U* option
SigA Data

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
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                       ***        12:46:26

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                           ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   223 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   3276208.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    223 Source(s);       1 Source Group(s); and     991
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    223 VOLUME source(s)
```

```
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  22112

 **Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   143.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.7 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Santee_CommCtr_Con.err

 **File for Summary of Results:   Santee_CommCtr_Con.sum

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0000001	0	0.44843E-02	502137.7	3634710.9	107.0	5.00	4.65	4.65	YES	NO	
L0000002	0	0.44843E-02	502147.7	3634711.9	106.5	5.00	4.65	4.65	YES	NO	
L0000003	0	0.44843E-02	502157.6	3634712.9	106.4	5.00	4.65	4.65	YES	NO	
L0000004	0	0.44843E-02	502167.6	3634713.8	106.3	5.00	4.65	4.65	YES	NO	
L0000005	0	0.44843E-02	502177.5	3634714.8	106.1	5.00	4.65	4.65	YES	NO	
L0000006	0	0.44843E-02	502187.5	3634715.8	105.9	5.00	4.65	4.65	YES	NO	
L0000007	0	0.44843E-02	502197.4	3634716.8	105.7	5.00	4.65	4.65	YES	NO	
L0000008	0	0.44843E-02	502204.0	3634723.1	105.8	5.00	4.65	4.65	YES	NO	
L0000009	0	0.44843E-02	502209.0	3634731.7	106.0	5.00	4.65	4.65	YES	NO	
L0000010	0	0.44843E-02	502211.3	3634741.1	106.3	5.00	4.65	4.65	YES	NO	
L0000011	0	0.44843E-02	502211.3	3634751.1	106.5	5.00	4.65	4.65	YES	NO	
L0000012	0	0.44843E-02	502211.4	3634761.1	106.7	5.00	4.65	4.65	YES	NO	
L0000013	0	0.44843E-02	502211.4	3634771.1	106.8	5.00	4.65	4.65	YES	NO	
L0000014	0	0.44843E-02	502211.5	3634781.1	106.8	5.00	4.65	4.65	YES	NO	
L0000015	0	0.44843E-02	502211.5	3634791.1	106.8	5.00	4.65	4.65	YES	NO	
L0000016	0	0.44843E-02	502211.6	3634801.1	107.0	5.00	4.65	4.65	YES	NO	
L0000017	0	0.44843E-02	502211.6	3634811.1	107.2	5.00	4.65	4.65	YES	NO	
L0000018	0	0.44843E-02	502211.7	3634821.1	107.4	5.00	4.65	4.65	YES	NO	
L0000019	0	0.44843E-02	502209.5	3634828.9	107.6	5.00	4.65				

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4.65     YES                    NO
 L0000020         0   0.44843E-02  502199.5 3634828.7   107.5     5.00     4.65
4.65     YES                    NO
 L0000021         0   0.44843E-02  502189.5 3634828.5   107.5     5.00     4.65
4.65     YES                    NO
 L0000022         0   0.44843E-02  502179.5 3634828.4   107.5     5.00     4.65
4.65     YES                    NO
 L0000023         0   0.44843E-02  502169.5 3634828.2   107.6     5.00     4.65
4.65     YES                    NO
 L0000024         0   0.44843E-02  502159.5 3634828.0   107.7     5.00     4.65
4.65     YES                    NO
 L0000025         0   0.44843E-02  502149.5 3634827.9   107.8     5.00     4.65
4.65     YES                    NO
 L0000026         0   0.44843E-02  502139.5 3634827.7   108.0     5.00     4.65
4.65     YES                    NO
 L0000027         0   0.44843E-02  502129.5 3634827.6   108.3     5.00     4.65
4.65     YES                    NO
 L0000028         0   0.44843E-02  502119.5 3634827.4   108.6     5.00     4.65
4.65     YES                    NO
 L0000029         0   0.44843E-02  502109.5 3634827.2   108.6     5.00     4.65
4.65     YES                    NO
 L0000030         0   0.44843E-02  502099.5 3634827.1   108.6     5.00     4.65
4.65     YES                    NO
 L0000031         0   0.44843E-02  502089.5 3634826.9   108.7     5.00     4.65
4.65     YES                    NO
 L0000032         0   0.44843E-02  502079.5 3634826.8   108.9     5.00     4.65
4.65     YES                    NO
 L0000033         0   0.44843E-02  502069.5 3634826.6   109.1     5.00     4.65
4.65     YES                    NO
 L0000034         0   0.44843E-02  502059.5 3634826.4   109.1     5.00     4.65
4.65     YES                    NO
 L0000035         0   0.44843E-02  502049.5 3634826.3   109.0     5.00     4.65
4.65     YES                    NO
 L0000036         0   0.44843E-02  502039.5 3634826.1   109.0     5.00     4.65
4.65     YES                    NO
 L0000037         0   0.44843E-02  502029.5 3634825.9   109.0     5.00     4.65
4.65     YES                    NO
 L0000038         0   0.44843E-02  502021.8 3634823.9   108.9     5.00     4.65
4.65     YES                    NO
 L0000039         0   0.44843E-02  502023.7 3634814.1   108.7     5.00     4.65
4.65     YES                    NO
 L0000040         0   0.44843E-02  502025.5 3634804.2   108.4     5.00     4.65
4.65     YES                    NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0000041	0	0.44843E-02	502027.3	3634794.4	108.2	5.00	4.65	4.65	YES	NO	
L0000042	0	0.44843E-02	502029.2	3634784.6	108.2	5.00	4.65	4.65	YES	NO	
L0000043	0	0.44843E-02	502031.0	3634774.7	108.2	5.00	4.65	4.65	YES	NO	
L0000044	0	0.44843E-02	502037.6	3634770.3	108.1	5.00	4.65	4.65	YES	NO	
L0000045	0	0.44843E-02	502047.6	3634770.1	108.1	5.00	4.65	4.65	YES	NO	
L0000046	0	0.44843E-02	502057.6	3634769.9	108.1	5.00	4.65	4.65	YES	NO	
L0000047	0	0.44843E-02	502067.6	3634769.6	108.1	5.00	4.65	4.65	YES	NO	
L0000048	0	0.44843E-02	502077.6	3634769.4	108.1	5.00	4.65	4.65	YES	NO	
L0000049	0	0.44843E-02	502087.6	3634769.2	108.0	5.00	4.65	4.65	YES	NO	
L0000050	0	0.44843E-02	502097.6	3634769.0	108.0	5.00	4.65	4.65	YES	NO	
L0000051	0	0.44843E-02	502107.6	3634768.7	107.9	5.00	4.65	4.65	YES	NO	
L0000052	0	0.44843E-02	502117.6	3634768.5	107.9	5.00	4.65	4.65	YES	NO	
L0000053	0	0.44843E-02	502123.8	3634764.3	107.7	5.00	4.65	4.65	YES	NO	
L0000054	0	0.44843E-02	502124.4	3634754.3	107.8	5.00	4.65	4.65	YES	NO	
L0000055	0	0.44843E-02	502125.0	3634744.3	107.8	5.00	4.65	4.65	YES	NO	
L0000056	0	0.44843E-02	502125.7	3634734.4	107.7	5.00	4.65	4.65	YES	NO	
L0000057	0	0.44843E-02	502126.3	3634724.4	107.7	5.00	4.65	4.65	YES	NO	
L0000058	0	0.44843E-02	502131.3	3634719.4	107.4	5.00	4.65	4.65	YES	NO	
L0000059	0	0.44843E-02	502141.3	3634719.9	106.8	5.00	4.65				

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4.65     YES                    NO
 L0000060         0   0.44843E-02  502151.3 3634720.4   106.6     5.00     4.65
4.65     YES                    NO
 L0000061         0   0.44843E-02  502161.3 3634720.9   106.4     5.00     4.65
4.65     YES                    NO
 L0000062         0   0.44843E-02  502171.3 3634721.5   106.3     5.00     4.65
4.65     YES                    NO
 L0000063         0   0.44843E-02  502181.3 3634722.0   106.1     5.00     4.65
4.65     YES                    NO
 L0000064         0   0.44843E-02  502191.3 3634722.5   106.0     5.00     4.65
4.65     YES                    NO
 L0000065         0   0.44843E-02  502198.0 3634727.7   106.0     5.00     4.65
4.65     YES                    NO
 L0000066         0   0.44843E-02  502201.9 3634736.9   106.3     5.00     4.65
4.65     YES                    NO
 L0000067         0   0.44843E-02  502204.6 3634746.4   106.4     5.00     4.65
4.65     YES                    NO
 L0000068         0   0.44843E-02  502204.6 3634756.4   106.6     5.00     4.65
4.65     YES                    NO
 L0000069         0   0.44843E-02  502204.6 3634766.4   106.7     5.00     4.65
4.65     YES                    NO
 L0000070         0   0.44843E-02  502204.6 3634776.4   106.8     5.00     4.65
4.65     YES                    NO
 L0000071         0   0.44843E-02  502204.6 3634786.4   106.9     5.00     4.65
4.65     YES                    NO
 L0000072         0   0.44843E-02  502204.6 3634796.4   106.9     5.00     4.65
4.65     YES                    NO
 L0000073         0   0.44843E-02  502204.6 3634806.4   107.1     5.00     4.65
4.65     YES                    NO
 L0000074         0   0.44843E-02  502204.6 3634816.4   107.3     5.00     4.65
4.65     YES                    NO
 L0000075         0   0.44843E-02  502200.4 3634822.2   107.3     5.00     4.65
4.65     YES                    NO
 L0000076         0   0.44843E-02  502190.4 3634822.1   107.3     5.00     4.65
4.65     YES                    NO
 L0000077         0   0.44843E-02  502180.4 3634822.0   107.4     5.00     4.65
4.65     YES                    NO
 L0000078         0   0.44843E-02  502170.4 3634821.9   107.5     5.00     4.65
4.65     YES                    NO
 L0000079         0   0.44843E-02  502160.4 3634821.8   107.6     5.00     4.65
4.65     YES                    NO
 L0000080         0   0.44843E-02  502150.4 3634821.7   107.8     5.00     4.65
4.65     YES                    NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                        ***        12:46:26

                                   PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0000081	0	0.44843E-02	502140.4	3634821.6	107.9	5.00	4.65	4.65	YES	NO	
L0000082	0	0.44843E-02	502130.4	3634821.6	108.1	5.00	4.65	4.65	YES	NO	
L0000083	0	0.44843E-02	502120.4	3634821.5	108.4	5.00	4.65	4.65	YES	NO	
L0000084	0	0.44843E-02	502110.4	3634821.4	108.5	5.00	4.65	4.65	YES	NO	
L0000085	0	0.44843E-02	502100.4	3634821.3	108.5	5.00	4.65	4.65	YES	NO	
L0000086	0	0.44843E-02	502090.4	3634821.2	108.6	5.00	4.65	4.65	YES	NO	
L0000087	0	0.44843E-02	502080.4	3634821.1	108.7	5.00	4.65	4.65	YES	NO	
L0000088	0	0.44843E-02	502070.4	3634821.0	108.9	5.00	4.65	4.65	YES	NO	
L0000089	0	0.44843E-02	502060.4	3634820.9	108.9	5.00	4.65	4.65	YES	NO	
L0000090	0	0.44843E-02	502050.4	3634820.8	108.8	5.00	4.65	4.65	YES	NO	
L0000091	0	0.44843E-02	502040.4	3634820.8	108.8	5.00	4.65	4.65	YES	NO	
L0000092	0	0.44843E-02	502033.1	3634818.4	108.8	5.00	4.65	4.65	YES	NO	
L0000093	0	0.44843E-02	502034.6	3634808.5	108.5	5.00	4.65	4.65	YES	NO	
L0000094	0	0.44843E-02	502036.2	3634798.6	108.2	5.00	4.65	4.65	YES	NO	
L0000095	0	0.44843E-02	502037.7	3634788.7	108.1	5.00	4.65	4.65	YES	NO	
L0000096	0	0.44843E-02	502038.6	3634778.9	108.1	5.00	4.65	4.65	YES	NO	
L0000097	0	0.44843E-02	502047.1	3634777.4	108.1	5.00	4.65	4.65	YES	NO	
L0000098	0	0.44843E-02	502057.1	3634777.2	108.1	5.00	4.65	4.65	YES	NO	
L0000099	0	0.44843E-02	502067.1	3634777.0	108.1	5.00	4.65				

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4.65     YES                    NO
 L0000100         0   0.44843E-02  502077.1 3634776.8   108.0     5.00     4.65
4.65     YES                    NO
 L0000101         0   0.44843E-02  502087.1 3634776.6   108.0     5.00     4.65
4.65     YES                    NO
 L0000102         0   0.44843E-02  502097.1 3634776.3   108.0     5.00     4.65
4.65     YES                    NO
 L0000103         0   0.44843E-02  502107.1 3634776.1   107.9     5.00     4.65
4.65     YES                    NO
 L0000104         0   0.44843E-02  502117.1 3634775.9   107.9     5.00     4.65
4.65     YES                    NO
 L0000105         0   0.44843E-02  502127.1 3634775.7   107.7     5.00     4.65
4.65     YES                    NO
 L0000106         0   0.44843E-02  502133.8 3634772.2   107.5     5.00     4.65
4.65     YES                    NO
 L0000107         0   0.44843E-02  502133.9 3634762.2   107.4     5.00     4.65
4.65     YES                    NO
 L0000108         0   0.44843E-02  502134.0 3634752.2   107.4     5.00     4.65
4.65     YES                    NO
 L0000109         0   0.44843E-02  502134.2 3634742.2   107.3     5.00     4.65
4.65     YES                    NO
 L0000110         0   0.44843E-02  502134.3 3634732.2   107.3     5.00     4.65
4.65     YES                    NO
 L0000111         0   0.44843E-02  502141.4 3634729.7   106.9     5.00     4.65
4.65     YES                    NO
 L0000112         0   0.44843E-02  502151.4 3634730.0   106.6     5.00     4.65
4.65     YES                    NO
 L0000113         0   0.44843E-02  502161.4 3634730.4   106.5     5.00     4.65
4.65     YES                    NO
 L0000114         0   0.44843E-02  502171.4 3634730.8   106.4     5.00     4.65
4.65     YES                    NO
 L0000115         0   0.44843E-02  502181.4 3634731.2   106.3     5.00     4.65
4.65     YES                    NO
 L0000116         0   0.44843E-02  502190.1 3634733.5   106.3     5.00     4.65
4.65     YES                    NO
 L0000117         0   0.44843E-02  502194.4 3634742.5   106.4     5.00     4.65
4.65     YES                    NO
 L0000118         0   0.44843E-02  502196.8 3634752.0   106.5     5.00     4.65
4.65     YES                    NO
 L0000119         0   0.44843E-02  502196.5 3634762.0   106.6     5.00     4.65
4.65     YES                    NO
 L0000120         0   0.44843E-02  502196.3 3634772.0   106.7     5.00     4.65
4.65     YES                    NO
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE BY	EMISSION RATE SCALAR VARY	AIRCRAFT
L0000121	0	0.44843E-02	502196.1	3634782.0	106.8	5.00	4.65	4.65	YES	NO	
L0000122	0	0.44843E-02	502195.8	3634791.9	107.0	5.00	4.65	4.65	YES	NO	
L0000123	0	0.44843E-02	502195.6	3634801.9	107.1	5.00	4.65	4.65	YES	NO	
L0000124	0	0.44843E-02	502195.3	3634811.9	107.2	5.00	4.65	4.65	YES	NO	
L0000125	0	0.44843E-02	502185.9	3634812.5	107.3	5.00	4.65	4.65	YES	NO	
L0000126	0	0.44843E-02	502175.9	3634812.5	107.4	5.00	4.65	4.65	YES	NO	
L0000127	0	0.44843E-02	502165.9	3634812.5	107.5	5.00	4.65	4.65	YES	NO	
L0000128	0	0.44843E-02	502155.9	3634812.5	107.6	5.00	4.65	4.65	YES	NO	
L0000129	0	0.44843E-02	502145.9	3634812.5	107.7	5.00	4.65	4.65	YES	NO	
L0000130	0	0.44843E-02	502135.9	3634812.5	107.9	5.00	4.65	4.65	YES	NO	
L0000131	0	0.44843E-02	502125.9	3634812.5	108.1	5.00	4.65	4.65	YES	NO	
L0000132	0	0.44843E-02	502115.9	3634812.5	108.2	5.00	4.65	4.65	YES	NO	
L0000133	0	0.44843E-02	502105.9	3634812.5	108.3	5.00	4.65	4.65	YES	NO	
L0000134	0	0.44843E-02	502095.9	3634812.5	108.3	5.00	4.65	4.65	YES	NO	
L0000135	0	0.44843E-02	502085.9	3634812.5	108.4	5.00	4.65	4.65	YES	NO	
L0000136	0	0.44843E-02	502075.9	3634812.5	108.5	5.00	4.65	4.65	YES	NO	
L0000137	0	0.44843E-02	502065.9	3634812.5	108.6	5.00	4.65	4.65	YES	NO	
L0000138	0	0.44843E-02	502055.9	3634812.5	108.6	5.00	4.65	4.65	YES	NO	
L0000139	0	0.44843E-02	502045.9	3634812.5	108.6	5.00	4.65				

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4.65     YES                    NO
 L0000140         0   0.44843E-02  502046.0 3634803.3   108.3     5.00     4.65
4.65     YES                    NO
 L0000141         0   0.44843E-02  502047.1 3634793.4   108.1     5.00     4.65
4.65     YES                    NO
 L0000142         0   0.44843E-02  502052.6 3634788.2   108.1     5.00     4.65
4.65     YES                    NO
 L0000143         0   0.44843E-02  502062.6 3634787.9   108.0     5.00     4.65
4.65     YES                    NO
 L0000144         0   0.44843E-02  502072.6 3634787.5   108.0     5.00     4.65
4.65     YES                    NO
 L0000145         0   0.44843E-02  502082.6 3634787.2   108.0     5.00     4.65
4.65     YES                    NO
 L0000146         0   0.44843E-02  502092.5 3634786.8   108.0     5.00     4.65
4.65     YES                    NO
 L0000147         0   0.44843E-02  502102.5 3634786.5   108.0     5.00     4.65
4.65     YES                    NO
 L0000148         0   0.44843E-02  502112.5 3634786.2   107.9     5.00     4.65
4.65     YES                    NO
 L0000149         0   0.44843E-02  502122.5 3634785.8   107.8     5.00     4.65
4.65     YES                    NO
 L0000150         0   0.44843E-02  502132.5 3634785.5   107.6     5.00     4.65
4.65     YES                    NO
 L0000151         0   0.44843E-02  502142.0 3634784.8   107.4     5.00     4.65
4.65     YES                    NO
 L0000152         0   0.44843E-02  502141.9 3634774.8   107.3     5.00     4.65
4.65     YES                    NO
 L0000153         0   0.44843E-02  502141.7 3634764.8   107.2     5.00     4.65
4.65     YES                    NO
 L0000154         0   0.44843E-02  502141.6 3634754.8   107.1     5.00     4.65
4.65     YES                    NO
 L0000155         0   0.44843E-02  502141.5 3634744.8   107.0     5.00     4.65
4.65     YES                    NO
 L0000156         0   0.44843E-02  502144.8 3634738.8   106.8     5.00     4.65
4.65     YES                    NO
 L0000157         0   0.44843E-02  502154.8 3634739.1   106.7     5.00     4.65
4.65     YES                    NO
 L0000158         0   0.44843E-02  502164.8 3634739.5   106.6     5.00     4.65
4.65     YES                    NO
 L0000159         0   0.44843E-02  502174.8 3634739.9   106.5     5.00     4.65
4.65     YES                    NO
 L0000160         0   0.44843E-02  502183.9 3634741.6   106.5     5.00     4.65
4.65     YES                    NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE BY	EMISSION RATE SCALAR VARY	AIRCRAFT
L0000161	0	0.44843E-02	502189.1	3634750.2	106.5	5.00	4.65	4.65	YES	NO	
L0000162	0	0.44843E-02	502188.8	3634760.2	106.7	5.00	4.65	4.65	YES	NO	
L0000163	0	0.44843E-02	502188.4	3634770.2	106.8	5.00	4.65	4.65	YES	NO	
L0000164	0	0.44843E-02	502188.1	3634780.2	106.9	5.00	4.65	4.65	YES	NO	
L0000165	0	0.44843E-02	502187.7	3634790.2	107.0	5.00	4.65	4.65	YES	NO	
L0000166	0	0.44843E-02	502187.3	3634800.2	107.1	5.00	4.65	4.65	YES	NO	
L0000167	0	0.44843E-02	502182.8	3634805.8	107.2	5.00	4.65	4.65	YES	NO	
L0000168	0	0.44843E-02	502172.8	3634805.8	107.3	5.00	4.65	4.65	YES	NO	
L0000169	0	0.44843E-02	502162.8	3634805.7	107.4	5.00	4.65	4.65	YES	NO	
L0000170	0	0.44843E-02	502152.8	3634805.7	107.5	5.00	4.65	4.65	YES	NO	
L0000171	0	0.44843E-02	502142.8	3634805.6	107.7	5.00	4.65	4.65	YES	NO	
L0000172	0	0.44843E-02	502132.8	3634805.6	107.8	5.00	4.65	4.65	YES	NO	
L0000173	0	0.44843E-02	502122.8	3634805.6	108.0	5.00	4.65	4.65	YES	NO	
L0000174	0	0.44843E-02	502112.8	3634805.5	108.1	5.00	4.65	4.65	YES	NO	
L0000175	0	0.44843E-02	502102.8	3634805.5	108.1	5.00	4.65	4.65	YES	NO	
L0000176	0	0.44843E-02	502092.8	3634805.4	108.2	5.00	4.65	4.65	YES	NO	
L0000177	0	0.44843E-02	502082.8	3634805.4	108.3	5.00	4.65	4.65	YES	NO	
L0000178	0	0.44843E-02	502072.8	3634805.4	108.3	5.00	4.65	4.65	YES	NO	
L0000179	0	0.44843E-02	502062.8	3634805.3	108.3	5.00	4.65				

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4.65     YES                    NO
 L0000180         0   0.44843E-02  502054.8 3634803.3   108.3     5.00     4.65
4.65     YES                    NO
 L0000181         0   0.44843E-02  502057.5 3634795.5   108.0     5.00     4.65
4.65     YES                    NO
 L0000182         0   0.44843E-02  502067.5 3634795.4   108.0     5.00     4.65
4.65     YES                    NO
 L0000183         0   0.44843E-02  502077.5 3634795.3   108.0     5.00     4.65
4.65     YES                    NO
 L0000184         0   0.44843E-02  502087.5 3634795.2   108.0     5.00     4.65
4.65     YES                    NO
 L0000185         0   0.44843E-02  502097.5 3634795.1   108.0     5.00     4.65
4.65     YES                    NO
 L0000186         0   0.44843E-02  502107.5 3634795.0   107.9     5.00     4.65
4.65     YES                    NO
 L0000187         0   0.44843E-02  502117.5 3634794.8   107.8     5.00     4.65
4.65     YES                    NO
 L0000188         0   0.44843E-02  502127.5 3634794.7   107.7     5.00     4.65
4.65     YES                    NO
 L0000189         0   0.44843E-02  502137.5 3634794.6   107.6     5.00     4.65
4.65     YES                    NO
 L0000190         0   0.44843E-02  502147.5 3634794.5   107.5     5.00     4.65
4.65     YES                    NO
 L0000191         0   0.44843E-02  502148.8 3634786.2   107.4     5.00     4.65
4.65     YES                    NO
 L0000192         0   0.44843E-02  502148.4 3634776.2   107.2     5.00     4.65
4.65     YES                    NO
 L0000193         0   0.44843E-02  502148.0 3634766.2   107.1     5.00     4.65
4.65     YES                    NO
 L0000194         0   0.44843E-02  502147.5 3634756.2   107.0     5.00     4.65
4.65     YES                    NO
 L0000195         0   0.44843E-02  502147.2 3634746.3   106.9     5.00     4.65
4.65     YES                    NO
 L0000196         0   0.44843E-02  502157.2 3634746.9   106.8     5.00     4.65
4.65     YES                    NO
 L0000197         0   0.44843E-02  502167.2 3634747.5   106.7     5.00     4.65
4.65     YES                    NO
 L0000198         0   0.44843E-02  502177.1 3634748.1   106.6     5.00     4.65
4.65     YES                    NO
 L0000199         0   0.44843E-02  502182.4 3634753.9   106.6     5.00     4.65
4.65     YES                    NO
 L0000200         0   0.44843E-02  502184.0 3634763.8   106.8     5.00     4.65
4.65     YES                    NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE BY	EMISSION RATE SCALAR VARY	AIRCRAFT
L0000201	0	0.44843E-02	502183.1	3634773.8	106.9	5.00	4.65	4.65	YES	NO	
L0000202	0	0.44843E-02	502182.1	3634783.7	107.0	5.00	4.65	4.65	YES	NO	
L0000203	0	0.44843E-02	502181.1	3634793.7	107.1	5.00	4.65	4.65	YES	NO	
L0000204	0	0.44843E-02	502177.5	3634800.7	107.2	5.00	4.65	4.65	YES	NO	
L0000205	0	0.44843E-02	502167.5	3634800.7	107.3	5.00	4.65	4.65	YES	NO	
L0000206	0	0.44843E-02	502157.5	3634800.7	107.4	5.00	4.65	4.65	YES	NO	
L0000207	0	0.44843E-02	502154.7	3634793.4	107.4	5.00	4.65	4.65	YES	NO	
L0000208	0	0.44843E-02	502154.6	3634783.4	107.3	5.00	4.65	4.65	YES	NO	
L0000209	0	0.44843E-02	502154.5	3634773.4	107.1	5.00	4.65	4.65	YES	NO	
L0000210	0	0.44843E-02	502154.4	3634763.4	107.0	5.00	4.65	4.65	YES	NO	
L0000211	0	0.44843E-02	502157.0	3634756.1	106.9	5.00	4.65	4.65	YES	NO	
L0000212	0	0.44843E-02	502167.0	3634756.4	106.8	5.00	4.65	4.65	YES	NO	
L0000213	0	0.44843E-02	502174.4	3634760.1	106.8	5.00	4.65	4.65	YES	NO	
L0000214	0	0.44843E-02	502176.7	3634769.7	106.9	5.00	4.65	4.65	YES	NO	
L0000215	0	0.44843E-02	502176.0	3634779.7	107.0	5.00	4.65	4.65	YES	NO	
L0000216	0	0.44843E-02	502175.3	3634789.7	107.1	5.00	4.65	4.65	YES	NO	
L0000217	0	0.44843E-02	502171.3	3634795.7	107.2	5.00	4.65	4.65	YES	NO	
L0000218	0	0.44843E-02	502161.3	3634794.6	107.3	5.00	4.65	4.65	YES	NO	
L0000219	0	0.44843E-02	502160.6	3634785.4	107.2	5.00	4.65				

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID   SOURCE IDs
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  ALL   L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
L0000006   , L0000007   , L0000008   ,

             L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
L0000014   , L0000015   , L0000016   ,

             L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
L0000022   , L0000023   , L0000024   ,

             L0000025   , L0000026   , L0000027   , L0000028   , L0000029   ,
L0000030   , L0000031   , L0000032   ,

             L0000033   , L0000034   , L0000035   , L0000036   , L0000037   ,
L0000038   , L0000039   , L0000040   ,

             L0000041   , L0000042   , L0000043   , L0000044   , L0000045   ,
L0000046   , L0000047   , L0000048   ,

             L0000049   , L0000050   , L0000051   , L0000052   , L0000053   ,
L0000054   , L0000055   , L0000056   ,

             L0000057   , L0000058   , L0000059   , L0000060   , L0000061   ,
L0000062   , L0000063   , L0000064   ,

             L0000065   , L0000066   , L0000067   , L0000068   , L0000069   ,
L0000070   , L0000071   , L0000072   ,

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             L0000073    , L0000074    , L0000075    , L0000076    , L0000077    ,
L0000078    , L0000079    , L0000080    ,

             L0000081    , L0000082    , L0000083    , L0000084    , L0000085    ,
L0000086    , L0000087    , L0000088    ,

             L0000089    , L0000090    , L0000091    , L0000092    , L0000093    ,
L0000094    , L0000095    , L0000096    ,

             L0000097    , L0000098    , L0000099    , L0000100    , L0000101    ,
L0000102    , L0000103    , L0000104    ,

             L0000105    , L0000106    , L0000107    , L0000108    , L0000109    ,
L0000110    , L0000111    , L0000112    ,

             L0000113    , L0000114    , L0000115    , L0000116    , L0000117    ,
L0000118    , L0000119    , L0000120    ,

             L0000121    , L0000122    , L0000123    , L0000124    , L0000125    ,
L0000126    , L0000127    , L0000128    ,

             L0000129    , L0000130    , L0000131    , L0000132    , L0000133    ,
L0000134    , L0000135    , L0000136    ,

             L0000137    , L0000138    , L0000139    , L0000140    , L0000141    ,
L0000142    , L0000143    , L0000144    ,

             L0000145    , L0000146    , L0000147    , L0000148    , L0000149    ,
L0000150    , L0000151    , L0000152    ,

             L0000153    , L0000154    , L0000155    , L0000156    , L0000157    ,
L0000158    , L0000159    , L0000160    ,
```


*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

```
             L0000161    , L0000162    , L0000163    , L0000164    , L0000165    ,
L0000166    , L0000167    , L0000168    ,
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
	3276208.	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
		L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
		L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
		L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,

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             L0000033    , L0000034    , L0000035    , L0000036    , L0000037    ,
L0000038    , L0000039    , L0000040    ,

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L0000046    , L0000047    , L0000048    ,

             L0000049    , L0000050    , L0000051    , L0000052    , L0000053    ,
L0000054    , L0000055    , L0000056    ,

             L0000057    , L0000058    , L0000059    , L0000060    , L0000061    ,
L0000062    , L0000063    , L0000064    ,

             L0000065    , L0000066    , L0000067    , L0000068    , L0000069    ,
L0000070    , L0000071    , L0000072    ,

             L0000073    , L0000074    , L0000075    , L0000076    , L0000077    ,
L0000078    , L0000079    , L0000080    ,

             L0000081    , L0000082    , L0000083    , L0000084    , L0000085    ,
L0000086    , L0000087    , L0000088    ,

             L0000089    , L0000090    , L0000091    , L0000092    , L0000093    ,
L0000094    , L0000095    , L0000096    ,

             L0000097    , L0000098    , L0000099    , L0000100    , L0000101    ,
L0000102    , L0000103    , L0000104    ,

             L0000105    , L0000106    , L0000107    , L0000108    , L0000109    ,
L0000110    , L0000111    , L0000112    ,

             L0000113    , L0000114    , L0000115    , L0000116    , L0000117    ,
L0000118    , L0000119    , L0000120    ,

             L0000121    , L0000122    , L0000123    , L0000124    , L0000125    ,
L0000126    , L0000127    , L0000128    ,

             L0000129    , L0000130    , L0000131    , L0000132    , L0000133    ,
L0000134    , L0000135    , L0000136    ,

             L0000137    , L0000138    , L0000139    , L0000140    , L0000141    ,
L0000142    , L0000143    , L0000144    ,

             L0000145    , L0000146    , L0000147    , L0000148    , L0000149    ,
L0000150    , L0000151    , L0000152    ,

             L0000153    , L0000154    , L0000155    , L0000156    , L0000157    ,
L0000158    , L0000159    , L0000160    ,
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
```

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs

L0000161 , L0000162 , L0000163 , L0000164 , L0000165 , L0000166 , L0000167 , L0000168 ,

L0000169 , L0000170 , L0000171 , L0000172 , L0000173 , L0000174 , L0000175 , L0000176 ,

L0000177 , L0000178 , L0000179 , L0000180 , L0000181 , L0000182 , L0000183 , L0000184 ,

L0000185 , L0000186 , L0000187 , L0000188 , L0000189 , L0000190 , L0000191 , L0000192 ,

L0000193 , L0000194 , L0000195 , L0000196 , L0000197 , L0000198 , L0000199 , L0000200 ,

L0000201 , L0000202 , L0000203 , L0000204 , L0000205 , L0000206 , L0000207 , L0000208 ,

L0000209 , L0000210 , L0000211 , L0000212 , L0000213 , L0000214 , L0000215 , L0000216 ,

L0000217 , L0000218 , L0000219 , L0000220 , L0000221 , L0000222 , L0000223 ,

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***

(METERS)

501597.3, 501630.1, 501662.8, 501695.6, 501728.4, 501761.2, 501794.0, 501826.7, 501859.5, 501892.3,
501925.1, 501957.9, 501990.6, 502023.4, 502056.2, 502089.0, 502121.8, 502154.5, 502187.3, 502220.1,
502252.9,

*** Y-COORDINATES OF GRID ***
(METERS)

3634948.4, 3634961.6, 3634974.9, 3634988.1, 3635001.4, 3635014.6, 3635027.9, 3635041.1, 3635054.4, 3635067.6,
3635080.9, 3635094.1, 3635107.4, 3635120.6, 3635133.9, 3635147.1, 3635160.4, 3635173.6, 3635186.9, 3635200.1,
3635213.4,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	501597.27	501630.05	501662.83	501695.61	501728.39	501761.17	501793.95	501826.73	501859.51	
3635213.38	129.60	127.40	123.30	120.50	118.60	117.20	116.60	116.20	116.60	
3635200.13	129.40	127.40	121.90	118.90	117.60	116.30	116.10	115.70	116.30	
3635186.88	129.20	127.40	121.10	117.70	116.60	115.70	115.50	115.40	116.20	
3635173.63	129.10	127.40	120.50	116.60	115.70	115.20	114.80	115.10	116.10	
3635160.38	128.70	126.90	119.70	115.90	115.00	114.60	114.30	114.90	116.00	
3635147.13	128.10	126.00	118.70	115.60	114.60	113.90	113.90	114.90	115.80	
3635133.88	127.50	124.90	117.60	115.30	114.30	113.30	113.50	114.90	115.70	
3635120.63	127.40	123.60	116.30	114.70	114.20					

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  113.00       113.10       114.80       115.60
  3635107.38 |        127.40       122.30       115.10       114.10       114.10
  112.80       112.80       114.60       115.50
  3635094.13 |        125.40       120.30       114.50       114.00       114.00
  112.50       112.50       114.10       114.90
  3635080.88 |        122.90       118.20       114.00       113.90       114.00
  112.20       112.10       113.50       114.30
  3635067.63 |        120.50       116.70       113.60       113.50       113.30
  111.80       111.90       113.10       114.00
  3635054.38 |        118.20       115.90       113.20       112.70       112.10
  111.10       111.80       113.00       113.90
  3635041.13 |        116.10       115.00       112.60       111.80       110.80
  110.60       111.60       112.80       113.70
  3635027.88 |        115.20       114.00       111.20       110.50       109.90
  110.50       111.00       112.00       112.80
  3635014.63 |        114.30       113.00       109.70       109.20       109.00
  110.30       110.50       111.30       112.00
  3635001.38 |        113.50       112.00       109.30       108.90       108.70
  110.10       110.10       110.80       111.70
  3634988.13 |        112.70       111.10       109.10       108.80       108.50
  109.80       109.70       110.20       111.50
  3634974.88 |        112.20       110.50       108.90       108.60       108.30
  109.40       109.50       109.90       111.00
  3634961.63 |        112.00       110.20       108.70       108.40       108.30
  109.00       109.30       109.60       110.20
  3634948.38 |        111.90       109.80       108.60       108.20       108.20
  108.50       109.00       109.40       109.60
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                 *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                              * ELEVATION HEIGHTS IN METERS *

    Y-COORD  |                                              X-COORD (METERS)
    (METERS) |     501892.29    501925.07    501957.85    501990.63    502023.41
502056.19    502088.97    502121.75    502154.53
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

  3635213.38 |        117.20       117.70       117.90       117.20       117.00
  116.30       115.30       114.20       113.40
  3635200.13 |        117.00       117.70       117.90       116.70       116.60
  115.90       115.00       113.80       113.40
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  3635186.88 |        116.80       117.50       117.70       116.60       116.30
  115.60       114.60       113.70       113.20
  3635173.63 |        116.70       117.30       117.50       116.50       116.00
  115.30       114.30       113.60       112.90
  3635160.38 |        116.50       117.10       117.30       116.40       115.80
  115.00       114.00       113.30       112.70
  3635147.13 |        116.40       117.00       117.10       116.30       115.60
  114.70       113.80       113.00       112.50
  3635133.88 |        116.20       116.80       116.90       116.20       115.40
  114.50       113.60       112.60       112.40
  3635120.63 |        116.10       116.50       116.70       116.20       115.60
  114.90       114.00       112.40       112.20
  3635107.38 |        115.90       116.30       116.50       116.10       115.80
  115.30       114.30       112.30       112.10
  3635094.13 |        115.70       116.10       116.20       115.90       115.50
  114.90       114.00       112.10       111.80
  3635080.88 |        115.40       115.90       115.90       115.60       115.10
  114.40       113.60       112.00       111.50
  3635067.63 |        115.20       115.80       115.70       115.50       114.90
  114.20       113.40       112.10       111.40
  3635054.38 |        115.20       115.70       115.80       115.60       114.90
  114.10       113.40       112.30       111.50
  3635041.13 |        115.00       115.40       115.60       115.50       114.80
  114.00       113.30       112.50       111.60
  3635027.88 |        113.90       114.50       114.60       114.40       113.90
  113.10       112.60       111.90       111.40
  3635014.63 |        112.80       113.50       113.60       113.40       112.90
  112.20       111.80       111.30       111.10
  3635001.38 |        112.30       113.00       113.30       113.10       112.60
  112.00       111.40       111.10       111.00
  3634988.13 |        112.00       112.70       113.20       113.00       112.40
  111.90       111.20       111.00       111.00
  3634974.88 |        111.50       112.20       112.80       112.70       112.20
  111.70       110.90       110.80       110.90
  3634961.63 |        110.80       111.60       112.30       112.30       111.80
  111.40       110.70       110.60       110.60
  3634948.38 |        110.20       111.10       111.90       112.00       111.50
  111.10       110.50       110.40       110.40
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                              * ELEVATION HEIGHTS IN METERS *
```

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 502187.31	502220.09	502252.87
3635213.38	112.70	112.10	111.90
3635200.13	112.70	112.00	112.10
3635186.88	112.70	111.90	112.00
3635173.63	112.60	111.80	111.90
3635160.38	112.50	111.60	111.70
3635147.13	112.30	111.40	111.50
3635133.88	112.00	111.10	111.20
3635120.63	111.80	110.90	110.90
3635107.38	111.60	110.70	110.70
3635094.13	111.30	110.50	110.60
3635080.88	111.00	110.30	110.50
3635067.63	110.90	110.40	110.40
3635054.38	111.00	110.70	110.20
3635041.13	111.00	110.90	110.00
3635027.88	110.90	110.90	109.50
3635014.63	110.90	110.90	109.00
3635001.38	110.80	110.80	108.60
3634988.13	110.80	110.70	108.10
3634974.88	110.70	110.60	107.80
3634961.63	110.50	110.40	107.50
3634948.38	110.40	110.30	107.30

Y-COORD (METERS)	X-COORD (METERS) 501597.27	501630.05	501662.83	501695.61	501728.39	501761.17	501793.95	501826.73	501859.51
3635213.38	255.40	255.40	255.40	255.40	255.40	255.40	255.40	255.40	255.40
3635200.13	255.40	255.40	255.40	255.40	255.40	255.40	255.40	255.40	255.40

```
  3635186.88 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635173.63 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635160.38 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635147.13 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635133.88 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635120.63 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635107.38 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635094.13 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635080.88 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635067.63 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635054.38 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635041.13 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635027.88 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.40
  3635014.63 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.00
  3635001.38 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.00
  3634988.13 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.00
  3634974.88 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.00       205.10
  3634961.63 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.00       205.10
  3634948.38 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.00       255.00       205.10
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                                * HILL HEIGHT SCALES IN METERS *
```

```
    Y-COORD  |                                                X-COORD (METERS)
    (METERS) |     501892.29    501925.07    501957.85    501990.63    502023.41
502056.19    502088.97    502121.75    502154.53
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -

  3635213.38 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.40       255.00
  3635200.13 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.40       255.00       255.00
  3635186.88 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.00       255.00       113.20
  3635173.63 |        255.40       255.40       255.40       255.40       255.40
  255.40       255.00       113.60       112.90
  3635160.38 |        255.40       255.40       255.40       255.40       255.40
  255.00       255.00       113.30       112.70
  3635147.13 |        255.40       255.40       255.40       255.40       255.00
  255.00       113.80       113.00       112.50
  3635133.88 |        255.40       255.40       255.40       255.00       255.00
  114.50       113.60       112.60       112.40
  3635120.63 |        255.40       255.40       255.00       255.00       115.60
  114.90       114.00       112.40       112.20
  3635107.38 |        255.40       255.40       255.00       116.10       115.80
  115.30       114.30       112.30       112.10
  3635094.13 |        255.40       255.00       255.00       115.90       115.50
  114.90       114.00       112.10       111.80
  3635080.88 |        255.40       255.00       197.60       115.60       115.10
  114.40       113.60       112.00       111.50
  3635067.63 |        255.00       255.00       196.40       115.50       114.90
  114.20       113.40       112.10       111.40
  3635054.38 |        255.00       198.40       115.80       115.60       114.90
  114.10       113.40       112.30       111.50
  3635041.13 |        255.00       198.40       115.60       115.50       114.80
  114.00       113.30       112.50       111.60
  3635027.88 |        255.00       198.40       114.60       114.40       113.90
  113.10       112.60       111.90       111.40
  3635014.63 |        255.00       198.40       113.60       113.40       112.90
  112.20       111.80       111.30       111.10
  3635001.38 |        205.10       198.40       113.30       113.10       112.60
  112.00       111.40       111.10       111.00
  3634988.13 |        205.10       197.60       113.20       113.00       112.40
  111.90       111.20       111.00       111.00
  3634974.88 |        203.10       197.60       112.80       112.70       112.20
  111.70       110.90       110.80       110.90
  3634961.63 |        198.90       197.60       112.30       112.30       111.80
  111.40       110.70       110.60       110.60
  3634948.38 |        198.90       196.40       111.90       112.00       111.50
  111.10       110.50       110.40       110.40
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
```

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 502187.31	502220.09	502252.87
3635213.38	112.70	112.10	111.90
3635200.13	112.70	112.00	112.10
3635186.88	112.70	111.90	112.00
3635173.63	112.60	111.80	111.90
3635160.38	112.50	111.60	111.70
3635147.13	112.30	111.40	111.50
3635133.88	112.00	111.10	111.20
3635120.63	111.80	110.90	110.90
3635107.38	111.60	110.70	110.70
3635094.13	111.30	110.50	110.60
3635080.88	111.00	110.30	110.50
3635067.63	110.90	110.40	110.40
3635054.38	111.00	110.70	110.20
3635041.13	111.00	110.90	110.00
3635027.88	110.90	110.90	109.50
3635014.63	110.90	110.90	109.00
3635001.38	110.80	110.80	108.60
3634988.13	110.80	110.70	108.10
3634974.88	110.70	110.60	107.80
3634961.63	110.50	110.40	107.50
3634948.38	110.40	110.30	107.30

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
    ( 501602.7, 3635113.8,     127.0,     255.4,       0.0);         ( 502091.2,
3634721.3,     108.2,     108.2,       0.0);
    ( 501724.0, 3634830.5,     105.3,     205.7,       0.0);         ( 501656.0,
3634810.1,     105.4,     205.7,       0.0);
    ( 501659.4, 3634840.7,     105.4,     255.1,       0.0);         ( 501682.0,
3634782.9,     105.4,     205.1,       0.0);
    ( 501615.2, 3634804.5,     105.4,     205.7,       0.0);         ( 501713.8,
3634792.0,     105.3,     205.1,       0.0);
    ( 501738.7, 3634746.7,     105.4,     198.4,       0.0);         ( 502804.3,
3635417.2,     116.9,     333.1,       0.0);
    ( 502842.8, 3635418.0,     116.9,     333.1,       0.0);         ( 502881.3,
3635418.8,     117.0,     333.1,       0.0);
    ( 502916.5, 3635414.7,     116.8,     333.1,       0.0);         ( 502946.8,
3635416.3,     116.8,     333.1,       0.0);
    ( 502812.5, 3635466.3,     116.9,     333.1,       0.0);         ( 502802.7,
3635530.9,     117.2,     333.1,       0.0);
    ( 502804.3, 3635509.7,     117.2,     333.1,       0.0);         ( 502803.5,
3635553.9,     117.3,     333.1,       0.0);
    ( 502881.3, 3635525.2,     116.9,     333.1,       0.0);         ( 502923.9,
3635526.0,     117.0,     333.1,       0.0);
    ( 502966.4, 3635530.1,     116.8,     333.1,       0.0);         ( 502996.7,
3635469.6,     116.8,     333.1,       0.0);
    ( 503003.3, 3635421.3,     116.5,     333.1,       0.0);         ( 503514.5,
3634924.9,     111.8,     197.1,       0.0);
    ( 503585.7, 3634932.6,     111.8,     197.1,       0.0);         ( 503561.6,
3634986.6,     111.8,     197.1,       0.0);
    ( 503547.2, 3634944.2,     111.8,     197.1,       0.0);         ( 503568.4,
3634877.7,     111.8,     318.9,       0.0);
    ( 503469.2, 3634893.1,     111.8,     197.1,       0.0);         ( 503457.6,
3634854.6,     111.5,     197.1,       0.0);
    ( 503469.2, 3634854.6,     111.8,     317.2,       0.0);         ( 502528.4,
3634617.4,     106.3,     106.3,       0.0);
    ( 502584.8, 3634617.4,     106.4,     106.4,       0.0);         ( 502641.1,
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    ( 502697.5, 3634617.4,     106.6,     106.6,       0.0);         ( 502753.8,
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    ( 502528.4, 3634647.6,     106.6,     106.6,       0.0);         ( 502584.8,
3634647.6,     107.1,     107.1,       0.0);
    ( 502641.1, 3634647.6,     107.0,     107.0,       0.0);         ( 502697.5,
3634647.6,     106.9,     106.9,       0.0);
    ( 502753.8, 3634647.6,     107.0,     107.0,       0.0);         ( 502810.1,
3634647.6,     108.2,     108.2,       0.0);
    ( 502866.5, 3634647.6,     108.3,     108.3,       0.0);         ( 502922.8,
3634647.6,     108.7,     108.7,       0.0);
    ( 502979.1, 3634647.6,     108.8,     108.8,       0.0);         ( 503035.5,
3634647.6,     108.8,     108.8,       0.0);
    ( 503091.8, 3634647.6,     108.5,     108.5,       0.0);         ( 503148.2,
3634647.6,     109.5,     109.5,       0.0);
    ( 503204.5, 3634647.6,     109.3,     318.9,       0.0);         ( 503260.8,
3634647.6,     107.4,     318.9,       0.0);
```

```
     ( 503317.2, 3634647.6,     107.4,     318.9,       0.0);         ( 503373.5,
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     ( 502528.4, 3634677.8,     107.3,     107.3,       0.0);         ( 502584.8,
3634677.8,     107.4,     107.4,       0.0);
     ( 502641.1, 3634677.8,     107.5,     107.5,       0.0);         ( 502697.5,
3634677.8,     107.2,     107.2,       0.0);
     ( 502753.8, 3634677.8,     107.5,     107.5,       0.0);         ( 502810.1,
3634677.8,     108.2,     108.2,       0.0);
     ( 502866.5, 3634677.8,     108.5,     108.5,       0.0);         ( 502922.8,
3634677.8,     108.5,     108.5,       0.0);
     ( 502979.1, 3634677.8,     108.8,     108.8,       0.0);         ( 503035.5,
3634677.8,     108.6,     108.6,       0.0);
     ( 503091.8, 3634677.8,     108.1,     108.1,       0.0);         ( 503148.2,
3634677.8,     109.9,     109.9,       0.0);
     ( 503204.5, 3634677.8,     110.4,     110.4,       0.0);         ( 503260.8,
3634677.8,     108.1,     318.9,       0.0);
     ( 503317.2, 3634677.8,     108.0,     318.9,       0.0);         ( 503373.5,
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     ( 502641.1, 3634708.0,     108.0,     108.0,       0.0);         ( 502697.5,
3634708.0,     107.8,     107.8,       0.0);
     ( 502753.8, 3634708.0,     107.6,     107.6,       0.0);         ( 502810.1,
3634708.0,     108.6,     108.6,       0.0);
     ( 502866.5, 3634708.0,     109.1,     109.1,       0.0);         ( 502922.8,
3634708.0,     108.9,     108.9,       0.0);
     ( 502979.1, 3634708.0,     109.1,     109.1,       0.0);         ( 503035.5,
3634708.0,     108.9,     108.9,       0.0);
     ( 503091.8, 3634708.0,     108.5,     108.5,       0.0);         ( 503148.2,
3634708.0,     109.8,     109.8,       0.0);
     ( 503204.5, 3634708.0,     109.8,     109.8,       0.0);         ( 503260.8,
3634708.0,     108.5,     318.9,       0.0);
     ( 503317.2, 3634708.0,     108.8,     318.9,       0.0);         ( 503373.5,
3634708.0,     109.3,     318.9,       0.0);
     ( 502528.4, 3634738.2,     107.3,     107.3,       0.0);         ( 502584.8,
3634738.2,     107.8,     107.8,       0.0);
     ( 502641.1, 3634738.2,     107.8,     107.8,       0.0);         ( 502697.5,
3634738.2,     107.8,     107.8,       0.0);
     ( 502810.1, 3634738.2,     108.6,     108.6,       0.0);         ( 502866.5,
3634738.2,     109.4,     109.4,       0.0);
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                   PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                                                    *** DISCRETE CARTESIAN RECEPTORS ***
                                                   (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
```

(METERS)

(502922.8, 3634738.2, 109.3, 109.3, 0.0); (502979.1, 3634738.2, 108.9, 108.9, 0.0);
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(503148.2, 3634738.2, 109.6, 109.6, 0.0); (503204.5, 3634738.2, 109.5, 109.5, 0.0);
(503260.8, 3634738.2, 108.4, 317.2, 0.0); (503317.2, 3634738.2, 108.6, 318.9, 0.0);
(503373.5, 3634738.2, 109.1, 318.9, 0.0); (502528.4, 3634768.4, 107.8, 107.8, 0.0);
(502584.8, 3634768.4, 107.6, 107.6, 0.0); (502641.1, 3634768.4, 108.0, 108.0, 0.0);
(502697.5, 3634768.4, 108.0, 108.0, 0.0); (502810.1, 3634768.4, 108.8, 108.8, 0.0);
(502866.5, 3634768.4, 109.5, 109.5, 0.0); (502922.8, 3634768.4, 109.5, 109.5, 0.0);
(502979.1, 3634768.4, 108.9, 108.9, 0.0); (503035.5, 3634768.4, 109.1, 109.1, 0.0);
(503091.8, 3634768.4, 109.0, 109.0, 0.0); (503148.2, 3634768.4, 109.5, 109.5, 0.0);
(503204.5, 3634768.4, 109.0, 109.0, 0.0); (503260.8, 3634768.4, 108.4, 108.4, 0.0);
(503317.2, 3634768.4, 108.4, 317.2, 0.0); (503373.5, 3634768.4, 108.5, 318.9, 0.0);
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(502641.1, 3634798.6, 108.2, 108.2, 0.0); (502697.5, 3634798.6, 108.5, 108.5, 0.0);
(502810.1, 3634798.6, 109.2, 109.2, 0.0); (502866.5, 3634798.6, 109.6, 109.6, 0.0);
(502922.8, 3634798.6, 109.7, 109.7, 0.0); (502979.1, 3634798.6, 109.0, 109.0, 0.0);
(503035.5, 3634798.6, 109.8, 109.8, 0.0); (503091.8, 3634798.6, 109.3, 109.3, 0.0);
(503148.2, 3634798.6, 109.1, 109.1, 0.0); (503204.5, 3634798.6, 108.4, 108.4, 0.0);
(503260.8, 3634798.6, 108.3, 195.7, 0.0); (503317.2, 3634798.6, 108.3, 197.1, 0.0);
(503373.5, 3634798.6, 108.6, 318.9, 0.0); (502303.1, 3634828.8, 107.7, 107.7, 0.0);
(502359.4, 3634828.8, 107.7, 107.7, 0.0); (502415.8, 3634828.8, 107.1, 107.1, 0.0);
(502472.1, 3634828.8, 105.9, 105.9, 0.0); (502528.4, 3634828.8, 107.9, 107.9, 0.0);
(502584.8, 3634828.8, 108.3, 108.3, 0.0); (502641.1, 3634828.8, 108.3, 108.3, 0.0);
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     ( 502866.5, 3634828.8,     109.2,     109.2,       0.0);         ( 502922.8,
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     ( 502979.1, 3634828.8,     109.7,     109.7,       0.0);         ( 503035.5,
3634828.8,     109.6,     109.6,       0.0);
     ( 503091.8, 3634828.8,     108.9,     108.9,       0.0);         ( 503148.2,
3634828.8,     108.8,     108.8,       0.0);
     ( 503204.5, 3634828.8,     108.4,     108.4,       0.0);         ( 503260.8,
3634828.8,     108.4,     197.1,       0.0);
     ( 503317.2, 3634828.8,     108.7,     197.1,       0.0);         ( 503373.5,
3634828.8,     110.3,     197.1,       0.0);
     ( 502303.1, 3634859.0,     107.7,     107.7,       0.0);         ( 502359.4,
3634859.0,     107.7,     107.7,       0.0);
     ( 502415.8, 3634859.0,     107.9,     107.9,       0.0);         ( 502472.1,
3634859.0,     108.1,     108.1,       0.0);
     ( 502528.4, 3634859.0,     108.1,     108.1,       0.0);         ( 502584.8,
3634859.0,     108.1,     108.1,       0.0);
     ( 502641.1, 3634859.0,     108.6,     108.6,       0.0);         ( 502697.5,
3634859.0,     108.3,     108.3,       0.0);
     ( 502810.1, 3634859.0,     108.9,     108.9,       0.0);         ( 502866.5,
3634859.0,     109.0,     109.0,       0.0);
     ( 502922.8, 3634859.0,     109.9,     109.9,       0.0);         ( 502979.1,
3634859.0,     109.8,     109.8,       0.0);
     ( 503035.5, 3634859.0,     109.9,     109.9,       0.0);         ( 503091.8,
3634859.0,     109.4,     109.4,       0.0);
     ( 503148.2, 3634859.0,     108.8,     108.8,       0.0);         ( 503204.5,
3634859.0,     108.2,     108.2,       0.0);
     ( 503260.8, 3634859.0,     108.7,     197.1,       0.0);         ( 503317.2,
3634859.0,     110.5,     197.1,       0.0);
     ( 503373.5, 3634859.0,     110.9,     197.1,       0.0);         ( 502303.1,
3634889.2,     108.1,     108.1,       0.0);
     ( 502359.4, 3634889.2,     108.3,     108.3,       0.0);         ( 502415.8,
3634889.2,     108.4,     108.4,       0.0);
     ( 502472.1, 3634889.2,     108.1,     108.1,       0.0);         ( 502528.4,
3634889.2,     108.2,     108.2,       0.0);
     ( 502584.8, 3634889.2,     108.4,     108.4,       0.0);         ( 502641.1,
3634889.2,     108.4,     108.4,       0.0);
     ( 502697.5, 3634889.2,     108.8,     108.8,       0.0);         ( 502753.8,
3634889.2,     108.4,     108.4,       0.0);
     ( 502810.1, 3634889.2,     108.7,     108.7,       0.0);         ( 502866.5,
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     ( 502922.8, 3634889.2,     109.3,     109.3,       0.0);         ( 502979.1,
3634889.2,     109.7,     109.7,       0.0);
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

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(503260.8, 3634889.2, 110.2, 197.1, 0.0); (503317.2, 3634889.2, 110.8, 197.1, 0.0);
(503373.5, 3634889.2, 110.6, 197.1, 0.0); (502303.1, 3634919.4, 108.5, 108.5, 0.0);
(502359.4, 3634919.4, 108.4, 108.4, 0.0); (502415.8, 3634919.4, 108.5, 108.5, 0.0);
(502472.1, 3634919.4, 108.0, 108.0, 0.0); (502528.4, 3634919.4, 108.3, 108.3, 0.0);
(502584.8, 3634919.4, 108.3, 108.3, 0.0); (502641.1, 3634919.4, 108.8, 108.8, 0.0);
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(502415.8, 3634949.6, 108.4, 108.4, 0.0); (502472.1, 3634949.6, 108.1, 108.1, 0.0);
(502528.4, 3634949.6, 108.5, 108.5, 0.0); (502584.8, 3634949.6, 108.2, 108.2, 0.0);
(502641.1, 3634949.6, 108.2, 108.2, 0.0); (502753.8, 3634949.6, 108.6, 108.6, 0.0);
(502810.1, 3634949.6, 109.4, 109.4, 0.0); (502866.5, 3634949.6, 108.9, 108.9, 0.0);
(502922.8, 3634949.6, 109.9, 109.9, 0.0); (502979.1, 3634949.6, 109.1, 109.1, 0.0);
(503035.5, 3634949.6, 109.6, 109.6, 0.0); (503091.8, 3634949.6, 109.6, 109.6, 0.0);
(503148.2, 3634949.6, 109.0, 109.0, 0.0); (503204.5, 3634949.6, 108.8, 197.1, 0.0);
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(503373.5, 3634949.6, 110.6, 197.1, 0.0); (502303.1, 3634979.8, 108.8, 108.8, 0.0);
(502359.4, 3634979.8, 108.4, 108.4, 0.0); (502415.8, 3634979.8, 108.4, 108.4, 0.0);
(502472.1, 3634979.8, 108.2, 108.2, 0.0); (502528.4, 3634979.8, 108.5, 108.5, 0.0);
(502584.8, 3634979.8, 108.4, 108.4, 0.0); (502641.1, 3634979.8, 108.2, 108.2, 0.0);
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     ( 502810.1, 3635010.0,     109.0,     109.0,       0.0);         ( 502866.5,
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     ( 503035.5, 3635010.0,     109.5,     333.1,       0.0);         ( 503091.8,
3635010.0,     109.8,     333.1,       0.0);
     ( 503148.2, 3635010.0,     109.1,     333.1,       0.0);         ( 503204.5,
3635010.0,     108.5,     333.1,       0.0);
     ( 503260.8, 3635010.0,     108.8,     333.1,       0.0);         ( 503317.2,
3635010.0,     109.1,     333.1,       0.0);
     ( 503373.5, 3635010.0,     109.8,     333.1,       0.0);         ( 502303.1,
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     ( 502472.1, 3635040.2,     109.5,     109.5,       0.0);         ( 502528.4,
3635040.2,     109.4,     109.4,       0.0);
     ( 502584.8, 3635040.2,     109.0,     109.0,       0.0);         ( 502641.1,
3635040.2,     108.9,     108.9,       0.0);
     ( 502753.8, 3635040.2,     109.2,     109.2,       0.0);         ( 502810.1,
3635040.2,     109.4,     109.4,       0.0);
     ( 502866.5, 3635040.2,     109.3,     333.1,       0.0);         ( 502922.8,
3635040.2,     109.3,     333.1,       0.0);
     ( 502979.1, 3635040.2,     109.4,     333.1,       0.0);         ( 503035.5,
3635040.2,     109.7,     333.1,       0.0);
     ( 503091.8, 3635040.2,     110.1,     333.1,       0.0);         ( 503148.2,
3635040.2,     110.0,     333.1,       0.0);
     ( 503204.5, 3635040.2,     110.0,     333.1,       0.0);         ( 503260.8,
3635040.2,     110.4,     333.1,       0.0);
     ( 503317.2, 3635040.2,     110.6,     333.1,       0.0);         ( 503373.5,
3635040.2,     111.0,     333.1,       0.0);
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     ( 502641.1, 3635070.4,     108.9,     108.9,       0.0);         ( 502753.8,
3635070.4,     109.9,     333.1,       0.0);
     ( 502810.1, 3635070.4,     109.9,     333.1,       0.0);         ( 502866.5,
3635070.4,     109.5,     333.1,       0.0);
     ( 502922.8, 3635070.4,     109.7,     333.1,       0.0);         ( 502979.1,
3635070.4,     109.9,     333.1,       0.0);
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***       12:46:26

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(503035.5, 3635070.4, 109.7, 333.1, 0.0); (503091.8, 3635070.4, 110.1, 333.1, 0.0);
(503148.2, 3635070.4, 109.7, 333.1, 0.0); (503204.5, 3635070.4, 109.7, 333.1, 0.0);
(503260.8, 3635070.4, 109.9, 333.1, 0.0); (503317.2, 3635070.4, 110.3, 333.1, 0.0);
(503373.5, 3635070.4, 110.6, 333.1, 0.0); (502303.1, 3635100.6, 110.8, 110.8, 0.0);
(502359.4, 3635100.6, 110.0, 110.0, 0.0); (502415.8, 3635100.6, 110.1, 110.1, 0.0);
(502472.1, 3635100.6, 110.6, 110.6, 0.0); (502528.4, 3635100.6, 110.3, 110.3, 0.0);
(502584.8, 3635100.6, 109.7, 109.7, 0.0); (502641.1, 3635100.6, 109.1, 333.1, 0.0);
(502753.8, 3635100.6, 110.4, 333.1, 0.0); (502810.1, 3635100.6, 110.6, 333.1, 0.0);
(502866.5, 3635100.6, 110.2, 333.1, 0.0); (502922.8, 3635100.6, 109.2, 333.1, 0.0);
(502979.1, 3635100.6, 109.5, 333.1, 0.0); (503035.5, 3635100.6, 109.5, 333.1, 0.0);
(503091.8, 3635100.6, 109.8, 333.1, 0.0); (503148.2, 3635100.6, 109.9, 333.1, 0.0);
(503204.5, 3635100.6, 110.4, 333.1, 0.0); (503260.8, 3635100.6, 110.3, 333.1, 0.0);
(503317.2, 3635100.6, 110.9, 333.1, 0.0); (503373.5, 3635100.6, 111.0, 333.1, 0.0);
(502303.1, 3635130.8, 111.1, 111.1, 0.0); (502359.4, 3635130.8, 110.5, 110.5, 0.0);
(502415.8, 3635130.8, 110.7, 110.7, 0.0); (502472.1, 3635130.8, 111.0, 111.0, 0.0);
(502528.4, 3635130.8, 110.5, 110.5, 0.0); (502584.8, 3635130.8, 110.1, 110.1, 0.0);
(502641.1, 3635130.8, 109.5, 333.1, 0.0); (502753.8, 3635130.8, 110.7, 333.1, 0.0);
(502810.1, 3635130.8, 110.9, 333.1, 0.0); (502866.5, 3635130.8, 110.5, 333.1, 0.0);
(502922.8, 3635130.8, 109.5, 333.1, 0.0); (502979.1, 3635130.8, 109.5, 333.1, 0.0);
(503035.5, 3635130.8, 109.8, 333.1, 0.0); (503091.8, 3635130.8, 110.6, 333.1, 0.0);
(503148.2, 3635130.8, 110.1, 333.1, 0.0); (503204.5, 3635130.8, 110.9, 333.1, 0.0);
(503260.8, 3635130.8, 110.5, 333.1, 0.0); (503317.2, 3635130.8, 111.1, 333.1, 0.0);

```
     ( 503373.5, 3635130.8,     111.2,     333.1,       0.0);         ( 502303.1,
3635161.0,     111.5,     111.5,       0.0);
     ( 502359.4, 3635161.0,     111.0,     111.0,       0.0);         ( 502415.8,
3635161.0,     111.4,     111.4,       0.0);
     ( 502472.1, 3635161.0,     111.7,     111.7,       0.0);         ( 502528.4,
3635161.0,     111.7,     111.7,       0.0);
     ( 502584.8, 3635161.0,     110.5,     333.1,       0.0);         ( 502641.1,
3635161.0,     110.1,     333.1,       0.0);
     ( 502753.8, 3635161.0,     111.0,     333.1,       0.0);         ( 502810.1,
3635161.0,     111.2,     333.1,       0.0);
     ( 502866.5, 3635161.0,     111.5,     333.1,       0.0);         ( 502922.8,
3635161.0,     109.8,     333.1,       0.0);
     ( 502979.1, 3635161.0,     109.8,     333.1,       0.0);         ( 503035.5,
3635161.0,     110.5,     333.1,       0.0);
     ( 503091.8, 3635161.0,     110.6,     333.1,       0.0);         ( 503148.2,
3635161.0,     110.2,     333.1,       0.0);
     ( 503204.5, 3635161.0,     110.8,     333.1,       0.0);         ( 503260.8,
3635161.0,     110.5,     333.1,       0.0);
     ( 503317.2, 3635161.0,     111.3,     333.1,       0.0);         ( 503373.5,
3635161.0,     111.3,     333.1,       0.0);
     ( 502303.1, 3635191.2,     111.6,     111.6,       0.0);         ( 502359.4,
3635191.2,     111.4,     111.4,       0.0);
     ( 502415.8, 3635191.2,     111.5,     111.5,       0.0);         ( 502472.1,
3635191.2,     111.9,     111.9,       0.0);
     ( 502528.4, 3635191.2,     112.1,     333.1,       0.0);         ( 502584.8,
3635191.2,     110.6,     333.1,       0.0);
     ( 502641.1, 3635191.2,     110.3,     333.1,       0.0);         ( 502753.8,
3635191.2,     111.2,     333.1,       0.0);
     ( 502810.1, 3635191.2,     111.2,     333.1,       0.0);         ( 502866.5,
3635191.2,     111.6,     333.1,       0.0);
     ( 502922.8, 3635191.2,     110.6,     333.1,       0.0);         ( 502979.1,
3635191.2,     110.5,     333.1,       0.0);
     ( 503035.5, 3635191.2,     110.8,     333.1,       0.0);         ( 503091.8,
3635191.2,     110.8,     333.1,       0.0);
     ( 503148.2, 3635191.2,     110.7,     333.1,       0.0);         ( 503204.5,
3635191.2,     111.0,     333.1,       0.0);
     ( 503260.8, 3635191.2,     111.0,     333.1,       0.0);         ( 503317.2,
3635191.2,     111.5,     333.1,       0.0);
     ( 503373.5, 3635191.2,     111.2,     333.1,       0.0);         ( 502531.0,
3633473.4,     107.8,     317.2,       0.0);
     ( 502585.5, 3633473.4,     108.0,     318.9,       0.0);         ( 502640.0,
3633473.4,     108.8,     318.9,       0.0);
     ( 502694.5, 3633473.4,     108.8,     318.9,       0.0);         ( 502749.0,
3633473.4,     108.8,     318.9,       0.0);
     ( 502803.5, 3633473.4,     109.2,     329.9,       0.0);         ( 502858.0,
3633473.4,     109.4,     335.8,       0.0);
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(502531.0, 3633537.4, 107.0, 317.2, 0.0); (502585.5, 3633537.4, 106.1, 318.9, 0.0);
(502640.0, 3633537.4, 106.9, 318.9, 0.0); (502694.5, 3633537.4, 107.1, 318.9, 0.0);
(502749.0, 3633537.4, 107.7, 318.9, 0.0); (502803.5, 3633537.4, 107.6, 329.9, 0.0);
(502858.0, 3633537.4, 108.6, 335.8, 0.0); (502367.6, 3633601.5, 106.0, 106.0, 0.0);
(502422.1, 3633601.5, 106.5, 106.5, 0.0); (502476.6, 3633601.5, 106.3, 106.3, 0.0);
(502531.0, 3633601.5, 106.8, 106.8, 0.0); (502585.5, 3633601.5, 106.9, 318.9, 0.0);
(502640.0, 3633601.5, 107.1, 318.9, 0.0); (502367.6, 3633633.5, 106.2, 106.2, 0.0);
(502422.1, 3633633.5, 107.0, 107.0, 0.0); (502476.6, 3633633.5, 106.6, 106.6, 0.0);
(502531.0, 3633633.5, 107.3, 107.3, 0.0); (502585.5, 3633633.5, 107.1, 318.9, 0.0);
(502640.0, 3633633.5, 107.3, 318.9, 0.0); (502367.6, 3633665.5, 105.8, 105.8, 0.0);
(502422.1, 3633665.5, 106.5, 106.5, 0.0); (502476.6, 3633665.5, 106.8, 106.8, 0.0);
(502531.0, 3633665.5, 107.3, 107.3, 0.0); (502585.5, 3633665.5, 107.2, 318.9, 0.0);
(502640.0, 3633665.5, 107.1, 318.9, 0.0); (502422.1, 3633697.5, 106.5, 106.5, 0.0);
(502585.5, 3633697.5, 107.3, 318.9, 0.0); (502640.0, 3633697.5, 107.3, 318.9, 0.0);
(502422.1, 3633729.5, 106.3, 106.3, 0.0); (502585.5, 3633729.5, 107.3, 317.2, 0.0);
(502640.0, 3633729.5, 107.3, 318.9, 0.0); (502422.1, 3633761.6, 106.8, 106.8, 0.0);
(502585.5, 3633761.6, 107.2, 317.2, 0.0); (502640.0, 3633761.6, 107.1, 318.9, 0.0);
(502367.6, 3633793.6, 106.3, 106.3, 0.0); (502422.1, 3633793.6, 106.9, 106.9, 0.0);
(502585.5, 3633793.6, 107.2, 107.2, 0.0); (502640.0, 3633793.6, 107.1, 318.9, 0.0);
(502040.6, 3633825.6, 106.1, 106.1, 0.0); (502095.1, 3633825.6, 105.6, 105.6, 0.0);
(502367.6, 3633825.6, 106.5, 106.5, 0.0); (502422.1, 3633825.6, 106.6, 106.6, 0.0);

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     ( 502585.5, 3633825.6,     107.3,     107.3,       0.0);         ( 502640.0,
3633825.6,     107.6,     318.9,       0.0);
     ( 502040.6, 3633857.6,     105.8,     105.8,       0.0);         ( 502095.1,
3633857.6,     105.8,     105.8,       0.0);
     ( 502422.1, 3633857.6,     106.5,     106.5,       0.0);         ( 502585.5,
3633857.6,     107.3,     107.3,       0.0);
     ( 502640.0, 3633857.6,     107.6,     317.2,       0.0);         ( 502040.6,
3633889.6,     105.3,     105.3,       0.0);
     ( 502095.1, 3633889.6,     105.5,     105.5,       0.0);         ( 502422.1,
3633889.6,     106.3,     106.3,       0.0);
     ( 502585.5, 3633889.6,     107.2,     107.2,       0.0);         ( 502640.0,
3633889.6,     107.5,     317.2,       0.0);
     ( 502040.6, 3633921.7,     105.2,     105.2,       0.0);         ( 502095.1,
3633921.7,     105.1,     105.1,       0.0);
     ( 502422.1, 3633921.7,     106.5,     106.5,       0.0);         ( 502585.5,
3633921.7,     107.0,     107.0,       0.0);
     ( 502640.0, 3633921.7,     107.3,     107.3,       0.0);         ( 502040.6,
3633953.7,     104.8,     104.8,       0.0);
     ( 502095.1, 3633953.7,     105.0,     105.0,       0.0);         ( 502422.1,
3633953.7,     106.6,     106.6,       0.0);
     ( 502585.5, 3633953.7,     106.9,     106.9,       0.0);         ( 502640.0,
3633953.7,     107.6,     107.6,       0.0);
     ( 502040.6, 3633985.7,     104.6,     104.6,       0.0);         ( 502095.1,
3633985.7,     105.0,     105.0,       0.0);
     ( 501768.2, 3634017.7,     104.9,     104.9,       0.0);         ( 501822.7,
3634017.7,     105.0,     105.0,       0.0);
     ( 501877.2, 3634017.7,     105.2,     105.2,       0.0);         ( 501931.7,
3634017.7,     105.2,     105.2,       0.0);
     ( 501986.1, 3634017.7,     104.3,     104.3,       0.0);         ( 502040.6,
3634017.7,     104.7,     104.7,       0.0);
     ( 502095.1, 3634017.7,     105.3,     105.3,       0.0);         ( 501768.2,
3634049.7,     104.7,     104.7,       0.0);
     ( 501822.7, 3634049.7,     105.1,     105.1,       0.0);         ( 501877.2,
3634049.7,     105.1,     105.1,       0.0);
     ( 501931.7, 3634049.7,     105.3,     105.3,       0.0);         ( 501986.1,
3634049.7,     104.7,     104.7,       0.0);
     ( 502040.6, 3634049.7,     105.0,     105.0,       0.0);         ( 502095.1,
3634049.7,     105.5,     105.5,       0.0);
     ( 502149.6, 3634049.7,     105.7,     105.7,       0.0);         ( 501768.2,
3634081.8,     103.5,     103.5,       0.0);
     ( 501822.7, 3634081.8,     103.8,     103.8,       0.0);         ( 501877.2,
3634081.8,     103.4,     103.4,       0.0);
     ( 501931.7, 3634081.8,     104.1,     104.1,       0.0);         ( 501986.1,
3634081.8,     104.2,     104.2,       0.0);
     ( 502040.6, 3634081.8,     104.1,     104.1,       0.0);         ( 502095.1,
3634081.8,     103.7,     103.7,       0.0);
     ( 502149.6, 3634081.8,     103.3,     103.3,       0.0);         ( 501520.8,
3634629.9,     104.1,     198.4,       0.0);
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
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*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(501511.3, 3634708.8, 105.3, 203.1, 0.0); (501509.9, 3634738.7, 105.8, 205.1, 0.0);
(501522.1, 3634835.2, 109.1, 205.7, 0.0); (501511.3, 3634920.9, 112.6, 255.4, 0.0);
(501511.3, 3634952.1, 114.2, 255.4, 0.0); (501516.7, 3634990.2, 115.2, 255.4, 0.0);
(503043.6, 3634375.6, 106.5, 318.9, 0.0); (503061.3, 3634387.9, 106.9, 318.9, 0.0);
(503087.1, 3634382.4, 106.8, 318.9, 0.0); (503103.5, 3634385.1, 106.8, 318.9, 0.0);
(503130.7, 3634383.8, 106.7, 318.9, 0.0); (503159.2, 3634383.8, 106.7, 318.9, 0.0);
(503182.3, 3634381.1, 106.5, 318.9, 0.0); (502909.0, 3634272.3, 106.7, 318.9, 0.0);
(502903.6, 3634246.5, 106.6, 318.9, 0.0); (502905.0, 3634190.7, 106.5, 318.9, 0.0);
(502903.6, 3634158.1, 106.8, 318.9, 0.0); (502905.0, 3634126.8, 106.9, 318.9, 0.0);
(502906.3, 3634103.7, 106.9, 318.9, 0.0); (502963.8, 3634312.6, 106.0, 318.9, 0.0);
(503013.9, 3634311.4, 106.6, 318.9, 0.0); (502947.5, 3634269.8, 106.4, 318.9, 0.0);
(502965.6, 3634265.6, 106.1, 318.9, 0.0); (503000.6, 3634291.5, 106.7, 318.9, 0.0);
(503023.5, 3634327.1, 106.6, 318.9, 0.0); (503037.4, 3634331.3, 106.7, 318.9, 0.0);
(503053.7, 3634345.8, 106.6, 318.9, 0.0); (503072.4, 3634344.6, 106.8, 318.9, 0.0);
(502211.8, 3634864.1, 109.9, 109.9, 0.0); (502115.9, 3634941.6, 110.3, 110.3, 0.0);
(502116.7, 3634933.1, 110.2, 110.2, 0.0); (502114.8, 3634929.0, 110.1, 110.1, 0.0);
(502115.2, 3634920.9, 110.0, 110.0, 0.0); (502115.2, 3634914.9, 109.9, 109.9, 0.0);
(502114.5, 3634907.2, 109.7, 109.7, 0.0); (502115.2, 3634902.0, 109.6, 109.6, 0.0);
(502115.2, 3634893.8, 109.5, 109.5, 0.0); (502140.8, 3634893.1, 109.6, 109.6, 0.0);
(502141.5, 3634901.2, 109.8, 109.8, 0.0); (502141.1, 3634910.9, 109.9, 109.9, 0.0);

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    ( 502141.1, 3634922.7,     110.0,     110.0,       0.0);         ( 502141.1,
3634933.1,     110.2,     110.2,       0.0);
    ( 502141.1, 3634942.0,     110.4,     110.4,       0.0);         ( 502187.5,
3634940.5,     110.3,     110.3,       0.0);
    ( 502186.7, 3634927.2,     110.2,     110.2,       0.0);         ( 502187.8,
3634918.3,     110.1,     110.1,       0.0);
    ( 502187.1, 3634911.2,     110.0,     110.0,       0.0);         ( 502188.2,
3634904.2,     110.0,     110.0,       0.0);
    ( 502187.8, 3634898.6,     109.9,     109.9,       0.0);         ( 502187.1,
3634891.6,     109.8,     109.8,       0.0);
    ( 502211.5, 3634884.5,     109.9,     109.9,       0.0);         ( 502212.3,
3634893.4,     110.0,     110.0,       0.0);
    ( 502212.6, 3634903.8,     110.0,     110.0,       0.0);         ( 502215.2,
3634913.1,     110.1,     110.1,       0.0);
    ( 502215.6, 3634921.2,     110.2,     110.2,       0.0);         ( 502214.9,
3634926.0,     110.2,     110.2,       0.0);
    ( 502214.1, 3634934.2,     110.3,     110.3,       0.0);         ( 502214.1,
3634942.0,     110.3,     110.3,       0.0);
    ( 502204.1, 3634861.9,     109.9,     109.9,       0.0);         ( 502186.3,
3634861.2,     109.9,     109.9,       0.0);
    ( 502173.7, 3634860.8,     109.8,     109.8,       0.0);         ( 502156.0,
3634861.9,     109.7,     109.7,       0.0);
    ( 502134.1, 3634860.8,     109.5,     109.5,       0.0);         ( 502118.2,
3634861.6,     109.4,     109.4,       0.0);
    ( 502085.2, 3634862.3,     109.2,     109.2,       0.0);         ( 502070.7,
3634863.1,     109.7,     109.7,       0.0);
    ( 502055.2, 3634861.9,     110.0,     110.0,       0.0);         ( 502043.7,
3634862.3,     110.2,     110.2,       0.0);
    ( 502031.5, 3634861.9,     110.3,     110.3,       0.0);         ( 502021.1,
3634861.9,     110.4,     110.4,       0.0);
    ( 502009.6, 3634861.9,     110.5,     110.5,       0.0);         ( 501997.0,
3634861.9,     110.6,     110.6,       0.0);
    ( 501981.4, 3634866.4,     110.4,     110.4,       0.0);         ( 501973.6,
3634869.0,     110.2,     110.2,       0.0);
    ( 502079.3, 3634895.3,     109.8,     109.8,       0.0);         ( 502065.9,
3634895.3,     110.1,     110.1,       0.0);
    ( 502053.3, 3634897.9,     110.3,     110.3,       0.0);         ( 502041.8,
3634895.3,     110.4,     110.4,       0.0);
    ( 502031.8, 3634897.5,     110.6,     110.6,       0.0);         ( 502018.9,
3634897.9,     110.7,     110.7,       0.0);
    ( 502007.7, 3634894.9,     110.7,     110.7,       0.0);         ( 501994.8,
3634897.9,     110.8,     110.8,       0.0);
    ( 501983.7, 3634902.3,     111.1,     111.1,       0.0);         ( 501974.0,
3634908.3,     111.2,     111.2,       0.0);
    ( 501981.4, 3634920.9,     111.7,     111.7,       0.0);         ( 502003.7,
3634919.0,     111.6,     111.6,       0.0);
    ( 502014.0, 3634919.0,     111.4,     111.4,       0.0);         ( 502028.1,
3634920.1,     111.3,     111.3,       0.0);
    ( 502042.9, 3634917.9,     111.0,     111.0,       0.0);         ( 502051.5,
3634918.3,     111.0,     111.0,       0.0);
```

↑ *** AERMOD - VERSION 23132 *** *** C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co *** 02/05/24
*** AERMET - VERSION 22112 *** ***
*** 12:46:26

PAGE 25
*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(502064.1, 3634919.0, 110.9, 110.9, 0.0); (502077.4, 3634918.6, 110.5, 110.5, 0.0);
(501921.8, 3634897.9, 110.4, 110.4, 0.0); (501909.5, 3634907.9, 110.1, 110.1, 0.0);
(501929.6, 3634893.8, 110.8, 110.8, 0.0); (501938.5, 3634887.5, 111.0, 111.0, 0.0);
(501949.2, 3634879.7, 110.5, 110.5, 0.0); (501959.2, 3634875.3, 110.1, 110.1, 0.0);
(501951.4, 3634922.0, 111.1, 111.1, 0.0); (501961.4, 3634912.0, 111.1, 111.1, 0.0);

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: LES_2019-2021_v22112.SFC
Met Version: 22112
Profile file: LES_2019-2021_v22112.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 53143 Upper air station no.: 3190
Name: LES Name: UNKNOWN

Year: 2019 Year: 2019

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
19	01	01	1	01	-1.2	0.036	-9.000	-9.000	-999.	17.	3.4	0.03	1.10	1.00	1.07	109.	10.0	279.8	10.0
19	01	01	1	02	-0.4	0.018	-9.000	-9.000	-999.	6.	1.5	0.03	1.10	1.00	0.54	221.	10.0	278.4	10.0
19	01	01	1	03	-0.4	0.020	-9.000	-9.000	-999.	7.	1.7	0.03	1.10	1.00	0.58	120.	10.0	277.3	10.0
19	01	01	1	04	-0.9	0.029	-9.000	-9.000	-999.	12.	2.3	0.03	1.10	1.00	0.85	74.	10.0	276.5	10.0
19	01	01	1	05	-0.6	0.024	-9.000	-9.000	-999.	9.	2.0	0.03	1.10	1.00	0.72	108.	10.0	276.0	10.0

```
 19 01 01   1 06   -1.1  0.032 -9.000 -9.000 -999.   14.      2.6  0.03   1.10
1.00    0.94   44.   10.0  275.4   10.0
 19 01 01   1 07   -0.7  0.024 -9.000 -9.000 -999.    9.      2.0  0.03   1.10
1.00    0.72  288.   10.0  275.5   10.0
 19 01 01   1 08   -0.5  0.024 -9.000 -9.000 -999.    9.      2.5  0.03   1.10
0.49    0.72  231.   10.0  276.0   10.0
 19 01 01   1 09   33.8 -9.000 -9.000 -9.000  154. -999. -99999.0  0.03   1.10
0.30    0.00    0.   10.0  279.9   10.0
 19 01 01   1 10   85.0  0.120  0.857  0.005  265.  100.     -1.8  0.03   1.10
0.23    1.16  332.   10.0  283.3   10.0
 19 01 01   1 11  119.9  0.189  1.381  0.005  785.  197.     -5.0  0.03   1.10
0.21    2.10  320.   10.0  285.3   10.0
 19 01 01   1 12  136.4  0.238  1.521  0.005  922.  278.     -8.8  0.03   1.10
0.20    2.82   18.   10.0  286.5   10.0
 19 01 01   1 13  133.6  0.307  1.572  0.005 1039.  409.    -19.4  0.03   1.10
0.20    3.93   12.   10.0  286.8   10.0
 19 01 01   1 14  112.1  0.313  1.524  0.005 1127.  419.    -24.3  0.03   1.10
0.21    4.07   26.   10.0  286.8   10.0
 19 01 01   1 15   72.7  0.324  1.339  0.005 1180.  443.    -41.9  0.03   1.10
0.24    4.38   62.   10.0  286.8   10.0
 19 01 01   1 16   18.5  0.316  0.851  0.005 1191.  426.   -152.4  0.03   1.10
0.33    4.51   44.   10.0  285.8   10.0
 19 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.03   1.10
0.61    4.02   71.   10.0  284.5   10.0
 19 01 01   1 18  -21.6  0.194 -9.000 -9.000 -999.  205.     30.1  0.03   1.10
1.00    3.67   76.   10.0  283.2   10.0
 19 01 01   1 19   -8.3  0.088 -9.000 -9.000 -999.   69.      7.2  0.03   1.10
1.00    2.59   53.   10.0  282.6   10.0
 19 01 01   1 20   -4.6  0.065 -9.000 -9.000 -999.   40.      5.3  0.03   1.10
1.00    1.92   93.   10.0  280.8   10.0
 19 01 01   1 21   -2.7  0.050 -9.000 -9.000 -999.   27.      4.1  0.03   1.10
1.00    1.48   85.   10.0  278.6   10.0
 19 01 01   1 22   -1.2  0.033 -9.000 -9.000 -999.   14.      2.7  0.03   1.10
1.00    0.98   82.   10.0  277.5   10.0
 19 01 01   1 23   -4.0  0.061 -9.000 -9.000 -999.   36.      4.9  0.03   1.10
1.00    1.79   85.   10.0  276.5   10.0
 19 01 01   1 24   -5.3  0.070 -9.000 -9.000 -999.   44.      5.7  0.03   1.10
1.00    2.06  100.   10.0  276.4   10.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 19 01 01 01   10.0 1  109.    1.07   279.9   38.0  -99.00    0.58

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)									
	501597.27	501630.05	501662.83	501695.61	501728.39	501761.17	501793.95	501826.73	501859.51
3635213.38	2.73112	2.98419	3.37809	3.74943	4.10332	4.44984	4.77319	5.09998	5.40161
3635200.13	2.80207	3.05165	3.53810	3.93516	4.26541	4.62097	4.94364	5.29240	5.60632
3635186.88	2.87757	3.12322	3.67373	4.10374	4.43431	4.78626	5.12900	5.48660	5.81305
3635173.63	2.95286	3.19937	3.80606	4.27307	4.60665	4.95596	5.33163	5.69202	6.03096
3635160.38	3.04986	3.31070	3.95957	4.42962	4.77775	5.14134	5.53552	5.90339	6.26085
3635147.13	3.16544	3.45508	4.13451	4.57399	4.94201	5.35173	5.75505	6.11317	6.51067
3635133.88	3.28983	3.62312	4.32302	4.72628	5.10952	5.57965	5.99488	6.33360	6.76823
3635120.63	3.39288	3.81710	4.52588	4.90011	5.27546	5.81275	6.25610	6.57374	7.04111
3635107.38	3.49764	4.02634	4.71887	5.08032	5.45250	6.02415	6.53089	6.83659	7.33078
3635094.13	3.74267	4.30021	4.88768	5.24714	5.63866	6.23932	6.78938	7.14649	7.68991
3635080.88	4.03660	4.58394	5.05528	5.42368	5.82982	6.45135	7.06031	7.51915	8.07711
3635067.63	4.33664	4.81917	5.21452	5.60942	6.06970	6.66500	7.31829	7.89487	8.46705

```
  3635054.38 |       4.62084      5.00950      5.35933      5.78237      6.26079
 6.88868      7.57707      8.25841      8.86800
  3635041.13 |       4.85025      5.19031      5.45622      5.84566      6.42223
 7.10210      7.84653      8.63172      9.31144
  3635027.88 |       5.00443      5.34644      5.42492      5.96728      6.59803
 7.31172      8.13171      9.02690      9.98895
  3635014.63 |       5.13450      5.34238      5.53911      6.11241      6.77363
 7.52540      8.40958      9.41410     10.52826
  3635001.38 |       5.16888      5.23904      5.64969      6.24842      6.94368
 7.74102      8.68936      9.78538     11.02155
  3634988.13 |       5.05929      5.22055      5.75704      6.38165      7.11202
 7.95880      8.97269     10.16234     11.52303
  3634974.88 |       5.01112      5.29606      5.86166      6.51275      7.27804
 8.17729      9.25497     10.53886     12.04967
  3634961.63 |       5.03908      5.37807      5.96267      6.64003      7.44087
 8.39322      9.53738     10.92028     12.58881
  3634948.38 |       5.08550      5.45685      6.05900      6.76242      7.59905
 8.60403      9.81882     11.30150     13.12985
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                      ***        12:46:26

                                 PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

    Y-COORD  |                                            X-COORD (METERS)
    (METERS) |     501892.29    501925.07    501957.85    501990.63    502023.41
502056.19    502088.97    502121.75    502154.53
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -

  3635213.38 |       5.70429      6.01569      6.33634      6.67785      6.97177
```

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 7.23631      7.44267      7.57836      7.62577
  3635200.13 |       5.92697      6.25313      6.60081      6.99088      7.30721
 7.59343      7.81797      7.95231      8.03096
  3635186.88 |       6.16324      6.51608      6.89376      7.31491      7.66649
 7.97957      8.22433      8.37787      8.45032
  3635173.63 |       6.40850      6.79650      7.20768      7.66349      8.05518
 8.39921      8.67007      8.84382      8.88003
  3635160.38 |       6.67488      7.09596      7.54461      8.03922      8.47458
 8.85710      9.15773      9.34567      9.40081
  3635147.13 |       6.95139      7.40892      7.90688      8.44507      8.93104
 9.35845      9.69165      9.88136      9.98364
  3635133.88 |       7.25299      7.75114      8.29704      8.88438      9.42936
 9.90773     10.28445     10.52912     10.62795
  3635120.63 |       7.56622      8.12713      8.71814      9.35399      9.95446
10.49410     10.93516     11.24940     11.35345
  3635107.38 |       7.90967      8.52268      9.17362      9.87099     10.52299
11.12858     11.64609     12.04007     12.14787
  3635094.13 |       8.27782      8.94867      9.67806     10.44384     11.18165
11.86682     12.44462     12.94159     13.06497
  3635080.88 |       8.68532      9.40853     10.22798     11.08304     11.92131
12.69846     13.34524     13.93288     14.08877
  3635067.63 |       9.11241      9.89244     10.81603     11.76286     12.72416
13.60886     14.36051     15.00537     15.21844
  3635054.38 |       9.54444     10.41551     11.41145     12.47912     13.59098
14.62560     15.48309     16.17848     16.46880
  3635041.13 |      10.04046     11.01778     12.10996     13.29738     14.56946
15.76638     16.77062     17.48117     17.89183
  3635027.88 |      10.75879     11.79242     13.04272     14.40994     15.85839
17.32853     18.46856     19.32503     19.57361
  3635014.63 |      11.70267     12.77886     14.19498     15.81969     17.64167
19.36368     20.60274     21.37736     21.52209
  3635001.38 |      12.40815     13.82186     15.29303     17.20182     19.31812
21.27920     22.79887     23.61101     23.76090
  3634988.13 |      13.09879     14.80000     16.44334     18.71802     21.18877
23.44345     25.26509     26.22076     26.36440
  3634974.88 |      13.83915     15.83579     17.97339     20.50358     23.35786
26.03492     28.18633     29.32025     29.46420
  3634961.63 |      14.60131     16.94073     19.52835     22.53664     25.95614
29.10130     31.63786     33.03792     33.21806
  3634948.38 |      15.36790     18.06420     21.15314     24.76729     28.88362
32.69328     35.79158     37.53827     37.74086
```

VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002
, L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010
, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE:
GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

Y-COORD (METERS)	X-COORD (METERS)		
	502187.31	502220.09	502252.87
3635213.38	7.57034	7.49780	7.37098
3635200.13	7.97292	7.88727	7.76983
3635186.88	8.41055	8.31214	8.16964
3635173.63	8.88499	8.77430	8.60593
3635160.38	9.40511	9.27767	9.06896
3635147.13	9.97508	9.83243	9.58240
3635133.88	10.61156	10.44991	10.15083
3635120.63	11.31985	11.12984	10.78513
3635107.38	12.10661	11.88324	11.48482
3635094.13	12.98891	12.71982	12.25515
3635080.88	13.97761	13.65191	13.10778
3635067.63	15.07614	14.68031	14.05473
3635054.38	16.30327	15.82249	15.11533
3635041.13	17.70251	17.11423	16.30254
3635027.88	19.30884	18.59216	17.65450
3635014.63	21.14509	20.27694	19.17958
3635001.38	23.28109	22.21992	20.90029
3634988.13	25.76046	24.46589	22.85760
3634974.88	28.69744	27.07988	25.08318
3634961.63	32.20466	30.16506	27.63539
3634948.38	36.40349	33.80318	30.58445

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
501602.73	3635113.79	3.49980	502091.20	3634721.35	114.08114
501723.95	3634830.54	8.31385	501655.97	3634810.14	6.41713
501659.36	3634840.73	6.45608	501682.03	3634782.95	7.05623
501615.18	3634804.48	5.57872	501713.75	3634792.01	8.00727
501738.68	3634746.69	8.76674	502804.34	3635417.16	2.36707
502842.81	3635417.98	2.22782	502881.29	3635418.80	2.09923
502916.49	3635414.71	2.00002	502946.78	3635416.34	1.91221
502812.52	3635466.28	2.22808	502802.70	3635530.95	2.11697
502804.34	3635509.67	2.15877	502803.52	3635553.88	2.06515
502881.29	3635525.22	1.91482	502923.86	3635526.04	1.80561
502966.43	3635530.14	1.69957	502996.72	3635469.56	1.70955
503003.27	3635421.26	1.76326	503514.45	3634924.92	1.23787
503585.73	3634932.63	1.13743	503561.65	3634986.57	1.15111
503547.20	3634944.19	1.18532	503568.39	3634877.73	1.17418
503469.18	3634893.14	1.31935	503457.62		

3634854.61 1.34722
503469.18 3634854.61 1.33050 502528.43
3634617.44 11.15039
502584.77 3634617.44 9.06972 502641.11
3634617.44 7.49472
502697.45 3634617.44 6.28317 502753.79
3634617.44 5.34186
502528.43 3634647.64 11.52065 502584.77
3634647.64 9.23813
502641.11 3634647.64 7.55491 502697.45
3634647.64 6.29391
502753.79 3634647.64 5.32913 502810.13
3634647.64 4.57582
502866.47 3634647.64 3.97403 502922.81
3634647.64 3.48687
502979.15 3634647.64 3.08762 503035.49
3634647.64 2.75633
503091.83 3634647.64 2.47837 503148.17
3634647.64 2.24068
503204.51 3634647.64 2.03881 503260.85
3634647.64 1.86523
503317.19 3634647.64 1.71327 503373.53
3634647.64 1.58018
502528.43 3634677.84 11.72514 502584.77
3634677.84 9.29304
502641.11 3634677.84 7.55340 502697.45
3634677.84 6.26740
502753.79 3634677.84 5.29483 502810.13
3634677.84 4.53833
502866.47 3634677.84 3.93835 502922.81
3634677.84 3.45541
502979.15 3634677.84 3.05926 503035.49
3634677.84 2.73171
503091.83 3634677.84 2.45682 503148.17
3634677.84 2.22076
503204.51 3634677.84 2.02018 503260.85
3634677.84 1.85048
503317.19 3634677.84 1.70031 503373.53
3634677.84 1.56868
502528.43 3634708.04 11.76002 502584.77
3634708.04 9.26139
502641.11 3634708.04 7.50058 502697.45
3634708.04 6.21391
502753.79 3634708.04 5.24361 502810.13
3634708.04 4.49126
502866.47 3634708.04 3.89638 502922.81
3634708.04 3.41989
502979.15 3634708.04 3.02907 503035.49
3634708.04 2.70570
503091.83 3634708.04 2.43445 503148.17

                              *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_10   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         503204.51   3634708.04   2.00460   503260.85
3634708.04   1.83577
         503317.19   3634708.04   1.68716   503373.53
3634708.04   1.55684
         502528.43   3634738.24   11.67423   502584.77
3634738.24   9.16767
         502641.11   3634738.24   7.41611   502697.45
3634738.24   6.14158
         502810.13   3634738.24   4.44063   502866.47
3634738.24   3.85303
         502922.81   3634738.24   3.38327   502979.15
3634738.24   2.99949
         503035.49   3634738.24   2.68015   503091.83
3634738.24   2.41243
         503148.17   3634738.24   2.18338   503204.51
3634738.24   1.98869
         503260.85   3634738.24   1.82161   503317.19
3634738.24   1.67487
         503373.53   3634738.24   1.54604   502528.43
3634768.44   11.50336

```
         502584.77    3634768.44        9.03159                    502641.11
3634768.44        7.30948
         502697.45    3634768.44        6.05751                    502810.13
3634768.44        4.38608
         502866.47    3634768.44        3.80838                    502922.81
3634768.44        3.34589
         502979.15    3634768.44        2.96894                    503035.49
3634768.44        2.65383
         503091.83    3634768.44        2.38994                    503148.17
3634768.44        2.16472
         503204.51    3634768.44        1.97312                    503260.85
3634768.44        1.80739
         503317.19    3634768.44        1.66252                    503373.53
3634768.44        1.53546
         502528.43    3634798.64       11.26317                    502584.77
3634798.64        8.86310
         502641.11    3634798.64        7.18525                    502697.45
3634798.64        5.96212
         502810.13    3634798.64        4.32661                    502866.47
3634798.64        3.76149
         502922.81    3634798.64        3.30706                    502979.15
3634798.64        2.93694
         503035.49    3634798.64        2.62555                    503091.83
3634798.64        2.36672
         503148.17    3634798.64        2.14593                    503204.51
3634798.64        1.95703
         503260.85    3634798.64        1.79293                    503317.19
3634798.64        1.64988
         503373.53    3634798.64        1.52427                    502303.07
3634828.84       49.89111
         502359.41    3634828.84       29.78153                    502415.75
3634828.84       19.94095
         502472.09    3634828.84       14.34784                    502528.43
3634828.84       10.96303
         502584.77    3634828.84        8.66034                    502641.11
3634828.84        7.04333
         502697.45    3634828.84        5.85777                    502810.13
3634828.84        4.26535
         502866.47    3634828.84        3.71345                    502922.81
3634828.84        3.26578
         502979.15    3634828.84        2.90178                    503035.49
3634828.84        2.59833
         503091.83    3634828.84        2.34392                    503148.17
3634828.84        2.12630
         503204.51    3634828.84        1.93973                    503260.85
3634828.84        1.77784
         503317.19    3634828.84        1.63649                    503373.53
3634828.84        1.51114
         502303.07    3634859.04       42.97500                    502359.41
3634859.04       27.28485
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         502415.75    3634859.04       18.81817                       502472.09
3634859.04       13.80385
         502528.43    3634859.04       10.60020                       502584.77
3634859.04        8.42686
         502641.11    3634859.04        6.87929                       502697.45
3634859.04        5.74212
         502810.13    3634859.04        4.19819                       502866.47
3634859.04        3.66097
         502922.81    3634859.04        3.22266                       502979.15
3634859.04        2.86597
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                               *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
         503035.49    3634859.04        2.56794                       503091.83
3634859.04        2.31807
         503148.17    3634859.04        2.10510                       503204.51
3634859.04        1.92160
         503260.85    3634859.04        1.76182                       503317.19
3634859.04        1.62077
         503373.53    3634859.04        1.49899                       502303.07
3634889.24       35.90256
         502359.41    3634889.24       24.44249                       502415.75
3634889.24       17.47821
         502472.09    3634889.24       13.09042                       502528.43
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3634889.24       10.17620
         502584.77    3634889.24        8.15416                    502641.11
3634889.24        6.69654
         502697.45    3634889.24        5.60784                    502753.79
3634889.24        4.77803
         502810.13    3634889.24        4.12472                    502866.47
3634889.24        3.60329
         502922.81    3634889.24        3.17800                    502979.15
3634889.24        2.82808
         503035.49    3634889.24        2.53700                    503091.83
3634889.24        2.29158
         503148.17    3634889.24        2.08249                    503204.51
3634889.24        1.90214
         503260.85    3634889.24        1.74331                    503317.19
3634889.24        1.60631
         503373.53    3634889.24        1.48608                    502303.07
3634919.44       29.64310
         502359.41    3634919.44       21.57401                    502415.75
3634919.44       16.03518
         502472.09    3634919.44       12.29597                    502528.43
3634919.44        9.69884
         502584.77    3634919.44        7.84974                    502641.11
3634919.44        6.48644
         502303.07    3634949.64       24.52599                    502359.41
3634949.64       18.89695
         502415.75    3634949.64       14.57464                    502472.09
3634949.64       11.45112
         502528.43    3634949.64        9.17855                    502584.77
3634949.64        7.51479
         502641.11    3634949.64        6.26339                    502753.79
3634949.64        4.55100
         502810.13    3634949.64        3.95041                    502866.47
3634949.64        3.47023
         502922.81    3634949.64        3.07076                    502979.15
3634949.64        2.74449
         503035.49    3634949.64        2.46718                    503091.83
3634949.64        2.23283
         503148.17    3634949.64        2.03308                    503204.51
3634949.64        1.85992
         503260.85    3634949.64        1.70676                    503317.19
3634949.64        1.57590
         503373.53    3634949.64        1.45874                    502303.07
3634979.84       20.48361
         502359.41    3634979.84       16.49291                    502415.75
3634979.84       13.16764
         502472.09    3634979.84       10.59527                    502528.43
3634979.84        8.63871
         502584.77    3634979.84        7.15636                    502641.11
3634979.84        6.01758
         502303.07    3635010.04       17.23777                    502359.41
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3635010.04   14.42651
         502415.75   3635010.04   11.86497   502472.09
3635010.04   9.76127
         502528.43   3635010.04   8.08944   502584.77
3635010.04   6.78567
         502641.11   3635010.04   5.75914   502753.79
3635010.04   4.28502
         502810.13   3635010.04   3.75247   502866.47
3635010.04   3.31276
         502922.81   3635010.04   2.95108   502979.15
3635010.04   2.64698
         503035.49   3635010.04   2.38776   503091.83
3635010.04   2.16661
         503148.17   3635010.04   1.97774   503204.51
3635010.04   1.81347
         503260.85   3635010.04   1.66908   503317.19
3635010.04   1.54213
         503373.53   3635010.04   1.42962   502303.07
3635040.24   14.68242

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

                             *** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                               ** CONC OF PM_10   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         502359.41   3635040.24   12.63950   502415.75
3635040.24   10.65134

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         502472.09    3635040.24        8.95076                    502528.43
3635040.24        7.54483
         502584.77    3635040.24        6.40986                    502641.11
3635040.24        5.49130
         502753.79    3635040.24        4.13978                    502810.13
3635040.24        3.64120
         502866.47    3635040.24        3.22945                    502922.81
3635040.24        2.88431
         502979.15    3635040.24        2.59250                    503035.49
3635040.24        2.34359
         503091.83    3635040.24        2.12991                    503148.17
3635040.24        1.94632
         503204.51    3635040.24        1.78632                    503260.85
3635040.24        1.64566
         503317.19    3635040.24        1.52210                    503373.53
3635040.24        1.41302
         502303.07    3635070.44       12.64484                    502359.41
3635070.44       11.12900
         502415.75    3635070.44        9.59273                    502472.09
3635070.44        8.20756
         502528.43    3635070.44        7.02378                    502584.77
3635070.44        6.04147
         502641.11    3635070.44        5.22543                    502753.79
3635070.44        3.98764
         502810.13    3635070.44        3.52543                    502866.47
3635070.44        3.14001
         502922.81    3635070.44        2.81279                    502979.15
3635070.44        2.53467
         503035.49    3635070.44        2.29768                    503091.83
3635070.44        2.09220
         503148.17    3635070.44        1.91533                    503204.51
3635070.44        1.76016
         503260.85    3635070.44        1.62373                    503317.19
3635070.44        1.50313
         503373.53    3635070.44        1.39620                    502303.07
3635100.64       10.99390
         502359.41    3635100.64        9.85765                    502415.75
3635100.64        8.65765
         502472.09    3635100.64        7.52593                    502528.43
3635100.64        6.53328
         502584.77    3635100.64        5.68262                    502641.11
3635100.64        4.96148
         502753.79    3635100.64        3.83499                    502810.13
3635100.64        3.40587
         502866.47    3635100.64        3.04595                    502922.81
3635100.64        2.74143
         502979.15    3635100.64        2.47695                    503035.49
3635100.64        2.25009
         503091.83    3635100.64        2.05313                    503148.17
3635100.64        1.88197
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         503204.51    3635100.64        1.73142                        503260.85
3635100.64        1.59967
         503317.19    3635100.64        1.48242                        503373.53
3635100.64        1.37868
         502303.07    3635130.84        9.65221                        502359.41
3635130.84        8.77494
         502415.75    3635130.84        7.82799                        502472.09
3635130.84        6.91389
         502528.43    3635130.84        6.07561                        502584.77
3635130.84        5.33921
         502641.11    3635130.84        4.70318                        502753.79
3635130.84        3.68301
         502810.13    3635130.84        3.28657                        502866.47
3635130.84        2.95137
         502922.81    3635130.84        2.66571                        502979.15
3635130.84        2.41629
         503035.49    3635130.84        2.19961                        503091.83
3635130.84        2.01033
         503148.17    3635130.84        1.84716                        503204.51
3635130.84        1.70166
         503260.85    3635130.84        1.57468                        503317.19
3635130.84        1.46133
         503373.53    3635130.84        1.36067                        502303.07
3635161.04        8.55746
         502359.41    3635161.04        7.86330                        502415.75
3635161.04        7.12440
         502472.09    3635161.04        6.39559                        502528.43
3635161.04        5.67170
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                              *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS
***
```

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
502584.77	3635161.04	5.01369	502641.11	3635161.04	4.45199
502753.79	3635161.04	3.53276	502810.13	3635161.04	3.16703
502866.47	3635161.04	2.85155	502922.81	3635161.04	2.58867
502979.15	3635161.04	2.35339	503035.49	3635161.04	2.14699
503091.83	3635161.04	1.96776	503148.17	3635161.04	1.81124
503204.51	3635161.04	1.67162	503260.85	3635161.04	1.54908
503317.19	3635161.04	1.43918	503373.53	3635161.04	1.34159
502303.07	3635191.24	7.63679	502359.41	3635191.24	7.09394
502415.75	3635191.24	6.50990	502472.09	3635191.24	5.91801
502528.43	3635191.24	5.32262	502584.77	3635191.24	4.71034
502641.11	3635191.24	4.21501	502753.79	3635191.24	3.38630
502810.13	3635191.24	3.05138	502866.47	3635191.24	2.75684
502922.81	3635191.24	2.50956	502979.15	3635191.24	2.28862
503035.49	3635191.24	2.09389	503091.83	3635191.24	1.92384
503148.17	3635191.24	1.77384	503204.51	3635191.24	1.64018
503260.85	3635191.24	1.52187	503317.19	3635191.24	1.41608
503373.53	3635191.24	1.32155	502531.05	3633473.38	1.12918
502585.54	3633473.38	1.11223	502640.03	3633473.38	1.09329
502694.52	3633473.38	1.07323	502749.01	3633473.38	1.05254
502803.50	3633473.38	1.03163	502857.99	3633473.38	1.01101
502531.05	3633537.42	1.22025	502585.54	3633537.42	1.19936
502640.03	3633537.42	1.17789	502694.52		

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3633537.42        1.15474
         502749.01    3633537.42        1.13121                        502803.50
3633537.42        1.10760
         502857.99    3633537.42        1.08438                        502367.58
3633601.46        1.37591
         502422.07    3633601.46        1.36250                        502476.56
3633601.46        1.34443
         502531.05    3633601.46        1.32359                        502585.54
3633601.46        1.29956
         502640.03    3633601.46        1.27359                        502367.58
3633633.48        1.43890
         502422.07    3633633.48        1.42418                        502476.56
3633633.48        1.40394
         502531.05    3633633.48        1.38096                        502585.54
3633633.48        1.35440
         502640.03    3633633.48        1.32617                        502367.58
3633665.50        1.50566
         502422.07    3633665.50        1.48932                        502476.56
3633665.50        1.46756
         502531.05    3633665.50        1.44193                        502585.54
3633665.50        1.41288
         502640.03    3633665.50        1.38205                        502422.07
3633697.52        1.55984
         502585.54    3633697.52        1.47545                        502640.03
3633697.52        1.44202
         502422.07    3633729.54        1.63546                        502585.54
3633729.54        1.54246
         502640.03    3633729.54        1.50608                        502422.07
3633761.56        1.71811
         502585.54    3633761.56        1.61437                        502640.03
3633761.56        1.57464
         502367.58    3633793.58        1.83378                        502422.07
3633793.58        1.80690
         502585.54    3633793.58        1.69176                        502640.03
3633793.58        1.64852
         502040.64    3633825.60        1.94724                        502095.13
3633825.60        1.96499
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                      ***        12:46:26

                                 PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                             *** THE PERIOD ( 26304 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL     ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                L0000006    , L0000007    , L0000008    , L0000009    , L0000010
```

, L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018
, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
502367.58	3633825.60	1.93386	502422.07	3633825.60	1.90255
502585.54	3633825.60	1.77524	502640.03	3633825.60	1.72831
502040.64	3633857.62	2.05802	502095.13	3633857.62	2.07940
502422.07	3633857.62	2.00673	502585.54	3633857.62	1.86547
502640.03	3633857.62	1.81415	502040.64	3633889.64	2.17885
502095.13	3633889.64	2.20342	502422.07	3633889.64	2.12005
502585.54	3633889.64	1.96304	502640.03	3633889.64	1.90693
502040.64	3633921.66	2.31244	502095.13	3633921.66	2.33940
502422.07	3633921.66	2.24473	502585.54	3633921.66	2.06878
502640.03	3633921.66	2.00743	502040.64	3633953.68	2.45855
502095.13	3633953.68	2.49051	502422.07	3633953.68	2.38098
502585.54	3633953.68	2.18415	502640.03	3633953.68	2.11694
502040.64	3633985.70	2.62075	502095.13	3633985.70	2.65874
501768.19	3634017.72	2.36922	501822.68	3634017.72	2.47771
501877.17	3634017.72	2.57951	501931.66	3634017.72	2.67002
501986.15	3634017.72	2.74100	502040.64	3634017.72	2.80295
502095.13	3634017.72	2.84752	501768.19	3634049.74	2.50723

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         501822.68    3634049.74        2.63219                     501877.17
3634049.74        2.74729
         501931.66    3634049.74        2.85195                     501986.15
3634049.74        2.93631
         502040.64    3634049.74        3.00723                     502095.13
3634049.74        3.05761
         502149.62    3634049.74        3.08339                     501768.19
3634081.76        2.65077
         501822.68    3634081.76        2.79192                     501877.17
3634081.76        2.92046
         501931.66    3634081.76        3.04515                     501986.15
3634081.76        3.14766
         502040.64    3634081.76        3.22671                     502095.13
3634081.76        3.27749
         502149.62    3634081.76        3.30143                     501520.78
3634629.90        3.90907
         501511.26    3634708.76        4.00452                     501509.90
3634738.67        4.03813
         501522.14    3634835.21        4.22432                     501511.26
3634920.87        4.25914
         501511.26    3634952.15        4.56394                     501516.70
3634990.22        4.50828
         503043.64    3634375.63        2.67959                     503061.32
3634387.87        2.62254
         503087.15    3634382.43        2.51082                     503103.47
3634385.15        2.45006
         503130.66    3634383.79        2.34737                     503159.22
3634383.79        2.24708
         503182.33    3634381.07        2.16826                     502909.03
3634272.29        2.95489
         502903.59    3634246.46        2.86839                     502904.95
3634190.71        2.63417
         502903.59    3634158.08        2.50666                     502904.95
3634126.81        2.38241
         502906.31    3634103.69        2.29346                     502963.80
3634312.63        2.87700
         503013.88    3634311.43        2.67798                     502947.51
3634269.80        2.80400
         502965.61    3634265.58        2.72508                     503000.61
3634291.52        2.67823
         503023.53    3634327.11        2.67534                     503037.41
3634331.34        2.62989
         503053.70    3634345.82        2.59223                     503072.40
3634344.61        2.51884
         502211.77    3634864.08       93.37478                     502115.94
3634941.62       39.98093
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***       12:46:26
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE PERIOD (26304 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
502116.68	3634933.09	43.80681	502114.83	3634929.02	45.71631
502115.20	3634920.87	50.20710	502115.20	3634914.94	53.89570
502114.46	3634907.16	59.33887	502115.20	3634901.97	63.57580
502115.20	3634893.82	71.09717	502140.77	3634893.08	73.21203
502141.51	3634901.23	65.37687	502141.14	3634910.86	57.66661
502141.14	3634922.72	49.94092	502141.14	3634933.09	44.41200
502141.14	3634941.99	40.38474	502187.45	3634940.50	39.31635
502186.71	3634927.17	45.22714	502187.82	3634918.27	49.80087
502187.08	3634911.23	54.16601	502188.19	3634904.19	58.86807
502187.82	3634898.63	63.27297	502187.08	3634891.59	69.71316
502211.54	3634884.55	69.39811	502212.28	3634893.45	61.65946
502212.65	3634903.82	54.33367	502215.24	3634913.08	48.47230
502215.61	3634921.24	44.40062	502214.87		

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3634926.05       42.38563
         502214.13    3634934.21       39.20085                       502214.13
3634941.99       36.41863
         502204.13    3634861.95      101.79984                       502186.34
3634861.21      113.21348
         502173.74    3634860.84      119.00154                       502155.96
3634861.95      120.43456
         502134.10    3634860.84      123.63995                       502118.16
3634861.58      120.00321
         502085.18    3634862.32      108.72371                       502070.73
3634863.06      100.26111
         502055.17    3634861.95       93.07129                       502043.68
3634862.32       84.78603
         502031.46    3634861.95       76.50846                       502021.08
3634861.95       68.91430
         502009.60    3634861.95       60.83384                       501997.00
3634861.95       52.80971
         501981.43    3634866.40       43.10017                       501973.65
3634868.99       39.19806
         502079.26    3634895.30       63.38582                       502065.92
3634895.30       59.95043
         502053.32    3634897.89       54.58510                       502041.83
3634895.30       52.87904
         502031.83    3634897.52       48.51520                       502018.86
3634897.89       44.43195
         502007.74    3634894.93       42.33503                       501994.77
3634897.89       37.48956
         501983.66    3634902.34       33.38160                       501974.02
3634908.27       29.93167
         501981.43    3634920.87       28.61630                       502003.67
3634919.01       33.14970
         502014.04    3634919.01       35.24605                       502028.12
3634920.12       37.66119
         502042.94    3634917.90       41.42476                       502051.47
3634918.27       42.89363
         502064.06    3634919.01       44.78569                       502077.40
3634918.64       47.22225
         501921.78    3634897.89       22.18723                       501909.55
3634907.90       19.71367
         501929.56    3634893.82       23.78296                       501938.45
3634887.52       26.06911
         501949.20    3634879.74       29.54076                       501959.20
3634875.29       32.99453
         501951.42    3634921.98       23.84488                       501961.43
3634911.97       26.90718
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                      ***        12:46:26
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)			
	501597.27	501630.05	501662.83	501695.61
	501728.39			
3635213.4	98.73723 (21012023)	102.65559 (20122721)	118.58511 (20122721)	122.47106 (20070801)
	138.83342 (20070802)			
3635200.1	98.94842 (21012023)	106.11139 (21012023)	118.90223 (20122721)	132.58715 (20070801)
	140.17169 (20070802)			
3635186.9	102.12842 (20122320)	108.79150 (21012023)	118.36485 (21012023)	136.68199 (20070801)
	141.03073 (20070801)			
3635173.6	102.79369 (20122320)	108.66777 (21012023)	125.47700 (20071201)	136.53377 (21110406)
	142.27372 (20070801)			
3635160.4	102.58083 (19013101)	113.05691 (20122320)	138.00271 (20071201)	139.83659 (21072005)
	138.78979 (20070801)			
3635147.1	108.24109 (19013101)	115.47473 (20122320)	148.49133 (19083024)	148.87151 (20071201)
	135.07134 (21110406)			
3635133.9	110.70649 (19013101)	118.67368 (19013101)	157.45454 (19083024)	155.34287 (20071201)
	138.74080 (20071201)			
3635120.6	110.53568 (21052423)	125.36598 (19013101)	162.22475 (19012005)	154.82479 (19083024)
	149.26921 (20071201)			
3635107.4	112.48883 (21011719)	137.25090 (21052423)	156.13220 (19012005)	154.23811 (19012005)
	155.08327 (20071201)			
3635094.1	127.01538 (21011719)	153.33809 (21052423)	155.23954 (21052423)	156.35529 (19012005)
	158.51165 (19083024)			
3635080.9	139.49426 (21011719)	162.82219 (21052423)	156.31665 (21052423)	150.41824 (19012005)
	166.73111 (19012005)			
3635067.6	147.97756 (21011719)	169.39911 (19111006)	147.61616 (21011719)	144.97044 (21052423)
	139.22984 (19012005)			

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 3635054.4 |    164.39080 (19012720)    170.84723 (19111006)    155.41720 (21011719)
   133.83845 (21011719)    120.29176 (20022207)
 3635041.1 |    177.59007 (19012720)    172.15060 (21011719)    146.08311 (21011719)
   119.43978 (21011719)    110.53808 (20022207)
 3635027.9 |    177.57642 (19012720)    172.06149 (19012720)    113.15949 (21011719)
   115.37667 (21011719)    113.15101 (21011719)
 3635014.6 |    171.33094 (20021924)    132.92732 (21011719)    109.86250 (21011719)
   120.31177 (21011719)    123.86474 (21011719)
 3635001.4 |    146.67440 (20021924)    104.35079 (21011719)    105.44179 (21011719)
   121.01232 (21011719)    131.02420 (21011719)
 3634988.1 |    105.50135 (19120120)     79.78395 (21011719)     97.52823 (21011719)
   117.23646 (21011719)    133.58936 (21011719)
 3634974.9 |     86.42237 (19120120)     67.79488 (20021724)     86.85650 (21011719)
   109.18621 (21011719)    130.89840 (21011719)
 3634961.6 |     77.60298 (19120120)     63.43208 (20021724)     74.51972 (20021724)
    97.60606 (21011719)    122.94958 (21011719)
 3634948.4 |     72.71834 (21121021)     69.16181 (19050903)     70.24097 (19050903)
    83.71140 (21011719)    110.46280 (21011719)
↟ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                      ***        12:46:26

                                 PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

  Y-COORD  |                                                 X-COORD (METERS)
  (METERS) |       501761.17              501793.95              501826.73
      501859.51              501892.29
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

 3635213.4 |    144.79906 (20070802)    157.39916 (19091321)    163.71640 (20042421)
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  159.64857 (20042421)    163.29947 (20110924)
 3635200.1 |    149.78504 (20070802)    158.03423 (19091321)    163.35731 (20042421)
  168.04383 (20042421)    167.55922 (20110924)
 3635186.9 |    150.34958 (20070802)    154.42882 (19091321)    163.79040 (19091321)
  174.60937 (20042421)    170.25277 (20110924)
 3635173.6 |    147.46724 (20070802)    151.09746 (20070802)    166.20732 (19091321)
  179.18642 (20042421)    171.29963 (20110924)
 3635160.4 |    140.34335 (20070802)    151.31769 (20070802)    166.74712 (19091321)
  181.58707 (20042421)    181.08078 (20042421)
 3635147.1 |    131.56962 (20070801)    143.70180 (20070802)    166.49541 (19091321)
  182.09095 (19091321)    189.99015 (20042421)
 3635133.9 |    117.76781 (20122721)    126.76937 (20070802)    169.03292 (20070802)
  187.58739 (19091321)    196.72502 (20042421)
 3635120.6 |    122.10550 (21012023)    119.62996 (20122721)    173.55121 (20070802)
  190.38375 (19091321)    201.09091 (20042421)
 3635107.4 |    126.34484 (21012023)    119.29290 (21012023)    174.03725 (20070802)
  190.30190 (19091321)    202.68527 (20042421)
 3635094.1 |    127.18406 (21012023)    125.32450 (21012023)    165.80028 (20070802)
  189.29730 (20070802)    208.18895 (19091321)
 3635080.9 |    124.37624 (21012023)    125.06476 (21012023)    145.40202 (20122721)
  188.83923 (20070802)    211.16678 (19091321)
 3635067.6 |    119.48800 (21012023)    128.44993 (21012023)    147.47975 (21012023)
  184.10220 (20070802)    211.26355 (19091321)
 3635054.4 |    117.37747 (20022207)    131.22285 (21012023)    157.43172 (21012023)
  177.86577 (20070801)    216.10323 (20070802)
 3635041.1 |    120.85470 (20022207)    129.86717 (21012023)    161.37050 (21012023)
  174.58120 (20070801)    220.86785 (20070802)
 3635027.9 |    122.75883 (20022207)    131.40375 (20022207)    151.40649 (21012023)
  170.52237 (21012023)    200.83161 (20070802)
 3635014.6 |    121.94185 (20022207)    135.81774 (20022207)    142.59885 (21012023)
  163.85626 (21012023)    174.43038 (21012023)
 3635001.4 |    132.41570 (21011719)    137.55260 (20022207)    149.11258 (20022207)
  165.24664 (21012023)    179.69887 (21012023)
 3634988.1 |    142.58433 (21011719)    141.42772 (21011719)    154.14540 (20022207)
  165.99289 (21012023)    186.31317 (21012023)
 3634974.9 |    147.77611 (21011719)    155.30785 (21011719)    155.31995 (20022207)
  171.09044 (20022207)    185.91723 (21012023)
 3634961.6 |    146.84092 (21011719)    163.93376 (21011719)    168.93285 (21011719)
  176.64618 (20022207)    186.99204 (20022207)
 3634948.4 |    139.39163 (21011719)    165.55671 (21011719)    182.17195 (21011719)
  183.47834 (21011719)    198.97250 (20022207)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                             *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
```

VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                  *** NETWORK ID: UCART1   ; NETWORK TYPE:
GRIDCART ***

                                       ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

  Y-COORD | X-COORD (METERS)
  (METERS) | 501925.07   501957.85   501990.63
      502023.41   502056.19
 -
- -

 3635213.4 | 161.93111 (20091222)   156.43622 (20033120)   165.43912 (20101023)
   165.65016 (20101023)   170.75545 (19031924)
 3635200.1 | 164.58245 (20091222)   160.89603 (20091222)   169.31140 (20033120)
   172.85668 (20101023)   175.36365 (19031924)
 3635186.9 | 167.09144 (20110924)   169.00543 (20091222)   174.28107 (20033120)
   179.09687 (20101023)   179.18416 (19031924)
 3635173.6 | 175.49244 (20110924)   176.17486 (20091222)   178.49171 (20033120)
   184.45480 (20101023)   182.24191 (19031924)
 3635160.4 | 182.49572 (20110924)   182.23819 (20091222)   181.89219 (20033120)
   188.98189 (20101023)   184.59574 (19031924)
 3635147.1 | 187.67453 (20110924)   187.05562 (20091222)   184.45414 (20033120)
   192.67798 (20101023)   186.33185 (19031924)
 3635133.9 | 191.37869 (20110924)   190.51873 (20091222)   190.63275 (20091222)
   195.54786 (20101023)   188.31396 (19031924)
 3635120.6 | 195.24664 (20042421)   198.65030 (20110924)   199.54661 (20091222)
   200.37814 (20033120)   199.73652 (20101023)
 3635107.4 | 206.92793 (20042421)   206.94647 (20110924)   207.20895 (20091222)
   207.12616 (20033120)   210.21212 (20101023)
 3635094.1 | 216.17443 (20042421)   213.22330 (20110924)   213.25302 (20091222)
   211.63711 (20033120)   216.68562 (20101023)
 3635080.9 | 222.66074 (20042421)   217.02083 (20110924)   217.17219 (20091222)
   214.08988 (20033120)   221.08063 (20101023)
 3635067.6 | 226.46367 (20042421)   226.13694 (20042421)   226.01222 (20110924)
   220.94881 (20091222)   226.50014 (20101023)
 3635054.4 | 232.56474 (19091321)   238.40377 (20042421)   236.15571 (20110924)
   232.01299 (20091222)   231.84556 (20101023)
 3635041.1 | 237.40549 (19091321)   247.56720 (20042421)   243.65489 (20110924)
   240.84559 (20091222)   236.63955 (20101023)

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 3635027.9 |    232.72893 (19091321)    249.69562 (20042421)    244.32916 (20042421)
   239.35070 (20091222)    217.18563 (20033120)
 3635014.6 |    202.55543 (21121424)    228.79443 (19091321)    239.73705 (20042421)
   210.34573 (20110924)    167.33284 (20120224)
 3635001.4 |    190.39755 (21121424)    218.29125 (21121424)    232.85112 (20042421)
   203.56385 (19121706)    179.09322 (19120316)
 3634988.1 |    192.53977 (21012023)    223.96105 (21121424)    224.74567 (20042421)
   212.72004 (19121706)    193.11183 (19120316)
 3634974.9 |    200.62081 (21012023)    217.17297 (21121424)    229.78267 (21121424)
   219.41023 (19121706)    208.24361 (19120316)
 3634961.6 |    203.72208 (21012023)    210.17174 (21121424)    232.87145 (21121424)
   221.93613 (19121706)    224.59802 (19120316)
 3634948.4 |    212.27790 (21012023)    221.90694 (21012023)    237.33744 (21121424)
   226.28014 (19121706)    242.31179 (19120316)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                      ***        12:46:26

                                 PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                 *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

  Y-COORD  |                                                 X-COORD (METERS)
  (METERS) |       502088.97              502121.75              502154.53
      502187.31              502220.09
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

 3635213.4 |    164.97417 (21081004)    157.67951 (19101219)    144.23915 (20071102)
   110.11804 (20071102)     92.62923 (19122420)
 3635200.1 |    167.11765 (21081004)    158.59248 (19101219)    148.80944 (20071102)
   114.18793 (20071102)     89.89727 (19122420)
 3635186.9 |    168.08147 (21081004)    162.04693 (19101219)    148.43280 (20071102)
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  118.51711 (20071102)     87.89762 (19122420)
 3635173.6 |    169.44433 (21081004)    164.93256 (19101219)    141.21473 (20071102)
  118.39828 (20071102)     84.24793 (19122420)
 3635160.4 |    170.37049 (20090823)    163.09350 (19101219)    139.05554 (21012024)
  118.43951 (20071102)     86.18198 (21013118)
 3635147.1 |    176.75507 (19031924)    158.57278 (21081004)    141.18561 (21012024)
  112.89929 (21012024)     91.37615 (21013118)
 3635133.9 |    182.23471 (19031924)    140.76461 (21081004)    143.62165 (21012024)
  112.45962 (21012024)     96.87917 (21013118)
 3635120.6 |    194.56948 (19031924)    139.48394 (21012024)    143.96956 (21012024)
  113.17694 (21012024)    102.52736 (21013118)
 3635107.4 |    205.12878 (19031924)    141.95386 (21012024)    147.34421 (21012024)
  114.38509 (21012024)    108.35114 (21013118)
 3635094.1 |    210.66293 (19031924)    144.39346 (21012024)    147.84330 (21012024)
  115.92966 (21012024)    114.38975 (21013118)
 3635080.9 |    213.64128 (19031924)    148.42981 (21021806)    149.27089 (21012024)
  119.14947 (21012024)    120.78220 (21013118)
 3635067.6 |    216.07878 (19031924)    157.62987 (21021806)    154.29939 (21012024)
  124.17544 (21012024)    127.44000 (21013118)
 3635054.4 |    222.93408 (19031924)    169.51229 (21021806)    162.16869 (21012024)
  129.94827 (21012024)    134.40339 (21013118)
 3635041.1 |    228.75684 (20101023)    187.95356 (19031924)    170.51221 (21012024)
  136.04642 (21012024)    141.72345 (21013118)
 3635027.9 |    204.12238 (20101023)    177.83061 (21021806)    175.83506 (21012024)
  142.53260 (21012024)    149.83287 (21013118)
 3635014.6 |    183.43731 (20120224)    177.82334 (21021806)    183.08750 (21012024)
  149.79284 (21012024)    158.55980 (21013118)
 3635001.4 |    181.91053 (20120224)    186.55848 (21021806)    191.69306 (21012024)
  157.89564 (21012024)    168.08976 (21013118)
 3634988.1 |    192.20095 (19120316)    195.91419 (21021806)    201.46128 (21012024)
  166.66655 (21012024)    178.56654 (21013118)
 3634974.9 |    211.01989 (19120316)    206.57341 (21021806)    212.03816 (21012024)
  175.85153 (21012024)    189.82069 (21013118)
 3634961.6 |    231.89362 (19120316)    217.87764 (21021806)    224.12008 (21012024)
  186.97020 (21012024)    202.21782 (21013118)
 3634948.4 |    254.94474 (19120316)    237.04705 (19120316)    237.13592 (21012024)
  200.66711 (21013118)    215.59185 (21013118)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
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 3635213.4 | 82.86427 (21013118)
 3635200.1 | 96.69877 (19122420)
 3635186.9 | 92.60654 (19122420)
 3635173.6 | 96.14074 (21013118)
 3635160.4 | 99.31753 (21013118)
 3635147.1 | 102.76908 (21013118)
 3635133.9 | 106.76476 (21013118)
 3635120.6 | 111.33805 (21013118)
 3635107.4 | 116.17232 (21013118)
 3635094.1 | 121.10854 (21013118)
 3635080.9 | 126.19105 (21013118)
 3635067.6 | 131.41365 (21013118)
 3635054.4 | 136.81486 (21013118)
 3635041.1 | 142.32633 (21013118)
 3635027.9 | 148.06374 (21013118)
 3635014.6 | 153.80452 (21013118)
 3635001.4 | 159.41876 (21013118)
 3634988.1 | 164.84218 (21013118)
 3634974.9 | 169.81929 (21013118)
 3634961.6 | 174.15606 (21013118)
 3634948.4 | 181.47861 (20011620)

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                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        501602.73   3635113.79      113.72886  (21052423)               502091.20
3634721.35      306.88455  (21020121)
        501723.95   3634830.54      114.01980  (21021102)               501655.97
3634810.14       99.13119  (21021102)
        501659.36   3634840.73       92.57798  (21021102)               501682.03
3634782.95       99.62737  (21021102)
        501615.18   3634804.48       88.83689  (21021102)               501713.75
3634792.01      113.32676  (21021102)
        501738.68   3634746.69       96.80141  (19083104)               502804.34
3635417.16       85.22882  (21122618)
        502842.81   3635417.98       74.01813  (20091421)               502881.29
3635418.80       72.60440  (19102623)
        502916.49   3635414.71       78.63476  (19102623)               502946.78
3635416.34       78.65777  (19102623)
        502812.52   3635466.28       88.20293  (21122618)               502802.70
3635530.95       77.53857  (21081602)
        502804.34   3635509.67       81.38856  (21122618)               502803.52
3635553.88       77.71022  (21090701)
        502881.29   3635525.22       79.07823  (21122618)               502923.86
3635526.04       68.38514  (21122618)
        502966.43   3635530.14       60.87980  (20091421)               502996.72
3635469.56       71.97468  (19102623)
        503003.27   3635421.26       71.46602  (19102623)               503514.45
3634924.92       27.03749  (20122119)
        503585.73   3634932.63       25.30379  (20122119)               503561.65
3634986.57       24.03008  (21101422)
        503547.20   3634944.19       25.05358  (20122119)               503568.39
3634877.73       28.26001  (21011518)
        503469.18   3634893.14       30.06950  (21011518)               503457.62
3634854.61       31.17936  (21011518)
        503469.18   3634854.61       31.58388  (21011518)               502528.43
3634617.44      136.25431  (21020122)
        502584.77   3634617.44      117.80808  (20011319)               502641.11
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3634617.44      103.48413  (21010422)
        502697.45   3634617.44       92.31527  (21022220)                502753.79
3634617.44       82.21597  (21020523)
        502528.43   3634647.64      139.89519  (21010422)                502584.77
3634647.64      121.20794  (21022220)
        502641.11   3634647.64      105.53639  (21022220)                502697.45
3634647.64       93.76587  (19021120)
        502753.79   3634647.64       83.66903  (19021120)                502810.13
3634647.64       74.44845  (21010620)
        502866.47   3634647.64       68.27752  (21020307)                502922.81
3634647.64       62.32101  (21020307)
        502979.15   3634647.64       57.20543  (20010320)                503035.49
3634647.64       53.17438  (20010320)
        503091.83   3634647.64       49.35702  (20010320)                503148.17
3634647.64       45.73166  (20010320)
        503204.51   3634647.64       42.40804  (20010320)                503260.85
3634647.64       39.42047  (20120922)
        503317.19   3634647.64       37.17188  (20120922)                503373.53
3634647.64       35.05659  (20120922)
        502528.43   3634677.84      143.08561  (21022220)                502584.77
3634677.84      123.33717  (19021120)
        502641.11   3634677.84      106.76524  (20122520)                502697.45
3634677.84       94.54475  (21020307)
        502753.79   3634677.84       84.47181  (21020307)                502810.13
3634677.84       76.56379  (20010320)
        502866.47   3634677.84       69.68854  (20010320)                502922.81
3634677.84       63.40086  (20010320)
        502979.15   3634677.84       57.68586  (20010320)                503035.49
3634677.84       53.05922  (20120922)
        503091.83   3634677.84       49.25028  (20120922)                503148.17
3634677.84       45.69843  (20120922)
        503204.51   3634677.84       42.48487  (20120922)                503260.85
3634677.84       39.70002  (20121618)
        503317.19   3634677.84       37.49021  (20121618)                503373.53
3634677.84       35.44540  (20121618)
        502528.43   3634708.04      144.43306  (21010620)                502584.77
3634708.04      124.27625  (20010320)
        502641.11   3634708.04      109.64666  (20010320)                502697.45
3634708.04       96.64602  (20010320)
        502753.79   3634708.04       85.30611  (20010320)                502810.13
3634708.04       76.91741  (20120922)
        502866.47   3634708.04       69.57362  (20120922)                502922.81
3634708.04       63.20559  (20121618)
        502979.15   3634708.04       58.32463  (20121618)                503035.49
3634708.04       53.98121  (20121618)
        503091.83   3634708.04       50.09228  (20121618)                503148.17
3634708.04       46.53077  (20121618)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
503204.51	3634708.04	43.38386	(20121618)	503260.85	3634708.04	40.58771	(20121618)
503317.19	3634708.04	38.00616	(20121618)	503373.53	3634708.04	35.65752	(20121618)
502528.43	3634738.24	146.07130	(20120922)	502584.77	3634738.24	125.84355	(20120922)
502641.11	3634738.24	110.51100	(20121618)	502697.45	3634738.24	97.87810	(20121618)
502810.13	3634738.24	78.32130	(20121618)	502866.47	3634738.24	70.62619	(20121618)
502922.81	3634738.24	64.10531	(20121618)	502979.15	3634738.24	58.48548	(20121618)
503035.49	3634738.24	53.57329	(20121618)	503091.83	3634738.24	49.28362	(20121618)
503148.17	3634738.24	45.46019	(20121618)	503204.51	3634738.24	42.11867	(20121618)
503260.85	3634738.24	39.17477	(20121618)	503317.19	3634738.24	36.58174	(21010219)
503373.53	3634738.24	34.38341	(21010219)	502528.43	3634768.44	146.07405	(21010219)
502584.77	3634768.44	124.88070	(21010219)	502641.11	3634768.44	108.38995	(21010219)
502697.45	3634768.44	95.13948	(21010219)	502810.13	3634768.44	75.45857	(21010219)

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        502866.47   3634768.44       67.97599  (21010219)              502922.81
3634768.44       61.69747  (21010219)
        502979.15   3634768.44       56.36289  (21010219)              503035.49
3634768.44       51.71973  (21010219)
        503091.83   3634768.44       47.69727  (21010219)              503148.17
3634768.44       44.15041  (21010219)
        503204.51   3634768.44       41.05201  (21010219)              503260.85
3634768.44       38.29715  (21010219)
        503317.19   3634768.44       35.83122  (21010219)              503373.53
3634768.44       33.61963  (21010219)
        502528.43   3634798.64      138.63484  (21011518)              502584.77
3634798.64      118.70025  (21011518)
        502641.11   3634798.64      103.03912  (21011518)              502697.45
3634798.64       90.39462  (21011518)
        502810.13   3634798.64       71.51422  (21011518)              502866.47
3634798.64       64.34397  (21011518)
        502922.81   3634798.64       58.39999  (20020719)              502979.15
3634798.64       53.41606  (20020719)
        503035.49   3634798.64       49.01316  (20020719)              503091.83
3634798.64       45.25758  (20020719)
        503148.17   3634798.64       41.93989  (20020719)              503204.51
3634798.64       39.01969  (20020719)
        503260.85   3634798.64       36.41069  (20020719)              503317.19
3634798.64       34.08070  (20020719)
        503373.53   3634798.64       31.98848  (20020719)              502303.07
3634828.84      296.52244  (21020220)
        502359.41   3634828.84      231.99305  (21020220)              502415.75
3634828.84      181.11152  (21020220)
        502472.09   3634828.84      145.62366  (20122119)              502528.43
3634828.84      128.46274  (21011518)
        502584.77   3634828.84      112.84695  (21011518)              502641.11
3634828.84       99.86177  (21011518)
        502697.45   3634828.84       88.99793  (21011518)              502810.13
3634828.84       72.04909  (21011518)
        502866.47   3634828.84       65.38631  (21011518)              502922.81
3634828.84       59.59466  (21011518)
        502979.15   3634828.84       54.65989  (21011518)              503035.49
3634828.84       50.33006  (21011518)
        503091.83   3634828.84       46.55036  (21011518)              503148.17
3634828.84       43.17717  (21011518)
        503204.51   3634828.84       40.18370  (21011518)              503260.85
3634828.84       37.50412  (21011518)
        503317.19   3634828.84       35.09741  (21011518)              503373.53
3634828.84       32.88734  (21011518)
        502303.07   3634859.04      225.16336  (21020220)              502359.41
3634859.04      206.28902  (21020220)
        502415.75   3634859.04      179.52086  (21020220)              502472.09
3634859.04      152.17339  (21020220)
        502528.43   3634859.04      127.18668  (21020220)              502584.77
3634859.04      105.64263  (21020220)
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
502641.11	3634859.04	90.06997	(21101422)	502697.45	3634859.04	78.05774	(20122119)
502810.13	3634859.04	65.65881	(21011518)	502866.47	3634859.04	60.65956	(21011518)
502922.81	3634859.04	56.09480	(21011518)	502979.15	3634859.04	52.08490	(21011518)
503035.49	3634859.04	48.45775	(21011518)	503091.83	3634859.04	45.22845	(21011518)
503148.17	3634859.04	42.30469	(21011518)	503204.51	3634859.04	39.64296	(21011518)
503260.85	3634859.04	37.21866	(21011518)	503317.19	3634859.04	34.95811	(21011518)
503373.53	3634859.04	33.03253	(21011518)	502303.07	3634889.24	214.46789	(21012617)
502359.41	3634889.24	143.03525	(20082303)	502415.75	3634889.24	142.77612	(21020220)
502472.09	3634889.24	135.17100	(21020220)	502528.43	3634889.24	122.76877	(21020220)
502584.77	3634889.24	108.69879	(21020220)	502641.11	3634889.24	94.79255	(21020220)
502697.45	3634889.24	81.93346	(21020220)	502753.79			

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3634889.24       71.37997  (21101422)
        502810.13   3634889.24       63.10862  (21101422)                502866.47
3634889.24       55.80449  (21101422)
        502922.81   3634889.24       49.64308  (20122119)                502979.15
3634889.24       46.58404  (20122119)
        503035.49   3634889.24       43.74578  (20122119)                503091.83
3634889.24       41.23364  (21011518)
        503148.17   3634889.24       39.04710  (21011518)                503204.51
3634889.24       36.99069  (21011518)
        503260.85   3634889.24       35.01500  (21011518)                503317.19
3634889.24       33.22644  (21011518)
        503373.53   3634889.24       31.55118  (21011518)                502303.07
3634919.44      206.30156  (21012617)
        502359.41   3634919.44      148.00492  (21012617)                502415.75
3634919.44       97.56672  (20082303)
        502472.09   3634919.44      100.73456  (21020220)                502528.43
3634919.44      101.57452  (21020220)
        502584.77   3634919.44       97.52389  (21020220)                502641.11
3634919.44       90.63576  (21020220)
        502303.07   3634949.64      180.13505  (20011620)                502359.41
3634949.64      157.00896  (21012617)
        502415.75   3634949.64      105.29848  (21012617)                502472.09
3634949.64       69.85690  (21071520)
        502528.43   3634949.64       73.66730  (20082303)                502584.77
3634949.64       76.91875  (21020220)
        502641.11   3634949.64       77.16631  (21020220)                502753.79
3634949.64       70.50019  (21020220)
        502810.13   3634949.64       65.31455  (21020220)                502866.47
3634949.64       59.83133  (21020220)
        502922.81   3634949.64       54.23816  (21020220)                502979.15
3634949.64       48.96805  (21020220)
        503035.49   3634949.64       44.30426  (21101422)                503091.83
3634949.64       40.73067  (21101422)
        503148.17   3634949.64       37.39888  (21101422)                503204.51
3634949.64       34.29019  (21101422)
        503260.85   3634949.64       31.36567  (21101422)                503317.19
3634949.64       29.17468  (21101422)
        503373.53   3634949.64       26.43213  (21090306)                502303.07
3634979.84      160.84242  (20011620)
        502359.41   3634979.84      148.64098  (21012617)                502415.75
3634979.84      118.72345  (21012617)
        502472.09   3634979.84       77.22957  (21012617)                502528.43
3634979.84       56.09792  (21071520)
        502584.77   3634979.84       56.66672  (20082303)                502641.11
3634979.84       58.90549  (21020220)
        502303.07   3635010.04      136.67583  (20011620)                502359.41
3635010.04      129.63544  (20011620)
        502415.75   3635010.04      120.94322  (21012617)                502472.09
3635010.04       90.65391  (21012617)
        502528.43   3635010.04       61.10865  (21071520)                502584.77
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
502359.41	3635040.24	121.54518	(20011620)	502415.75	3635040.24	113.24267	(21012617)
502472.09	3635040.24	97.00048	(21012617)	502528.43	3635040.24	70.03157	(21012617)
502584.77	3635040.24	50.63259	(21071520)	502641.11	3635040.24	38.88869	(21071520)

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        502753.79   3635040.24       38.55584  (20082303)                502810.13
3635040.24       40.36847  (20082303)
        502866.47   3635040.24       41.14801  (21020220)                502922.81
3635040.24       42.07745  (21020220)
        502979.15   3635040.24       42.05128  (21020220)                503035.49
3635040.24       41.26503  (21020220)
        503091.83   3635040.24       39.91469  (21020220)                503148.17
3635040.24       38.19544  (21020220)
        503204.51   3635040.24       36.21740  (21020220)                503260.85
3635040.24       34.08413  (21020220)
        503317.19   3635040.24       31.90225  (21020220)                503373.53
3635040.24       29.88259  (21020220)
        502303.07   3635070.44       99.40325  (21013118)                502359.41
3635070.44      108.57238  (20011620)
        502415.75   3635070.44       99.61672  (21012617)                502472.09
3635070.44       96.29487  (21012617)
        502528.43   3635070.44       77.87297  (21012617)                502584.77
3635070.44       55.05469  (21012617)
        502641.11   3635070.44       42.73897  (21071520)                502753.79
3635070.44       28.16669  (20082303)
        502810.13   3635070.44       31.57404  (20082303)                502866.47
3635070.44       33.85585  (20082303)
        502922.81   3635070.44       34.82160  (20082303)                502979.15
3635070.44       35.29479  (21020220)
        503035.49   3635070.44       35.95482  (21020220)                503091.83
3635070.44       35.92641  (21020220)
        503148.17   3635070.44       35.38310  (21020220)                503204.51
3635070.44       34.40718  (21020220)
        503260.85   3635070.44       33.12128  (21020220)                503317.19
3635070.44       31.62090  (21020220)
        503373.53   3635070.44       29.99055  (21020220)                502303.07
3635100.64       99.41206  (21013118)
        502359.41   3635100.64       93.51789  (20011620)                502415.75
3635100.64       95.41052  (20011620)
        502472.09   3635100.64       89.73068  (21012617)                502528.43
3635100.64       80.78468  (21012617)
        502584.77   3635100.64       62.92252  (21012617)                502641.11
3635100.64       44.71111  (21071520)
        502753.79   3635100.64       28.76595  (21071520)                502810.13
3635100.64       22.89611  (20082303)
        502866.47   3635100.64       26.05580  (20082303)                502922.81
3635100.64       28.48163  (20082303)
        502979.15   3635100.64       29.92651  (20082303)                503035.49
3635100.64       30.36049  (20082303)
        503091.83   3635100.64       30.71579  (21020220)                503148.17
3635100.64       31.19675  (21020220)
        503204.51   3635100.64       31.17769  (21020220)                503260.85
3635100.64       30.77311  (21020220)
        503317.19   3635100.64       30.06136  (21020220)                503373.53
3635100.64       29.12800  (21020220)
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        502303.07   3635130.84       98.26698  (21013118)                502359.41
3635130.84       78.18700  (20011620)
        502415.75   3635130.84       88.06093  (20011620)                502472.09
3635130.84       79.22188  (20011620)
        502528.43   3635130.84       78.95019  (21012617)                502584.77
3635130.84       67.47859  (21012617)
        502641.11   3635130.84       51.18853  (21012617)                502753.79
3635130.84       31.69145  (21071520)
        502810.13   3635130.84       25.35388  (21071520)                502866.47
3635130.84       19.56744  (21071520)
        502922.81   3635130.84       21.67286  (20082303)                502979.15
3635130.84       24.04599  (20082303)
        503035.49   3635130.84       25.72310  (20082303)                503091.83
3635130.84       26.59990  (20082303)
        503148.17   3635130.84       26.70681  (20082303)                503204.51
3635130.84       26.99116  (21020220)
        503260.85   3635130.84       27.39464  (21020220)                503317.19
3635130.84       27.41319  (21020220)
        503373.53   3635130.84       27.17319  (21020220)                502303.07
3635161.04       97.58480  (21013118)
        502359.41   3635161.04       63.59406  (20011620)                502415.75
3635161.04       78.12589  (20011620)
        502472.09   3635161.04       82.14333  (20011620)                502528.43
3635161.04       73.65992  (21012617)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                      ***        12:46:26

                                 PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data

                             *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                   L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                   L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                   L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
```

Y-COORD (M) CONC (YYMMDDHH)
- -

502584.77 3635161.04 68.42520 (21012617) 502641.11
3635161.04 56.30607 (21012617)
502753.79 3635161.04 33.83367 (21071520) 502810.13
3635161.04 28.41695 (21071520)
502866.47 3635161.04 23.50496 (21071520) 502922.81
3635161.04 17.53400 (21071520)
502979.15 3635161.04 18.15363 (20082303) 503035.49
3635161.04 20.38247 (20082303)
503091.83 3635161.04 22.13509 (20082303) 503148.17
3635161.04 23.28610 (20082303)
503204.51 3635161.04 23.85805 (20082303) 503260.85
3635161.04 23.68426 (20082303)
503317.19 3635161.04 24.22954 (20082303) 503373.53
3635161.04 24.31659 (21020220)
502303.07 3635191.24 93.64895 (21013118) 502359.41
3635191.24 67.57084 (21013118)
502415.75 3635191.24 67.17163 (20011620) 502472.09
3635191.24 77.51629 (20011620)
502528.43 3635191.24 79.91128 (20011620) 502584.77
3635191.24 66.12842 (21012617)
502641.11 3635191.24 58.85539 (21012617) 502753.79
3635191.24 35.33459 (21012617)
502810.13 3635191.24 30.19235 (21071520) 502866.47
3635191.24 26.51767 (21071520)
502922.81 3635191.24 19.90319 (21071520) 502979.15
3635191.24 15.79202 (21071520)
503035.49 3635191.24 15.29423 (20082303) 503091.83
3635191.24 17.34956 (20082303)
503148.17 3635191.24 19.09177 (20082303) 503204.51
3635191.24 20.40503 (20082303)
503260.85 3635191.24 21.24795 (20082303) 503317.19
3635191.24 22.46588 (20082303)
503373.53 3635191.24 21.70736 (20082303) 502531.05
3633473.38 26.62552 (21022105)
502585.54 3633473.38 24.73253 (20022403) 502640.03
3633473.38 23.72207 (20050805)
502694.52 3633473.38 22.25428 (20050805) 502749.01
3633473.38 22.52115 (20110505)
502803.50 3633473.38 23.91623 (21022020) 502857.99
3633473.38 24.61028 (21022020)
502531.05 3633537.42 27.69996 (21022105) 502585.54
3633537.42 25.50610 (20022403)
502640.03 3633537.42 24.86983 (20050805) 502694.52
3633537.42 24.09765 (20110505)
502749.01 3633537.42 24.65203 (21022020) 502803.50
3633537.42 26.30209 (21022020)
502857.99 3633537.42 26.62715 (21120804) 502367.58

3633601.46   28.03169 (21013120)
        502422.07   3633601.46   29.20903 (21022105)   502476.56
3633601.46   30.71051 (21022105)
        502531.05   3633601.46   28.61411 (20022403)   502585.54
3633601.46   27.19340 (20050805)
        502640.03   3633601.46   25.58280 (20050805)   502367.58
3633633.48   29.00414 (21013120)
        502422.07   3633633.48   30.79243 (21022105)   502476.56
3633633.48   31.70405 (21022105)
        502531.05   3633633.48   29.38272 (20022403)   502585.54
3633633.48   28.06721 (20050805)
        502640.03   3633633.48   26.65369 (20110505)   502367.58
3633665.50   29.94871 (21013120)
        502422.07   3633665.50   32.34146 (21022105)   502476.56
3633665.50   32.61862 (21022105)
        502531.05   3633665.50   30.02102 (20022403)   502585.54
3633665.50   28.81950 (20050805)
        502640.03   3633665.50   27.84595 (20110505)   502422.07
3633697.52   33.92962 (21022105)
        502585.54   3633697.52   29.42909 (20050805)   502640.03
3633697.52   28.91902 (20110505)
        502422.07   3633729.54   35.49488 (21022105)   502585.54
3633729.54   29.86503 (20050805)
        502640.03   3633729.54   29.91926 (21022020)   502422.07
3633761.56   37.09535 (21022105)
        502585.54   3633761.56   31.19494 (20110505)   502640.03
3633761.56   32.41005 (21022020)
        502367.58   3633793.58   36.15206 (21022105)   502422.07
3633793.58   38.61803 (21022105)
        502585.54   3633793.58   32.69483 (20110505)   502640.03
3633793.58   34.80104 (21022020)
        502040.64   3633825.60   35.10386 (20050102)   502095.13
3633825.60   37.01185 (20032924)

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026

, L0000027   , L0000028   , . . .   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
502367.58	3633825.60	38.47641	(21022105)	502422.07	3633825.60	40.03445	(21022105)
502585.54	3633825.60	34.01182	(20110505)	502640.03	3633825.60	37.00463	(21022020)
502040.64	3633857.62	36.48844	(20050102)	502095.13	3633857.62	38.55872	(20032924)
502422.07	3633857.62	41.35829	(21022105)	502585.54	3633857.62	36.41439	(21022020)
502640.03	3633857.62	38.88352	(21022020)	502040.64	3633889.64	37.93181	(20050102)
502095.13	3633889.64	40.14789	(20032924)	502422.07	3633889.64	42.53158	(21022105)
502585.54	3633889.64	39.46140	(21022020)	502640.03	3633889.64	40.77767	(21120804)
502040.64	3633921.66	39.47718	(20050102)	502095.13	3633921.66	41.86098	(21020203)
502422.07	3633921.66	43.56622	(21022105)	502585.54	3633921.66	42.27474	(21022020)
502640.03	3633921.66	43.19398	(21120804)	502040.64	3633953.68	41.07021	(20050102)
502095.13	3633953.68	43.83879	(21020203)	502422.07	3633953.68	44.82119	(20022403)
502585.54	3633953.68	44.73584	(21022020)	502640.03	3633953.68	45.05215	(21120804)
502040.64	3633985.70	42.76197	(20050102)	502095.13	3633985.70	45.99057	(21020203)
501768.19	3634017.72	37.26839	(20102407)	501822.68	3634017.72	40.32043	(20102407)
501877.17	3634017.72	37.76988	(20111701)	501931.66	3634017.72	40.82974	(19110606)
501986.15	3634017.72	44.10189	(19110606)	502040.64	3634017.72	44.59802	(20050102)
502095.13	3634017.72	48.35744	(21020203)	501768.19	3634049.74	38.72983	(21063005)
501822.68	3634049.74	42.25594	(20102407)	501877.17	3634049.74	40.77142	(20102407)
501931.66	3634049.74	41.81987	(19110606)	501986.15	3634049.74	46.52784	(19110606)

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        502040.64   3634049.74       46.55576  (20050102)                502095.13
3634049.74       50.88664  (21020203)
        502149.62   3634049.74       51.62324  (20032924)                501768.19
3634081.76       42.32261  (20121603)
        501822.68   3634081.76       43.61882  (20102407)                501877.17
3634081.76       43.76357  (20102407)
        501931.66   3634081.76       42.45740  (19110606)                501986.15
3634081.76       48.82917  (19110606)
        502040.64   3634081.76       48.35966  (20050102)                502095.13
3634081.76       53.16713  (21020203)
        502149.62   3634081.76       53.66126  (20032924)                501520.78
3634629.90       55.44349  (21012320)
        501511.26   3634708.76       54.51770  (19083104)                501509.90
3634738.67       49.88492  (19083104)
        501522.14   3634835.21       71.33024  (21021102)                501511.26
3634920.87       92.44918  (20021521)
        501511.26   3634952.15      151.73839  (21121021)                501516.70
3634990.22      153.21635  (19110921)
        503043.64   3634375.63       45.72544  (21020122)                503061.32
3634387.87       46.88307  (21020122)
        503087.15   3634382.43       45.61347  (21020122)                503103.47
3634385.15       45.10181  (21020122)
        503130.66   3634383.79       43.71621  (21020122)                503159.22
3634383.79       42.08605  (21020122)
        503182.33   3634381.07       40.69111  (21020122)                502909.03
3634272.29       48.76004  (20020722)
        502903.59   3634246.46       49.20923  (20020722)                502904.95
3634190.71       46.53955  (21020424)
        502903.59   3634158.08       44.81220  (21020424)                502904.95
3634126.81       42.67512  (19120524)
        502906.31   3634103.69       41.36156  (20021602)                502963.80
3634312.63       49.71431  (19012124)
        503013.88   3634311.43       47.14889  (21121223)                502947.51
3634269.80       47.15392  (20021502)
        502965.61   3634265.58       46.04267  (20021502)                503000.61
3634291.52       47.10282  (19012124)
        503023.53   3634327.11       46.74028  (21121223)                503037.41
3634331.34       45.50538  (21022221)
        503053.70   3634345.82       45.04266  (21022221)                503072.40
3634344.61       43.78021  (21022221)
        502211.77   3634864.08      350.40555  (21013118)                502115.94
3634941.62      257.67974  (19120316)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Santee_CommCtr_Co ***        02/05/24
 *** AERMET - VERSION  22112 ***   ***
                       ***        12:46:26

                                  PAGE  49
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  SigA Data
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
502116.68	3634933.09	277.08601	(19120316)	502114.83	3634929.02	288.56423	(19120316)
502115.20	3634920.87	309.64680	(19120316)	502115.20	3634914.94	326.15697	(19120316)
502114.46	3634907.16	349.28715	(19120316)	502115.20	3634901.97	365.17554	(19120316)
502115.20	3634893.82	391.66900	(19120316)	502140.77	3634893.08	373.58996	(19120316)
502141.51	3634901.23	341.01183	(19120316)	502141.14	3634910.86	308.17847	(19120316)
502141.14	3634922.72	271.58456	(19120316)	502141.14	3634933.09	246.58679	(21012024)
502141.14	3634941.99	238.04615	(21012024)	502187.45	3634940.50	210.42134	(21013118)
502186.71	3634927.17	227.80240	(21013118)	502187.82	3634918.27	242.57230	(21013118)
502187.08	3634911.23	253.56168	(21013118)	502188.19	3634904.19	267.52548	(21013118)
502187.82	3634898.63	277.94618	(21013118)	502187.08	3634891.59	291.88703	(21013118)
502211.54	3634884.55	310.99326	(21013118)	502212.28	3634893.45	294.30571	(21013118)
502212.65	3634903.82	276.68283	(21013118)	502215.24	3634913.08	260.92895	(21013118)
502215.61	3634921.24	249.37112	(21013118)	502214.87	3634926.05	243.28351	(21013118)
502214.13	3634934.21	232.97632	(21013118)	502214.13	3634941.99	223.53028	(21013118)
502204.13	3634861.95	368.13516	(21013118)	502186.34			

3634861.21   369.27815 (21013118)
        502173.74   3634860.84   407.60716 (19120316)   502155.96
3634861.95   479.82974 (19120316)
        502134.10   3634860.84   520.47821 (19120316)   502118.16
3634861.58   509.33898 (19120316)
        502085.18   3634862.32   452.95724 (19120316)   502070.73
3634863.06   422.73228 (19120316)
        502055.17   3634861.95   395.73937 (19120316)   502043.68
3634862.32   399.34272 (21011719)
        502031.46   3634861.95   409.27610 (21011719)   502021.08
3634861.95   413.13481 (21011719)
        502009.60   3634861.95   415.45943 (21011719)   501997.00
3634861.95   415.23862 (21011719)
        501981.43   3634866.40   389.73902 (21011719)   501973.65
3634868.99   375.82476 (21011719)
        502079.26   3634895.30   360.60498 (19120316)   502065.92
3634895.30   343.63108 (19120316)
        502053.32   3634897.89   320.69297 (19120316)   502041.83
3634895.30   306.06942 (19120316)
        502031.83   3634897.52   292.92433 (21121424)   502018.86
3634897.89   286.13544 (21012023)
        502007.74   3634894.93   300.48533 (21012023)   501994.77
3634897.89   296.68577 (21012023)
        501983.66   3634902.34   288.55222 (21012023)   501974.02
3634908.27   276.75393 (21012023)
        501981.43   3634920.87   260.35258 (21012023)   502003.67
3634919.01   260.75937 (21121424)
        502014.04   3634919.01   261.78644 (21121424)   502028.12
3634920.12   259.03946 (21121424)
        502042.94   3634917.90   271.11339 (19120316)   502051.47
3634918.27   282.39948 (19120316)
        502064.06   3634919.01   295.41780 (19120316)   502077.40
3634918.64   308.08050 (19120316)
        501921.78   3634897.89   274.98621 (21011719)   501909.55
3634907.90   252.86731 (21011719)
        501929.56   3634893.82   286.96175 (21011719)   501938.45
3634887.52   305.89089 (21011719)
        501949.20   3634879.74   327.51357 (21011719)   501959.20
3634875.29   346.44770 (21011719)
        501951.42   3634921.98   249.19658 (21012023)   501961.43
3634911.97   265.67111 (21012023)

HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	123.63995 AT	(502134.10, 3634860.84, 109.52, 109.52, 0.00)	DC	
	2ND HIGHEST VALUE IS	120.43456 AT	(502155.96, 3634861.95, 109.66, 109.66, 0.00)	DC	
	3RD HIGHEST VALUE IS	120.00321 AT	(502118.16, 3634861.58, 109.42, 109.42, 0.00)	DC	
	4TH HIGHEST VALUE IS	119.00154 AT	(502173.74, 3634860.84, 109.79, 109.79, 0.00)	DC	
	5TH HIGHEST VALUE IS	114.08114 AT	(502091.20, 3634721.35, 108.22, 108.22, 0.00)	DC	
	6TH HIGHEST VALUE IS	113.21348 AT	(502186.34, 3634861.21, 109.88, 109.88, 0.00)	DC	
	7TH HIGHEST VALUE IS	108.72371 AT	(502085.18, 3634862.32, 109.24, 109.24, 0.00)	DC	
	8TH HIGHEST VALUE IS	101.79984 AT	(502204.13, 3634861.95, 109.93, 109.93, 0.00)	DC	
	9TH HIGHEST VALUE IS	100.26111 AT	(502070.73, 3634863.06, 109.70, 109.70, 0.00)	DC	
	10TH HIGHEST VALUE IS	93.37478 AT	(502211.77, 3634864.08, 109.91, 109.91, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

```
                                                         DATE
                                            NETWORK
GROUP ID                             AVERAGE CONC     (YYMMDDHH)            RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS     520.47821  ON 19120316: AT (  502134.10,
3634860.84,   109.52,   109.52,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



```
 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of           0 Fatal Error Message(s)
 A Total of           1 Warning Message(s)
 A Total of        5244 Informational Message(s)

 A Total of       26304 Hours Were Processed

 A Total of        4177 Calm Hours Identified

 A Total of        1067 Missing Hours Identified (  4.06 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 MX W403     570       PFLCNV: Turbulence data is being used w/o ADJ_U* option
SigA Data
```

```
**********************************
*** AERMOD Finishes Successfully ***
**********************************
```

HARP2 - HRACalc (dated 22118) 2/5/2024 4:26:08 PM - Output Log - Unmitigated

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.13

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.13
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Warm

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_NCAcuteRiskSumByRec.csv
HRA ran successfully

*HARP - HRACalc v22118 2/5/2024 4:26:08 PM - Cancer Risk - Input File: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_HRAInput.hra

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INH_RISK	SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_R	EGG_RISK
954	ALL		502134.1	3634861	3.86E-05	1.13YrCanc	3.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
953	ALL		502156	3634862	3.76E-05	1.13YrCanc	3.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
955	ALL		502118.2	3634862	3.75E-05	1.13YrCanc	3.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
952	ALL		502173.7	3634861	3.72E-05	1.13YrCanc	3.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
443	ALL		502091.2	3634721	3.56E-05	1.13YrCanc	3.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
951	ALL		502186.3	3634861	3.54E-05	1.13YrCanc	3.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
956	ALL		502085.2	3634862	3.40E-05	1.13YrCanc	3.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
950	ALL		502204.1	3634862	3.18E-05	1.13YrCanc	3.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
957	ALL		502070.7	3634863	3.13E-05	1.13YrCanc	3.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
920	ALL		502211.8	3634864	2.92E-05	1.13YrCanc	2.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
958	ALL		502055.2	3634862	2.91E-05	1.13YrCanc	2.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
959	ALL		502043.7	3634862	2.65E-05	1.13YrCanc	2.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
960	ALL		502031.5	3634862	2.39E-05	1.13YrCanc	2.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929	ALL		502140.8	3634893	2.29E-05	1.13YrCanc	2.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928	ALL		502115.2	3634894	2.22E-05	1.13YrCanc	2.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941	ALL		502187.1	3634892	2.18E-05	1.13YrCanc	2.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
942	ALL		502211.5	3634885	2.17E-05	1.13YrCanc	2.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
961	ALL		502021.1	3634862	2.15E-05	1.13YrCanc	2.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930	ALL		502141.5	3634901	2.04E-05	1.13YrCanc	2.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
927	ALL		502115.2	3634902	1.99E-05	1.13YrCanc	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
966	ALL		502079.3	3634895	1.98E-05	1.13YrCanc	1.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
940	ALL		502187.8	3634899	1.98E-05	1.13YrCanc	1.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
943	ALL		502212.3	3634893	1.93E-05	1.13YrCanc	1.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
962	ALL		502009.6	3634862	1.90E-05	1.13YrCanc	1.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
967	ALL		502065.9	3634895	1.87E-05	1.13YrCanc	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
926	ALL		502114.5	3634907	1.85E-05	1.13YrCanc	1.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
939	ALL		502188.2	3634904	1.84E-05	1.13YrCanc	1.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
931	ALL		502141.1	3634911	1.80E-05	1.13YrCanc	1.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
968	ALL		502053.3	3634898	1.71E-05	1.13YrCanc	1.71E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
944	ALL		502212.7	3634904	1.70E-05	1.13YrCanc	1.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
938	ALL		502187.1	3634911	1.69E-05	1.13YrCanc	1.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
925	ALL		502115.2	3634915	1.68E-05	1.13YrCanc	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
969	ALL		502041.8	3634895	1.65E-05	1.13YrCanc	1.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
963	ALL		501997	3634862	1.65E-05	1.13YrCanc	1.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924	ALL		502115.2	3634921	1.57E-05	1.13YrCanc	1.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
932	ALL		502141.1	3634923	1.56E-05	1.13YrCanc	1.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
571	ALL		502303.1	3634829	1.56E-05	1.13YrCanc	1.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
937	ALL		502187.8	3634918	1.56E-05	1.13YrCanc	1.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
970	ALL		502031.8	3634898	1.52E-05	1.13YrCanc	1.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
945	ALL		502215.2	3634913	1.51E-05	1.13YrCanc	1.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
983	ALL		502077.4	3634919	1.48E-05	1.13YrCanc	1.48E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
923	ALL		502114.8	3634929	1.43E-05	1.13YrCanc	1.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936	ALL		502186.7	3634927	1.41E-05	1.13YrCanc	1.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
982	ALL		502064.1	3634919	1.40E-05	1.13YrCanc	1.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
971	ALL		502018.9	3634898	1.39E-05	1.13YrCanc	1.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
933	ALL		502141.1	3634933	1.39E-05	1.13YrCanc	1.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
946	ALL		502215.6	3634921	1.39E-05	1.13YrCanc	1.39E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
922	ALL		502116.7	3634933	1.37E-05	1.13YrCanc	1.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
964	ALL		501981.4	3634866	1.35E-05	1.13YrCanc	1.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
590	ALL		502303.1	3634859	1.34E-05	1.13YrCanc	1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
981	ALL		502051.5	3634918	1.34E-05	1.13YrCanc	1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
947	ALL		502214.9	3634926	1.32E-05	1.13YrCanc	1.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
972	ALL		502007.7	3634895	1.32E-05	1.13YrCanc	1.32E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
980	ALL		502042.9	3634918	1.29E-05	1.13YrCanc	1.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934	ALL		502141.1	3634942	1.26E-05	1.13YrCanc	1.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
921	ALL		502115.9	3634942	1.25E-05	1.13YrCanc	1.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935	ALL		502187.5	3634941	1.23E-05	1.13YrCanc	1.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
948	ALL		502214.1	3634934	1.22E-05	1.13YrCanc	1.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
965	ALL		501973.7	3634869	1.22E-05	1.13YrCanc	1.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	ALL	UCART1	502154.5	3634948	1.18E-05	1.13YrCanc	1.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
979	ALL		502028.1	3634920	1.18E-05	1.13YrCanc	1.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	ALL	UCART1	502121.8	3634948	1.17E-05	1.13YrCanc	1.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
973	ALL		501994.8	3634898	1.17E-05	1.13YrCanc	1.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
949	ALL		502214.1	3634942	1.14E-05	1.13YrCanc	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	ALL	UCART1	502187.3	3634948	1.14E-05	1.13YrCanc	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
609	ALL		502303.1	3634889	1.12E-05	1.13YrCanc	1.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ALL	UCART1	502089	3634948	1.12E-05	1.13YrCanc	1.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
978	ALL		502014	3634919	1.10E-05	1.13YrCanc	1.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	ALL	UCART1	502220.1	3634948	1.06E-05	1.13YrCanc	1.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
974	ALL		501983.7	3634902	1.04E-05	1.13YrCanc	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	ALL	UCART1	502154.5	3634962	1.04E-05	1.13YrCanc	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
977	ALL		502003.7	3634919	1.04E-05	1.13YrCanc	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	ALL	UCART1	502121.8	3634962	1.03E-05	1.13YrCanc	1.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
989	ALL		501959.2	3634875	1.03E-05	1.13YrCanc	1.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	ALL	UCART1	502056.2	3634948	1.02E-05	1.13YrCanc	1.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40	ALL	UCART1	502187.3	3634962	1.01E-05	1.13YrCanc	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	ALL	UCART1	502089	3634962	9.89E-06	1.13YrCanc	9.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	ALL	UCART1	502252.9	3634948	9.56E-06	1.13YrCanc	9.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	ALL	UCART1	502220.1	3634962	9.43E-06	1.13YrCanc	9.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
975	ALL		501974	3634908	9.35E-06	1.13YrCanc	9.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
572	ALL		502359.4	3634829	9.31E-06	1.13YrCanc	9.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
629	ALL		502303.1	3634919	9.26E-06	1.13YrCanc	9.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
988	ALL		501949.2	3634880	9.23E-06	1.13YrCanc	9.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60	ALL	UCART1	502154.5	3634975	9.21E-06	1.13YrCanc	9.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
59	ALL	UCART1	502121.8	3634975	9.16E-06	1.13YrCanc	9.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	ALL	UCART1	502056.2	3634962	9.09E-06	1.13YrCanc	9.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	ALL	UCART1	502023.4	3634948	9.03E-06	1.13YrCanc	9.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
61	ALL	UCART1	502187.3	3634975	8.97E-06	1.13YrCanc	8.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
976	ALL		501981.4	3634921	8.94E-06	1.13YrCanc	8.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
58	ALL	UCART1	502089	3634975	8.81E-06	1.13YrCanc	8.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	ALL	UCART1	502252.9	3634962	8.64E-06	1.13YrCanc	8.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
591	ALL		502359.4	3634859	8.53E-06	1.13YrCanc	8.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

62	ALL	UCART1	502220.1	3634975	8.46E-06	1.13YrCanc	8.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
991	ALL		501961.4	3634912	8.41E-06	1.13YrCanc	8.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
81	ALL	UCART1	502154.5	3634988	8.24E-06	1.13YrCanc	8.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
80	ALL	UCART1	502121.8	3634988	8.19E-06	1.13YrCanc	8.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
987	ALL		501938.5	3634888	8.15E-06	1.13YrCanc	8.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57	ALL	UCART1	502056.2	3634975	8.14E-06	1.13YrCanc	8.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	ALL	UCART1	502023.4	3634962	8.11E-06	1.13YrCanc	8.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
82	ALL	UCART1	502187.3	3634988	8.05E-06	1.13YrCanc	8.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79	ALL	UCART1	502089	3634988	7.89E-06	1.13YrCanc	7.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
63	ALL	UCART1	502252.9	3634975	7.84E-06	1.13YrCanc	7.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	ALL	UCART1	501990.6	3634948	7.74E-06	1.13YrCanc	7.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
636	ALL		502303.1	3634950	7.66E-06	1.13YrCanc	7.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
83	ALL	UCART1	502220.1	3634988	7.64E-06	1.13YrCanc	7.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
610	ALL		502359.4	3634889	7.64E-06	1.13YrCanc	7.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
990	ALL		501951.4	3634922	7.45E-06	1.13YrCanc	7.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
986	ALL		501929.6	3634894	7.43E-06	1.13YrCanc	7.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
102	ALL	UCART1	502154.5	3635001	7.42E-06	1.13YrCanc	7.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101	ALL	UCART1	502121.8	3635001	7.38E-06	1.13YrCanc	7.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78	ALL	UCART1	502056.2	3634988	7.33E-06	1.13YrCanc	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56	ALL	UCART1	502023.4	3634975	7.30E-06	1.13YrCanc	7.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
103	ALL	UCART1	502187.3	3635001	7.27E-06	1.13YrCanc	7.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
84	ALL	UCART1	502252.9	3634988	7.14E-06	1.13YrCanc	7.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100	ALL	UCART1	502089	3635001	7.12E-06	1.13YrCanc	7.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	ALL	UCART1	501990.6	3634962	7.04E-06	1.13YrCanc	7.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
104	ALL	UCART1	502220.1	3635001	6.94E-06	1.13YrCanc	6.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
984	ALL		501921.8	3634898	6.93E-06	1.13YrCanc	6.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
630	ALL		502359.4	3634919	6.74E-06	1.13YrCanc	6.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
123	ALL	UCART1	502154.5	3635015	6.72E-06	1.13YrCanc	6.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
122	ALL	UCART1	502121.8	3635015	6.68E-06	1.13YrCanc	6.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
99	ALL	UCART1	502056.2	3635001	6.65E-06	1.13YrCanc	6.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
77	ALL	UCART1	502023.4	3634988	6.62E-06	1.13YrCanc	6.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	ALL	UCART1	501957.9	3634948	6.61E-06	1.13YrCanc	6.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
124	ALL	UCART1	502187.3	3635015	6.61E-06	1.13YrCanc	6.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
105	ALL	UCART1	502252.9	3635001	6.53E-06	1.13YrCanc	6.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
121	ALL	UCART1	502089	3635015	6.44E-06	1.13YrCanc	6.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55	ALL	UCART1	501990.6	3634975	6.41E-06	1.13YrCanc	6.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
655	ALL		502303.1	3634980	6.40E-06	1.13YrCanc	6.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
125	ALL	UCART1	502220.1	3635015	6.34E-06	1.13YrCanc	6.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
573	ALL		502415.8	3634829	6.23E-06	1.13YrCanc	6.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
985	ALL		501909.6	3634908	6.16E-06	1.13YrCanc	6.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
144	ALL	UCART1	502154.5	3635028	6.12E-06	1.13YrCanc	6.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	ALL	UCART1	501957.9	3634962	6.10E-06	1.13YrCanc	6.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
120	ALL	UCART1	502056.2	3635015	6.05E-06	1.13YrCanc	6.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
143	ALL	UCART1	502121.8	3635028	6.04E-06	1.13YrCanc	6.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
98	ALL	UCART1	502023.4	3635001	6.04E-06	1.13YrCanc	6.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
145	ALL	UCART1	502187.3	3635028	6.03E-06	1.13YrCanc	6.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
126	ALL	UCART1	502252.9	3635015	5.99E-06	1.13YrCanc	5.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
637	ALL		502359.4	3634950	5.90E-06	1.13YrCanc	5.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
592	ALL		502415.8	3634859	5.88E-06	1.13YrCanc	5.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76	ALL	UCART1	501990.6	3634988	5.85E-06	1.13YrCanc	5.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
146	ALL	UCART1	502220.1	3635028	5.81E-06	1.13YrCanc	5.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
142	ALL	UCART1	502089	3635028	5.77E-06	1.13YrCanc	5.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	ALL	UCART1	501925.1	3634948	5.64E-06	1.13YrCanc	5.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
54	ALL	UCART1	501957.9	3634975	5.62E-06	1.13YrCanc	5.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
165	ALL	UCART1	502154.5	3635041	5.59E-06	1.13YrCanc	5.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
166	ALL	UCART1	502187.3	3635041	5.53E-06	1.13YrCanc	5.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
147	ALL	UCART1	502252.9	3635028	5.52E-06	1.13YrCanc	5.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
119	ALL	UCART1	502023.4	3635015	5.51E-06	1.13YrCanc	5.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
164	ALL	UCART1	502121.8	3635041	5.46E-06	1.13YrCanc	5.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
611	ALL		502415.8	3634889	5.46E-06	1.13YrCanc	5.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
141	ALL	UCART1	502056.2	3635028	5.41E-06	1.13YrCanc	5.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
662	ALL		502303.1	3635010	5.39E-06	1.13YrCanc	5.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
97	ALL	UCART1	501990.6	3635001	5.37E-06	1.13YrCanc	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
167	ALL	UCART1	502220.1	3635041	5.35E-06	1.13YrCanc	5.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	ALL	UCART1	501925.1	3634962	5.29E-06	1.13YrCanc	5.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
163	ALL	UCART1	502089	3635041	5.24E-06	1.13YrCanc	5.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
656	ALL		502359.4	3634980	5.15E-06	1.13YrCanc	5.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
186	ALL	UCART1	502154.5	3635054	5.15E-06	1.13YrCanc	5.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75	ALL	UCART1	501957.9	3634988	5.14E-06	1.13YrCanc	5.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
187	ALL	UCART1	502187.3	3635054	5.09E-06	1.13YrCanc	5.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
168	ALL	UCART1	502252.9	3635041	5.09E-06	1.13YrCanc	5.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
185	ALL	UCART1	502121.8	3635054	5.06E-06	1.13YrCanc	5.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
631	ALL		502415.8	3634919	5.01E-06	1.13YrCanc	5.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
140	ALL	UCART1	502023.4	3635028	4.96E-06	1.13YrCanc	4.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53	ALL	UCART1	501925.1	3634975	4.95E-06	1.13YrCanc	4.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
188	ALL	UCART1	502220.1	3635054	4.94E-06	1.13YrCanc	4.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
118	ALL	UCART1	501990.6	3635015	4.94E-06	1.13YrCanc	4.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
162	ALL	UCART1	502056.2	3635041	4.93E-06	1.13YrCanc	4.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
184	ALL	UCART1	502089	3635054	4.84E-06	1.13YrCanc	4.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	ALL	UCART1	501892.3	3634948	4.80E-06	1.13YrCanc	4.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96	ALL	UCART1	501957.9	3635001	4.78E-06	1.13YrCanc	4.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
207	ALL	UCART1	502154.5	3635068	4.76E-06	1.13YrCanc	4.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189	ALL	UCART1	502252.9	3635054	4.72E-06	1.13YrCanc	4.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
208	ALL	UCART1	502187.3	3635068	4.71E-06	1.13YrCanc	4.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
206	ALL	UCART1	502121.8	3635068	4.69E-06	1.13YrCanc	4.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74	ALL	UCART1	501925.1	3634988	4.62E-06	1.13YrCanc	4.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
681	ALL		502303.1	3635040	4.59E-06	1.13YrCanc	4.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
209	ALL	UCART1	502220.1	3635068	4.59E-06	1.13YrCanc	4.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183	ALL	UCART1	502056.2	3635054	4.57E-06	1.13YrCanc	4.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	ALL	UCART1	501892.3	3634962	4.56E-06	1.13YrCanc	4.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
638	ALL		502415.8	3634950	4.55E-06	1.13YrCanc	4.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
161	ALL	UCART1	502023.4	3635041	4.55E-06	1.13YrCanc	4.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
663	ALL		502359.4	3635010	4.51E-06	1.13YrCanc	4.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139	ALL	UCART1	501990.6	3635028	4.50E-06	1.13YrCanc	4.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
205	ALL	UCART1	502089	3635068	4.49E-06	1.13YrCanc	4.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
574	ALL		502472.1	3634829	4.48E-06	1.13YrCanc	4.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

117	ALL	UCART1	501957.9	3635015	4.44E-06	1.13YrCanc	4.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
228	ALL	UCART1	502154.5	3635081	4.40E-06	1.13YrCanc	4.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
210	ALL	UCART1	502252.9	3635068	4.39E-06	1.13YrCanc	4.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
229	ALL	UCART1	502187.3	3635081	4.37E-06	1.13YrCanc	4.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
227	ALL	UCART1	502121.8	3635081	4.35E-06	1.13YrCanc	4.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52	ALL	UCART1	501892.3	3634975	4.32E-06	1.13YrCanc	4.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95	ALL	UCART1	501925.1	3635001	4.32E-06	1.13YrCanc	4.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
593	ALL		502472.1	3634859	4.31E-06	1.13YrCanc	4.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
230	ALL	UCART1	502220.1	3635081	4.27E-06	1.13YrCanc	4.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
204	ALL	UCART1	502056.2	3635068	4.25E-06	1.13YrCanc	4.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
182	ALL	UCART1	502023.4	3635054	4.25E-06	1.13YrCanc	4.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
226	ALL	UCART1	502089	3635081	4.17E-06	1.13YrCanc	4.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
160	ALL	UCART1	501990.6	3635041	4.15E-06	1.13YrCanc	4.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
657	ALL		502415.8	3634980	4.11E-06	1.13YrCanc	4.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	ALL	UCART1	501859.5	3634948	4.10E-06	1.13YrCanc	4.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
231	ALL	UCART1	502252.9	3635081	4.10E-06	1.13YrCanc	4.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73	ALL	UCART1	501892.3	3634988	4.09E-06	1.13YrCanc	4.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
612	ALL		502472.1	3634889	4.09E-06	1.13YrCanc	4.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
249	ALL	UCART1	502154.5	3635094	4.08E-06	1.13YrCanc	4.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
138	ALL	UCART1	501957.9	3635028	4.08E-06	1.13YrCanc	4.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
250	ALL	UCART1	502187.3	3635094	4.06E-06	1.13YrCanc	4.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
248	ALL	UCART1	502121.8	3635094	4.04E-06	1.13YrCanc	4.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
116	ALL	UCART1	501925.1	3635015	3.99E-06	1.13YrCanc	3.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
203	ALL	UCART1	502023.4	3635068	3.98E-06	1.13YrCanc	3.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
251	ALL	UCART1	502220.1	3635094	3.97E-06	1.13YrCanc	3.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
225	ALL	UCART1	502056.2	3635081	3.97E-06	1.13YrCanc	3.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
700	ALL		502303.1	3635070	3.95E-06	1.13YrCanc	3.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
682	ALL		502359.4	3635040	3.95E-06	1.13YrCanc	3.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	ALL	UCART1	501859.5	3634962	3.93E-06	1.13YrCanc	3.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
181	ALL	UCART1	501990.6	3635054	3.90E-06	1.13YrCanc	3.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
247	ALL	UCART1	502089	3635094	3.89E-06	1.13YrCanc	3.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
94	ALL	UCART1	501892.3	3635001	3.88E-06	1.13YrCanc	3.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
632	ALL		502472.1	3634919	3.84E-06	1.13YrCanc	3.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
252	ALL	UCART1	502252.9	3635094	3.83E-06	1.13YrCanc	3.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
270	ALL	UCART1	502154.5	3635107	3.80E-06	1.13YrCanc	3.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
159	ALL	UCART1	501957.9	3635041	3.78E-06	1.13YrCanc	3.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
271	ALL	UCART1	502187.3	3635107	3.78E-06	1.13YrCanc	3.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51	ALL	UCART1	501859.5	3634975	3.77E-06	1.13YrCanc	3.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
269	ALL	UCART1	502121.8	3635107	3.76E-06	1.13YrCanc	3.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
224	ALL	UCART1	502023.4	3635081	3.73E-06	1.13YrCanc	3.73E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
272	ALL	UCART1	502220.1	3635107	3.71E-06	1.13YrCanc	3.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
246	ALL	UCART1	502056.2	3635094	3.71E-06	1.13YrCanc	3.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
664	ALL		502415.8	3635010	3.71E-06	1.13YrCanc	3.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
137	ALL	UCART1	501925.1	3635028	3.68E-06	1.13YrCanc	3.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
202	ALL	UCART1	501990.6	3635068	3.68E-06	1.13YrCanc	3.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
510	ALL		502528.4	3634708	3.67E-06	1.13YrCanc	3.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
494	ALL		502528.4	3634678	3.66E-06	1.13YrCanc	3.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
115	ALL	UCART1	501892.3	3635015	3.66E-06	1.13YrCanc	3.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
526	ALL		502528.4	3634738	3.65E-06	1.13YrCanc	3.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
268	ALL	UCART1	502089	3635107	3.64E-06	1.13YrCanc	3.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72	ALL	UCART1	501859.5	3634988	3.60E-06	1.13YrCanc	3.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
478	ALL		502528.4	3634648	3.60E-06	1.13YrCanc	3.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
541	ALL		502528.4	3634768	3.59E-06	1.13YrCanc	3.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
273	ALL	UCART1	502252.9	3635107	3.59E-06	1.13YrCanc	3.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
639	ALL		502472.1	3634950	3.58E-06	1.13YrCanc	3.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
180	ALL	UCART1	501957.9	3635054	3.57E-06	1.13YrCanc	3.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
291	ALL	UCART1	502154.5	3635121	3.55E-06	1.13YrCanc	3.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
292	ALL	UCART1	502187.3	3635121	3.54E-06	1.13YrCanc	3.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	ALL	UCART1	501826.7	3634948	3.53E-06	1.13YrCanc	3.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
556	ALL		502528.4	3634799	3.52E-06	1.13YrCanc	3.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
290	ALL	UCART1	502121.8	3635121	3.52E-06	1.13YrCanc	3.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
245	ALL	UCART1	502023.4	3635094	3.49E-06	1.13YrCanc	3.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
473	ALL		502528.4	3634617	3.48E-06	1.13YrCanc	3.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
293	ALL	UCART1	502220.1	3635121	3.48E-06	1.13YrCanc	3.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
701	ALL		502359.4	3635070	3.48E-06	1.13YrCanc	3.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
267	ALL	UCART1	502056.2	3635107	3.48E-06	1.13YrCanc	3.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
223	ALL	UCART1	501990.6	3635081	3.46E-06	1.13YrCanc	3.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
93	ALL	UCART1	501859.5	3635001	3.44E-06	1.13YrCanc	3.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
158	ALL	UCART1	501925.1	3635041	3.44E-06	1.13YrCanc	3.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
719	ALL		502303.1	3635101	3.44E-06	1.13YrCanc	3.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
575	ALL		502528.4	3634829	3.43E-06	1.13YrCanc	3.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
289	ALL	UCART1	502089	3635121	3.42E-06	1.13YrCanc	3.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	ALL	UCART1	501826.7	3634962	3.41E-06	1.13YrCanc	3.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
201	ALL	UCART1	501957.9	3635068	3.38E-06	1.13YrCanc	3.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
294	ALL	UCART1	502252.9	3635121	3.37E-06	1.13YrCanc	3.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
136	ALL	UCART1	501892.3	3635028	3.36E-06	1.13YrCanc	3.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
683	ALL		502415.8	3635040	3.33E-06	1.13YrCanc	3.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
312	ALL	UCART1	502154.5	3635134	3.32E-06	1.13YrCanc	3.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
313	ALL	UCART1	502187.3	3635134	3.32E-06	1.13YrCanc	3.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
594	ALL		502528.4	3634859	3.31E-06	1.13YrCanc	3.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
658	ALL		502472.1	3634980	3.31E-06	1.13YrCanc	3.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50	ALL	UCART1	501826.7	3634975	3.29E-06	1.13YrCanc	3.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
311	ALL	UCART1	502121.8	3635134	3.29E-06	1.13YrCanc	3.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
114	ALL	UCART1	501859.5	3635015	3.29E-06	1.13YrCanc	3.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
266	ALL	UCART1	502023.4	3635107	3.29E-06	1.13YrCanc	3.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
288	ALL	UCART1	502056.2	3635121	3.28E-06	1.13YrCanc	3.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	ALL	UCART1	502220.1	3635134	3.27E-06	1.13YrCanc	3.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
244	ALL	UCART1	501990.6	3635094	3.26E-06	1.13YrCanc	3.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
179	ALL	UCART1	501925.1	3635054	3.25E-06	1.13YrCanc	3.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
310	ALL	UCART1	502089	3635134	3.21E-06	1.13YrCanc	3.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222	ALL	UCART1	501957.9	3635081	3.20E-06	1.13YrCanc	3.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
613	ALL		502528.4	3634889	3.18E-06	1.13YrCanc	3.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
71	ALL	UCART1	501826.7	3634988	3.18E-06	1.13YrCanc	3.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	ALL	UCART1	502252.9	3635134	3.17E-06	1.13YrCanc	3.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
157	ALL	UCART1	501892.3	3635041	3.14E-06	1.13YrCanc	3.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135	ALL	UCART1	501859.5	3635028	3.12E-06	1.13YrCanc	3.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

333	ALL	UCART1	502154.5	3635147	3.12E-06	1.13YrCanc	3.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
334	ALL	UCART1	502187.3	3635147	3.12E-06	1.13YrCanc	3.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
287	ALL	UCART1	502023.4	3635121	3.11E-06	1.13YrCanc	3.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
309	ALL	UCART1	502056.2	3635134	3.10E-06	1.13YrCanc	3.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
200	ALL	UCART1	501925.1	3635068	3.09E-06	1.13YrCanc	3.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
332	ALL	UCART1	502121.8	3635147	3.09E-06	1.13YrCanc	3.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
265	ALL	UCART1	501990.6	3635107	3.08E-06	1.13YrCanc	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
720	ALL		502359.4	3635101	3.08E-06	1.13YrCanc	3.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
335	ALL	UCART1	502220.1	3635147	3.07E-06	1.13YrCanc	3.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	ALL	UCART1	501794	3634948	3.07E-06	1.13YrCanc	3.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
92	ALL	UCART1	501826.7	3635001	3.06E-06	1.13YrCanc	3.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
665	ALL		502472.1	3635010	3.05E-06	1.13YrCanc	3.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
633	ALL		502528.4	3634919	3.03E-06	1.13YrCanc	3.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
331	ALL	UCART1	502089	3635147	3.03E-06	1.13YrCanc	3.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
243	ALL	UCART1	501957.9	3635094	3.02E-06	1.13YrCanc	3.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
738	ALL		502303.1	3635131	3.02E-06	1.13YrCanc	3.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
702	ALL		502415.8	3635070	3.00E-06	1.13YrCanc	3.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
336	ALL	UCART1	502252.9	3635147	2.99E-06	1.13YrCanc	2.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
178	ALL	UCART1	501892.3	3635054	2.98E-06	1.13YrCanc	2.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	ALL	UCART1	501794	3634962	2.98E-06	1.13YrCanc	2.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
308	ALL	UCART1	502023.4	3635134	2.95E-06	1.13YrCanc	2.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
113	ALL	UCART1	501826.7	3635015	2.94E-06	1.13YrCanc	2.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221	ALL	UCART1	501925.1	3635081	2.94E-06	1.13YrCanc	2.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
355	ALL	UCART1	502187.3	3635160	2.94E-06	1.13YrCanc	2.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
354	ALL	UCART1	502154.5	3635160	2.94E-06	1.13YrCanc	2.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
330	ALL	UCART1	502056.2	3635147	2.92E-06	1.13YrCanc	2.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
286	ALL	UCART1	501990.6	3635121	2.92E-06	1.13YrCanc	2.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
353	ALL	UCART1	502121.8	3635160	2.92E-06	1.13YrCanc	2.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
156	ALL	UCART1	501859.5	3635041	2.91E-06	1.13YrCanc	2.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
495	ALL		502584.8	3634678	2.90E-06	1.13YrCanc	2.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
356	ALL	UCART1	502220.1	3635160	2.90E-06	1.13YrCanc	2.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
511	ALL		502584.8	3634708	2.89E-06	1.13YrCanc	2.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
49	ALL	UCART1	501794	3634975	2.89E-06	1.13YrCanc	2.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
479	ALL		502584.8	3634648	2.89E-06	1.13YrCanc	2.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
640	ALL		502528.4	3634950	2.87E-06	1.13YrCanc	2.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
264	ALL	UCART1	501957.9	3635107	2.87E-06	1.13YrCanc	2.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
527	ALL		502584.8	3634738	2.86E-06	1.13YrCanc	2.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
352	ALL	UCART1	502089	3635160	2.86E-06	1.13YrCanc	2.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
199	ALL	UCART1	501892.3	3635068	2.85E-06	1.13YrCanc	2.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
474	ALL		502584.8	3634617	2.83E-06	1.13YrCanc	2.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
357	ALL	UCART1	502252.9	3635160	2.83E-06	1.13YrCanc	2.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542	ALL		502584.8	3634768	2.82E-06	1.13YrCanc	2.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
134	ALL	UCART1	501826.7	3635028	2.82E-06	1.13YrCanc	2.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70	ALL	UCART1	501794	3634988	2.80E-06	1.13YrCanc	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
684	ALL		502472.1	3635040	2.80E-06	1.13YrCanc	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
242	ALL	UCART1	501925.1	3635094	2.80E-06	1.13YrCanc	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
329	ALL	UCART1	502023.4	3635147	2.79E-06	1.13YrCanc	2.79E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
376	ALL	UCART1	502187.3	3635174	2.78E-06	1.13YrCanc	2.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
307	ALL	UCART1	501990.6	3635134	2.78E-06	1.13YrCanc	2.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
375	ALL	UCART1	502154.5	3635174	2.77E-06	1.13YrCanc	2.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
177	ALL	UCART1	501859.5	3635054	2.77E-06	1.13YrCanc	2.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
557	ALL		502584.8	3634799	2.77E-06	1.13YrCanc	2.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
351	ALL	UCART1	502056.2	3635160	2.77E-06	1.13YrCanc	2.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
374	ALL	UCART1	502121.8	3635174	2.76E-06	1.13YrCanc	2.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
739	ALL		502359.4	3635131	2.74E-06	1.13YrCanc	2.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
377	ALL	UCART1	502220.1	3635174	2.74E-06	1.13YrCanc	2.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
450	ALL		501738.7	3634747	2.74E-06	1.13YrCanc	2.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
285	ALL	UCART1	501957.9	3635121	2.72E-06	1.13YrCanc	2.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91	ALL	UCART1	501794	3635001	2.72E-06	1.13YrCanc	2.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
220	ALL	UCART1	501892.3	3635081	2.71E-06	1.13YrCanc	2.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
373	ALL	UCART1	502089	3635174	2.71E-06	1.13YrCanc	2.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
576	ALL		502584.8	3634829	2.71E-06	1.13YrCanc	2.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
721	ALL		502415.8	3635101	2.71E-06	1.13YrCanc	2.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
659	ALL		502528.4	3634980	2.70E-06	1.13YrCanc	2.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
155	ALL	UCART1	501826.7	3635041	2.70E-06	1.13YrCanc	2.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
378	ALL	UCART1	502252.9	3635174	2.69E-06	1.13YrCanc	2.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	ALL	UCART1	501761.2	3634948	2.69E-06	1.13YrCanc	2.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
757	ALL		502303.1	3635161	2.67E-06	1.13YrCanc	2.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
263	ALL	UCART1	501925.1	3635107	2.66E-06	1.13YrCanc	2.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
350	ALL	UCART1	502023.4	3635160	2.65E-06	1.13YrCanc	2.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
198	ALL	UCART1	501859.5	3635068	2.65E-06	1.13YrCanc	2.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
396	ALL	UCART1	502154.5	3635187	2.64E-06	1.13YrCanc	2.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
328	ALL	UCART1	501990.6	3635147	2.64E-06	1.13YrCanc	2.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
595	ALL		502584.8	3634859	2.63E-06	1.13YrCanc	2.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
397	ALL	UCART1	502187.3	3635187	2.63E-06	1.13YrCanc	2.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
112	ALL	UCART1	501794	3635015	2.63E-06	1.13YrCanc	2.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
372	ALL	UCART1	502056.2	3635174	2.62E-06	1.13YrCanc	2.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	ALL	UCART1	501761.2	3634962	2.62E-06	1.13YrCanc	2.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
395	ALL	UCART1	502121.8	3635187	2.62E-06	1.13YrCanc	2.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
444	ALL		501724	3634831	2.60E-06	1.13YrCanc	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
398	ALL	UCART1	502220.1	3635187	2.60E-06	1.13YrCanc	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
306	ALL	UCART1	501957.9	3635134	2.59E-06	1.13YrCanc	2.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
241	ALL	UCART1	501892.3	3635094	2.59E-06	1.13YrCanc	2.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176	ALL	UCART1	501826.7	3635054	2.58E-06	1.13YrCanc	2.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
394	ALL	UCART1	502089	3635187	2.57E-06	1.13YrCanc	2.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
703	ALL		502472.1	3635070	2.56E-06	1.13YrCanc	2.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
48	ALL	UCART1	501761.2	3634975	2.56E-06	1.13YrCanc	2.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
399	ALL	UCART1	502252.9	3635187	2.55E-06	1.13YrCanc	2.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
614	ALL		502584.8	3634889	2.55E-06	1.13YrCanc	2.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	ALL	UCART1	501794	3635028	2.54E-06	1.13YrCanc	2.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
284	ALL	UCART1	501925.1	3635121	2.54E-06	1.13YrCanc	2.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
666	ALL		502528.4	3635010	2.53E-06	1.13YrCanc	2.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
219	ALL	UCART1	501859.5	3635081	2.52E-06	1.13YrCanc	2.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
371	ALL	UCART1	502023.4	3635174	2.52E-06	1.13YrCanc	2.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
349	ALL	UCART1	501990.6	3635160	2.51E-06	1.13YrCanc	2.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
417	ALL	UCART1	502154.5	3635200	2.51E-06	1.13YrCanc	2.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

449	ALL		501713.8	3634792	2.50E-06	1.13YrCanc	2.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
393	ALL	UCART1	502056.2	3635187	2.49E-06	1.13YrCanc	2.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
418	ALL	UCART1	502187.3	3635200	2.49E-06	1.13YrCanc	2.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
69	ALL	UCART1	501761.2	3634988	2.49E-06	1.13YrCanc	2.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
416	ALL	UCART1	502121.8	3635200	2.48E-06	1.13YrCanc	2.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
262	ALL	UCART1	501892.3	3635107	2.47E-06	1.13YrCanc	2.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
327	ALL	UCART1	501957.9	3635147	2.47E-06	1.13YrCanc	2.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
197	ALL	UCART1	501826.7	3635068	2.47E-06	1.13YrCanc	2.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
419	ALL	UCART1	502220.1	3635200	2.46E-06	1.13YrCanc	2.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
758	ALL		502359.4	3635161	2.46E-06	1.13YrCanc	2.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
634	ALL		502584.8	3634919	2.45E-06	1.13YrCanc	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
154	ALL	UCART1	501794	3635041	2.45E-06	1.13YrCanc	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
740	ALL		502415.8	3635131	2.45E-06	1.13YrCanc	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
415	ALL	UCART1	502089	3635200	2.44E-06	1.13YrCanc	2.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
420	ALL	UCART1	502252.9	3635200	2.43E-06	1.13YrCanc	2.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
305	ALL	UCART1	501925.1	3635134	2.42E-06	1.13YrCanc	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90	ALL	UCART1	501761.2	3635001	2.42E-06	1.13YrCanc	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
240	ALL	UCART1	501859.5	3635094	2.40E-06	1.13YrCanc	2.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
392	ALL	UCART1	502023.4	3635187	2.40E-06	1.13YrCanc	2.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
370	ALL	UCART1	501990.6	3635174	2.39E-06	1.13YrCanc	2.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
776	ALL		502303.1	3635191	2.39E-06	1.13YrCanc	2.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
438	ALL	UCART1	502154.5	3635213	2.38E-06	1.13YrCanc	2.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	ALL	UCART1	501728.4	3634948	2.37E-06	1.13YrCanc	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
414	ALL	UCART1	502056.2	3635200	2.37E-06	1.13YrCanc	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
437	ALL	UCART1	502121.8	3635213	2.37E-06	1.13YrCanc	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
175	ALL	UCART1	501794	3635054	2.37E-06	1.13YrCanc	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
439	ALL	UCART1	502187.3	3635213	2.37E-06	1.13YrCanc	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
283	ALL	UCART1	501892.3	3635121	2.36E-06	1.13YrCanc	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
480	ALL		502641.1	3634648	2.36E-06	1.13YrCanc	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
496	ALL		502641.1	3634678	2.36E-06	1.13YrCanc	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
685	ALL		502528.4	3635040	2.36E-06	1.13YrCanc	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
348	ALL	UCART1	501957.9	3635160	2.36E-06	1.13YrCanc	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
722	ALL		502472.1	3635101	2.35E-06	1.13YrCanc	2.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
111	ALL	UCART1	501761.2	3635015	2.35E-06	1.13YrCanc	2.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218	ALL	UCART1	501826.7	3635081	2.35E-06	1.13YrCanc	2.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
641	ALL		502584.8	3634950	2.35E-06	1.13YrCanc	2.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
512	ALL		502641.1	3634708	2.34E-06	1.13YrCanc	2.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
440	ALL	UCART1	502220.1	3635213	2.34E-06	1.13YrCanc	2.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
475	ALL		502641.1	3634617	2.34E-06	1.13YrCanc	2.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
436	ALL	UCART1	502089	3635213	2.33E-06	1.13YrCanc	2.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	ALL	UCART1	501728.4	3634962	2.33E-06	1.13YrCanc	2.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
528	ALL		502641.1	3634738	2.32E-06	1.13YrCanc	2.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
326	ALL	UCART1	501925.1	3635147	2.32E-06	1.13YrCanc	2.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
441	ALL	UCART1	502252.9	3635213	2.30E-06	1.13YrCanc	2.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
261	ALL	UCART1	501859.5	3635107	2.29E-06	1.13YrCanc	2.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
196	ALL	UCART1	501794	3635068	2.29E-06	1.13YrCanc	2.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
391	ALL	UCART1	501990.6	3635187	2.29E-06	1.13YrCanc	2.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	ALL	UCART1	501761.2	3635028	2.28E-06	1.13YrCanc	2.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
543	ALL		502641.1	3634768	2.28E-06	1.13YrCanc	2.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
413	ALL	UCART1	502023.4	3635200	2.28E-06	1.13YrCanc	2.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
47	ALL	UCART1	501728.4	3634975	2.27E-06	1.13YrCanc	2.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
304	ALL	UCART1	501892.3	3635134	2.27E-06	1.13YrCanc	2.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
435	ALL	UCART1	502056.2	3635213	2.26E-06	1.13YrCanc	2.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
369	ALL	UCART1	501957.9	3635174	2.25E-06	1.13YrCanc	2.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
558	ALL		502641.1	3634799	2.25E-06	1.13YrCanc	2.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
660	ALL		502584.8	3634980	2.24E-06	1.13YrCanc	2.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
239	ALL	UCART1	501826.7	3635094	2.23E-06	1.13YrCanc	2.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
759	ALL		502415.8	3635161	2.23E-06	1.13YrCanc	2.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
68	ALL	UCART1	501728.4	3634988	2.22E-06	1.13YrCanc	2.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
153	ALL	UCART1	501761.2	3635041	2.22E-06	1.13YrCanc	2.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
347	ALL	UCART1	501925.1	3635160	2.22E-06	1.13YrCanc	2.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
777	ALL		502359.4	3635191	2.22E-06	1.13YrCanc	2.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
217	ALL	UCART1	501794	3635081	2.21E-06	1.13YrCanc	2.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
447	ALL		501682	3634783	2.20E-06	1.13YrCanc	2.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
577	ALL		502641.1	3634829	2.20E-06	1.13YrCanc	2.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
282	ALL	UCART1	501859.5	3635121	2.20E-06	1.13YrCanc	2.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
704	ALL		502528.4	3635070	2.19E-06	1.13YrCanc	2.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
412	ALL	UCART1	501990.6	3635200	2.18E-06	1.13YrCanc	2.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
434	ALL	UCART1	502023.4	3635213	2.18E-06	1.13YrCanc	2.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
325	ALL	UCART1	501892.3	3635147	2.17E-06	1.13YrCanc	2.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
89	ALL	UCART1	501728.4	3635001	2.17E-06	1.13YrCanc	2.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
741	ALL		502472.1	3635131	2.16E-06	1.13YrCanc	2.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
390	ALL	UCART1	501957.9	3635187	2.15E-06	1.13YrCanc	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
174	ALL	UCART1	501761.2	3635054	2.15E-06	1.13YrCanc	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
596	ALL		502641.1	3634859	2.15E-06	1.13YrCanc	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
260	ALL	UCART1	501826.7	3635107	2.14E-06	1.13YrCanc	2.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
368	ALL	UCART1	501925.1	3635174	2.12E-06	1.13YrCanc	2.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
238	ALL	UCART1	501794	3635094	2.12E-06	1.13YrCanc	2.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
667	ALL		502584.8	3635010	2.12E-06	1.13YrCanc	2.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
110	ALL	UCART1	501728.4	3635015	2.12E-06	1.13YrCanc	2.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
303	ALL	UCART1	501859.5	3635134	2.11E-06	1.13YrCanc	2.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	ALL	UCART1	501695.6	3634948	2.11E-06	1.13YrCanc	2.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
615	ALL		502641.1	3634889	2.09E-06	1.13YrCanc	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
433	ALL	UCART1	501990.6	3635213	2.09E-06	1.13YrCanc	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
346	ALL	UCART1	501892.3	3635160	2.09E-06	1.13YrCanc	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
195	ALL	UCART1	501761.2	3635068	2.08E-06	1.13YrCanc	2.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	ALL	UCART1	501695.6	3634962	2.07E-06	1.13YrCanc	2.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
411	ALL	UCART1	501957.9	3635200	2.06E-06	1.13YrCanc	2.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	ALL	UCART1	501728.4	3635028	2.06E-06	1.13YrCanc	2.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
281	ALL	UCART1	501826.7	3635121	2.05E-06	1.13YrCanc	2.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
723	ALL		502528.4	3635101	2.04E-06	1.13YrCanc	2.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
259	ALL	UCART1	501794	3635107	2.04E-06	1.13YrCanc	2.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
389	ALL	UCART1	501925.1	3635187	2.04E-06	1.13YrCanc	2.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
46	ALL	UCART1	501695.6	3634975	2.04E-06	1.13YrCanc	2.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
324	ALL	UCART1	501859.5	3635147	2.03E-06	1.13YrCanc	2.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
778	ALL		502415.8	3635191	2.03E-06	1.13YrCanc	2.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

635	ALL		502641.1	3634919	2.03E-06	1.13YrCanc	2.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
446	ALL		501659.4	3634841	2.02E-06	1.13YrCanc	2.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
216	ALL	UCART1	501761.2	3635081	2.02E-06	1.13YrCanc	2.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
152	ALL	UCART1	501728.4	3635041	2.01E-06	1.13YrCanc	2.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
445	ALL		501656	3634810	2.01E-06	1.13YrCanc	2.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
686	ALL		502584.8	3635040	2.00E-06	1.13YrCanc	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
367	ALL	UCART1	501892.3	3635174	2.00E-06	1.13YrCanc	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
760	ALL		502472.1	3635161	2.00E-06	1.13YrCanc	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67	ALL	UCART1	501695.6	3634988	1.99E-06	1.13YrCanc	1.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
432	ALL	UCART1	501957.9	3635213	1.98E-06	1.13YrCanc	1.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
302	ALL	UCART1	501826.7	3635134	1.98E-06	1.13YrCanc	1.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
481	ALL		502697.5	3634648	1.97E-06	1.13YrCanc	1.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
476	ALL		502697.5	3634617	1.96E-06	1.13YrCanc	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
497	ALL		502697.5	3634678	1.96E-06	1.13YrCanc	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
642	ALL		502641.1	3634950	1.96E-06	1.13YrCanc	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
173	ALL	UCART1	501728.4	3635054	1.96E-06	1.13YrCanc	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
345	ALL	UCART1	501859.5	3635160	1.96E-06	1.13YrCanc	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
280	ALL	UCART1	501794	3635121	1.95E-06	1.13YrCanc	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
410	ALL	UCART1	501925.1	3635200	1.95E-06	1.13YrCanc	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
88	ALL	UCART1	501695.6	3635001	1.95E-06	1.13YrCanc	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
237	ALL	UCART1	501761.2	3635094	1.95E-06	1.13YrCanc	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
513	ALL		502697.5	3634708	1.94E-06	1.13YrCanc	1.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
388	ALL	UCART1	501892.3	3635187	1.93E-06	1.13YrCanc	1.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
529	ALL		502697.5	3634738	1.92E-06	1.13YrCanc	1.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
323	ALL	UCART1	501826.7	3635147	1.91E-06	1.13YrCanc	1.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
109	ALL	UCART1	501695.6	3635015	1.91E-06	1.13YrCanc	1.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
742	ALL		502528.4	3635131	1.90E-06	1.13YrCanc	1.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194	ALL	UCART1	501728.4	3635068	1.90E-06	1.13YrCanc	1.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	ALL	UCART1	501662.8	3634948	1.89E-06	1.13YrCanc	1.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
544	ALL		502697.5	3634768	1.89E-06	1.13YrCanc	1.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
705	ALL		502584.8	3635070	1.89E-06	1.13YrCanc	1.89E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
366	ALL	UCART1	501859.5	3635174	1.88E-06	1.13YrCanc	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
258	ALL	UCART1	501761.2	3635107	1.88E-06	1.13YrCanc	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
661	ALL		502641.1	3634980	1.88E-06	1.13YrCanc	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
431	ALL	UCART1	501925.1	3635213	1.88E-06	1.13YrCanc	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
301	ALL	UCART1	501794	3635134	1.87E-06	1.13YrCanc	1.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
130	ALL	UCART1	501695.6	3635028	1.86E-06	1.13YrCanc	1.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	ALL	UCART1	501662.8	3634962	1.86E-06	1.13YrCanc	1.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
559	ALL		502697.5	3634799	1.86E-06	1.13YrCanc	1.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
409	ALL	UCART1	501892.3	3635200	1.85E-06	1.13YrCanc	1.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
779	ALL		502472.1	3635191	1.85E-06	1.13YrCanc	1.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
344	ALL	UCART1	501826.7	3635160	1.84E-06	1.13YrCanc	1.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
45	ALL	UCART1	501662.8	3634975	1.83E-06	1.13YrCanc	1.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
578	ALL		502697.5	3634829	1.83E-06	1.13YrCanc	1.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
151	ALL	UCART1	501695.6	3635041	1.83E-06	1.13YrCanc	1.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
215	ALL	UCART1	501728.4	3635081	1.82E-06	1.13YrCanc	1.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
387	ALL	UCART1	501859.5	3635187	1.82E-06	1.13YrCanc	1.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
279	ALL	UCART1	501761.2	3635121	1.82E-06	1.13YrCanc	1.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
172	ALL	UCART1	501695.6	3635054	1.81E-06	1.13YrCanc	1.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
668	ALL		502641.1	3635010	1.80E-06	1.13YrCanc	1.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
66	ALL	UCART1	501662.8	3634988	1.80E-06	1.13YrCanc	1.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
322	ALL	UCART1	501794	3635147	1.80E-06	1.13YrCanc	1.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
597	ALL		502697.5	3634859	1.79E-06	1.13YrCanc	1.79E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
430	ALL	UCART1	501892.3	3635213	1.78E-06	1.13YrCanc	1.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
365	ALL	UCART1	501826.7	3635174	1.78E-06	1.13YrCanc	1.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
724	ALL		502584.8	3635101	1.78E-06	1.13YrCanc	1.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
761	ALL		502528.4	3635161	1.77E-06	1.13YrCanc	1.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
87	ALL	UCART1	501662.8	3635001	1.77E-06	1.13YrCanc	1.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
236	ALL	UCART1	501728.4	3635094	1.76E-06	1.13YrCanc	1.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193	ALL	UCART1	501695.6	3635068	1.75E-06	1.13YrCanc	1.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
616	ALL		502697.5	3634889	1.75E-06	1.13YrCanc	1.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
408	ALL	UCART1	501859.5	3635200	1.75E-06	1.13YrCanc	1.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
300	ALL	UCART1	501761.2	3635134	1.74E-06	1.13YrCanc	1.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
448	ALL		501615.2	3634804	1.74E-06	1.13YrCanc	1.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108	ALL	UCART1	501662.8	3635015	1.73E-06	1.13YrCanc	1.73E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
343	ALL	UCART1	501794	3635160	1.73E-06	1.13YrCanc	1.73E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
687	ALL		502641.1	3635040	1.72E-06	1.13YrCanc	1.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
386	ALL	UCART1	501826.7	3635187	1.71E-06	1.13YrCanc	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	ALL	UCART1	501630.1	3634948	1.71E-06	1.13YrCanc	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
150	ALL	UCART1	501662.8	3635041	1.70E-06	1.13YrCanc	1.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
257	ALL	UCART1	501728.4	3635107	1.70E-06	1.13YrCanc	1.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
129	ALL	UCART1	501662.8	3635028	1.70E-06	1.13YrCanc	1.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
214	ALL	UCART1	501695.6	3635081	1.69E-06	1.13YrCanc	1.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
429	ALL	UCART1	501859.5	3635213	1.69E-06	1.13YrCanc	1.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	ALL	UCART1	501630.1	3634962	1.68E-06	1.13YrCanc	1.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
171	ALL	UCART1	501662.8	3635054	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
321	ALL	UCART1	501761.2	3635147	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
128	ALL	UCART1	501630.1	3635028	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107	ALL	UCART1	501630.1	3635015	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
477	ALL		502753.8	3634617	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
743	ALL		502584.8	3635131	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
364	ALL	UCART1	501794	3635174	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
482	ALL		502753.8	3634648	1.67E-06	1.13YrCanc	1.67E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
780	ALL		502528.4	3635191	1.66E-06	1.13YrCanc	1.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
44	ALL	UCART1	501630.1	3634975	1.65E-06	1.13YrCanc	1.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
498	ALL		502753.8	3634678	1.65E-06	1.13YrCanc	1.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
407	ALL	UCART1	501826.7	3635200	1.65E-06	1.13YrCanc	1.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
278	ALL	UCART1	501728.4	3635121	1.65E-06	1.13YrCanc	1.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
235	ALL	UCART1	501695.6	3635094	1.64E-06	1.13YrCanc	1.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
514	ALL		502753.8	3634708	1.64E-06	1.13YrCanc	1.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
86	ALL	UCART1	501630.1	3635001	1.64E-06	1.13YrCanc	1.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
706	ALL		502641.1	3635070	1.63E-06	1.13YrCanc	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
65	ALL	UCART1	501630.1	3634988	1.63E-06	1.13YrCanc	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	ALL	UCART1	501662.8	3635068	1.63E-06	1.13YrCanc	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
149	ALL	UCART1	501630.1	3635041	1.62E-06	1.13YrCanc	1.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
85	ALL	UCART1	501597.3	3635001	1.62E-06	1.13YrCanc	1.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

342	ALL	UCART1	501761.2	3635160	1.61E-06	1.13YrCanc	1.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106	ALL	UCART1	501597.3	3635015	1.60E-06	1.13YrCanc	1.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
385	ALL	UCART1	501794	3635187	1.60E-06	1.13YrCanc	1.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
299	ALL	UCART1	501728.4	3635134	1.60E-06	1.13YrCanc	1.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
428	ALL	UCART1	501826.7	3635213	1.59E-06	1.13YrCanc	1.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1	ALL	UCART1	501597.3	3634948	1.59E-06	1.13YrCanc	1.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
256	ALL	UCART1	501695.6	3635107	1.59E-06	1.13YrCanc	1.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
64	ALL	UCART1	501597.3	3634988	1.58E-06	1.13YrCanc	1.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
213	ALL	UCART1	501662.8	3635081	1.58E-06	1.13YrCanc	1.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	ALL	UCART1	501597.3	3634962	1.57E-06	1.13YrCanc	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
762	ALL		502584.8	3635161	1.57E-06	1.13YrCanc	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
43	ALL	UCART1	501597.3	3634975	1.57E-06	1.13YrCanc	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
170	ALL	UCART1	501630.1	3635054	1.57E-06	1.13YrCanc	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
127	ALL	UCART1	501597.3	3635028	1.56E-06	1.13YrCanc	1.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
725	ALL		502641.1	3635101	1.55E-06	1.13YrCanc	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
363	ALL	UCART1	501761.2	3635174	1.55E-06	1.13YrCanc	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
406	ALL	UCART1	501794	3635200	1.54E-06	1.13YrCanc	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	ALL	UCART1	501728.4	3635147	1.54E-06	1.13YrCanc	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
277	ALL	UCART1	501695.6	3635121	1.53E-06	1.13YrCanc	1.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
234	ALL	UCART1	501662.8	3635094	1.53E-06	1.13YrCanc	1.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148	ALL	UCART1	501597.3	3635041	1.52E-06	1.13YrCanc	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191	ALL	UCART1	501630.1	3635068	1.51E-06	1.13YrCanc	1.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
384	ALL	UCART1	501761.2	3635187	1.50E-06	1.13YrCanc	1.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
617	ALL		502753.8	3634889	1.49E-06	1.13YrCanc	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
341	ALL	UCART1	501728.4	3635160	1.49E-06	1.13YrCanc	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
427	ALL	UCART1	501794	3635213	1.49E-06	1.13YrCanc	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
298	ALL	UCART1	501695.6	3635134	1.48E-06	1.13YrCanc	1.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
255	ALL	UCART1	501662.8	3635107	1.47E-06	1.13YrCanc	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
781	ALL		502584.8	3635191	1.47E-06	1.13YrCanc	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
744	ALL		502641.1	3635131	1.47E-06	1.13YrCanc	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
405	ALL	UCART1	501761.2	3635200	1.44E-06	1.13YrCanc	1.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
169	ALL	UCART1	501597.3	3635054	1.44E-06	1.13YrCanc	1.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
362	ALL	UCART1	501728.4	3635174	1.44E-06	1.13YrCanc	1.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
212	ALL	UCART1	501630.1	3635081	1.43E-06	1.13YrCanc	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
483	ALL		502810.1	3634648	1.43E-06	1.13YrCanc	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	ALL	UCART1	501695.6	3635147	1.43E-06	1.13YrCanc	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
896	ALL		501511.3	3634952	1.43E-06	1.13YrCanc	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
643	ALL		502753.8	3634950	1.42E-06	1.13YrCanc	1.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
499	ALL		502810.1	3634678	1.42E-06	1.13YrCanc	1.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
276	ALL	UCART1	501662.8	3635121	1.41E-06	1.13YrCanc	1.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
897	ALL		501516.7	3634990	1.41E-06	1.13YrCanc	1.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
515	ALL		502810.1	3634708	1.40E-06	1.13YrCanc	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
763	ALL		502641.1	3635161	1.39E-06	1.13YrCanc	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
426	ALL	UCART1	501761.2	3635213	1.39E-06	1.13YrCanc	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
530	ALL		502810.1	3634738	1.39E-06	1.13YrCanc	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
383	ALL	UCART1	501728.4	3635187	1.39E-06	1.13YrCanc	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
340	ALL	UCART1	501695.6	3635160	1.38E-06	1.13YrCanc	1.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
545	ALL		502810.1	3634768	1.37E-06	1.13YrCanc	1.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
190	ALL	UCART1	501597.3	3635068	1.36E-06	1.13YrCanc	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
560	ALL		502810.1	3634799	1.35E-06	1.13YrCanc	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
297	ALL	UCART1	501662.8	3635134	1.35E-06	1.13YrCanc	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
233	ALL	UCART1	501630.1	3635094	1.34E-06	1.13YrCanc	1.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
669	ALL		502753.8	3635010	1.34E-06	1.13YrCanc	1.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
361	ALL	UCART1	501695.6	3635174	1.34E-06	1.13YrCanc	1.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404	ALL	UCART1	501728.4	3635200	1.33E-06	1.13YrCanc	1.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
579	ALL		502810.1	3634829	1.33E-06	1.13YrCanc	1.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
895	ALL		501511.3	3634921	1.33E-06	1.13YrCanc	1.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
894	ALL		501522.1	3634835	1.32E-06	1.13YrCanc	1.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
782	ALL		502641.1	3635191	1.32E-06	1.13YrCanc	1.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
598	ALL		502810.1	3634859	1.31E-06	1.13YrCanc	1.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
688	ALL		502753.8	3635040	1.29E-06	1.13YrCanc	1.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	ALL	UCART1	501662.8	3635147	1.29E-06	1.13YrCanc	1.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
618	ALL		502810.1	3634889	1.29E-06	1.13YrCanc	1.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
382	ALL	UCART1	501695.6	3635187	1.28E-06	1.13YrCanc	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
425	ALL	UCART1	501728.4	3635213	1.28E-06	1.13YrCanc	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
893	ALL		501509.9	3634739	1.26E-06	1.13YrCanc	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
211	ALL	UCART1	501597.3	3635081	1.26E-06	1.13YrCanc	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
254	ALL	UCART1	501630.1	3635107	1.26E-06	1.13YrCanc	1.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
892	ALL		501511.3	3634709	1.25E-06	1.13YrCanc	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
707	ALL		502753.8	3635070	1.25E-06	1.13YrCanc	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
484	ALL		502866.5	3634648	1.24E-06	1.13YrCanc	1.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
339	ALL	UCART1	501662.8	3635160	1.24E-06	1.13YrCanc	1.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
644	ALL		502810.1	3634950	1.23E-06	1.13YrCanc	1.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
500	ALL		502866.5	3634678	1.23E-06	1.13YrCanc	1.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
403	ALL	UCART1	501695.6	3635200	1.23E-06	1.13YrCanc	1.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
891	ALL		501520.8	3634630	1.22E-06	1.13YrCanc	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
516	ALL		502866.5	3634708	1.22E-06	1.13YrCanc	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
531	ALL		502866.5	3634738	1.20E-06	1.13YrCanc	1.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
726	ALL		502753.8	3635101	1.20E-06	1.13YrCanc	1.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
275	ALL	UCART1	501630.1	3635121	1.19E-06	1.13YrCanc	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
546	ALL		502866.5	3634768	1.19E-06	1.13YrCanc	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
360	ALL	UCART1	501662.8	3635174	1.19E-06	1.13YrCanc	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
561	ALL		502866.5	3634799	1.18E-06	1.13YrCanc	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
670	ALL		502810.1	3635010	1.17E-06	1.13YrCanc	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
424	ALL	UCART1	501695.6	3635213	1.17E-06	1.13YrCanc	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
232	ALL	UCART1	501597.3	3635094	1.17E-06	1.13YrCanc	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
580	ALL		502866.5	3634829	1.16E-06	1.13YrCanc	1.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
745	ALL		502753.8	3635131	1.15E-06	1.13YrCanc	1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
381	ALL	UCART1	501662.8	3635187	1.15E-06	1.13YrCanc	1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
599	ALL		502866.5	3634859	1.14E-06	1.13YrCanc	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
689	ALL		502810.1	3635040	1.14E-06	1.13YrCanc	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
296	ALL	UCART1	501630.1	3635134	1.13E-06	1.13YrCanc	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
619	ALL		502866.5	3634889	1.13E-06	1.13YrCanc	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
402	ALL	UCART1	501662.8	3635200	1.11E-06	1.13YrCanc	1.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
764	ALL		502753.8	3635161	1.10E-06	1.13YrCanc	1.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
708	ALL		502810.1	3635070	1.10E-06	1.13YrCanc	1.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

442	ALL		501602.7	3635114	1.09E-06	1.13YrCanc	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
253	ALL	UCART1	501597.3	3635107	1.09E-06	1.13YrCanc	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
485	ALL		502922.8	3634648	1.09E-06	1.13YrCanc	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
645	ALL		502866.5	3634950	1.08E-06	1.13YrCanc	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
501	ALL		502922.8	3634678	1.08E-06	1.13YrCanc	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	ALL	UCART1	501630.1	3635147	1.08E-06	1.13YrCanc	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
517	ALL		502922.8	3634708	1.07E-06	1.13YrCanc	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
727	ALL		502810.1	3635101	1.06E-06	1.13YrCanc	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
274	ALL	UCART1	501597.3	3635121	1.06E-06	1.13YrCanc	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
783	ALL		502753.8	3635191	1.06E-06	1.13YrCanc	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
532	ALL		502922.8	3634738	1.06E-06	1.13YrCanc	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
423	ALL	UCART1	501662.8	3635213	1.06E-06	1.13YrCanc	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
547	ALL		502922.8	3634768	1.05E-06	1.13YrCanc	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
671	ALL		502866.5	3635010	1.04E-06	1.13YrCanc	1.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
338	ALL	UCART1	501630.1	3635160	1.03E-06	1.13YrCanc	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
562	ALL		502922.8	3634799	1.03E-06	1.13YrCanc	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890	ALL		502149.6	3634082	1.03E-06	1.13YrCanc	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
295	ALL	UCART1	501597.3	3635134	1.03E-06	1.13YrCanc	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
746	ALL		502810.1	3635131	1.03E-06	1.13YrCanc	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889	ALL		502095.1	3634082	1.02E-06	1.13YrCanc	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
581	ALL		502922.8	3634829	1.02E-06	1.13YrCanc	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
690	ALL		502866.5	3635040	1.01E-06	1.13YrCanc	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
888	ALL		502040.6	3634082	1.01E-06	1.13YrCanc	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
600	ALL		502922.8	3634859	1.01E-06	1.13YrCanc	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
359	ALL	UCART1	501630.1	3635174	1.00E-06	1.13YrCanc	1.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
620	ALL		502922.8	3634889	9.93E-07	1.13YrCanc	9.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
765	ALL		502810.1	3635161	9.90E-07	1.13YrCanc	9.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	ALL	UCART1	501597.3	3635147	9.89E-07	1.13YrCanc	9.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
887	ALL		501986.2	3634082	9.84E-07	1.13YrCanc	9.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
709	ALL		502866.5	3635070	9.81E-07	1.13YrCanc	9.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
380	ALL	UCART1	501630.1	3635187	9.76E-07	1.13YrCanc	9.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
486	ALL		502979.2	3634648	9.65E-07	1.13YrCanc	9.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
882	ALL		502149.6	3634050	9.63E-07	1.13YrCanc	9.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
646	ALL		502922.8	3634950	9.60E-07	1.13YrCanc	9.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
502	ALL		502979.2	3634678	9.56E-07	1.13YrCanc	9.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
881	ALL		502095.1	3634050	9.55E-07	1.13YrCanc	9.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
401	ALL	UCART1	501630.1	3635200	9.54E-07	1.13YrCanc	9.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
784	ALL		502810.1	3635191	9.53E-07	1.13YrCanc	9.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
337	ALL	UCART1	501597.3	3635160	9.53E-07	1.13YrCanc	9.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
728	ALL		502866.5	3635101	9.52E-07	1.13YrCanc	9.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
886	ALL		501931.7	3634082	9.52E-07	1.13YrCanc	9.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
518	ALL		502979.2	3634708	9.46E-07	1.13YrCanc	9.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880	ALL		502040.6	3634050	9.40E-07	1.13YrCanc	9.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
533	ALL		502979.2	3634738	9.37E-07	1.13YrCanc	9.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
422	ALL	UCART1	501630.1	3635213	9.32E-07	1.13YrCanc	9.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
548	ALL		502979.2	3634768	9.28E-07	1.13YrCanc	9.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
905	ALL		502909	3634272	9.23E-07	1.13YrCanc	9.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
358	ALL	UCART1	501597.3	3635174	9.23E-07	1.13YrCanc	9.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
747	ALL		502866.5	3635131	9.22E-07	1.13YrCanc	9.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
672	ALL		502922.8	3635010	9.22E-07	1.13YrCanc	9.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
563	ALL		502979.2	3634799	9.18E-07	1.13YrCanc	9.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
879	ALL		501986.2	3634050	9.17E-07	1.13YrCanc	9.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
885	ALL		501877.2	3634082	9.13E-07	1.13YrCanc	9.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
582	ALL		502979.2	3634829	9.07E-07	1.13YrCanc	9.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
691	ALL		502922.8	3635040	9.01E-07	1.13YrCanc	9.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
379	ALL	UCART1	501597.3	3635187	8.99E-07	1.13YrCanc	8.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
911	ALL		502963.8	3634313	8.99E-07	1.13YrCanc	8.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
906	ALL		502903.6	3634246	8.96E-07	1.13YrCanc	8.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
601	ALL		502979.2	3634859	8.96E-07	1.13YrCanc	8.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
878	ALL		501931.7	3634050	8.91E-07	1.13YrCanc	8.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
766	ALL		502866.5	3635161	8.91E-07	1.13YrCanc	8.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
874	ALL		502095.1	3634018	8.90E-07	1.13YrCanc	8.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
621	ALL		502979.2	3634889	8.84E-07	1.13YrCanc	8.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
710	ALL		502922.8	3635070	8.79E-07	1.13YrCanc	8.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
913	ALL		502947.5	3634270	8.76E-07	1.13YrCanc	8.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
873	ALL		502040.6	3634018	8.76E-07	1.13YrCanc	8.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
400	ALL	UCART1	501597.3	3635200	8.76E-07	1.13YrCanc	8.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
884	ALL		501822.7	3634082	8.72E-07	1.13YrCanc	8.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
785	ALL		502866.5	3635191	8.61E-07	1.13YrCanc	8.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
487	ALL		503035.5	3634648	8.61E-07	1.13YrCanc	8.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
877	ALL		501877.2	3634050	8.58E-07	1.13YrCanc	8.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
647	ALL		502979.2	3634950	8.58E-07	1.13YrCanc	8.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
729	ALL		502922.8	3635101	8.57E-07	1.13YrCanc	8.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
872	ALL		501986.2	3634018	8.56E-07	1.13YrCanc	8.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
503	ALL		503035.5	3634678	8.54E-07	1.13YrCanc	8.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
421	ALL	UCART1	501597.3	3635213	8.53E-07	1.13YrCanc	8.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
914	ALL		502965.6	3634266	8.51E-07	1.13YrCanc	8.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
519	ALL		503035.5	3634708	8.45E-07	1.13YrCanc	8.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
534	ALL		503035.5	3634738	8.37E-07	1.13YrCanc	8.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
898	ALL		503043.6	3634376	8.37E-07	1.13YrCanc	8.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
915	ALL		503000.6	3634292	8.37E-07	1.13YrCanc	8.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912	ALL		503013.9	3634311	8.37E-07	1.13YrCanc	8.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
916	ALL		503023.5	3634327	8.36E-07	1.13YrCanc	8.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
871	ALL		501931.7	3634018	8.34E-07	1.13YrCanc	8.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748	ALL		502922.8	3635131	8.33E-07	1.13YrCanc	8.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
867	ALL		502095.1	3633986	8.31E-07	1.13YrCanc	8.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
549	ALL		503035.5	3634768	8.29E-07	1.13YrCanc	8.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
883	ALL		501768.2	3634082	8.28E-07	1.13YrCanc	8.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
673	ALL		502979.2	3635010	8.27E-07	1.13YrCanc	8.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
907	ALL		502905	3634191	8.23E-07	1.13YrCanc	8.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
876	ALL		501822.7	3634050	8.22E-07	1.13YrCanc	8.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
917	ALL		503037.4	3634331	8.22E-07	1.13YrCanc	8.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
564	ALL		503035.5	3634799	8.20E-07	1.13YrCanc	8.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
899	ALL		503061.3	3634388	8.19E-07	1.13YrCanc	8.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
866	ALL		502040.6	3633986	8.19E-07	1.13YrCanc	8.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
583	ALL		503035.5	3634829	8.12E-07	1.13YrCanc	8.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

692	ALL	502979.2	3635040	8.10E-07	1.13YrCanc	8.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
918	ALL	503053.7	3634346	8.10E-07	1.13YrCanc	8.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
767	ALL	502922.8	3635161	8.09E-07	1.13YrCanc	8.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
870	ALL	501877.2	3634018	8.06E-07	1.13YrCanc	8.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
602	ALL	503035.5	3634859	8.02E-07	1.13YrCanc	8.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
622	ALL	503035.5	3634889	7.93E-07	1.13YrCanc	7.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
711	ALL	502979.2	3635070	7.92E-07	1.13YrCanc	7.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
919	ALL	503072.4	3634345	7.87E-07	1.13YrCanc	7.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
900	ALL	503087.2	3634382	7.85E-07	1.13YrCanc	7.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
786	ALL	502922.8	3635191	7.84E-07	1.13YrCanc	7.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
875	ALL	501768.2	3634050	7.83E-07	1.13YrCanc	7.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
908	ALL	502903.6	3634158	7.83E-07	1.13YrCanc	7.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
862	ALL	502095.1	3633954	7.78E-07	1.13YrCanc	7.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
488	ALL	503091.8	3634648	7.74E-07	1.13YrCanc	7.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
869	ALL	501822.7	3634018	7.74E-07	1.13YrCanc	7.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
730	ALL	502979.2	3635101	7.74E-07	1.13YrCanc	7.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
648	ALL	503035.5	3634950	7.71E-07	1.13YrCanc	7.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
861	ALL	502040.6	3633954	7.68E-07	1.13YrCanc	7.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
504	ALL	503091.8	3634678	7.68E-07	1.13YrCanc	7.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
901	ALL	503103.5	3634385	7.66E-07	1.13YrCanc	7.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
520	ALL	503091.8	3634708	7.61E-07	1.13YrCanc	7.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
749	ALL	502979.2	3635131	7.55E-07	1.13YrCanc	7.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
535	ALL	503091.8	3634738	7.54E-07	1.13YrCanc	7.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
550	ALL	503091.8	3634768	7.47E-07	1.13YrCanc	7.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
674	ALL	503035.5	3635010	7.46E-07	1.13YrCanc	7.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
909	ALL	502905	3634127	7.44E-07	1.13YrCanc	7.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
863	ALL	502422.1	3633954	7.44E-07	1.13YrCanc	7.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
868	ALL	501768.2	3634018	7.40E-07	1.13YrCanc	7.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
451	ALL	502804.3	3635417	7.40E-07	1.13YrCanc	7.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
565	ALL	503091.8	3634799	7.40E-07	1.13YrCanc	7.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
768	ALL	502979.2	3635161	7.35E-07	1.13YrCanc	7.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
902	ALL	503130.7	3634384	7.33E-07	1.13YrCanc	7.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
584	ALL	503091.8	3634829	7.32E-07	1.13YrCanc	7.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
693	ALL	503035.5	3635040	7.32E-07	1.13YrCanc	7.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
857	ALL	502095.1	3633922	7.31E-07	1.13YrCanc	7.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
603	ALL	503091.8	3634859	7.24E-07	1.13YrCanc	7.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
856	ALL	502040.6	3633922	7.23E-07	1.13YrCanc	7.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
712	ALL	503035.5	3635070	7.18E-07	1.13YrCanc	7.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
910	ALL	502906.3	3634104	7.17E-07	1.13YrCanc	7.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
623	ALL	503091.8	3634889	7.16E-07	1.13YrCanc	7.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
787	ALL	502979.2	3635191	7.15E-07	1.13YrCanc	7.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
731	ALL	503035.5	3635101	7.03E-07	1.13YrCanc	7.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903	ALL	503159.2	3634384	7.02E-07	1.13YrCanc	7.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
858	ALL	502422.1	3633922	7.01E-07	1.13YrCanc	7.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
489	ALL	503148.2	3634648	7.00E-07	1.13YrCanc	7.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
649	ALL	503091.8	3634950	6.98E-07	1.13YrCanc	6.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
456	ALL	502812.5	3635466	6.96E-07	1.13YrCanc	6.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
452	ALL	502842.8	3635418	6.96E-07	1.13YrCanc	6.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
505	ALL	503148.2	3634678	6.94E-07	1.13YrCanc	6.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852	ALL	502095.1	3633890	6.88E-07	1.13YrCanc	6.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
521	ALL	503148.2	3634708	6.88E-07	1.13YrCanc	6.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
750	ALL	503035.5	3635131	6.87E-07	1.13YrCanc	6.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
864	ALL	502585.5	3633954	6.82E-07	1.13YrCanc	6.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
536	ALL	503148.2	3634738	6.82E-07	1.13YrCanc	6.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
851	ALL	502040.6	3633890	6.81E-07	1.13YrCanc	6.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
904	ALL	503182.3	3634381	6.78E-07	1.13YrCanc	6.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
675	ALL	503091.8	3635010	6.77E-07	1.13YrCanc	6.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
551	ALL	503148.2	3634768	6.76E-07	1.13YrCanc	6.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
458	ALL	502804.3	3635510	6.75E-07	1.13YrCanc	6.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
769	ALL	503035.5	3635161	6.71E-07	1.13YrCanc	6.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
566	ALL	503148.2	3634799	6.71E-07	1.13YrCanc	6.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
694	ALL	503091.8	3635040	6.66E-07	1.13YrCanc	6.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
585	ALL	503148.2	3634829	6.64E-07	1.13YrCanc	6.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
853	ALL	502422.1	3633890	6.62E-07	1.13YrCanc	6.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
457	ALL	502802.7	3635531	6.61E-07	1.13YrCanc	6.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
865	ALL	502640	3633954	6.61E-07	1.13YrCanc	6.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
604	ALL	503148.2	3634859	6.58E-07	1.13YrCanc	6.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
453	ALL	502881.3	3635419	6.56E-07	1.13YrCanc	6.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
788	ALL	503035.5	3635191	6.54E-07	1.13YrCanc	6.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
713	ALL	503091.8	3635070	6.54E-07	1.13YrCanc	6.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
624	ALL	503148.2	3634889	6.51E-07	1.13YrCanc	6.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
847	ALL	502095.1	3633858	6.50E-07	1.13YrCanc	6.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
859	ALL	502585.5	3633922	6.46E-07	1.13YrCanc	6.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
459	ALL	502803.5	3635554	6.45E-07	1.13YrCanc	6.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
846	ALL	502040.6	3633858	6.43E-07	1.13YrCanc	6.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
732	ALL	503091.8	3635101	6.42E-07	1.13YrCanc	6.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
490	ALL	503204.5	3634648	6.37E-07	1.13YrCanc	6.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
650	ALL	503148.2	3634950	6.35E-07	1.13YrCanc	6.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
506	ALL	503204.5	3634678	6.31E-07	1.13YrCanc	6.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
751	ALL	503091.8	3635131	6.28E-07	1.13YrCanc	6.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
860	ALL	502640	3633922	6.27E-07	1.13YrCanc	6.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848	ALL	502422.1	3633858	6.27E-07	1.13YrCanc	6.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
522	ALL	503204.5	3634708	6.26E-07	1.13YrCanc	6.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
454	ALL	502916.5	3635415	6.25E-07	1.13YrCanc	6.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
537	ALL	503204.5	3634738	6.21E-07	1.13YrCanc	6.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
676	ALL	503148.2	3635010	6.18E-07	1.13YrCanc	6.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
552	ALL	503204.5	3634768	6.17E-07	1.13YrCanc	6.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
770	ALL	503091.8	3635161	6.15E-07	1.13YrCanc	6.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
841	ALL	502095.1	3633826	6.14E-07	1.13YrCanc	6.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
854	ALL	502585.5	3633890	6.13E-07	1.13YrCanc	6.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
567	ALL	503204.5	3634799	6.12E-07	1.13YrCanc	6.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
840	ALL	502040.6	3633826	6.08E-07	1.13YrCanc	6.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
695	ALL	503148.2	3635040	6.08E-07	1.13YrCanc	6.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
586	ALL	503204.5	3634829	6.06E-07	1.13YrCanc	6.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
842	ALL	502367.6	3633826	6.04E-07	1.13YrCanc	6.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
789	ALL	503091.8	3635191	6.01E-07	1.13YrCanc	6.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

605	ALL	503204.5	3634859	6.00E-07	1.13YrCanc	6.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
714	ALL	503148.2	3635070	5.98E-07	1.13YrCanc	5.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
460	ALL	502881.3	3635525	5.98E-07	1.13YrCanc	5.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
455	ALL	502946.8	3635416	5.98E-07	1.13YrCanc	5.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
855	ALL	502640	3633890	5.96E-07	1.13YrCanc	5.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
843	ALL	502422.1	3633826	5.94E-07	1.13YrCanc	5.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
625	ALL	503204.5	3634889	5.94E-07	1.13YrCanc	5.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
733	ALL	503148.2	3635101	5.88E-07	1.13YrCanc	5.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
849	ALL	502585.5	3633858	5.83E-07	1.13YrCanc	5.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
491	ALL	503260.9	3634648	5.83E-07	1.13YrCanc	5.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
651	ALL	503204.5	3634950	5.81E-07	1.13YrCanc	5.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
507	ALL	503260.9	3634678	5.78E-07	1.13YrCanc	5.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
752	ALL	503148.2	3635131	5.77E-07	1.13YrCanc	5.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
523	ALL	503260.9	3634708	5.74E-07	1.13YrCanc	5.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
836	ALL	502367.6	3633794	5.73E-07	1.13YrCanc	5.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
538	ALL	503260.9	3634738	5.69E-07	1.13YrCanc	5.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850	ALL	502640	3633858	5.67E-07	1.13YrCanc	5.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
677	ALL	503204.5	3635010	5.67E-07	1.13YrCanc	5.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
771	ALL	503148.2	3635161	5.66E-07	1.13YrCanc	5.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
553	ALL	503260.9	3634768	5.65E-07	1.13YrCanc	5.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
837	ALL	502422.1	3633794	5.65E-07	1.13YrCanc	5.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
461	ALL	502923.9	3635526	5.64E-07	1.13YrCanc	5.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
568	ALL	503260.9	3634799	5.60E-07	1.13YrCanc	5.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
696	ALL	503204.5	3635040	5.58E-07	1.13YrCanc	5.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
587	ALL	503260.9	3634829	5.56E-07	1.13YrCanc	5.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
844	ALL	502585.5	3633826	5.55E-07	1.13YrCanc	5.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
790	ALL	503148.2	3635191	5.54E-07	1.13YrCanc	5.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
464	ALL	503003.3	3635421	5.51E-07	1.13YrCanc	5.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
606	ALL	503260.9	3634859	5.51E-07	1.13YrCanc	5.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
715	ALL	503204.5	3635070	5.50E-07	1.13YrCanc	5.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
626	ALL	503260.9	3634889	5.45E-07	1.13YrCanc	5.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
734	ALL	503204.5	3635101	5.41E-07	1.13YrCanc	5.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
845	ALL	502640	3633826	5.40E-07	1.13YrCanc	5.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
833	ALL	502422.1	3633762	5.37E-07	1.13YrCanc	5.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
492	ALL	503317.2	3634648	5.35E-07	1.13YrCanc	5.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
463	ALL	502996.7	3635470	5.34E-07	1.13YrCanc	5.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
652	ALL	503260.9	3634950	5.33E-07	1.13YrCanc	5.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
753	ALL	503204.5	3635131	5.32E-07	1.13YrCanc	5.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
508	ALL	503317.2	3634678	5.31E-07	1.13YrCanc	5.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
462	ALL	502966.4	3635530	5.31E-07	1.13YrCanc	5.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
838	ALL	502585.5	3633794	5.29E-07	1.13YrCanc	5.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
524	ALL	503317.2	3634708	5.27E-07	1.13YrCanc	5.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
539	ALL	503317.2	3634738	5.23E-07	1.13YrCanc	5.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
772	ALL	503204.5	3635161	5.22E-07	1.13YrCanc	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
678	ALL	503260.9	3635010	5.22E-07	1.13YrCanc	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
554	ALL	503317.2	3634768	5.19E-07	1.13YrCanc	5.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
569	ALL	503317.2	3634799	5.16E-07	1.13YrCanc	5.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
839	ALL	502640	3633794	5.15E-07	1.13YrCanc	5.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
697	ALL	503260.9	3635040	5.14E-07	1.13YrCanc	5.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791	ALL	503204.5	3635191	5.13E-07	1.13YrCanc	5.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
588	ALL	503317.2	3634829	5.11E-07	1.13YrCanc	5.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
830	ALL	502422.1	3633730	5.11E-07	1.13YrCanc	5.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
716	ALL	503260.9	3635070	5.07E-07	1.13YrCanc	5.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
607	ALL	503317.2	3634859	5.06E-07	1.13YrCanc	5.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
834	ALL	502585.5	3633762	5.04E-07	1.13YrCanc	5.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
627	ALL	503317.2	3634889	5.02E-07	1.13YrCanc	5.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
735	ALL	503260.9	3635101	5.00E-07	1.13YrCanc	5.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
493	ALL	503373.5	3634648	4.94E-07	1.13YrCanc	4.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
653	ALL	503317.2	3634950	4.92E-07	1.13YrCanc	4.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
754	ALL	503260.9	3635131	4.92E-07	1.13YrCanc	4.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
835	ALL	502640	3633762	4.92E-07	1.13YrCanc	4.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
509	ALL	503373.5	3634678	4.90E-07	1.13YrCanc	4.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
827	ALL	502422.1	3633698	4.87E-07	1.13YrCanc	4.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
525	ALL	503373.5	3634708	4.86E-07	1.13YrCanc	4.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
773	ALL	503260.9	3635161	4.84E-07	1.13YrCanc	4.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
540	ALL	503373.5	3634738	4.83E-07	1.13YrCanc	4.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831	ALL	502585.5	3633730	4.82E-07	1.13YrCanc	4.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
679	ALL	503317.2	3635010	4.82E-07	1.13YrCanc	4.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
555	ALL	503373.5	3634768	4.80E-07	1.13YrCanc	4.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
570	ALL	503373.5	3634799	4.76E-07	1.13YrCanc	4.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
698	ALL	503317.2	3635040	4.76E-07	1.13YrCanc	4.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792	ALL	503260.9	3635191	4.76E-07	1.13YrCanc	4.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
589	ALL	503373.5	3634829	4.72E-07	1.13YrCanc	4.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
832	ALL	502640	3633730	4.71E-07	1.13YrCanc	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
821	ALL	502367.6	3633666	4.70E-07	1.13YrCanc	4.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
717	ALL	503317.2	3635070	4.70E-07	1.13YrCanc	4.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
608	ALL	503373.5	3634859	4.68E-07	1.13YrCanc	4.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
822	ALL	502422.1	3633666	4.65E-07	1.13YrCanc	4.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
628	ALL	503373.5	3634889	4.64E-07	1.13YrCanc	4.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
736	ALL	503317.2	3635101	4.63E-07	1.13YrCanc	4.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
828	ALL	502585.5	3633698	4.61E-07	1.13YrCanc	4.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
823	ALL	502476.6	3633666	4.59E-07	1.13YrCanc	4.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
755	ALL	503317.2	3635131	4.57E-07	1.13YrCanc	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
654	ALL	503373.5	3634950	4.56E-07	1.13YrCanc	4.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
829	ALL	502640	3633698	4.51E-07	1.13YrCanc	4.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
824	ALL	502531.1	3633666	4.51E-07	1.13YrCanc	4.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
774	ALL	503317.2	3635161	4.50E-07	1.13YrCanc	4.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
815	ALL	502367.6	3633633	4.50E-07	1.13YrCanc	4.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
680	ALL	503373.5	3635010	4.47E-07	1.13YrCanc	4.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
816	ALL	502422.1	3633633	4.45E-07	1.13YrCanc	4.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
793	ALL	503317.2	3635191	4.42E-07	1.13YrCanc	4.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
699	ALL	503373.5	3635040	4.42E-07	1.13YrCanc	4.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
825	ALL	502585.5	3633666	4.41E-07	1.13YrCanc	4.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
817	ALL	502476.6	3633633	4.39E-07	1.13YrCanc	4.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
718	ALL	503373.5	3635070	4.36E-07	1.13YrCanc	4.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
826	ALL	502640	3633666	4.32E-07	1.13YrCanc	4.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

818	ALL	502531.1	3633633	4.32E-07	1.13YrCanc	4.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
737	ALL	503373.5	3635101	4.31E-07	1.13YrCanc	4.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
809	ALL	502367.6	3633601	4.30E-07	1.13YrCanc	4.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810	ALL	502422.1	3633601	4.26E-07	1.13YrCanc	4.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
756	ALL	503373.5	3635131	4.25E-07	1.13YrCanc	4.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
819	ALL	502585.5	3633633	4.23E-07	1.13YrCanc	4.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
471	ALL	503457.6	3634855	4.21E-07	1.13YrCanc	4.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
811	ALL	502476.6	3633601	4.20E-07	1.13YrCanc	4.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
775	ALL	503373.5	3635161	4.19E-07	1.13YrCanc	4.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
472	ALL	503469.2	3634855	4.16E-07	1.13YrCanc	4.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
820	ALL	502640	3633633	4.14E-07	1.13YrCanc	4.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
812	ALL	502531.1	3633601	4.14E-07	1.13YrCanc	4.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794	ALL	503373.5	3635191	4.13E-07	1.13YrCanc	4.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
470	ALL	503469.2	3634893	4.12E-07	1.13YrCanc	4.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
813	ALL	502585.5	3633601	4.06E-07	1.13YrCanc	4.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
814	ALL	502640	3633601	3.98E-07	1.13YrCanc	3.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
465	ALL	503514.5	3634925	3.87E-07	1.13YrCanc	3.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
802	ALL	502531.1	3633537	3.81E-07	1.13YrCanc	3.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803	ALL	502585.5	3633537	3.75E-07	1.13YrCanc	3.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
468	ALL	503547.2	3634944	3.70E-07	1.13YrCanc	3.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
804	ALL	502640	3633537	3.68E-07	1.13YrCanc	3.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
469	ALL	503568.4	3634878	3.67E-07	1.13YrCanc	3.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805	ALL	502694.5	3633537	3.61E-07	1.13YrCanc	3.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
467	ALL	503561.7	3634987	3.60E-07	1.13YrCanc	3.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
466	ALL	503585.7	3634933	3.55E-07	1.13YrCanc	3.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806	ALL	502749	3633537	3.53E-07	1.13YrCanc	3.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795	ALL	502531.1	3633473	3.53E-07	1.13YrCanc	3.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
796	ALL	502585.5	3633473	3.48E-07	1.13YrCanc	3.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
807	ALL	502803.5	3633537	3.46E-07	1.13YrCanc	3.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
797	ALL	502640	3633473	3.42E-07	1.13YrCanc	3.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808	ALL	502858	3633537	3.39E-07	1.13YrCanc	3.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798	ALL	502694.5	3633473	3.35E-07	1.13YrCanc	3.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799	ALL	502749	3633473	3.29E-07	1.13YrCanc	3.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
800	ALL	502803.5	3633473	3.22E-07	1.13YrCanc	3.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
801	ALL	502858	3633473	3.16E-07	1.13YrCanc	3.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v22118 2/5/2024 4:26:08 PM - Chronic Risk - Input File: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Unmit_HRAInput.hra

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEV	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR	GENERAL	MAXHI
954	ALL		502134.1	3634861	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-02
953	ALL		502156	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-02
955	ALL		502118.2	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-02
952	ALL		502173.7	3634861	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-02
443	ALL		502091.2	3634721	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-02
951	ALL		502186.3	3634861	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-02
956	ALL		502085.2	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-02
950	ALL		502204.1	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-02
957	ALL		502070.7	3634863	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-02
920	ALL		502211.8	3634864	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-02
958	ALL		502055.2	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-02
959	ALL		502043.7	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-02
960	ALL		502031.5	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-02
929	ALL		502140.8	3634893	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-02
928	ALL		502115.2	3634894	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-02
941	ALL		502187.1	3634892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-02
942	ALL		502211.5	3634885	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-02
961	ALL		502021.1	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-02
930	ALL		502141.5	3634901	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-02
927	ALL		502115.2	3634902	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-02
966	ALL		502079.3	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-02
940	ALL		502187.8	3634899	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-02
943	ALL		502212.3	3634893	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-02
962	ALL		502009.6	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-02
967	ALL		502065.9	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-02
926	ALL		502114.5	3634907	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-02
939	ALL		502188.2	3634904	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-02
931	ALL		502141.1	3634911	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-02
968	ALL		502053.3	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-02
944	ALL		502212.7	3634904	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-02
938	ALL		502187.1	3634911	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-02
925	ALL		502115.2	3634915	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-02
969	ALL		502041.8	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-02
963	ALL		501997	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-02
924	ALL		502115.2	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-02
932	ALL		502141.1	3634923	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-02
571	ALL		502303.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-02
937	ALL		502187.8	3634918	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-02
970	ALL		502031.8	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-02
945	ALL		502215.2	3634913	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-02
983	ALL		502077.4	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-02
923	ALL		502114.8	3634929	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-02
936	ALL		502186.7	3634927	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-02
982	ALL		502064.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-02
971	ALL		502018.9	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-02
933	ALL		502141.1	3634933	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-02
946	ALL		502215.6	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-02
922	ALL		502116.7	3634933	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-02
964	ALL		501981.4	3634866	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02
590	ALL		502303.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02
981	ALL		502051.5	3634918	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02
947	ALL		502214.9	3634926	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-02
972	ALL		502007.7	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-02
980	ALL		502042.9	3634918	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-02
934	ALL		502141.1	3634942	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-02
921	ALL		502115.9	3634942	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-02
935	ALL		502187.5	3634941	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02
948	ALL		502214.1	3634934	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02
965	ALL		501973.7	3634869	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-02
18	ALL	UCART1	502154.5	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02
979	ALL		502028.1	3634920	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02
17	ALL	UCART1	502121.8	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02
973	ALL		501994.8	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02
949	ALL		502214.1	3634942	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-02
19	ALL	UCART1	502187.3	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-02
609	ALL		502303.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-02
16	ALL	UCART1	502089	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-02
978	ALL		502014	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-02
20	ALL	UCART1	502220.1	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-02
974	ALL		501983.7	3634902	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-02
39	ALL	UCART1	502154.5	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02
977	ALL		502003.7	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02
38	ALL	UCART1	502121.8	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02
989	ALL		501959.2	3634875	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02
15	ALL	UCART1	502056.2	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-02
40	ALL	UCART1	502187.3	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-02
37	ALL	UCART1	502089	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-03
21	ALL	UCART1	502252.9	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-03
41	ALL	UCART1	502220.1	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.46E-03
975	ALL		501974	3634908	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-03
572	ALL		502359.4	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-03
629	ALL		502303.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-03
988	ALL		501949.2	3634880	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.27E-03
60	ALL	UCART1	502154.5	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E-03
59	ALL	UCART1	502121.8	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.20E-03
36	ALL	UCART1	502056.2	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-03
14	ALL	UCART1	502023.4	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.06E-03
61	ALL	UCART1	502187.3	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-03
976	ALL		501981.4	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.98E-03
58	ALL	UCART1	502089	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.84E-03
42	ALL	UCART1	502252.9	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.67E-03
591	ALL		502359.4	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.56E-03
62	ALL	UCART1	502220.1	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-03
991	ALL		501961.4	3634912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.44E-03
81	ALL	UCART1	502154.5	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-03
80	ALL	UCART1	502121.8	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.23E-03
987	ALL		501938.5	3634888	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.18E-03

57	ALL	UCART1	502056.2	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-03
35	ALL	UCART1	502023.4	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.14E-03
82	ALL	UCART1	502187.3	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.08E-03
79	ALL	UCART1	502089	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.93E-03
63	ALL	UCART1	502252.9	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-03
13	ALL	UCART1	501990.6	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-03
636	ALL		502303.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-03
83	ALL	UCART1	502220.1	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-03
610	ALL		502359.4	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-03
990	ALL		501951.4	3634922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.48E-03
986	ALL		501929.6	3634894	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.46E-03
102	ALL	UCART1	502154.5	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-03
101	ALL	UCART1	502121.8	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-03
78	ALL	UCART1	502056.2	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-03
56	ALL	UCART1	502023.4	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-03
103	ALL	UCART1	502187.3	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-03
84	ALL	UCART1	502252.9	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-03
100	ALL	UCART1	502089	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-03
34	ALL	UCART1	501990.6	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-03
104	ALL	UCART1	502220.1	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-03
984	ALL		501921.8	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-03
630	ALL		502359.4	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-03
123	ALL	UCART1	502154.5	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-03
122	ALL	UCART1	502121.8	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-03
99	ALL	UCART1	502056.2	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-03
77	ALL	UCART1	502023.4	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-03
12	ALL	UCART1	501957.9	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-03
124	ALL	UCART1	502187.3	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-03
105	ALL	UCART1	502252.9	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-03
121	ALL	UCART1	502089	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-03
55	ALL	UCART1	501990.6	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-03
655	ALL		502303.1	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-03
125	ALL	UCART1	502220.1	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-03
573	ALL		502415.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-03
985	ALL		501909.6	3634908	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-03
144	ALL	UCART1	502154.5	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-03
33	ALL	UCART1	501957.9	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-03
120	ALL	UCART1	502056.2	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-03
143	ALL	UCART1	502121.8	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-03
98	ALL	UCART1	502023.4	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-03
145	ALL	UCART1	502187.3	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-03
126	ALL	UCART1	502252.9	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.02E-03
637	ALL		502359.4	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-03
592	ALL		502415.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-03
76	ALL	UCART1	501990.6	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87E-03
146	ALL	UCART1	502220.1	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-03
142	ALL	UCART1	502089	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-03
11	ALL	UCART1	501925.1	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-03
54	ALL	UCART1	501957.9	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.64E-03
165	ALL	UCART1	502154.5	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-03
166	ALL	UCART1	502187.3	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-03
147	ALL	UCART1	502252.9	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-03
119	ALL	UCART1	502023.4	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-03
164	ALL	UCART1	502121.8	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-03
611	ALL		502415.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-03
141	ALL	UCART1	502056.2	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-03
662	ALL		502303.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-03
97	ALL	UCART1	501990.6	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-03
167	ALL	UCART1	502220.1	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-03
32	ALL	UCART1	501925.1	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-03
163	ALL	UCART1	502089	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.26E-03
656	ALL		502359.4	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-03
186	ALL	UCART1	502154.5	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-03
75	ALL	UCART1	501957.9	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-03
187	ALL	UCART1	502187.3	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-03
168	ALL	UCART1	502252.9	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-03
185	ALL	UCART1	502121.8	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-03
631	ALL		502415.8	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-03
140	ALL	UCART1	502023.4	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-03
53	ALL	UCART1	501925.1	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-03
188	ALL	UCART1	502220.1	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-03
118	ALL	UCART1	501990.6	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-03
162	ALL	UCART1	502056.2	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-03
184	ALL	UCART1	502089	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-03
10	ALL	UCART1	501892.3	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-03
96	ALL	UCART1	501957.9	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.80E-03
207	ALL	UCART1	502154.5	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-03
189	ALL	UCART1	502252.9	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-03
208	ALL	UCART1	502187.3	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-03
206	ALL	UCART1	502121.8	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-03
74	ALL	UCART1	501925.1	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-03
681	ALL		502303.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-03
209	ALL	UCART1	502220.1	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-03
183	ALL	UCART1	502056.2	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-03
31	ALL	UCART1	501892.3	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-03
638	ALL		502415.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-03
161	ALL	UCART1	502023.4	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-03
663	ALL		502359.4	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-03
139	ALL	UCART1	501990.6	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-03
205	ALL	UCART1	502089	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-03
574	ALL		502472.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-03
117	ALL	UCART1	501957.9	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-03
228	ALL	UCART1	502154.5	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-03
210	ALL	UCART1	502252.9	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-03
229	ALL	UCART1	502187.3	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-03
227	ALL	UCART1	502121.8	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-03
52	ALL	UCART1	501892.3	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-03
95	ALL	UCART1	501925.1	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-03
593	ALL		502472.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-03

230	ALL	UCART1	502220.1	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-03
204	ALL	UCART1	502056.2	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-03
182	ALL	UCART1	502023.4	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.26E-03
226	ALL	UCART1	502089	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-03
160	ALL	UCART1	501990.6	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-03
657	ALL		502415.8	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-03
9	ALL	UCART1	501859.5	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-03
231	ALL	UCART1	502252.9	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-03
73	ALL	UCART1	501892.3	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-03
612	ALL		502472.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-03
249	ALL	UCART1	502154.5	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-03
138	ALL	UCART1	501957.9	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-03
250	ALL	UCART1	502187.3	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-03
248	ALL	UCART1	502121.8	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-03
116	ALL	UCART1	501925.1	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-03
203	ALL	UCART1	502023.4	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-03
251	ALL	UCART1	502220.1	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-03
225	ALL	UCART1	502056.2	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-03
700	ALL		502303.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-03
682	ALL		502359.4	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-03
30	ALL	UCART1	501859.5	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-03
181	ALL	UCART1	501990.6	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-03
247	ALL	UCART1	502089	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-03
94	ALL	UCART1	501892.3	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-03
632	ALL		502472.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E-03
252	ALL	UCART1	502252.9	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-03
270	ALL	UCART1	502154.5	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-03
159	ALL	UCART1	501957.9	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03
271	ALL	UCART1	502187.3	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03
51	ALL	UCART1	501859.5	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-03
269	ALL	UCART1	502121.8	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-03
224	ALL	UCART1	502023.4	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-03
272	ALL	UCART1	502220.1	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-03
246	ALL	UCART1	502056.2	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-03
664	ALL		502415.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-03
137	ALL	UCART1	501925.1	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-03
202	ALL	UCART1	501990.6	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-03
510	ALL		502528.4	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-03
494	ALL		502528.4	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-03
115	ALL	UCART1	501892.3	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.67E-03
526	ALL		502528.4	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-03
268	ALL	UCART1	502089	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-03
72	ALL	UCART1	501859.5	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-03
478	ALL		502528.4	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-03
541	ALL		502528.4	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-03
273	ALL	UCART1	502252.9	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-03
639	ALL		502472.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-03
180	ALL	UCART1	501957.9	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-03
291	ALL	UCART1	502154.5	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-03
292	ALL	UCART1	502187.3	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-03
8	ALL	UCART1	501826.7	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-03
556	ALL		502528.4	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-03
290	ALL	UCART1	502121.8	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-03
245	ALL	UCART1	502023.4	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03
473	ALL		502528.4	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.50E-03
293	ALL	UCART1	502220.1	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03
701	ALL		502359.4	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03
267	ALL	UCART1	502056.2	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03
223	ALL	UCART1	501990.6	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03
93	ALL	UCART1	501859.5	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-03
158	ALL	UCART1	501925.1	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-03
719	ALL		502303.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-03
575	ALL		502528.4	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-03
289	ALL	UCART1	502089	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-03
29	ALL	UCART1	501826.7	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-03
201	ALL	UCART1	501957.9	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-03
294	ALL	UCART1	502252.9	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03
136	ALL	UCART1	501892.3	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03
683	ALL		502415.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-03
312	ALL	UCART1	502154.5	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-03
313	ALL	UCART1	502187.3	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-03
594	ALL		502528.4	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-03
658	ALL		502472.1	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-03
50	ALL	UCART1	501826.7	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-03
311	ALL	UCART1	502121.8	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03
114	ALL	UCART1	501859.5	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03
266	ALL	UCART1	502023.4	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-03
288	ALL	UCART1	502056.2	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-03
314	ALL	UCART1	502220.1	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-03
244	ALL	UCART1	501990.6	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-03
179	ALL	UCART1	501925.1	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-03
310	ALL	UCART1	502089	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-03
222	ALL	UCART1	501957.9	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-03
613	ALL		502528.4	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-03
71	ALL	UCART1	501826.7	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-03
315	ALL	UCART1	502252.9	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-03
157	ALL	UCART1	501892.3	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.15E-03
135	ALL	UCART1	501859.5	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03
333	ALL	UCART1	502154.5	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03
334	ALL	UCART1	502187.3	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03
287	ALL	UCART1	502023.4	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-03
309	ALL	UCART1	502056.2	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-03
200	ALL	UCART1	501925.1	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-03
332	ALL	UCART1	502121.8	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-03
265	ALL	UCART1	501990.6	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-03
720	ALL		502359.4	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-03
335	ALL	UCART1	502220.1	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-03
7	ALL	UCART1	501794	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-03
92	ALL	UCART1	501826.7	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-03

665	ALL		502472.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-03
633	ALL		502528.4	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03
331	ALL	UCART1	502089	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03
243	ALL	UCART1	501957.9	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-03
738	ALL		502303.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-03
702	ALL		502415.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-03
336	ALL	UCART1	502252.9	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-03
178	ALL	UCART1	501892.3	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-03
28	ALL	UCART1	501794	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-03
308	ALL	UCART1	502023.4	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-03
113	ALL	UCART1	501826.7	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03
221	ALL	UCART1	501925.1	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03
355	ALL	UCART1	502187.3	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03
354	ALL	UCART1	502154.5	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03
330	ALL	UCART1	502056.2	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03
286	ALL	UCART1	501990.6	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-03
353	ALL	UCART1	502121.8	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-03
156	ALL	UCART1	501859.5	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-03
495	ALL		502584.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.92E-03
356	ALL	UCART1	502220.1	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-03
511	ALL		502584.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-03
49	ALL	UCART1	501794	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-03
479	ALL		502584.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.90E-03
640	ALL		502528.4	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03
264	ALL	UCART1	501957.9	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03
527	ALL		502584.8	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-03
352	ALL	UCART1	502089	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-03
199	ALL	UCART1	501892.3	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-03
474	ALL		502584.8	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03
357	ALL	UCART1	502252.9	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03
542	ALL		502584.8	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-03
134	ALL	UCART1	501826.7	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-03
70	ALL	UCART1	501794	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03
684	ALL		502472.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03
242	ALL	UCART1	501925.1	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03
329	ALL	UCART1	502023.4	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-03
376	ALL	UCART1	502187.3	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-03
307	ALL	UCART1	501990.6	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-03
375	ALL	UCART1	502154.5	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-03
177	ALL	UCART1	501859.5	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-03
557	ALL		502584.8	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-03
351	ALL	UCART1	502056.2	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-03
374	ALL	UCART1	502121.8	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-03
739	ALL		502359.4	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-03
377	ALL	UCART1	502220.1	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-03
450	ALL		501738.7	3634747	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-03
285	ALL	UCART1	501957.9	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-03
91	ALL	UCART1	501794	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-03
220	ALL	UCART1	501892.3	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03
373	ALL	UCART1	502089	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03
576	ALL		502584.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03
721	ALL		502415.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03
659	ALL		502528.4	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-03
155	ALL	UCART1	501826.7	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-03
378	ALL	UCART1	502252.9	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-03
6	ALL	UCART1	501761.2	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-03
757	ALL		502303.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-03
263	ALL	UCART1	501925.1	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-03
350	ALL	UCART1	502023.4	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-03
198	ALL	UCART1	501859.5	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-03
396	ALL	UCART1	502154.5	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-03
328	ALL	UCART1	501990.6	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-03
595	ALL		502584.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03
397	ALL	UCART1	502187.3	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03
112	ALL	UCART1	501794	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03
372	ALL	UCART1	502056.2	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-03
27	ALL	UCART1	501761.2	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03
395	ALL	UCART1	502121.8	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-03
444	ALL		501724	3634831	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03
398	ALL	UCART1	502220.1	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-03
306	ALL	UCART1	501957.9	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03
241	ALL	UCART1	501892.3	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03
176	ALL	UCART1	501826.7	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03
394	ALL	UCART1	502089	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-03
703	ALL		502472.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-03
48	ALL	UCART1	501761.2	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-03
399	ALL	UCART1	502252.9	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03
614	ALL		502584.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03
133	ALL	UCART1	501794	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-03
284	ALL	UCART1	501925.1	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-03
666	ALL		502528.4	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-03
219	ALL	UCART1	501859.5	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-03
371	ALL	UCART1	502023.4	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-03
349	ALL	UCART1	501990.6	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-03
417	ALL	UCART1	502154.5	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-03
449	ALL		501713.8	3634792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-03
393	ALL	UCART1	502056.2	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03
418	ALL	UCART1	502187.3	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03
69	ALL	UCART1	501761.2	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03
416	ALL	UCART1	502121.8	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-03
262	ALL	UCART1	501892.3	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03
327	ALL	UCART1	501957.9	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03
197	ALL	UCART1	501826.7	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03
419	ALL	UCART1	502220.1	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-03
758	ALL		502359.4	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-03
634	ALL		502584.8	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03
154	ALL	UCART1	501794	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03
740	ALL		502415.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03
415	ALL	UCART1	502089	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-03

420	ALL	UCART1	502252.9	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-03
305	ALL	UCART1	501925.1	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-03
90	ALL	UCART1	501761.2	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-03
240	ALL	UCART1	501859.5	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-03
392	ALL	UCART1	502023.4	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-03
370	ALL	UCART1	501990.6	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03
776	ALL		502303.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03
438	ALL	UCART1	502154.5	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-03
5	ALL	UCART1	501728.4	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03
414	ALL	UCART1	502056.2	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03
437	ALL	UCART1	502121.8	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03
175	ALL	UCART1	501794	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03
439	ALL	UCART1	502187.3	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03
283	ALL	UCART1	501892.3	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
480	ALL		502641.1	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
496	ALL		502641.1	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
685	ALL		502528.4	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
348	ALL	UCART1	501957.9	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
722	ALL		502472.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03
111	ALL	UCART1	501761.2	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03
218	ALL	UCART1	501826.7	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03
641	ALL		502584.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03
512	ALL		502641.1	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03
440	ALL	UCART1	502220.1	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03
475	ALL		502641.1	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03
436	ALL	UCART1	502089	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03
26	ALL	UCART1	501728.4	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03
528	ALL		502641.1	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03
326	ALL	UCART1	501925.1	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03
441	ALL	UCART1	502252.9	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-03
261	ALL	UCART1	501859.5	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03
196	ALL	UCART1	501794	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03
391	ALL	UCART1	501990.6	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03
132	ALL	UCART1	501761.2	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03
543	ALL		502641.1	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03
413	ALL	UCART1	502023.4	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03
47	ALL	UCART1	501728.4	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-03
304	ALL	UCART1	501892.3	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-03
435	ALL	UCART1	502056.2	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-03
369	ALL	UCART1	501957.9	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-03
558	ALL		502641.1	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03
660	ALL		502584.8	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03
239	ALL	UCART1	501826.7	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03
759	ALL		502415.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03
68	ALL	UCART1	501728.4	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03
153	ALL	UCART1	501761.2	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03
347	ALL	UCART1	501925.1	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03
777	ALL		502359.4	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-03
217	ALL	UCART1	501794	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-03
447	ALL		501682	3634783	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03
577	ALL		502641.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03
282	ALL	UCART1	501859.5	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03
704	ALL		502528.4	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-03
412	ALL	UCART1	501990.6	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-03
434	ALL	UCART1	502023.4	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-03
325	ALL	UCART1	501892.3	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-03
89	ALL	UCART1	501728.4	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E-03
741	ALL		502472.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-03
390	ALL	UCART1	501957.9	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03
174	ALL	UCART1	501761.2	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03
596	ALL		502641.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-03
260	ALL	UCART1	501826.7	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-03
368	ALL	UCART1	501925.1	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03
238	ALL	UCART1	501794	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03
667	ALL		502584.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03
110	ALL	UCART1	501728.4	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-03
303	ALL	UCART1	501859.5	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03
4	ALL	UCART1	501695.6	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03
615	ALL		502641.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-03
433	ALL	UCART1	501990.6	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-03
346	ALL	UCART1	501892.3	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-03
195	ALL	UCART1	501761.2	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-03
25	ALL	UCART1	501695.6	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-03
411	ALL	UCART1	501957.9	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03
131	ALL	UCART1	501728.4	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03
281	ALL	UCART1	501826.7	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-03
723	ALL		502528.4	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-03
259	ALL	UCART1	501794	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-03
389	ALL	UCART1	501925.1	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03
46	ALL	UCART1	501695.6	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03
324	ALL	UCART1	501859.5	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03
778	ALL		502415.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03
635	ALL		502641.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03
446	ALL		501659.4	3634841	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03
216	ALL	UCART1	501761.2	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03
152	ALL	UCART1	501728.4	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03
445	ALL		501656	3634810	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03
686	ALL		502584.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03
367	ALL	UCART1	501892.3	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03
760	ALL		502472.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03
67	ALL	UCART1	501695.6	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-03
432	ALL	UCART1	501957.9	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-03
302	ALL	UCART1	501826.7	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-03
481	ALL		502697.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
476	ALL		502697.5	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
497	ALL		502697.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
642	ALL		502641.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
345	ALL	UCART1	501859.5	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03
173	ALL	UCART1	501728.4	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03

280	ALL	UCART1	501794	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03
410	ALL	UCART1	501925.1	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03
88	ALL	UCART1	501695.6	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03
237	ALL	UCART1	501761.2	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03
513	ALL		502697.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-03
388	ALL	UCART1	501892.3	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03
529	ALL		502697.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-03
323	ALL	UCART1	501826.7	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03
109	ALL	UCART1	501695.6	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03
742	ALL		502528.4	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-03
194	ALL	UCART1	501728.4	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03
3	ALL	UCART1	501662.8	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03
544	ALL		502697.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03
705	ALL		502584.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03
366	ALL	UCART1	501859.5	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03
258	ALL	UCART1	501761.2	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03
661	ALL		502641.1	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03
431	ALL	UCART1	501925.1	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-03
301	ALL	UCART1	501794	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-03
130	ALL	UCART1	501695.6	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03
24	ALL	UCART1	501662.8	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03
559	ALL		502697.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03
409	ALL	UCART1	501892.3	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03
779	ALL		502472.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03
344	ALL	UCART1	501826.7	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-03
45	ALL	UCART1	501662.8	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03
578	ALL		502697.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03
151	ALL	UCART1	501695.6	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03
215	ALL	UCART1	501728.4	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03
387	ALL	UCART1	501859.5	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03
279	ALL	UCART1	501761.2	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03
172	ALL	UCART1	501695.6	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03
668	ALL		502641.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03
66	ALL	UCART1	501662.8	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03
322	ALL	UCART1	501794	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03
597	ALL		502697.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-03
430	ALL	UCART1	501892.3	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03
365	ALL	UCART1	501826.7	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03
724	ALL		502584.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-03
761	ALL		502528.4	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-03
87	ALL	UCART1	501662.8	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-03
236	ALL	UCART1	501728.4	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-03
193	ALL	UCART1	501695.6	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03
616	ALL		502697.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03
408	ALL	UCART1	501859.5	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03
300	ALL	UCART1	501761.2	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03
448	ALL		501615.2	3634804	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03
108	ALL	UCART1	501662.8	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03
343	ALL	UCART1	501794	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03
687	ALL		502641.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-03
386	ALL	UCART1	501826.7	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-03
2	ALL	UCART1	501630.1	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03
150	ALL	UCART1	501662.8	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03
257	ALL	UCART1	501728.4	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-03
129	ALL	UCART1	501662.8	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03
214	ALL	UCART1	501695.6	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-03
429	ALL	UCART1	501859.5	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03
23	ALL	UCART1	501630.1	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03
171	ALL	UCART1	501662.8	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
321	ALL	UCART1	501761.2	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
128	ALL	UCART1	501630.1	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
107	ALL	UCART1	501630.1	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
477	ALL		502753.8	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
743	ALL		502584.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
364	ALL	UCART1	501794	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03
482	ALL		502753.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03
780	ALL		502528.4	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03
44	ALL	UCART1	501630.1	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
498	ALL		502753.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
407	ALL	UCART1	501826.7	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
278	ALL	UCART1	501728.4	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
235	ALL	UCART1	501695.6	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-03
514	ALL		502753.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-03
86	ALL	UCART1	501630.1	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
706	ALL		502641.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
65	ALL	UCART1	501630.1	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
192	ALL	UCART1	501662.8	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
149	ALL	UCART1	501630.1	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-03
85	ALL	UCART1	501597.3	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-03
342	ALL	UCART1	501761.2	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
106	ALL	UCART1	501597.3	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
385	ALL	UCART1	501794	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
299	ALL	UCART1	501728.4	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03
428	ALL	UCART1	501826.7	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03
1	ALL	UCART1	501597.3	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03
256	ALL	UCART1	501695.6	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03
64	ALL	UCART1	501597.3	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03
213	ALL	UCART1	501662.8	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03
22	ALL	UCART1	501597.3	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-03
762	ALL		502584.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03
43	ALL	UCART1	501597.3	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03
170	ALL	UCART1	501630.1	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03
127	ALL	UCART1	501597.3	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03
725	ALL		502641.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03
363	ALL	UCART1	501761.2	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03
406	ALL	UCART1	501794	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03
320	ALL	UCART1	501728.4	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-03
277	ALL	UCART1	501695.6	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03
234	ALL	UCART1	501662.8	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03

148	ALL	UCART1	501597.3	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03
191	ALL	UCART1	501630.1	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03
384	ALL	UCART1	501761.2	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
617	ALL		502753.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
341	ALL	UCART1	501728.4	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
427	ALL	UCART1	501794	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
298	ALL	UCART1	501695.6	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
255	ALL	UCART1	501662.8	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
781	ALL		502584.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
744	ALL		502641.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
169	ALL	UCART1	501597.3	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
405	ALL	UCART1	501761.2	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
362	ALL	UCART1	501728.4	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
212	ALL	UCART1	501630.1	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03
483	ALL		502810.1	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03
319	ALL	UCART1	501695.6	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03
896	ALL		501511.3	3634952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03
643	ALL		502753.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03
499	ALL		502810.1	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03
276	ALL	UCART1	501662.8	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03
897	ALL		501516.7	3634990	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03
515	ALL		502810.1	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03
763	ALL		502641.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03
426	ALL	UCART1	501761.2	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03
530	ALL		502810.1	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03
383	ALL	UCART1	501728.4	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03
340	ALL	UCART1	501695.6	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03
545	ALL		502810.1	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03
190	ALL	UCART1	501597.3	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03
560	ALL		502810.1	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03
297	ALL	UCART1	501662.8	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03
233	ALL	UCART1	501630.1	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03
669	ALL		502753.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
361	ALL	UCART1	501695.6	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
404	ALL	UCART1	501728.4	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
579	ALL		502810.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
895	ALL		501511.3	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
894	ALL		501522.1	3634835	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
782	ALL		502641.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-03
598	ALL		502810.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-03
688	ALL		502753.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03
318	ALL	UCART1	501662.8	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-03
618	ALL		502810.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
382	ALL	UCART1	501695.6	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
425	ALL	UCART1	501728.4	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
893	ALL		501509.9	3634739	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03
211	ALL	UCART1	501597.3	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03
254	ALL	UCART1	501630.1	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03
892	ALL		501511.3	3634709	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03
707	ALL		502753.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03
484	ALL		502866.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-03
339	ALL	UCART1	501662.8	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
644	ALL		502810.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
500	ALL		502866.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
403	ALL	UCART1	501695.6	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03
891	ALL		501520.8	3634630	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03
516	ALL		502866.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-03
531	ALL		502866.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03
726	ALL		502753.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03
275	ALL	UCART1	501630.1	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03
546	ALL		502866.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
360	ALL	UCART1	501662.8	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
561	ALL		502866.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
670	ALL		502810.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
424	ALL	UCART1	501695.6	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
232	ALL	UCART1	501597.3	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
580	ALL		502866.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
745	ALL		502753.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03
381	ALL	UCART1	501662.8	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03
599	ALL		502866.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03
689	ALL		502810.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
296	ALL	UCART1	501630.1	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
619	ALL		502866.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03
402	ALL	UCART1	501662.8	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03
764	ALL		502753.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03
708	ALL		502810.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03
442	ALL		501602.7	3635114	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
253	ALL	UCART1	501597.3	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
485	ALL		502922.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
645	ALL		502866.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
501	ALL		502922.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
317	ALL	UCART1	501630.1	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
517	ALL		502922.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
727	ALL		502810.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
274	ALL	UCART1	501597.3	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03
783	ALL		502753.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03
532	ALL		502922.8	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03
423	ALL	UCART1	501662.8	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03
547	ALL		502922.8	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03
671	ALL		502866.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03
338	ALL	UCART1	501630.1	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03
562	ALL		502922.8	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03
890	ALL		502149.6	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03
295	ALL	UCART1	501597.3	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
746	ALL		502810.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
889	ALL		502095.1	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
581	ALL		502922.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
690	ALL		502866.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
888	ALL		502040.6	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03

600	ALL		502922.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
359	ALL	UCART1	501630.1	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03
620	ALL		502922.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-04
765	ALL		502810.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.94E-04
316	ALL	UCART1	501597.3	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-04
887	ALL		501986.2	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04
709	ALL		502866.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.85E-04
380	ALL	UCART1	501630.1	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.80E-04
486	ALL		502979.2	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-04
882	ALL		502149.6	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-04
646	ALL		502922.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-04
502	ALL		502979.2	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04
881	ALL		502095.1	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-04
401	ALL	UCART1	501630.1	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-04
784	ALL		502810.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-04
337	ALL	UCART1	501597.3	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.57E-04
728	ALL		502866.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-04
886	ALL		501931.7	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.55E-04
518	ALL		502979.2	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-04
880	ALL		502040.6	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-04
533	ALL		502979.2	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.41E-04
422	ALL	UCART1	501630.1	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.36E-04
548	ALL		502979.2	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04
905	ALL		502909	3634272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.27E-04
358	ALL	UCART1	501597.3	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04
747	ALL		502866.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04
672	ALL		502922.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-04
563	ALL		502979.2	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-04
879	ALL		501986.2	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-04
885	ALL		501877.2	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.16E-04
582	ALL		502979.2	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.10E-04
691	ALL		502922.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.05E-04
379	ALL	UCART1	501597.3	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04
911	ALL		502963.8	3634313	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04
906	ALL		502903.6	3634246	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-04
601	ALL		502979.2	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.99E-04
878	ALL		501931.7	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-04
766	ALL		502866.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.95E-04
874	ALL		502095.1	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-04
621	ALL		502979.2	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-04
710	ALL		502922.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-04
913	ALL		502947.5	3634270	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-04
873	ALL		502040.6	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04
400	ALL	UCART1	501597.3	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.79E-04
884	ALL		501822.7	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-04
785	ALL		502866.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-04
487	ALL		503035.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.65E-04
877	ALL		501877.2	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-04
647	ALL		502979.2	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.61E-04
729	ALL		502922.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-04
872	ALL		501986.2	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-04
503	ALL		503035.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-04
421	ALL	UCART1	501597.3	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-04
914	ALL		502965.6	3634266	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.55E-04
519	ALL		503035.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.49E-04
534	ALL		503035.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-04
898	ALL		503043.6	3634376	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-04
915	ALL		503000.6	3634292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-04
912	ALL		503013.9	3634311	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-04
916	ALL		503023.5	3634327	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-04
871	ALL		501931.7	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.38E-04
748	ALL		502922.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.36E-04
867	ALL		502095.1	3633986	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-04
549	ALL		503035.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.33E-04
883	ALL		501768.2	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.32E-04
673	ALL		502979.2	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-04
907	ALL		502905	3634191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04
876	ALL		501822.7	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04
917	ALL		503037.4	3634331	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04
564	ALL		503035.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.24E-04
899	ALL		503061.3	3634388	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.23E-04
866	ALL		502040.6	3633986	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-04
583	ALL		503035.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.15E-04
692	ALL		502979.2	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04
918	ALL		503053.7	3634346	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E-04
767	ALL		502922.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.12E-04
870	ALL		501877.2	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.09E-04
602	ALL		503035.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04
622	ALL		503035.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-04
711	ALL		502979.2	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-04
919	ALL		503072.4	3634345	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.90E-04
900	ALL		503087.2	3634382	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.88E-04
786	ALL		502922.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-04
875	ALL		501768.2	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-04
908	ALL		502903.6	3634158	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-04
862	ALL		502095.1	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-04
488	ALL		503091.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.78E-04
869	ALL		501822.7	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04
730	ALL		502979.2	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.77E-04
648	ALL		503035.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-04
861	ALL		502040.6	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04
504	ALL		503091.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04
901	ALL		503103.5	3634385	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-04
520	ALL		503091.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-04
749	ALL		502979.2	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-04
535	ALL		503091.8	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-04
550	ALL		503091.8	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-04
674	ALL		503035.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.49E-04
909	ALL		502905	3634127	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-04

863	ALL	502422.1	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-04
868	ALL	501768.2	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-04
451	ALL	502804.3	3635417	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.43E-04
565	ALL	503091.8	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-04
768	ALL	502979.2	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-04
902	ALL	503130.7	3634384	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-04
584	ALL	503091.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-04
693	ALL	503035.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.35E-04
857	ALL	502095.1	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-04
603	ALL	503091.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-04
856	ALL	502040.6	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04
712	ALL	503035.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.21E-04
910	ALL	502906.3	3634104	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-04
623	ALL	503091.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-04
787	ALL	502979.2	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-04
731	ALL	503035.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.06E-04
903	ALL	503159.2	3634384	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-04
858	ALL	502422.1	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.04E-04
489	ALL	503148.2	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-04
649	ALL	503091.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-04
456	ALL	502812.5	3635466	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-04
452	ALL	502842.8	3635418	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-04
505	ALL	503148.2	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-04
852	ALL	502095.1	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-04
521	ALL	503148.2	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.91E-04
750	ALL	503035.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-04
864	ALL	502585.5	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-04
536	ALL	503148.2	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.85E-04
851	ALL	502040.6	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-04
904	ALL	503182.3	3634381	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-04
675	ALL	503091.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E-04
551	ALL	503148.2	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04
458	ALL	502804.3	3635510	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-04
769	ALL	503035.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04
566	ALL	503148.2	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.73E-04
694	ALL	503091.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-04
585	ALL	503148.2	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.67E-04
853	ALL	502422.1	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-04
457	ALL	502802.7	3635531	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04
865	ALL	502640	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04
604	ALL	503148.2	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-04
453	ALL	502881.3	3635419	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04
788	ALL	503035.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-04
713	ALL	503091.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-04
624	ALL	503148.2	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-04
847	ALL	502095.1	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-04
859	ALL	502585.5	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.49E-04
459	ALL	502803.5	3635554	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-04
846	ALL	502040.6	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.46E-04
732	ALL	503091.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04
490	ALL	503204.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-04
650	ALL	503148.2	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.38E-04
506	ALL	503204.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-04
751	ALL	503091.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-04
860	ALL	502640	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-04
848	ALL	502422.1	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-04
522	ALL	503204.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-04
454	ALL	502916.5	3635415	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-04
537	ALL	503204.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-04
676	ALL	503148.2	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-04
552	ALL	503204.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-04
770	ALL	503091.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-04
841	ALL	502095.1	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-04
854	ALL	502585.5	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-04
567	ALL	503204.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-04
840	ALL	502040.6	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-04
695	ALL	503148.2	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.11E-04
586	ALL	503204.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-04
842	ALL	502367.6	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04
789	ALL	503091.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.04E-04
605	ALL	503204.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-04
714	ALL	503148.2	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04
460	ALL	502881.3	3635525	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04
455	ALL	502946.8	3635416	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-04
855	ALL	502640	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-04
843	ALL	502422.1	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-04
625	ALL	503204.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-04
733	ALL	503148.2	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04
849	ALL	502585.5	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04
491	ALL	503260.9	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-04
651	ALL	503204.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.84E-04
507	ALL	503260.9	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-04
752	ALL	503148.2	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-04
523	ALL	503260.9	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.76E-04
836	ALL	502367.6	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-04
538	ALL	503260.9	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-04
850	ALL	502640	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04
677	ALL	503204.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04
771	ALL	503148.2	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-04
553	ALL	503260.9	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-04
837	ALL	502422.1	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-04
461	ALL	502923.9	3635526	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-04
568	ALL	503260.9	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-04
696	ALL	503204.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-04
587	ALL	503260.9	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-04
844	ALL	502585.5	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-04
790	ALL	503148.2	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04
464	ALL	503003.3	3635421	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04
606	ALL	503260.9	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04

715	ALL	503204.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04
626	ALL	503260.9	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-04
734	ALL	503204.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-04
845	ALL	502640	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-04
833	ALL	502422.1	3633762	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-04
492	ALL	503317.2	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-04
463	ALL	502996.7	3635470	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04
652	ALL	503260.9	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.35E-04
753	ALL	503204.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-04
508	ALL	503317.2	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-04
462	ALL	502966.4	3635530	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-04
838	ALL	502585.5	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04
524	ALL	503317.2	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.29E-04
539	ALL	503317.2	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04
772	ALL	503204.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.24E-04
678	ALL	503260.9	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.24E-04
554	ALL	503317.2	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-04
569	ALL	503317.2	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-04
839	ALL	502640	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-04
697	ALL	503260.9	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-04
791	ALL	503204.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.15E-04
588	ALL	503317.2	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04
830	ALL	502422.1	3633730	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-04
716	ALL	503260.9	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.09E-04
607	ALL	503317.2	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-04
834	ALL	502585.5	3633762	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04
627	ALL	503317.2	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-04
735	ALL	503260.9	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04
493	ALL	503373.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-04
653	ALL	503317.2	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04
754	ALL	503260.9	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04
835	ALL	502640	3633762	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.94E-04
509	ALL	503373.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04
827	ALL	502422.1	3633698	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04
525	ALL	503373.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.88E-04
773	ALL	503260.9	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-04
540	ALL	503373.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-04
831	ALL	502585.5	3633730	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-04
679	ALL	503317.2	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-04
555	ALL	503373.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-04
570	ALL	503373.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-04
698	ALL	503317.2	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-04
792	ALL	503260.9	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-04
589	ALL	503373.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-04
832	ALL	502640	3633730	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04
821	ALL	502367.6	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04
717	ALL	503317.2	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04
608	ALL	503373.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-04
822	ALL	502422.1	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-04
628	ALL	503373.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-04
736	ALL	503317.2	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-04
828	ALL	502585.5	3633698	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-04
823	ALL	502476.6	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-04
755	ALL	503317.2	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04
654	ALL	503373.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04
829	ALL	502640	3633698	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04
824	ALL	502531.1	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04
774	ALL	503317.2	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04
815	ALL	502367.6	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04
680	ALL	503373.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-04
816	ALL	502422.1	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04
793	ALL	503317.2	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-04
699	ALL	503373.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04
825	ALL	502585.5	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04
817	ALL	502476.6	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-04
718	ALL	503373.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-04
826	ALL	502640	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04
818	ALL	502531.1	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-04
737	ALL	503373.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-04
809	ALL	502367.6	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-04
810	ALL	502422.1	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-04
756	ALL	503373.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-04
819	ALL	502585.5	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04
471	ALL	503457.6	3634855	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-04
811	ALL	502476.6	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-04
775	ALL	503373.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-04
472	ALL	503469.2	3634855	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-04
820	ALL	502640	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-04
812	ALL	502531.1	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
794	ALL	503373.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
470	ALL	503469.2	3634893	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-04
813	ALL	502585.5	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E-04
814	ALL	502640	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04
465	ALL	503514.5	3634925	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-04
802	ALL	502531.1	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-04
803	ALL	502585.5	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.76E-04
468	ALL	503547.2	3634944	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-04
804	ALL	502640	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04
469	ALL	503568.4	3634878	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-04
805	ALL	502694.5	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-04
467	ALL	503561.7	3634987	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-04
466	ALL	503585.7	3634933	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04
806	ALL	502749	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04
795	ALL	502531.1	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-04
796	ALL	502585.5	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-04
807	ALL	502803.5	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04
797	ALL	502640	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-04
808	ALL	502858	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04
798	ALL	502694.5	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-04

799	ALL	502749	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04
800	ALL	502803.5	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04
801	ALL	502858	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-04

HARP2 - HRACalc (dated 22118) 2/5/2024 4:35:42 PM - Output Log - Mitigated

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.13

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.13
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Warm

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_CancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_NCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_NCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_NCAcuteRiskSumByRec.csv
HRA ran successfully

*HARP - HRACalc v22118 2/5/2024 4:35:42 PM - Cancer Risk - Input File: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_HRAInput.hra

REC	GRP	NETID	X	Y	RISK_SUM	SCENARIO	INH_RISK	SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RI	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_F	EGG_RISK
954	ALL		502134.1	3634861	8.20E-06	1.13YrCanc	8.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
953	ALL		502156	3634862	7.99E-06	1.13YrCanc	7.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
955	ALL		502118.2	3634862	7.96E-06	1.13YrCanc	7.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
952	ALL		502173.7	3634861	7.90E-06	1.13YrCanc	7.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
443	ALL		502091.2	3634721	7.57E-06	1.13YrCanc	7.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
951	ALL		502186.3	3634861	7.51E-06	1.13YrCanc	7.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
956	ALL		502085.2	3634862	7.21E-06	1.13YrCanc	7.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
950	ALL		502204.1	3634862	6.75E-06	1.13YrCanc	6.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
957	ALL		502070.7	3634863	6.65E-06	1.13YrCanc	6.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
920	ALL		502211.8	3634864	6.19E-06	1.13YrCanc	6.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
958	ALL		502055.2	3634862	6.17E-06	1.13YrCanc	6.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
959	ALL		502043.7	3634862	5.63E-06	1.13YrCanc	5.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
960	ALL		502031.5	3634862	5.08E-06	1.13YrCanc	5.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929	ALL		502140.8	3634893	4.86E-06	1.13YrCanc	4.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928	ALL		502115.2	3634894	4.72E-06	1.13YrCanc	4.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941	ALL		502187.1	3634892	4.63E-06	1.13YrCanc	4.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
942	ALL		502211.5	3634885	4.60E-06	1.13YrCanc	4.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
961	ALL		502021.1	3634862	4.57E-06	1.13YrCanc	4.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930	ALL		502141.5	3634901	4.34E-06	1.13YrCanc	4.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
927	ALL		502115.2	3634902	4.22E-06	1.13YrCanc	4.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
966	ALL		502079.3	3634895	4.21E-06	1.13YrCanc	4.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
940	ALL		502187.8	3634899	4.20E-06	1.13YrCanc	4.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
943	ALL		502212.3	3634893	4.09E-06	1.13YrCanc	4.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
962	ALL		502009.6	3634862	4.04E-06	1.13YrCanc	4.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
967	ALL		502065.9	3634895	3.98E-06	1.13YrCanc	3.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
926	ALL		502114.5	3634907	3.94E-06	1.13YrCanc	3.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
939	ALL		502188.2	3634904	3.91E-06	1.13YrCanc	3.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
931	ALL		502141.1	3634911	3.83E-06	1.13YrCanc	3.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
968	ALL		502053.3	3634898	3.62E-06	1.13YrCanc	3.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
944	ALL		502212.7	3634904	3.60E-06	1.13YrCanc	3.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
938	ALL		502187.1	3634911	3.59E-06	1.13YrCanc	3.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
925	ALL		502115.2	3634915	3.58E-06	1.13YrCanc	3.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
969	ALL		502041.8	3634895	3.51E-06	1.13YrCanc	3.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
963	ALL		501997	3634862	3.50E-06	1.13YrCanc	3.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924	ALL		502115.2	3634921	3.33E-06	1.13YrCanc	3.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
932	ALL		502141.1	3634923	3.31E-06	1.13YrCanc	3.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
571	ALL		502303.1	3634829	3.31E-06	1.13YrCanc	3.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
937	ALL		502187.8	3634918	3.30E-06	1.13YrCanc	3.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
970	ALL		502031.8	3634898	3.22E-06	1.13YrCanc	3.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
945	ALL		502215.2	3634913	3.22E-06	1.13YrCanc	3.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
983	ALL		502077.4	3634919	3.13E-06	1.13YrCanc	3.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
923	ALL		502114.8	3634929	3.03E-06	1.13YrCanc	3.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936	ALL		502186.7	3634927	3.00E-06	1.13YrCanc	3.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
982	ALL		502064.1	3634919	2.97E-06	1.13YrCanc	2.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
971	ALL		502018.9	3634898	2.95E-06	1.13YrCanc	2.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
933	ALL		502141.1	3634933	2.95E-06	1.13YrCanc	2.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
946	ALL		502215.6	3634921	2.95E-06	1.13YrCanc	2.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
922	ALL		502116.7	3634933	2.91E-06	1.13YrCanc	2.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
964	ALL		501981.4	3634866	2.86E-06	1.13YrCanc	2.86E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
590	ALL		502303.1	3634859	2.85E-06	1.13YrCanc	2.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
981	ALL		502051.5	3634918	2.85E-06	1.13YrCanc	2.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
947	ALL		502214.9	3634926	2.81E-06	1.13YrCanc	2.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
972	ALL		502007.7	3634895	2.81E-06	1.13YrCanc	2.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
980	ALL		502042.9	3634918	2.75E-06	1.13YrCanc	2.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934	ALL		502141.1	3634942	2.68E-06	1.13YrCanc	2.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
921	ALL		502115.9	3634942	2.65E-06	1.13YrCanc	2.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935	ALL		502187.5	3634941	2.61E-06	1.13YrCanc	2.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
948	ALL		502214.1	3634934	2.60E-06	1.13YrCanc	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
965	ALL		501973.7	3634869	2.60E-06	1.13YrCanc	2.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	ALL	UCART1	502154.5	3634948	2.50E-06	1.13YrCanc	2.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
979	ALL		502028.1	3634920	2.50E-06	1.13YrCanc	2.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	ALL	UCART1	502121.8	3634948	2.49E-06	1.13YrCanc	2.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
973	ALL		501994.8	3634898	2.49E-06	1.13YrCanc	2.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
949	ALL		502214.1	3634942	2.42E-06	1.13YrCanc	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	ALL	UCART1	502187.3	3634948	2.42E-06	1.13YrCanc	2.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
609	ALL		502303.1	3634889	2.38E-06	1.13YrCanc	2.38E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ALL	UCART1	502089	3634948	2.37E-06	1.13YrCanc	2.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
978	ALL		502014	3634919	2.34E-06	1.13YrCanc	2.34E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	ALL	UCART1	502220.1	3634948	2.24E-06	1.13YrCanc	2.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
974	ALL		501983.7	3634902	2.21E-06	1.13YrCanc	2.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	ALL	UCART1	502154.5	3634962	2.20E-06	1.13YrCanc	2.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
977	ALL		502003.7	3634919	2.20E-06	1.13YrCanc	2.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	ALL	UCART1	502121.8	3634962	2.19E-06	1.13YrCanc	2.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
989	ALL		501959.2	3634875	2.19E-06	1.13YrCanc	2.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	ALL	UCART1	502056.2	3634948	2.17E-06	1.13YrCanc	2.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40	ALL	UCART1	502187.3	3634962	2.14E-06	1.13YrCanc	2.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	ALL	UCART1	502089	3634962	2.10E-06	1.13YrCanc	2.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	ALL	UCART1	502252.9	3634948	2.03E-06	1.13YrCanc	2.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	ALL	UCART1	502220.1	3634962	2.00E-06	1.13YrCanc	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
975	ALL		501974	3634908	1.99E-06	1.13YrCanc	1.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
572	ALL		502359.4	3634829	1.98E-06	1.13YrCanc	1.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
629	ALL		502303.1	3634919	1.97E-06	1.13YrCanc	1.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
988	ALL		501949.2	3634880	1.96E-06	1.13YrCanc	1.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60	ALL	UCART1	502154.5	3634975	1.95E-06	1.13YrCanc	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
59	ALL	UCART1	502121.8	3634975	1.95E-06	1.13YrCanc	1.95E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	ALL	UCART1	502056.2	3634962	1.93E-06	1.13YrCanc	1.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	ALL	UCART1	502023.4	3634948	1.92E-06	1.13YrCanc	1.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
61	ALL	UCART1	502187.3	3634975	1.90E-06	1.13YrCanc	1.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
976	ALL		501981.4	3634921	1.90E-06	1.13YrCanc	1.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
58	ALL	UCART1	502089	3634975	1.87E-06	1.13YrCanc	1.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	ALL	UCART1	502252.9	3634962	1.83E-06	1.13YrCanc	1.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
591	ALL		502359.4	3634859	1.81E-06	1.13YrCanc	1.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

62	ALL	UCART1	502220.1	3634975	1.80E-06	1.13YrCanc	1.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
991	ALL		501961.4	3634912	1.79E-06	1.13YrCanc	1.79E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
81	ALL	UCART1	502154.5	3634988	1.75E-06	1.13YrCanc	1.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
80	ALL	UCART1	502121.8	3634988	1.74E-06	1.13YrCanc	1.74E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
987	ALL		501938.5	3634888	1.73E-06	1.13YrCanc	1.73E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57	ALL	UCART1	502056.2	3634975	1.73E-06	1.13YrCanc	1.73E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	ALL	UCART1	502023.4	3634962	1.72E-06	1.13YrCanc	1.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
82	ALL	UCART1	502187.3	3634988	1.71E-06	1.13YrCanc	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79	ALL	UCART1	502089	3634988	1.68E-06	1.13YrCanc	1.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
63	ALL	UCART1	502252.9	3634975	1.66E-06	1.13YrCanc	1.66E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	ALL	UCART1	501990.6	3634948	1.64E-06	1.13YrCanc	1.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
636	ALL		502303.1	3634950	1.63E-06	1.13YrCanc	1.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
83	ALL	UCART1	502220.1	3634988	1.62E-06	1.13YrCanc	1.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
610	ALL		502359.4	3634889	1.62E-06	1.13YrCanc	1.62E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
990	ALL		501951.4	3634922	1.58E-06	1.13YrCanc	1.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
986	ALL		501929.6	3634894	1.58E-06	1.13YrCanc	1.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
102	ALL	UCART1	502154.5	3635001	1.58E-06	1.13YrCanc	1.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
101	ALL	UCART1	502121.8	3635001	1.57E-06	1.13YrCanc	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78	ALL	UCART1	502056.2	3634988	1.56E-06	1.13YrCanc	1.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56	ALL	UCART1	502023.4	3634975	1.55E-06	1.13YrCanc	1.55E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
103	ALL	UCART1	502187.3	3635001	1.54E-06	1.13YrCanc	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
84	ALL	UCART1	502252.9	3634988	1.52E-06	1.13YrCanc	1.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
100	ALL	UCART1	502089	3635001	1.51E-06	1.13YrCanc	1.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	ALL	UCART1	501990.6	3634962	1.50E-06	1.13YrCanc	1.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
104	ALL	UCART1	502220.1	3635001	1.47E-06	1.13YrCanc	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
984	ALL		501921.8	3634898	1.47E-06	1.13YrCanc	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
630	ALL		502359.4	3634919	1.43E-06	1.13YrCanc	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
123	ALL	UCART1	502154.5	3635015	1.43E-06	1.13YrCanc	1.43E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
122	ALL	UCART1	502121.8	3635015	1.42E-06	1.13YrCanc	1.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
99	ALL	UCART1	502056.2	3635001	1.41E-06	1.13YrCanc	1.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
77	ALL	UCART1	502023.4	3634988	1.41E-06	1.13YrCanc	1.41E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	ALL	UCART1	501957.9	3634948	1.40E-06	1.13YrCanc	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
124	ALL	UCART1	502187.3	3635015	1.40E-06	1.13YrCanc	1.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
105	ALL	UCART1	502252.9	3635001	1.39E-06	1.13YrCanc	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
121	ALL	UCART1	502089	3635015	1.37E-06	1.13YrCanc	1.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55	ALL	UCART1	501990.6	3634975	1.36E-06	1.13YrCanc	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
655	ALL		502303.1	3634980	1.36E-06	1.13YrCanc	1.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
125	ALL	UCART1	502220.1	3635015	1.35E-06	1.13YrCanc	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
573	ALL		502415.8	3634829	1.32E-06	1.13YrCanc	1.32E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
985	ALL		501909.6	3634908	1.31E-06	1.13YrCanc	1.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
144	ALL	UCART1	502154.5	3635028	1.30E-06	1.13YrCanc	1.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	ALL	UCART1	501957.9	3634962	1.30E-06	1.13YrCanc	1.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
120	ALL	UCART1	502056.2	3635015	1.28E-06	1.13YrCanc	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
143	ALL	UCART1	502121.8	3635028	1.28E-06	1.13YrCanc	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
98	ALL	UCART1	502023.4	3635001	1.28E-06	1.13YrCanc	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
145	ALL	UCART1	502187.3	3635028	1.28E-06	1.13YrCanc	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
126	ALL	UCART1	502252.9	3635015	1.27E-06	1.13YrCanc	1.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
637	ALL		502359.4	3634950	1.25E-06	1.13YrCanc	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
592	ALL		502415.8	3634859	1.25E-06	1.13YrCanc	1.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76	ALL	UCART1	501990.6	3634988	1.24E-06	1.13YrCanc	1.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
146	ALL	UCART1	502220.1	3635028	1.23E-06	1.13YrCanc	1.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
142	ALL	UCART1	502089	3635028	1.23E-06	1.13YrCanc	1.23E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	ALL	UCART1	501925.1	3634948	1.20E-06	1.13YrCanc	1.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
54	ALL	UCART1	501957.9	3634975	1.19E-06	1.13YrCanc	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
165	ALL	UCART1	502154.5	3635041	1.19E-06	1.13YrCanc	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
166	ALL	UCART1	502187.3	3635041	1.17E-06	1.13YrCanc	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
147	ALL	UCART1	502252.9	3635028	1.17E-06	1.13YrCanc	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
119	ALL	UCART1	502023.4	3635015	1.17E-06	1.13YrCanc	1.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
164	ALL	UCART1	502121.8	3635041	1.16E-06	1.13YrCanc	1.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
611	ALL		502415.8	3634889	1.16E-06	1.13YrCanc	1.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
141	ALL	UCART1	502056.2	3635028	1.15E-06	1.13YrCanc	1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
662	ALL		502303.1	3635010	1.14E-06	1.13YrCanc	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
97	ALL	UCART1	501990.6	3635001	1.14E-06	1.13YrCanc	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
167	ALL	UCART1	502220.1	3635041	1.14E-06	1.13YrCanc	1.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	ALL	UCART1	501925.1	3634962	1.12E-06	1.13YrCanc	1.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
163	ALL	UCART1	502089	3635041	1.11E-06	1.13YrCanc	1.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
656	ALL		502359.4	3634980	1.09E-06	1.13YrCanc	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
186	ALL	UCART1	502154.5	3635054	1.09E-06	1.13YrCanc	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75	ALL	UCART1	501957.9	3634988	1.09E-06	1.13YrCanc	1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
168	ALL	UCART1	502252.9	3635041	1.08E-06	1.13YrCanc	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
187	ALL	UCART1	502187.3	3635054	1.08E-06	1.13YrCanc	1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
185	ALL	UCART1	502121.8	3635054	1.07E-06	1.13YrCanc	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
631	ALL		502415.8	3634919	1.06E-06	1.13YrCanc	1.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
140	ALL	UCART1	502023.4	3635028	1.05E-06	1.13YrCanc	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53	ALL	UCART1	501925.1	3634975	1.05E-06	1.13YrCanc	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
188	ALL	UCART1	502220.1	3635054	1.05E-06	1.13YrCanc	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
118	ALL	UCART1	501990.6	3635015	1.05E-06	1.13YrCanc	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
162	ALL	UCART1	502056.2	3635041	1.05E-06	1.13YrCanc	1.05E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
184	ALL	UCART1	502089	3635054	1.03E-06	1.13YrCanc	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	ALL	UCART1	501892.3	3634948	1.02E-06	1.13YrCanc	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
96	ALL	UCART1	501957.9	3635001	1.01E-06	1.13YrCanc	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
207	ALL	UCART1	502154.5	3635068	1.01E-06	1.13YrCanc	1.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189	ALL	UCART1	502252.9	3635054	1.00E-06	1.13YrCanc	1.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
208	ALL	UCART1	502187.3	3635068	1.00E-06	1.13YrCanc	1.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
206	ALL	UCART1	502121.8	3635068	9.96E-07	1.13YrCanc	9.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74	ALL	UCART1	501925.1	3634988	9.82E-07	1.13YrCanc	9.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
681	ALL		502303.1	3635040	9.74E-07	1.13YrCanc	9.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
209	ALL	UCART1	502220.1	3635068	9.74E-07	1.13YrCanc	9.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183	ALL	UCART1	502056.2	3635054	9.70E-07	1.13YrCanc	9.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	ALL	UCART1	501892.3	3634962	9.69E-07	1.13YrCanc	9.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
638	ALL		502415.8	3634950	9.67E-07	1.13YrCanc	9.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
161	ALL	UCART1	502023.4	3635041	9.67E-07	1.13YrCanc	9.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
663	ALL		502359.4	3635010	9.57E-07	1.13YrCanc	9.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139	ALL	UCART1	501990.6	3635028	9.56E-07	1.13YrCanc	9.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
205	ALL	UCART1	502089	3635068	9.53E-07	1.13YrCanc	9.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
574	ALL		502472.1	3634829	9.52E-07	1.13YrCanc	9.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

117	ALL	UCART1	501957.9	3635015	9.42E-07	1.13YrCanc	9.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
228	ALL	UCART1	502154.5	3635081	9.35E-07	1.13YrCanc	9.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
210	ALL	UCART1	502252.9	3635068	9.32E-07	1.13YrCanc	9.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
229	ALL	UCART1	502187.3	3635081	9.27E-07	1.13YrCanc	9.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
227	ALL	UCART1	502121.8	3635081	9.24E-07	1.13YrCanc	9.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52	ALL	UCART1	501892.3	3634975	9.18E-07	1.13YrCanc	9.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
95	ALL	UCART1	501925.1	3635001	9.17E-07	1.13YrCanc	9.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
593	ALL		502472.1	3634859	9.16E-07	1.13YrCanc	9.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
230	ALL	UCART1	502220.1	3635081	9.06E-07	1.13YrCanc	9.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
204	ALL	UCART1	502056.2	3635068	9.03E-07	1.13YrCanc	9.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
182	ALL	UCART1	502023.4	3635054	9.02E-07	1.13YrCanc	9.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
226	ALL	UCART1	502089	3635081	8.85E-07	1.13YrCanc	8.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
160	ALL	UCART1	501990.6	3635041	8.82E-07	1.13YrCanc	8.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
657	ALL		502415.8	3634980	8.74E-07	1.13YrCanc	8.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	ALL	UCART1	501859.5	3634948	8.71E-07	1.13YrCanc	8.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
231	ALL	UCART1	502252.9	3635081	8.70E-07	1.13YrCanc	8.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73	ALL	UCART1	501892.3	3634988	8.69E-07	1.13YrCanc	8.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
612	ALL		502472.1	3634889	8.68E-07	1.13YrCanc	8.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
249	ALL	UCART1	502154.5	3635094	8.67E-07	1.13YrCanc	8.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
138	ALL	UCART1	501957.9	3635028	8.65E-07	1.13YrCanc	8.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
250	ALL	UCART1	502187.3	3635094	8.62E-07	1.13YrCanc	8.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
248	ALL	UCART1	502121.8	3635094	8.59E-07	1.13YrCanc	8.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
116	ALL	UCART1	501925.1	3635015	8.48E-07	1.13YrCanc	8.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
203	ALL	UCART1	502023.4	3635068	8.44E-07	1.13YrCanc	8.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
251	ALL	UCART1	502220.1	3635094	8.44E-07	1.13YrCanc	8.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
225	ALL	UCART1	502056.2	3635081	8.42E-07	1.13YrCanc	8.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
700	ALL		502303.1	3635070	8.39E-07	1.13YrCanc	8.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
682	ALL		502359.4	3635040	8.39E-07	1.13YrCanc	8.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	ALL	UCART1	501859.5	3634962	8.35E-07	1.13YrCanc	8.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
181	ALL	UCART1	501990.6	3635054	8.28E-07	1.13YrCanc	8.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
247	ALL	UCART1	502089	3635094	8.26E-07	1.13YrCanc	8.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
94	ALL	UCART1	501892.3	3635001	8.23E-07	1.13YrCanc	8.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
632	ALL		502472.1	3634919	8.16E-07	1.13YrCanc	8.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
252	ALL	UCART1	502252.9	3635094	8.13E-07	1.13YrCanc	8.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
270	ALL	UCART1	502154.5	3635107	8.06E-07	1.13YrCanc	8.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
159	ALL	UCART1	501957.9	3635041	8.03E-07	1.13YrCanc	8.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
271	ALL	UCART1	502187.3	3635107	8.03E-07	1.13YrCanc	8.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51	ALL	UCART1	501859.5	3634975	7.99E-07	1.13YrCanc	7.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
269	ALL	UCART1	502121.8	3635107	7.99E-07	1.13YrCanc	7.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
224	ALL	UCART1	502023.4	3635081	7.91E-07	1.13YrCanc	7.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
272	ALL	UCART1	502220.1	3635107	7.88E-07	1.13YrCanc	7.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
246	ALL	UCART1	502056.2	3635094	7.87E-07	1.13YrCanc	7.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
664	ALL		502415.8	3635010	7.87E-07	1.13YrCanc	7.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
137	ALL	UCART1	501925.1	3635028	7.82E-07	1.13YrCanc	7.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
202	ALL	UCART1	501990.6	3635068	7.80E-07	1.13YrCanc	7.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
510	ALL		502528.4	3634708	7.80E-07	1.13YrCanc	7.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
494	ALL		502528.4	3634678	7.78E-07	1.13YrCanc	7.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
115	ALL	UCART1	501892.3	3635015	7.76E-07	1.13YrCanc	7.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
526	ALL		502528.4	3634738	7.75E-07	1.13YrCanc	7.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
268	ALL	UCART1	502089	3635107	7.73E-07	1.13YrCanc	7.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72	ALL	UCART1	501859.5	3634988	7.64E-07	1.13YrCanc	7.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
478	ALL		502528.4	3634648	7.64E-07	1.13YrCanc	7.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
541	ALL		502528.4	3634768	7.63E-07	1.13YrCanc	7.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
273	ALL	UCART1	502252.9	3635107	7.62E-07	1.13YrCanc	7.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
639	ALL		502472.1	3634950	7.60E-07	1.13YrCanc	7.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
180	ALL	UCART1	501957.9	3635054	7.57E-07	1.13YrCanc	7.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
291	ALL	UCART1	502154.5	3635121	7.53E-07	1.13YrCanc	7.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
292	ALL	UCART1	502187.3	3635121	7.51E-07	1.13YrCanc	7.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	ALL	UCART1	501826.7	3634948	7.50E-07	1.13YrCanc	7.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
556	ALL		502528.4	3634799	7.47E-07	1.13YrCanc	7.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
290	ALL	UCART1	502121.8	3635121	7.46E-07	1.13YrCanc	7.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
245	ALL	UCART1	502023.4	3635094	7.42E-07	1.13YrCanc	7.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
473	ALL		502528.4	3634617	7.40E-07	1.13YrCanc	7.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
293	ALL	UCART1	502220.1	3635121	7.38E-07	1.13YrCanc	7.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
701	ALL		502359.4	3635070	7.38E-07	1.13YrCanc	7.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
267	ALL	UCART1	502056.2	3635107	7.38E-07	1.13YrCanc	7.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
223	ALL	UCART1	501990.6	3635081	7.35E-07	1.13YrCanc	7.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
93	ALL	UCART1	501859.5	3635001	7.31E-07	1.13YrCanc	7.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
158	ALL	UCART1	501925.1	3635041	7.31E-07	1.13YrCanc	7.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
719	ALL		502303.1	3635101	7.29E-07	1.13YrCanc	7.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
575	ALL		502528.4	3634829	7.27E-07	1.13YrCanc	7.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
289	ALL	UCART1	502089	3635121	7.25E-07	1.13YrCanc	7.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	ALL	UCART1	501826.7	3634962	7.24E-07	1.13YrCanc	7.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
201	ALL	UCART1	501957.9	3635068	7.18E-07	1.13YrCanc	7.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
294	ALL	UCART1	502252.9	3635121	7.16E-07	1.13YrCanc	7.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
136	ALL	UCART1	501892.3	3635028	7.14E-07	1.13YrCanc	7.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
683	ALL		502415.8	3635040	7.07E-07	1.13YrCanc	7.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
312	ALL	UCART1	502154.5	3635134	7.05E-07	1.13YrCanc	7.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
313	ALL	UCART1	502187.3	3635134	7.04E-07	1.13YrCanc	7.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
594	ALL		502528.4	3634859	7.03E-07	1.13YrCanc	7.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
658	ALL		502472.1	3634980	7.03E-07	1.13YrCanc	7.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50	ALL	UCART1	501826.7	3634975	6.99E-07	1.13YrCanc	6.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
311	ALL	UCART1	502121.8	3635134	6.99E-07	1.13YrCanc	6.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
114	ALL	UCART1	501859.5	3635015	6.98E-07	1.13YrCanc	6.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
266	ALL	UCART1	502023.4	3635107	6.98E-07	1.13YrCanc	6.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
288	ALL	UCART1	502056.2	3635121	6.96E-07	1.13YrCanc	6.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	ALL	UCART1	502220.1	3635134	6.93E-07	1.13YrCanc	6.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
244	ALL	UCART1	501990.6	3635094	6.93E-07	1.13YrCanc	6.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
179	ALL	UCART1	501925.1	3635054	6.91E-07	1.13YrCanc	6.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
310	ALL	UCART1	502089	3635134	6.82E-07	1.13YrCanc	6.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222	ALL	UCART1	501957.9	3635081	6.79E-07	1.13YrCanc	6.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
613	ALL		502528.4	3634889	6.75E-07	1.13YrCanc	6.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
71	ALL	UCART1	501826.7	3634988	6.74E-07	1.13YrCanc	6.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	ALL	UCART1	502252.9	3635134	6.73E-07	1.13YrCanc	6.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
157	ALL	UCART1	501892.3	3635041	6.66E-07	1.13YrCanc	6.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135	ALL	UCART1	501859.5	3635028	6.63E-07	1.13YrCanc	6.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

333	ALL	UCART1	502154.5	3635147	6.62E-07	1.13YrCanc	6.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
334	ALL	UCART1	502187.3	3635147	6.62E-07	1.13YrCanc	6.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
287	ALL	UCART1	502023.4	3635121	6.60E-07	1.13YrCanc	6.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
309	ALL	UCART1	502056.2	3635134	6.57E-07	1.13YrCanc	6.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
200	ALL	UCART1	501925.1	3635068	6.56E-07	1.13YrCanc	6.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
332	ALL	UCART1	502121.8	3635147	6.56E-07	1.13YrCanc	6.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
265	ALL	UCART1	501990.6	3635107	6.55E-07	1.13YrCanc	6.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
720	ALL		502359.4	3635101	6.54E-07	1.13YrCanc	6.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
335	ALL	UCART1	502220.1	3635147	6.52E-07	1.13YrCanc	6.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	ALL	UCART1	501794	3634948	6.51E-07	1.13YrCanc	6.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
92	ALL	UCART1	501826.7	3635001	6.49E-07	1.13YrCanc	6.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
665	ALL		502472.1	3635010	6.48E-07	1.13YrCanc	6.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
633	ALL		502528.4	3634919	6.43E-07	1.13YrCanc	6.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
331	ALL	UCART1	502089	3635147	6.43E-07	1.13YrCanc	6.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
243	ALL	UCART1	501957.9	3635094	6.42E-07	1.13YrCanc	6.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
738	ALL		502303.1	3635131	6.40E-07	1.13YrCanc	6.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
702	ALL		502415.8	3635070	6.36E-07	1.13YrCanc	6.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
336	ALL	UCART1	502252.9	3635147	6.36E-07	1.13YrCanc	6.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
178	ALL	UCART1	501892.3	3635054	6.33E-07	1.13YrCanc	6.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	ALL	UCART1	501794	3634962	6.33E-07	1.13YrCanc	6.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
308	ALL	UCART1	502023.4	3635134	6.26E-07	1.13YrCanc	6.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
113	ALL	UCART1	501826.7	3635015	6.25E-07	1.13YrCanc	6.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221	ALL	UCART1	501925.1	3635081	6.24E-07	1.13YrCanc	6.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
355	ALL	UCART1	502187.3	3635160	6.24E-07	1.13YrCanc	6.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
354	ALL	UCART1	502154.5	3635160	6.24E-07	1.13YrCanc	6.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
330	ALL	UCART1	502056.2	3635147	6.21E-07	1.13YrCanc	6.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
286	ALL	UCART1	501990.6	3635121	6.21E-07	1.13YrCanc	6.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
353	ALL	UCART1	502121.8	3635160	6.20E-07	1.13YrCanc	6.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
156	ALL	UCART1	501859.5	3635041	6.18E-07	1.13YrCanc	6.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
495	ALL		502584.8	3634678	6.17E-07	1.13YrCanc	6.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
356	ALL	UCART1	502220.1	3635160	6.16E-07	1.13YrCanc	6.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
511	ALL		502584.8	3634708	6.14E-07	1.13YrCanc	6.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
49	ALL	UCART1	501794	3634975	6.14E-07	1.13YrCanc	6.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
479	ALL		502584.8	3634648	6.13E-07	1.13YrCanc	6.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
640	ALL		502528.4	3634950	6.09E-07	1.13YrCanc	6.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
264	ALL	UCART1	501957.9	3635107	6.09E-07	1.13YrCanc	6.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
527	ALL		502584.8	3634738	6.08E-07	1.13YrCanc	6.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
352	ALL	UCART1	502089	3635160	6.08E-07	1.13YrCanc	6.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
199	ALL	UCART1	501892.3	3635068	6.05E-07	1.13YrCanc	6.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
474	ALL		502584.8	3634617	6.02E-07	1.13YrCanc	6.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
357	ALL	UCART1	502252.9	3635160	6.02E-07	1.13YrCanc	6.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542	ALL		502584.8	3634768	5.99E-07	1.13YrCanc	5.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
134	ALL	UCART1	501826.7	3635028	5.99E-07	1.13YrCanc	5.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70	ALL	UCART1	501794	3634988	5.95E-07	1.13YrCanc	5.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
684	ALL		502472.1	3635040	5.94E-07	1.13YrCanc	5.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
242	ALL	UCART1	501925.1	3635094	5.94E-07	1.13YrCanc	5.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
329	ALL	UCART1	502023.4	3635147	5.93E-07	1.13YrCanc	5.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
376	ALL	UCART1	502187.3	3635174	5.89E-07	1.13YrCanc	5.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
307	ALL	UCART1	501990.6	3635134	5.89E-07	1.13YrCanc	5.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
375	ALL	UCART1	502154.5	3635174	5.89E-07	1.13YrCanc	5.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
177	ALL	UCART1	501859.5	3635054	5.88E-07	1.13YrCanc	5.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
557	ALL		502584.8	3634799	5.88E-07	1.13YrCanc	5.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
351	ALL	UCART1	502056.2	3635160	5.88E-07	1.13YrCanc	5.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
374	ALL	UCART1	502121.8	3635174	5.87E-07	1.13YrCanc	5.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
739	ALL		502359.4	3635131	5.82E-07	1.13YrCanc	5.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
377	ALL	UCART1	502220.1	3635174	5.82E-07	1.13YrCanc	5.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
450	ALL		501738.7	3634747	5.82E-07	1.13YrCanc	5.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
285	ALL	UCART1	501957.9	3635121	5.78E-07	1.13YrCanc	5.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
91	ALL	UCART1	501794	3635001	5.76E-07	1.13YrCanc	5.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
220	ALL	UCART1	501892.3	3635081	5.76E-07	1.13YrCanc	5.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
373	ALL	UCART1	502089	3635174	5.75E-07	1.13YrCanc	5.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
576	ALL		502584.8	3634829	5.75E-07	1.13YrCanc	5.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
721	ALL		502415.8	3635101	5.74E-07	1.13YrCanc	5.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
659	ALL		502528.4	3634980	5.73E-07	1.13YrCanc	5.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
155	ALL	UCART1	501826.7	3635041	5.73E-07	1.13YrCanc	5.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
378	ALL	UCART1	502252.9	3635174	5.71E-07	1.13YrCanc	5.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	ALL	UCART1	501761.2	3634948	5.71E-07	1.13YrCanc	5.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
757	ALL		502303.1	3635161	5.68E-07	1.13YrCanc	5.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
263	ALL	UCART1	501925.1	3635107	5.65E-07	1.13YrCanc	5.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
350	ALL	UCART1	502023.4	3635160	5.62E-07	1.13YrCanc	5.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
198	ALL	UCART1	501859.5	3635068	5.62E-07	1.13YrCanc	5.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
396	ALL	UCART1	502154.5	3635187	5.61E-07	1.13YrCanc	5.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
328	ALL	UCART1	501990.6	3635147	5.60E-07	1.13YrCanc	5.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
595	ALL		502584.8	3634859	5.59E-07	1.13YrCanc	5.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
397	ALL	UCART1	502187.3	3635187	5.58E-07	1.13YrCanc	5.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
112	ALL	UCART1	501794	3635015	5.58E-07	1.13YrCanc	5.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
372	ALL	UCART1	502056.2	3635174	5.57E-07	1.13YrCanc	5.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	ALL	UCART1	501761.2	3634962	5.57E-07	1.13YrCanc	5.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
395	ALL	UCART1	502121.8	3635187	5.56E-07	1.13YrCanc	5.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
444	ALL		501724	3634831	5.52E-07	1.13YrCanc	5.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
398	ALL	UCART1	502220.1	3635187	5.51E-07	1.13YrCanc	5.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
306	ALL	UCART1	501957.9	3635134	5.50E-07	1.13YrCanc	5.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
241	ALL	UCART1	501892.3	3635094	5.49E-07	1.13YrCanc	5.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176	ALL	UCART1	501826.7	3635054	5.48E-07	1.13YrCanc	5.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
394	ALL	UCART1	502089	3635187	5.46E-07	1.13YrCanc	5.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
703	ALL		502472.1	3635070	5.45E-07	1.13YrCanc	5.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
48	ALL	UCART1	501761.2	3634975	5.43E-07	1.13YrCanc	5.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
399	ALL	UCART1	502252.9	3635187	5.42E-07	1.13YrCanc	5.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
614	ALL		502584.8	3634889	5.41E-07	1.13YrCanc	5.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	ALL	UCART1	501794	3635028	5.39E-07	1.13YrCanc	5.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
284	ALL	UCART1	501925.1	3635121	5.39E-07	1.13YrCanc	5.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
666	ALL		502528.4	3635010	5.37E-07	1.13YrCanc	5.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
219	ALL	UCART1	501859.5	3635081	5.36E-07	1.13YrCanc	5.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
371	ALL	UCART1	502023.4	3635174	5.34E-07	1.13YrCanc	5.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
349	ALL	UCART1	501990.6	3635160	5.33E-07	1.13YrCanc	5.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
417	ALL	UCART1	502154.5	3635200	5.33E-07	1.13YrCanc	5.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

449	ALL		501713.8	3634792	5.31E-07	1.13YrCanc	5.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
393	ALL	UCART1	502056.2	3635187	5.29E-07	1.13YrCanc	5.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
418	ALL	UCART1	502187.3	3635200	5.29E-07	1.13YrCanc	5.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
69	ALL	UCART1	501761.2	3634988	5.28E-07	1.13YrCanc	5.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
416	ALL	UCART1	502121.8	3635200	5.28E-07	1.13YrCanc	5.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
262	ALL	UCART1	501892.3	3635107	5.25E-07	1.13YrCanc	5.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
327	ALL	UCART1	501957.9	3635147	5.25E-07	1.13YrCanc	5.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
197	ALL	UCART1	501826.7	3635068	5.24E-07	1.13YrCanc	5.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
419	ALL	UCART1	502220.1	3635200	5.23E-07	1.13YrCanc	5.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
758	ALL		502359.4	3635161	5.22E-07	1.13YrCanc	5.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
634	ALL		502584.8	3634919	5.21E-07	1.13YrCanc	5.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
154	ALL	UCART1	501794	3635041	5.21E-07	1.13YrCanc	5.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
740	ALL		502415.8	3635131	5.19E-07	1.13YrCanc	5.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
415	ALL	UCART1	502089	3635200	5.19E-07	1.13YrCanc	5.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
420	ALL	UCART1	502252.9	3635200	5.15E-07	1.13YrCanc	5.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
305	ALL	UCART1	501925.1	3635134	5.14E-07	1.13YrCanc	5.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
90	ALL	UCART1	501761.2	3635001	5.14E-07	1.13YrCanc	5.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
240	ALL	UCART1	501859.5	3635094	5.10E-07	1.13YrCanc	5.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
392	ALL	UCART1	502023.4	3635187	5.09E-07	1.13YrCanc	5.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
370	ALL	UCART1	501990.6	3635174	5.08E-07	1.13YrCanc	5.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
776	ALL		502303.1	3635191	5.07E-07	1.13YrCanc	5.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
438	ALL	UCART1	502154.5	3635213	5.06E-07	1.13YrCanc	5.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	ALL	UCART1	501728.4	3634948	5.04E-07	1.13YrCanc	5.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
414	ALL	UCART1	502056.2	3635200	5.04E-07	1.13YrCanc	5.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
437	ALL	UCART1	502121.8	3635213	5.03E-07	1.13YrCanc	5.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
175	ALL	UCART1	501794	3635054	5.03E-07	1.13YrCanc	5.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
439	ALL	UCART1	502187.3	3635213	5.02E-07	1.13YrCanc	5.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
283	ALL	UCART1	501892.3	3635121	5.02E-07	1.13YrCanc	5.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
480	ALL		502641.1	3634648	5.01E-07	1.13YrCanc	5.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
496	ALL		502641.1	3634678	5.01E-07	1.13YrCanc	5.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
685	ALL		502528.4	3635040	5.01E-07	1.13YrCanc	5.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
348	ALL	UCART1	501957.9	3635160	5.01E-07	1.13YrCanc	5.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
722	ALL		502472.1	3635101	4.99E-07	1.13YrCanc	4.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
111	ALL	UCART1	501761.2	3635015	4.99E-07	1.13YrCanc	4.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218	ALL	UCART1	501826.7	3635081	4.99E-07	1.13YrCanc	4.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
641	ALL		502584.8	3634950	4.99E-07	1.13YrCanc	4.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
512	ALL		502641.1	3634708	4.98E-07	1.13YrCanc	4.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
440	ALL	UCART1	502220.1	3635213	4.97E-07	1.13YrCanc	4.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
475	ALL		502641.1	3634617	4.97E-07	1.13YrCanc	4.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
436	ALL	UCART1	502089	3635213	4.94E-07	1.13YrCanc	4.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	ALL	UCART1	501728.4	3634962	4.94E-07	1.13YrCanc	4.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
528	ALL		502641.1	3634738	4.92E-07	1.13YrCanc	4.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
326	ALL	UCART1	501925.1	3635147	4.92E-07	1.13YrCanc	4.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
441	ALL	UCART1	502252.9	3635213	4.89E-07	1.13YrCanc	4.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
261	ALL	UCART1	501859.5	3635107	4.86E-07	1.13YrCanc	4.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
196	ALL	UCART1	501794	3635068	4.86E-07	1.13YrCanc	4.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
391	ALL	UCART1	501990.6	3635187	4.85E-07	1.13YrCanc	4.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	ALL	UCART1	501761.2	3635028	4.85E-07	1.13YrCanc	4.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
543	ALL		502641.1	3634768	4.85E-07	1.13YrCanc	4.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
413	ALL	UCART1	502023.4	3635200	4.85E-07	1.13YrCanc	4.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
47	ALL	UCART1	501728.4	3634975	4.83E-07	1.13YrCanc	4.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
304	ALL	UCART1	501892.3	3635134	4.81E-07	1.13YrCanc	4.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
435	ALL	UCART1	502056.2	3635213	4.80E-07	1.13YrCanc	4.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
369	ALL	UCART1	501957.9	3635174	4.78E-07	1.13YrCanc	4.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
558	ALL		502641.1	3634799	4.77E-07	1.13YrCanc	4.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
660	ALL		502584.8	3634980	4.75E-07	1.13YrCanc	4.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
239	ALL	UCART1	501826.7	3635094	4.74E-07	1.13YrCanc	4.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
759	ALL		502415.8	3635161	4.73E-07	1.13YrCanc	4.73E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
68	ALL	UCART1	501728.4	3634988	4.72E-07	1.13YrCanc	4.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
153	ALL	UCART1	501761.2	3635041	4.71E-07	1.13YrCanc	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
347	ALL	UCART1	501925.1	3635160	4.71E-07	1.13YrCanc	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
777	ALL		502359.4	3635191	4.71E-07	1.13YrCanc	4.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
217	ALL	UCART1	501794	3635081	4.68E-07	1.13YrCanc	4.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
447	ALL		501682	3634783	4.68E-07	1.13YrCanc	4.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
577	ALL		502641.1	3634829	4.67E-07	1.13YrCanc	4.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
282	ALL	UCART1	501859.5	3635121	4.67E-07	1.13YrCanc	4.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
704	ALL		502528.4	3635070	4.66E-07	1.13YrCanc	4.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
412	ALL	UCART1	501990.6	3635200	4.64E-07	1.13YrCanc	4.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
434	ALL	UCART1	502023.4	3635213	4.63E-07	1.13YrCanc	4.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
325	ALL	UCART1	501892.3	3635147	4.61E-07	1.13YrCanc	4.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
89	ALL	UCART1	501728.4	3635001	4.61E-07	1.13YrCanc	4.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
741	ALL		502472.1	3635131	4.59E-07	1.13YrCanc	4.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
390	ALL	UCART1	501957.9	3635187	4.57E-07	1.13YrCanc	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
174	ALL	UCART1	501761.2	3635054	4.57E-07	1.13YrCanc	4.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
596	ALL		502641.1	3634859	4.56E-07	1.13YrCanc	4.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
260	ALL	UCART1	501826.7	3635107	4.54E-07	1.13YrCanc	4.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
368	ALL	UCART1	501925.1	3635174	4.51E-07	1.13YrCanc	4.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
238	ALL	UCART1	501794	3635094	4.50E-07	1.13YrCanc	4.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
667	ALL		502584.8	3635010	4.50E-07	1.13YrCanc	4.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
110	ALL	UCART1	501728.4	3635015	4.49E-07	1.13YrCanc	4.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
303	ALL	UCART1	501859.5	3635134	4.49E-07	1.13YrCanc	4.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	ALL	UCART1	501695.6	3634948	4.49E-07	1.13YrCanc	4.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
615	ALL		502641.1	3634889	4.44E-07	1.13YrCanc	4.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
433	ALL	UCART1	501990.6	3635213	4.43E-07	1.13YrCanc	4.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
346	ALL	UCART1	501892.3	3635160	4.43E-07	1.13YrCanc	4.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
195	ALL	UCART1	501761.2	3635068	4.42E-07	1.13YrCanc	4.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	ALL	UCART1	501695.6	3634962	4.41E-07	1.13YrCanc	4.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
411	ALL	UCART1	501957.9	3635200	4.38E-07	1.13YrCanc	4.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	ALL	UCART1	501728.4	3635028	4.38E-07	1.13YrCanc	4.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
281	ALL	UCART1	501826.7	3635121	4.36E-07	1.13YrCanc	4.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
723	ALL		502528.4	3635101	4.33E-07	1.13YrCanc	4.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
259	ALL	UCART1	501794	3635107	4.33E-07	1.13YrCanc	4.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
389	ALL	UCART1	501925.1	3635187	4.32E-07	1.13YrCanc	4.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
46	ALL	UCART1	501695.6	3634975	4.32E-07	1.13YrCanc	4.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
324	ALL	UCART1	501859.5	3635147	4.32E-07	1.13YrCanc	4.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
778	ALL		502415.8	3635191	4.32E-07	1.13YrCanc	4.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

635	ALL		502641.1	3634919	4.30E-07	1.13YrCanc	4.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
446	ALL		501659.4	3634841	4.28E-07	1.13YrCanc	4.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
216	ALL	UCART1	501761.2	3635081	4.28E-07	1.13YrCanc	4.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
152	ALL	UCART1	501728.4	3635041	4.26E-07	1.13YrCanc	4.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
445	ALL		501656	3634810	4.26E-07	1.13YrCanc	4.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
686	ALL		502584.8	3635040	4.25E-07	1.13YrCanc	4.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
367	ALL	UCART1	501892.3	3635174	4.25E-07	1.13YrCanc	4.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
760	ALL		502472.1	3635161	4.24E-07	1.13YrCanc	4.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67	ALL	UCART1	501695.6	3634988	4.23E-07	1.13YrCanc	4.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
432	ALL	UCART1	501957.9	3635213	4.20E-07	1.13YrCanc	4.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
302	ALL	UCART1	501826.7	3635134	4.20E-07	1.13YrCanc	4.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
481	ALL		502697.5	3634648	4.18E-07	1.13YrCanc	4.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
476	ALL		502697.5	3634617	4.17E-07	1.13YrCanc	4.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
497	ALL		502697.5	3634678	4.16E-07	1.13YrCanc	4.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
642	ALL		502641.1	3634950	4.16E-07	1.13YrCanc	4.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
345	ALL	UCART1	501859.5	3635160	4.15E-07	1.13YrCanc	4.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
173	ALL	UCART1	501728.4	3635054	4.15E-07	1.13YrCanc	4.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
280	ALL	UCART1	501794	3635121	4.15E-07	1.13YrCanc	4.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
410	ALL	UCART1	501925.1	3635200	4.15E-07	1.13YrCanc	4.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
88	ALL	UCART1	501695.6	3635001	4.15E-07	1.13YrCanc	4.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
237	ALL	UCART1	501761.2	3635094	4.14E-07	1.13YrCanc	4.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
513	ALL		502697.5	3634708	4.12E-07	1.13YrCanc	4.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
388	ALL	UCART1	501892.3	3635187	4.09E-07	1.13YrCanc	4.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
529	ALL		502697.5	3634738	4.07E-07	1.13YrCanc	4.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
323	ALL	UCART1	501826.7	3635147	4.06E-07	1.13YrCanc	4.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
109	ALL	UCART1	501695.6	3635015	4.06E-07	1.13YrCanc	4.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
742	ALL		502528.4	3635131	4.03E-07	1.13YrCanc	4.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194	ALL	UCART1	501728.4	3635068	4.03E-07	1.13YrCanc	4.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	ALL	UCART1	501662.8	3634948	4.02E-07	1.13YrCanc	4.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
544	ALL		502697.5	3634768	4.02E-07	1.13YrCanc	4.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
705	ALL		502584.8	3635070	4.01E-07	1.13YrCanc	4.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
366	ALL	UCART1	501859.5	3635174	4.00E-07	1.13YrCanc	4.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
258	ALL	UCART1	501761.2	3635107	4.00E-07	1.13YrCanc	4.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
661	ALL		502641.1	3634980	3.99E-07	1.13YrCanc	3.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
431	ALL	UCART1	501925.1	3635213	3.99E-07	1.13YrCanc	3.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
301	ALL	UCART1	501794	3635134	3.98E-07	1.13YrCanc	3.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
130	ALL	UCART1	501695.6	3635028	3.96E-07	1.13YrCanc	3.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	ALL	UCART1	501662.8	3634962	3.96E-07	1.13YrCanc	3.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
559	ALL		502697.5	3634799	3.96E-07	1.13YrCanc	3.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
409	ALL	UCART1	501892.3	3635200	3.93E-07	1.13YrCanc	3.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
779	ALL		502472.1	3635191	3.93E-07	1.13YrCanc	3.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
344	ALL	UCART1	501826.7	3635160	3.92E-07	1.13YrCanc	3.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
45	ALL	UCART1	501662.8	3634975	3.89E-07	1.13YrCanc	3.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
578	ALL		502697.5	3634829	3.89E-07	1.13YrCanc	3.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
151	ALL	UCART1	501695.6	3635041	3.88E-07	1.13YrCanc	3.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
215	ALL	UCART1	501728.4	3635081	3.87E-07	1.13YrCanc	3.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
387	ALL	UCART1	501859.5	3635187	3.86E-07	1.13YrCanc	3.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
279	ALL	UCART1	501761.2	3635121	3.86E-07	1.13YrCanc	3.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
172	ALL	UCART1	501695.6	3635054	3.84E-07	1.13YrCanc	3.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
668	ALL		502641.1	3635010	3.82E-07	1.13YrCanc	3.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
66	ALL	UCART1	501662.8	3634988	3.82E-07	1.13YrCanc	3.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
322	ALL	UCART1	501794	3635147	3.82E-07	1.13YrCanc	3.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
597	ALL		502697.5	3634859	3.81E-07	1.13YrCanc	3.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
430	ALL	UCART1	501892.3	3635213	3.78E-07	1.13YrCanc	3.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
365	ALL	UCART1	501826.7	3635174	3.78E-07	1.13YrCanc	3.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
724	ALL		502584.8	3635101	3.77E-07	1.13YrCanc	3.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
761	ALL		502528.4	3635161	3.76E-07	1.13YrCanc	3.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
87	ALL	UCART1	501662.8	3635001	3.75E-07	1.13YrCanc	3.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
236	ALL	UCART1	501728.4	3635094	3.74E-07	1.13YrCanc	3.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193	ALL	UCART1	501695.6	3635068	3.72E-07	1.13YrCanc	3.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
616	ALL		502697.5	3634889	3.72E-07	1.13YrCanc	3.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
408	ALL	UCART1	501859.5	3635200	3.72E-07	1.13YrCanc	3.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
300	ALL	UCART1	501761.2	3635134	3.70E-07	1.13YrCanc	3.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
448	ALL		501615.2	3634804	3.70E-07	1.13YrCanc	3.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
108	ALL	UCART1	501662.8	3635015	3.67E-07	1.13YrCanc	3.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
343	ALL	UCART1	501794	3635160	3.67E-07	1.13YrCanc	3.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
687	ALL		502641.1	3635040	3.64E-07	1.13YrCanc	3.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
386	ALL	UCART1	501826.7	3635187	3.64E-07	1.13YrCanc	3.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	ALL	UCART1	501630.1	3634948	3.62E-07	1.13YrCanc	3.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
150	ALL	UCART1	501662.8	3635041	3.62E-07	1.13YrCanc	3.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
257	ALL	UCART1	501728.4	3635107	3.62E-07	1.13YrCanc	3.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
129	ALL	UCART1	501662.8	3635028	3.60E-07	1.13YrCanc	3.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
214	ALL	UCART1	501695.6	3635081	3.60E-07	1.13YrCanc	3.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
429	ALL	UCART1	501859.5	3635213	3.58E-07	1.13YrCanc	3.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	ALL	UCART1	501630.1	3634962	3.57E-07	1.13YrCanc	3.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
171	ALL	UCART1	501662.8	3635054	3.56E-07	1.13YrCanc	3.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
321	ALL	UCART1	501761.2	3635147	3.55E-07	1.13YrCanc	3.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
128	ALL	UCART1	501630.1	3635028	3.55E-07	1.13YrCanc	3.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
107	ALL	UCART1	501630.1	3635015	3.54E-07	1.13YrCanc	3.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
477	ALL		502753.8	3634617	3.54E-07	1.13YrCanc	3.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
743	ALL		502584.8	3635131	3.54E-07	1.13YrCanc	3.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
364	ALL	UCART1	501794	3635174	3.54E-07	1.13YrCanc	3.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
482	ALL		502753.8	3634648	3.54E-07	1.13YrCanc	3.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
780	ALL		502528.4	3635191	3.53E-07	1.13YrCanc	3.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
44	ALL	UCART1	501630.1	3634975	3.51E-07	1.13YrCanc	3.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
498	ALL		502753.8	3634678	3.51E-07	1.13YrCanc	3.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
407	ALL	UCART1	501826.7	3635200	3.51E-07	1.13YrCanc	3.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
278	ALL	UCART1	501728.4	3635121	3.50E-07	1.13YrCanc	3.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
235	ALL	UCART1	501695.6	3635094	3.48E-07	1.13YrCanc	3.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
514	ALL		502753.8	3634708	3.48E-07	1.13YrCanc	3.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
86	ALL	UCART1	501630.1	3635001	3.48E-07	1.13YrCanc	3.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
706	ALL		502641.1	3635070	3.47E-07	1.13YrCanc	3.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
65	ALL	UCART1	501630.1	3634988	3.46E-07	1.13YrCanc	3.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	ALL	UCART1	501662.8	3635068	3.46E-07	1.13YrCanc	3.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
149	ALL	UCART1	501630.1	3635041	3.44E-07	1.13YrCanc	3.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
85	ALL	UCART1	501597.3	3635001	3.43E-07	1.13YrCanc	3.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

342	ALL	UCART1	501761.2	3635160	3.41E-07	1.13YrCanc	3.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
106	ALL	UCART1	501597.3	3635015	3.41E-07	1.13YrCanc	3.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
385	ALL	UCART1	501794	3635187	3.40E-07	1.13YrCanc	3.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
299	ALL	UCART1	501728.4	3635134	3.39E-07	1.13YrCanc	3.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
428	ALL	UCART1	501826.7	3635213	3.38E-07	1.13YrCanc	3.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1	ALL	UCART1	501597.3	3634948	3.37E-07	1.13YrCanc	3.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
256	ALL	UCART1	501695.6	3635107	3.37E-07	1.13YrCanc	3.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
64	ALL	UCART1	501597.3	3634988	3.36E-07	1.13YrCanc	3.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
213	ALL	UCART1	501662.8	3635081	3.35E-07	1.13YrCanc	3.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	ALL	UCART1	501597.3	3634962	3.34E-07	1.13YrCanc	3.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
762	ALL		502584.8	3635161	3.33E-07	1.13YrCanc	3.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
43	ALL	UCART1	501597.3	3634975	3.32E-07	1.13YrCanc	3.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
170	ALL	UCART1	501630.1	3635054	3.32E-07	1.13YrCanc	3.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
127	ALL	UCART1	501597.3	3635028	3.32E-07	1.13YrCanc	3.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
725	ALL		502641.1	3635101	3.29E-07	1.13YrCanc	3.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
363	ALL	UCART1	501761.2	3635174	3.29E-07	1.13YrCanc	3.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
406	ALL	UCART1	501794	3635200	3.28E-07	1.13YrCanc	3.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	ALL	UCART1	501728.4	3635147	3.28E-07	1.13YrCanc	3.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
277	ALL	UCART1	501695.6	3635121	3.25E-07	1.13YrCanc	3.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
234	ALL	UCART1	501662.8	3635094	3.24E-07	1.13YrCanc	3.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148	ALL	UCART1	501597.3	3635041	3.22E-07	1.13YrCanc	3.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191	ALL	UCART1	501630.1	3635068	3.20E-07	1.13YrCanc	3.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
384	ALL	UCART1	501761.2	3635187	3.18E-07	1.13YrCanc	3.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
617	ALL		502753.8	3634889	3.17E-07	1.13YrCanc	3.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
341	ALL	UCART1	501728.4	3635160	3.17E-07	1.13YrCanc	3.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
427	ALL	UCART1	501794	3635213	3.17E-07	1.13YrCanc	3.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
298	ALL	UCART1	501695.6	3635134	3.14E-07	1.13YrCanc	3.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
255	ALL	UCART1	501662.8	3635107	3.13E-07	1.13YrCanc	3.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
781	ALL		502584.8	3635191	3.13E-07	1.13YrCanc	3.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
744	ALL		502641.1	3635131	3.12E-07	1.13YrCanc	3.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
405	ALL	UCART1	501761.2	3635200	3.07E-07	1.13YrCanc	3.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
169	ALL	UCART1	501597.3	3635054	3.07E-07	1.13YrCanc	3.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
362	ALL	UCART1	501728.4	3635174	3.06E-07	1.13YrCanc	3.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
212	ALL	UCART1	501630.1	3635081	3.04E-07	1.13YrCanc	3.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
483	ALL		502810.1	3634648	3.04E-07	1.13YrCanc	3.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	ALL	UCART1	501695.6	3635147	3.03E-07	1.13YrCanc	3.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
896	ALL		501511.3	3634952	3.03E-07	1.13YrCanc	3.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
643	ALL		502753.8	3634950	3.02E-07	1.13YrCanc	3.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
499	ALL		502810.1	3634678	3.01E-07	1.13YrCanc	3.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
276	ALL	UCART1	501662.8	3635121	3.00E-07	1.13YrCanc	3.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
897	ALL		501516.7	3634990	2.99E-07	1.13YrCanc	2.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
515	ALL		502810.1	3634708	2.98E-07	1.13YrCanc	2.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
763	ALL		502641.1	3635161	2.95E-07	1.13YrCanc	2.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
426	ALL	UCART1	501761.2	3635213	2.95E-07	1.13YrCanc	2.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
530	ALL		502810.1	3634738	2.95E-07	1.13YrCanc	2.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
383	ALL	UCART1	501728.4	3635187	2.94E-07	1.13YrCanc	2.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
340	ALL	UCART1	501695.6	3635160	2.94E-07	1.13YrCanc	2.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
545	ALL		502810.1	3634768	2.91E-07	1.13YrCanc	2.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
190	ALL	UCART1	501597.3	3635068	2.88E-07	1.13YrCanc	2.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
560	ALL		502810.1	3634799	2.87E-07	1.13YrCanc	2.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
297	ALL	UCART1	501662.8	3635134	2.87E-07	1.13YrCanc	2.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
233	ALL	UCART1	501630.1	3635094	2.85E-07	1.13YrCanc	2.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
669	ALL		502753.8	3635010	2.84E-07	1.13YrCanc	2.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
361	ALL	UCART1	501695.6	3635174	2.83E-07	1.13YrCanc	2.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404	ALL	UCART1	501728.4	3635200	2.83E-07	1.13YrCanc	2.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
579	ALL		502810.1	3634829	2.83E-07	1.13YrCanc	2.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
895	ALL		501511.3	3634921	2.83E-07	1.13YrCanc	2.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
894	ALL		501522.1	3634835	2.80E-07	1.13YrCanc	2.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
782	ALL		502641.1	3635191	2.80E-07	1.13YrCanc	2.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
598	ALL		502810.1	3634859	2.79E-07	1.13YrCanc	2.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
688	ALL		502753.8	3635040	2.75E-07	1.13YrCanc	2.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	ALL	UCART1	501662.8	3635147	2.74E-07	1.13YrCanc	2.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
618	ALL		502810.1	3634889	2.74E-07	1.13YrCanc	2.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
382	ALL	UCART1	501695.6	3635187	2.72E-07	1.13YrCanc	2.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
425	ALL	UCART1	501728.4	3635213	2.72E-07	1.13YrCanc	2.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
893	ALL		501509.9	3634739	2.68E-07	1.13YrCanc	2.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
211	ALL	UCART1	501597.3	3635081	2.68E-07	1.13YrCanc	2.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
254	ALL	UCART1	501630.1	3635107	2.67E-07	1.13YrCanc	2.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
892	ALL		501511.3	3634709	2.66E-07	1.13YrCanc	2.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
707	ALL		502753.8	3635070	2.65E-07	1.13YrCanc	2.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
484	ALL		502866.5	3634648	2.64E-07	1.13YrCanc	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
339	ALL	UCART1	501662.8	3635160	2.63E-07	1.13YrCanc	2.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
644	ALL		502810.1	3634950	2.62E-07	1.13YrCanc	2.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
500	ALL		502866.5	3634678	2.61E-07	1.13YrCanc	2.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
403	ALL	UCART1	501695.6	3635200	2.61E-07	1.13YrCanc	2.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
891	ALL		501520.8	3634630	2.59E-07	1.13YrCanc	2.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
516	ALL		502866.5	3634708	2.59E-07	1.13YrCanc	2.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
531	ALL		502866.5	3634738	2.56E-07	1.13YrCanc	2.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
726	ALL		502753.8	3635101	2.54E-07	1.13YrCanc	2.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
275	ALL	UCART1	501630.1	3635121	2.53E-07	1.13YrCanc	2.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
546	ALL		502866.5	3634768	2.53E-07	1.13YrCanc	2.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
360	ALL	UCART1	501662.8	3635174	2.53E-07	1.13YrCanc	2.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
561	ALL		502866.5	3634799	2.50E-07	1.13YrCanc	2.50E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
670	ALL		502810.1	3635010	2.49E-07	1.13YrCanc	2.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
424	ALL	UCART1	501695.6	3635213	2.49E-07	1.13YrCanc	2.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
232	ALL	UCART1	501597.3	3635094	2.48E-07	1.13YrCanc	2.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
580	ALL		502866.5	3634829	2.46E-07	1.13YrCanc	2.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
745	ALL		502753.8	3635131	2.44E-07	1.13YrCanc	2.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
381	ALL	UCART1	501662.8	3635187	2.44E-07	1.13YrCanc	2.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
599	ALL		502866.5	3634859	2.43E-07	1.13YrCanc	2.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
689	ALL		502810.1	3635040	2.42E-07	1.13YrCanc	2.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
296	ALL	UCART1	501630.1	3635134	2.40E-07	1.13YrCanc	2.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
619	ALL		502866.5	3634889	2.39E-07	1.13YrCanc	2.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
402	ALL	UCART1	501662.8	3635200	2.35E-07	1.13YrCanc	2.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
764	ALL		502753.8	3635161	2.34E-07	1.13YrCanc	2.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
708	ALL		502810.1	3635070	2.34E-07	1.13YrCanc	2.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

442	ALL		501602.7	3635114	2.32E-07	1.13YrCanc	2.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
253	ALL	UCART1	501597.3	3635107	2.32E-07	1.13YrCanc	2.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
485	ALL		502922.8	3634648	2.31E-07	1.13YrCanc	2.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
645	ALL		502866.5	3634950	2.30E-07	1.13YrCanc	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
501	ALL		502922.8	3634678	2.29E-07	1.13YrCanc	2.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	ALL	UCART1	501630.1	3635147	2.29E-07	1.13YrCanc	2.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
517	ALL		502922.8	3634708	2.27E-07	1.13YrCanc	2.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
727	ALL		502810.1	3635101	2.26E-07	1.13YrCanc	2.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
274	ALL	UCART1	501597.3	3635121	2.25E-07	1.13YrCanc	2.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
783	ALL		502753.8	3635191	2.25E-07	1.13YrCanc	2.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
532	ALL		502922.8	3634738	2.24E-07	1.13YrCanc	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
423	ALL	UCART1	501662.8	3635213	2.24E-07	1.13YrCanc	2.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
547	ALL		502922.8	3634768	2.22E-07	1.13YrCanc	2.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
671	ALL		502866.5	3635010	2.20E-07	1.13YrCanc	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
338	ALL	UCART1	501630.1	3635160	2.20E-07	1.13YrCanc	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
562	ALL		502922.8	3634799	2.19E-07	1.13YrCanc	2.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890	ALL		502149.6	3634082	2.19E-07	1.13YrCanc	2.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
295	ALL	UCART1	501597.3	3635134	2.18E-07	1.13YrCanc	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
746	ALL		502810.1	3635131	2.18E-07	1.13YrCanc	2.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889	ALL		502095.1	3634082	2.17E-07	1.13YrCanc	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
581	ALL		502922.8	3634829	2.17E-07	1.13YrCanc	2.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
690	ALL		502866.5	3635040	2.14E-07	1.13YrCanc	2.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
888	ALL		502040.6	3634082	2.14E-07	1.13YrCanc	2.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
600	ALL		502922.8	3634859	2.14E-07	1.13YrCanc	2.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
359	ALL	UCART1	501630.1	3635174	2.12E-07	1.13YrCanc	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
620	ALL		502922.8	3634889	2.11E-07	1.13YrCanc	2.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
765	ALL		502810.1	3635161	2.10E-07	1.13YrCanc	2.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	ALL	UCART1	501597.3	3635147	2.10E-07	1.13YrCanc	2.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
887	ALL		501986.2	3634082	2.09E-07	1.13YrCanc	2.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
709	ALL		502866.5	3635070	2.08E-07	1.13YrCanc	2.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
380	ALL	UCART1	501630.1	3635187	2.07E-07	1.13YrCanc	2.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
486	ALL		502979.2	3634648	2.05E-07	1.13YrCanc	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
882	ALL		502149.6	3634050	2.05E-07	1.13YrCanc	2.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
646	ALL		502922.8	3634950	2.04E-07	1.13YrCanc	2.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
502	ALL		502979.2	3634678	2.03E-07	1.13YrCanc	2.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
881	ALL		502095.1	3634050	2.03E-07	1.13YrCanc	2.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
401	ALL	UCART1	501630.1	3635200	2.02E-07	1.13YrCanc	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
784	ALL		502810.1	3635191	2.02E-07	1.13YrCanc	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
337	ALL	UCART1	501597.3	3635160	2.02E-07	1.13YrCanc	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
728	ALL		502866.5	3635101	2.02E-07	1.13YrCanc	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
886	ALL		501931.7	3634082	2.02E-07	1.13YrCanc	2.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
518	ALL		502979.2	3634708	2.01E-07	1.13YrCanc	2.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880	ALL		502040.6	3634050	2.00E-07	1.13YrCanc	2.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
533	ALL		502979.2	3634738	1.99E-07	1.13YrCanc	1.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
422	ALL	UCART1	501630.1	3635213	1.98E-07	1.13YrCanc	1.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
548	ALL		502979.2	3634768	1.97E-07	1.13YrCanc	1.97E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
905	ALL		502909	3634272	1.96E-07	1.13YrCanc	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
358	ALL	UCART1	501597.3	3635174	1.96E-07	1.13YrCanc	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
747	ALL		502866.5	3635131	1.96E-07	1.13YrCanc	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
672	ALL		502922.8	3635010	1.96E-07	1.13YrCanc	1.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
563	ALL		502979.2	3634799	1.95E-07	1.13YrCanc	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
879	ALL		501986.2	3634050	1.95E-07	1.13YrCanc	1.95E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
885	ALL		501877.2	3634082	1.94E-07	1.13YrCanc	1.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
582	ALL		502979.2	3634829	1.93E-07	1.13YrCanc	1.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
691	ALL		502922.8	3635040	1.91E-07	1.13YrCanc	1.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
379	ALL	UCART1	501597.3	3635187	1.91E-07	1.13YrCanc	1.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
911	ALL		502963.8	3634313	1.91E-07	1.13YrCanc	1.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
906	ALL		502903.6	3634246	1.90E-07	1.13YrCanc	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
601	ALL		502979.2	3634859	1.90E-07	1.13YrCanc	1.90E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
878	ALL		501931.7	3634050	1.89E-07	1.13YrCanc	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
766	ALL		502866.5	3635161	1.89E-07	1.13YrCanc	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
874	ALL		502095.1	3634018	1.89E-07	1.13YrCanc	1.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
621	ALL		502979.2	3634889	1.88E-07	1.13YrCanc	1.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
710	ALL		502922.8	3635070	1.87E-07	1.13YrCanc	1.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
913	ALL		502947.5	3634270	1.86E-07	1.13YrCanc	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
873	ALL		502040.6	3634018	1.86E-07	1.13YrCanc	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
400	ALL	UCART1	501597.3	3635200	1.86E-07	1.13YrCanc	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
884	ALL		501822.7	3634082	1.85E-07	1.13YrCanc	1.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
785	ALL		502866.5	3635191	1.83E-07	1.13YrCanc	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
487	ALL		503035.5	3634648	1.83E-07	1.13YrCanc	1.83E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
877	ALL		501877.2	3634050	1.82E-07	1.13YrCanc	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
647	ALL		502979.2	3634950	1.82E-07	1.13YrCanc	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
729	ALL		502922.8	3635101	1.82E-07	1.13YrCanc	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
872	ALL		501986.2	3634018	1.82E-07	1.13YrCanc	1.82E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
503	ALL		503035.5	3634678	1.81E-07	1.13YrCanc	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
421	ALL	UCART1	501597.3	3635213	1.81E-07	1.13YrCanc	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
914	ALL		502965.6	3634266	1.81E-07	1.13YrCanc	1.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
519	ALL		503035.5	3634708	1.80E-07	1.13YrCanc	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
534	ALL		503035.5	3634738	1.78E-07	1.13YrCanc	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
898	ALL		503043.6	3634376	1.78E-07	1.13YrCanc	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
915	ALL		503000.6	3634292	1.78E-07	1.13YrCanc	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912	ALL		503013.9	3634311	1.78E-07	1.13YrCanc	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
916	ALL		503023.5	3634327	1.77E-07	1.13YrCanc	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
871	ALL		501931.7	3634018	1.77E-07	1.13YrCanc	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748	ALL		502922.8	3635131	1.77E-07	1.13YrCanc	1.77E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
867	ALL		502095.1	3633986	1.76E-07	1.13YrCanc	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
549	ALL		503035.5	3634768	1.76E-07	1.13YrCanc	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
883	ALL		501768.2	3634082	1.76E-07	1.13YrCanc	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
673	ALL		502979.2	3635010	1.76E-07	1.13YrCanc	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
907	ALL		502905	3634191	1.75E-07	1.13YrCanc	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
876	ALL		501822.7	3634050	1.75E-07	1.13YrCanc	1.75E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
917	ALL		503037.4	3634331	1.74E-07	1.13YrCanc	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
564	ALL		503035.5	3634799	1.74E-07	1.13YrCanc	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
899	ALL		503061.3	3634388	1.74E-07	1.13YrCanc	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
866	ALL		502040.6	3633986	1.74E-07	1.13YrCanc	1.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
583	ALL		503035.5	3634829	1.72E-07	1.13YrCanc	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

692	ALL	502979.2	3635040	1.72E-07	1.13YrCanc	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
918	ALL	503053.7	3634346	1.72E-07	1.13YrCanc	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
767	ALL	502922.8	3635161	1.72E-07	1.13YrCanc	1.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
870	ALL	501877.2	3634018	1.71E-07	1.13YrCanc	1.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
602	ALL	503035.5	3634859	1.70E-07	1.13YrCanc	1.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
622	ALL	503035.5	3634889	1.68E-07	1.13YrCanc	1.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
711	ALL	502979.2	3635070	1.68E-07	1.13YrCanc	1.68E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
919	ALL	503072.4	3634345	1.67E-07	1.13YrCanc	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
900	ALL	503087.2	3634382	1.67E-07	1.13YrCanc	1.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
786	ALL	502922.8	3635191	1.66E-07	1.13YrCanc	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
875	ALL	501768.2	3634050	1.66E-07	1.13YrCanc	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
908	ALL	502903.6	3634158	1.66E-07	1.13YrCanc	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
862	ALL	502095.1	3633954	1.65E-07	1.13YrCanc	1.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
488	ALL	503091.8	3634648	1.64E-07	1.13YrCanc	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
869	ALL	501822.7	3634018	1.64E-07	1.13YrCanc	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
730	ALL	502979.2	3635101	1.64E-07	1.13YrCanc	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
648	ALL	503035.5	3634950	1.64E-07	1.13YrCanc	1.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
861	ALL	502040.6	3633954	1.63E-07	1.13YrCanc	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
504	ALL	503091.8	3634678	1.63E-07	1.13YrCanc	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
901	ALL	503103.5	3634385	1.63E-07	1.13YrCanc	1.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
520	ALL	503091.8	3634708	1.62E-07	1.13YrCanc	1.62E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
749	ALL	502979.2	3635131	1.60E-07	1.13YrCanc	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
535	ALL	503091.8	3634738	1.60E-07	1.13YrCanc	1.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
550	ALL	503091.8	3634768	1.59E-07	1.13YrCanc	1.59E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
674	ALL	503035.5	3635010	1.58E-07	1.13YrCanc	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
909	ALL	502905	3634127	1.58E-07	1.13YrCanc	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
863	ALL	502422.1	3633954	1.58E-07	1.13YrCanc	1.58E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
868	ALL	501768.2	3634018	1.57E-07	1.13YrCanc	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
451	ALL	502804.3	3635417	1.57E-07	1.13YrCanc	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
565	ALL	503091.8	3634799	1.57E-07	1.13YrCanc	1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
768	ALL	502979.2	3635161	1.56E-07	1.13YrCanc	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
902	ALL	503130.7	3634384	1.56E-07	1.13YrCanc	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
584	ALL	503091.8	3634829	1.56E-07	1.13YrCanc	1.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
693	ALL	503035.5	3635040	1.55E-07	1.13YrCanc	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
857	ALL	502095.1	3633922	1.55E-07	1.13YrCanc	1.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
603	ALL	503091.8	3634859	1.54E-07	1.13YrCanc	1.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
856	ALL	502040.6	3633922	1.53E-07	1.13YrCanc	1.53E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
712	ALL	503035.5	3635070	1.52E-07	1.13YrCanc	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
910	ALL	502906.3	3634104	1.52E-07	1.13YrCanc	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
623	ALL	503091.8	3634889	1.52E-07	1.13YrCanc	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
787	ALL	502979.2	3635191	1.52E-07	1.13YrCanc	1.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
731	ALL	503035.5	3635101	1.49E-07	1.13YrCanc	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903	ALL	503159.2	3634384	1.49E-07	1.13YrCanc	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
858	ALL	502422.1	3633922	1.49E-07	1.13YrCanc	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
489	ALL	503148.2	3634648	1.49E-07	1.13YrCanc	1.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
649	ALL	503091.8	3634950	1.48E-07	1.13YrCanc	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
456	ALL	502812.5	3635466	1.48E-07	1.13YrCanc	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
452	ALL	502842.8	3635418	1.48E-07	1.13YrCanc	1.48E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
505	ALL	503148.2	3634678	1.47E-07	1.13YrCanc	1.47E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852	ALL	502095.1	3633890	1.46E-07	1.13YrCanc	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
521	ALL	503148.2	3634708	1.46E-07	1.13YrCanc	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
750	ALL	503035.5	3635131	1.46E-07	1.13YrCanc	1.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
864	ALL	502585.5	3633954	1.45E-07	1.13YrCanc	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
536	ALL	503148.2	3634738	1.45E-07	1.13YrCanc	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
851	ALL	502040.6	3633890	1.45E-07	1.13YrCanc	1.45E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
904	ALL	503182.3	3634381	1.44E-07	1.13YrCanc	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
675	ALL	503091.8	3635010	1.44E-07	1.13YrCanc	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
551	ALL	503148.2	3634768	1.44E-07	1.13YrCanc	1.44E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
458	ALL	502804.3	3635510	1.43E-07	1.13YrCanc	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
769	ALL	503035.5	3635161	1.42E-07	1.13YrCanc	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
566	ALL	503148.2	3634799	1.42E-07	1.13YrCanc	1.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
694	ALL	503091.8	3635040	1.41E-07	1.13YrCanc	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
585	ALL	503148.2	3634829	1.41E-07	1.13YrCanc	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
853	ALL	502422.1	3633890	1.41E-07	1.13YrCanc	1.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
457	ALL	502802.7	3635531	1.40E-07	1.13YrCanc	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
865	ALL	502640	3633954	1.40E-07	1.13YrCanc	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
604	ALL	503148.2	3634859	1.40E-07	1.13YrCanc	1.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
453	ALL	502881.3	3635419	1.39E-07	1.13YrCanc	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
788	ALL	503035.5	3635191	1.39E-07	1.13YrCanc	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
713	ALL	503091.8	3635070	1.39E-07	1.13YrCanc	1.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
624	ALL	503148.2	3634889	1.38E-07	1.13YrCanc	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
847	ALL	502095.1	3633858	1.38E-07	1.13YrCanc	1.38E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
859	ALL	502585.5	3633922	1.37E-07	1.13YrCanc	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
459	ALL	502803.5	3635554	1.37E-07	1.13YrCanc	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
846	ALL	502040.6	3633858	1.37E-07	1.13YrCanc	1.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
732	ALL	503091.8	3635101	1.36E-07	1.13YrCanc	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
490	ALL	503204.5	3634648	1.35E-07	1.13YrCanc	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
650	ALL	503148.2	3634950	1.35E-07	1.13YrCanc	1.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
506	ALL	503204.5	3634678	1.34E-07	1.13YrCanc	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
751	ALL	503091.8	3635131	1.33E-07	1.13YrCanc	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
860	ALL	502640	3633922	1.33E-07	1.13YrCanc	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848	ALL	502422.1	3633858	1.33E-07	1.13YrCanc	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
522	ALL	503204.5	3634708	1.33E-07	1.13YrCanc	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
454	ALL	502916.5	3635415	1.33E-07	1.13YrCanc	1.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
537	ALL	503204.5	3634738	1.32E-07	1.13YrCanc	1.32E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
676	ALL	503148.2	3635010	1.31E-07	1.13YrCanc	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
552	ALL	503204.5	3634768	1.31E-07	1.13YrCanc	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
770	ALL	503091.8	3635161	1.31E-07	1.13YrCanc	1.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
841	ALL	502095.1	3633826	1.30E-07	1.13YrCanc	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
854	ALL	502585.5	3633890	1.30E-07	1.13YrCanc	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
567	ALL	503204.5	3634799	1.30E-07	1.13YrCanc	1.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
840	ALL	502040.6	3633826	1.29E-07	1.13YrCanc	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
695	ALL	503148.2	3635040	1.29E-07	1.13YrCanc	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
586	ALL	503204.5	3634829	1.29E-07	1.13YrCanc	1.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
842	ALL	502367.6	3633826	1.28E-07	1.13YrCanc	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
789	ALL	503091.8	3635191	1.28E-07	1.13YrCanc	1.28E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

605	ALL	503204.5	3634859	1.27E-07	1.13YrCanc	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
714	ALL	503148.2	3635070	1.27E-07	1.13YrCanc	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
460	ALL	502881.3	3635525	1.27E-07	1.13YrCanc	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
455	ALL	502946.8	3635416	1.27E-07	1.13YrCanc	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
855	ALL	502640	3633890	1.27E-07	1.13YrCanc	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
843	ALL	502422.1	3633826	1.26E-07	1.13YrCanc	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
625	ALL	503204.5	3634889	1.26E-07	1.13YrCanc	1.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
733	ALL	503148.2	3635101	1.25E-07	1.13YrCanc	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
849	ALL	502585.5	3633858	1.24E-07	1.13YrCanc	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
491	ALL	503260.9	3634648	1.24E-07	1.13YrCanc	1.24E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
651	ALL	503204.5	3634950	1.23E-07	1.13YrCanc	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
507	ALL	503260.9	3634678	1.23E-07	1.13YrCanc	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
752	ALL	503148.2	3635131	1.23E-07	1.13YrCanc	1.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
523	ALL	503260.9	3634708	1.22E-07	1.13YrCanc	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
836	ALL	502367.6	3633794	1.22E-07	1.13YrCanc	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
538	ALL	503260.9	3634738	1.21E-07	1.13YrCanc	1.21E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850	ALL	502640	3633858	1.20E-07	1.13YrCanc	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
677	ALL	503204.5	3635010	1.20E-07	1.13YrCanc	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
771	ALL	503148.2	3635161	1.20E-07	1.13YrCanc	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
553	ALL	503260.9	3634768	1.20E-07	1.13YrCanc	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
837	ALL	502422.1	3633794	1.20E-07	1.13YrCanc	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
461	ALL	502923.9	3635526	1.20E-07	1.13YrCanc	1.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
568	ALL	503260.9	3634799	1.19E-07	1.13YrCanc	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
696	ALL	503204.5	3635040	1.19E-07	1.13YrCanc	1.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
587	ALL	503260.9	3634829	1.18E-07	1.13YrCanc	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
844	ALL	502585.5	3633826	1.18E-07	1.13YrCanc	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
790	ALL	503148.2	3635191	1.18E-07	1.13YrCanc	1.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
464	ALL	503003.3	3635421	1.17E-07	1.13YrCanc	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
606	ALL	503260.9	3634859	1.17E-07	1.13YrCanc	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
715	ALL	503204.5	3635070	1.17E-07	1.13YrCanc	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
626	ALL	503260.9	3634889	1.16E-07	1.13YrCanc	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
734	ALL	503204.5	3635101	1.15E-07	1.13YrCanc	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
845	ALL	502640	3633826	1.15E-07	1.13YrCanc	1.15E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
833	ALL	502422.1	3633762	1.14E-07	1.13YrCanc	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
492	ALL	503317.2	3634648	1.14E-07	1.13YrCanc	1.14E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
463	ALL	502996.7	3635470	1.13E-07	1.13YrCanc	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
652	ALL	503260.9	3634950	1.13E-07	1.13YrCanc	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
753	ALL	503204.5	3635131	1.13E-07	1.13YrCanc	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
508	ALL	503317.2	3634678	1.13E-07	1.13YrCanc	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
462	ALL	502966.4	3635530	1.13E-07	1.13YrCanc	1.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
838	ALL	502585.5	3633794	1.12E-07	1.13YrCanc	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
524	ALL	503317.2	3634708	1.12E-07	1.13YrCanc	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
539	ALL	503317.2	3634738	1.11E-07	1.13YrCanc	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
772	ALL	503204.5	3635161	1.11E-07	1.13YrCanc	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
678	ALL	503260.9	3635010	1.11E-07	1.13YrCanc	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
554	ALL	503317.2	3634768	1.10E-07	1.13YrCanc	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
569	ALL	503317.2	3634799	1.09E-07	1.13YrCanc	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
839	ALL	502640	3633794	1.09E-07	1.13YrCanc	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
697	ALL	503260.9	3635040	1.09E-07	1.13YrCanc	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791	ALL	503204.5	3635191	1.09E-07	1.13YrCanc	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
588	ALL	503317.2	3634829	1.09E-07	1.13YrCanc	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
830	ALL	502422.1	3633730	1.09E-07	1.13YrCanc	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
716	ALL	503260.9	3635070	1.08E-07	1.13YrCanc	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
607	ALL	503317.2	3634859	1.08E-07	1.13YrCanc	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
834	ALL	502585.5	3633762	1.07E-07	1.13YrCanc	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
627	ALL	503317.2	3634889	1.07E-07	1.13YrCanc	1.07E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
735	ALL	503260.9	3635101	1.06E-07	1.13YrCanc	1.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
493	ALL	503373.5	3634648	1.05E-07	1.13YrCanc	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
653	ALL	503317.2	3634950	1.05E-07	1.13YrCanc	1.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
754	ALL	503260.9	3635131	1.04E-07	1.13YrCanc	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
835	ALL	502640	3633762	1.04E-07	1.13YrCanc	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
509	ALL	503373.5	3634678	1.04E-07	1.13YrCanc	1.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
827	ALL	502422.1	3633698	1.03E-07	1.13YrCanc	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
525	ALL	503373.5	3634708	1.03E-07	1.13YrCanc	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
773	ALL	503260.9	3635161	1.03E-07	1.13YrCanc	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
540	ALL	503373.5	3634738	1.03E-07	1.13YrCanc	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831	ALL	502585.5	3633730	1.02E-07	1.13YrCanc	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
679	ALL	503317.2	3635010	1.02E-07	1.13YrCanc	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
555	ALL	503373.5	3634768	1.02E-07	1.13YrCanc	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
570	ALL	503373.5	3634799	1.01E-07	1.13YrCanc	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
698	ALL	503317.2	3635040	1.01E-07	1.13YrCanc	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792	ALL	503260.9	3635191	1.01E-07	1.13YrCanc	1.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
589	ALL	503373.5	3634829	1.00E-07	1.13YrCanc	1.00E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
832	ALL	502640	3633730	9.99E-08	1.13YrCanc	9.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
821	ALL	502367.6	3633666	9.99E-08	1.13YrCanc	9.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
717	ALL	503317.2	3635070	9.97E-08	1.13YrCanc	9.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
608	ALL	503373.5	3634859	9.94E-08	1.13YrCanc	9.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
822	ALL	502422.1	3633666	9.88E-08	1.13YrCanc	9.88E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
628	ALL	503373.5	3634889	9.86E-08	1.13YrCanc	9.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
736	ALL	503317.2	3635101	9.83E-08	1.13YrCanc	9.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
828	ALL	502585.5	3633698	9.79E-08	1.13YrCanc	9.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
823	ALL	502476.6	3633666	9.74E-08	1.13YrCanc	9.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
755	ALL	503317.2	3635131	9.70E-08	1.13YrCanc	9.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
654	ALL	503373.5	3634950	9.68E-08	1.13YrCanc	9.68E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
829	ALL	502640	3633698	9.57E-08	1.13YrCanc	9.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
824	ALL	502531.1	3633666	9.57E-08	1.13YrCanc	9.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
774	ALL	503317.2	3635161	9.55E-08	1.13YrCanc	9.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
815	ALL	502367.6	3633633	9.55E-08	1.13YrCanc	9.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
680	ALL	503373.5	3635010	9.48E-08	1.13YrCanc	9.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
816	ALL	502422.1	3633633	9.45E-08	1.13YrCanc	9.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
793	ALL	503317.2	3635191	9.39E-08	1.13YrCanc	9.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
699	ALL	503373.5	3635040	9.37E-08	1.13YrCanc	9.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
825	ALL	502585.5	3633666	9.37E-08	1.13YrCanc	9.37E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
817	ALL	502476.6	3633633	9.31E-08	1.13YrCanc	9.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
718	ALL	503373.5	3635070	9.26E-08	1.13YrCanc	9.26E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
826	ALL	502640	3633666	9.17E-08	1.13YrCanc	9.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

818	ALL	502531.1	3633633	9.16E-08	1.13YrCanc	9.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
737	ALL	503373.5	3635101	9.15E-08	1.13YrCanc	9.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
809	ALL	502367.6	3633601	9.13E-08	1.13YrCanc	9.13E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810	ALL	502422.1	3633601	9.04E-08	1.13YrCanc	9.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
756	ALL	503373.5	3635131	9.03E-08	1.13YrCanc	9.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
819	ALL	502585.5	3633633	8.99E-08	1.13YrCanc	8.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
471	ALL	503457.6	3634855	8.94E-08	1.13YrCanc	8.94E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
811	ALL	502476.6	3633601	8.92E-08	1.13YrCanc	8.92E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
775	ALL	503373.5	3635161	8.90E-08	1.13YrCanc	8.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
472	ALL	503469.2	3634855	8.83E-08	1.13YrCanc	8.83E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
820	ALL	502640	3633633	8.80E-08	1.13YrCanc	8.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
812	ALL	502531.1	3633601	8.78E-08	1.13YrCanc	8.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794	ALL	503373.5	3635191	8.77E-08	1.13YrCanc	8.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
470	ALL	503469.2	3634893	8.75E-08	1.13YrCanc	8.75E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
813	ALL	502585.5	3633601	8.62E-08	1.13YrCanc	8.62E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
814	ALL	502640	3633601	8.45E-08	1.13YrCanc	8.45E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
465	ALL	503514.5	3634925	8.21E-08	1.13YrCanc	8.21E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
802	ALL	502531.1	3633537	8.10E-08	1.13YrCanc	8.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803	ALL	502585.5	3633537	7.96E-08	1.13YrCanc	7.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
468	ALL	503547.2	3634944	7.86E-08	1.13YrCanc	7.86E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
804	ALL	502640	3633537	7.81E-08	1.13YrCanc	7.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
469	ALL	503568.4	3634878	7.79E-08	1.13YrCanc	7.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805	ALL	502694.5	3633537	7.66E-08	1.13YrCanc	7.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
467	ALL	503561.7	3634987	7.64E-08	1.13YrCanc	7.64E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
466	ALL	503585.7	3634933	7.55E-08	1.13YrCanc	7.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806	ALL	502749	3633537	7.50E-08	1.13YrCanc	7.50E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795	ALL	502531.1	3633473	7.49E-08	1.13YrCanc	7.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
796	ALL	502585.5	3633473	7.38E-08	1.13YrCanc	7.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
807	ALL	502803.5	3633537	7.35E-08	1.13YrCanc	7.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
797	ALL	502640	3633473	7.25E-08	1.13YrCanc	7.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808	ALL	502858	3633537	7.19E-08	1.13YrCanc	7.19E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798	ALL	502694.5	3633473	7.12E-08	1.13YrCanc	7.12E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799	ALL	502749	3633473	6.98E-08	1.13YrCanc	6.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
800	ALL	502803.5	3633473	6.84E-08	1.13YrCanc	6.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
801	ALL	502858	3633473	6.71E-08	1.13YrCanc	6.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v22118 2/5/2024 4:35:42 PM - Chronic Risk - Input File: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\SANTEE_COMM_CTR_CON_HARP2\hra\Santee_Con_HRA_Mit_HRAInput.hra

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEV	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR	GENERAL	MAXHI
954	ALL		502134.1	3634861	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.69E-03
953	ALL		502156	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-03
955	ALL		502118.2	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-03
952	ALL		502173.7	3634861	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.33E-03
443	ALL		502091.2	3634721	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.94E-03
951	ALL		502186.3	3634861	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-03
956	ALL		502085.2	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.52E-03
950	ALL		502204.1	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.98E-03
957	ALL		502070.7	3634863	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.86E-03
920	ALL		502211.8	3634864	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.32E-03
958	ALL		502055.2	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-03
959	ALL		502043.7	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-03
960	ALL		502031.5	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-03
929	ALL		502140.8	3634893	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-03
928	ALL		502115.2	3634894	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-03
941	ALL		502187.1	3634892	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-03
942	ALL		502211.5	3634885	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-03
961	ALL		502021.1	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-03
930	ALL		502141.5	3634901	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-03
927	ALL		502115.2	3634902	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-03
966	ALL		502079.3	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-03
940	ALL		502187.8	3634899	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-03
943	ALL		502212.3	3634893	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-03
962	ALL		502009.6	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-03
967	ALL		502065.9	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-03
926	ALL		502114.5	3634907	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-03
939	ALL		502188.2	3634904	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61E-03
931	ALL		502141.1	3634911	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-03
968	ALL		502053.3	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-03
944	ALL		502212.7	3634904	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.26E-03
938	ALL		502187.1	3634911	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.24E-03
925	ALL		502115.2	3634915	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-03
969	ALL		502041.8	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-03
963	ALL		501997	3634862	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-03
924	ALL		502115.2	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-03
932	ALL		502141.1	3634923	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03
571	ALL		502303.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-03
937	ALL		502187.8	3634918	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-03
970	ALL		502031.8	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03
945	ALL		502215.2	3634913	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03
983	ALL		502077.4	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-03
923	ALL		502114.8	3634929	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-03
936	ALL		502186.7	3634927	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-03
982	ALL		502064.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-03
971	ALL		502018.9	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03
933	ALL		502141.1	3634933	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03
946	ALL		502215.6	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-03
922	ALL		502116.7	3634933	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-03
964	ALL		501981.4	3634866	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-03
590	ALL		502303.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-03
981	ALL		502051.5	3634918	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-03
947	ALL		502214.9	3634926	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-03
972	ALL		502007.7	3634895	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-03
980	ALL		502042.9	3634918	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-03
934	ALL		502141.1	3634942	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-03
921	ALL		502115.9	3634942	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03
935	ALL		502187.5	3634941	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-03
948	ALL		502214.1	3634934	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-03
965	ALL		501973.7	3634869	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.07E-03
18	ALL	UCART1	502154.5	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-03
979	ALL		502028.1	3634920	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03
17	ALL	UCART1	502121.8	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03
973	ALL		501994.8	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03
949	ALL		502214.1	3634942	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03
19	ALL	UCART1	502187.3	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-03
609	ALL		502303.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-03
16	ALL	UCART1	502089	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.80E-03
978	ALL		502014	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-03
20	ALL	UCART1	502220.1	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-03
974	ALL		501983.7	3634902	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-03
39	ALL	UCART1	502154.5	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03
977	ALL		502003.7	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-03
38	ALL	UCART1	502121.8	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03
989	ALL		501959.2	3634875	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03
15	ALL	UCART1	502056.2	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-03
40	ALL	UCART1	502187.3	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-03
37	ALL	UCART1	502089	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-03
21	ALL	UCART1	502252.9	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03
41	ALL	UCART1	502220.1	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-03
975	ALL		501974	3634908	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-03
572	ALL		502359.4	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03
629	ALL		502303.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03
988	ALL		501949.2	3634880	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03
60	ALL	UCART1	502154.5	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-03
59	ALL	UCART1	502121.8	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03
36	ALL	UCART1	502056.2	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-03
14	ALL	UCART1	502023.4	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-03
61	ALL	UCART1	502187.3	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-03
976	ALL		501981.4	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-03
58	ALL	UCART1	502089	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-03
42	ALL	UCART1	502252.9	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-03
591	ALL		502359.4	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-03
62	ALL	UCART1	502220.1	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03
991	ALL		501961.4	3634912	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-03
81	ALL	UCART1	502154.5	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03
80	ALL	UCART1	502121.8	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-03
987	ALL		501938.5	3634888	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03

57	ALL	UCART1	502056.2	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-03
35	ALL	UCART1	502023.4	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-03
82	ALL	UCART1	502187.3	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-03
79	ALL	UCART1	502089	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-03
63	ALL	UCART1	502252.9	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03
13	ALL	UCART1	501990.6	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-03
636	ALL		502303.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03
83	ALL	UCART1	502220.1	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03
610	ALL		502359.4	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03
990	ALL		501951.4	3634922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-03
986	ALL		501929.6	3634894	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03
102	ALL	UCART1	502154.5	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03
101	ALL	UCART1	502121.8	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-03
78	ALL	UCART1	502056.2	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-03
56	ALL	UCART1	502023.4	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-03
103	ALL	UCART1	502187.3	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-03
84	ALL	UCART1	502252.9	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03
100	ALL	UCART1	502089	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03
34	ALL	UCART1	501990.6	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-03
104	ALL	UCART1	502220.1	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03
984	ALL		501921.8	3634898	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-03
630	ALL		502359.4	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03
123	ALL	UCART1	502154.5	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-03
122	ALL	UCART1	502121.8	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-03
99	ALL	UCART1	502056.2	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-03
77	ALL	UCART1	502023.4	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
12	ALL	UCART1	501957.9	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
124	ALL	UCART1	502187.3	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03
105	ALL	UCART1	502252.9	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03
121	ALL	UCART1	502089	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
55	ALL	UCART1	501990.6	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
655	ALL		502303.1	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
125	ALL	UCART1	502220.1	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-03
573	ALL		502415.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03
985	ALL		501909.6	3634908	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03
144	ALL	UCART1	502154.5	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03
33	ALL	UCART1	501957.9	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03
120	ALL	UCART1	502056.2	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03
143	ALL	UCART1	502121.8	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03
98	ALL	UCART1	502023.4	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03
145	ALL	UCART1	502187.3	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03
126	ALL	UCART1	502252.9	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03
637	ALL		502359.4	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-03
592	ALL		502415.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03
76	ALL	UCART1	501990.6	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03
146	ALL	UCART1	502220.1	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-03
142	ALL	UCART1	502089	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
11	ALL	UCART1	501925.1	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-03
54	ALL	UCART1	501957.9	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03
165	ALL	UCART1	502154.5	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03
166	ALL	UCART1	502187.3	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03
147	ALL	UCART1	502252.9	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03
119	ALL	UCART1	502023.4	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-03
164	ALL	UCART1	502121.8	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-03
611	ALL		502415.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-03
141	ALL	UCART1	502056.2	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03
662	ALL		502303.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03
97	ALL	UCART1	501990.6	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-03
167	ALL	UCART1	502220.1	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-03
32	ALL	UCART1	501925.1	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-03
163	ALL	UCART1	502089	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-03
656	ALL		502359.4	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
186	ALL	UCART1	502154.5	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
75	ALL	UCART1	501957.9	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
168	ALL	UCART1	502252.9	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03
187	ALL	UCART1	502187.3	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03
185	ALL	UCART1	502121.8	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-03
631	ALL		502415.8	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-03
140	ALL	UCART1	502023.4	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
53	ALL	UCART1	501925.1	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
188	ALL	UCART1	502220.1	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
118	ALL	UCART1	501990.6	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
162	ALL	UCART1	502056.2	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-03
184	ALL	UCART1	502089	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03
10	ALL	UCART1	501892.3	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03
96	ALL	UCART1	501957.9	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-03
207	ALL	UCART1	502154.5	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
189	ALL	UCART1	502252.9	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
208	ALL	UCART1	502187.3	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
206	ALL	UCART1	502121.8	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
74	ALL	UCART1	501925.1	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03
681	ALL		502303.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03
209	ALL	UCART1	502220.1	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03
183	ALL	UCART1	502056.2	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03
31	ALL	UCART1	501892.3	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
638	ALL		502415.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
161	ALL	UCART1	502023.4	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
663	ALL		502359.4	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03
139	ALL	UCART1	501990.6	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03
205	ALL	UCART1	502089	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-03
574	ALL		502472.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-03
117	ALL	UCART1	501957.9	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03
228	ALL	UCART1	502154.5	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
210	ALL	UCART1	502252.9	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
229	ALL	UCART1	502187.3	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
227	ALL	UCART1	502121.8	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
52	ALL	UCART1	501892.3	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
95	ALL	UCART1	501925.1	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
593	ALL		502472.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03

230	ALL	UCART1	502220.1	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
204	ALL	UCART1	502056.2	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
182	ALL	UCART1	502023.4	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03
226	ALL	UCART1	502089	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03
160	ALL	UCART1	501990.6	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-03
657	ALL		502415.8	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
9	ALL	UCART1	501859.5	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
231	ALL	UCART1	502252.9	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
73	ALL	UCART1	501892.3	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
612	ALL		502472.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03
249	ALL	UCART1	502154.5	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
138	ALL	UCART1	501957.9	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
250	ALL	UCART1	502187.3	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
248	ALL	UCART1	502121.8	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03
116	ALL	UCART1	501925.1	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03
203	ALL	UCART1	502023.4	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-04
251	ALL	UCART1	502220.1	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-04
225	ALL	UCART1	502056.2	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.95E-04
700	ALL		502303.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-04
682	ALL		502359.4	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.91E-04
30	ALL	UCART1	501859.5	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.87E-04
181	ALL	UCART1	501990.6	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.78E-04
247	ALL	UCART1	502089	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.75E-04
94	ALL	UCART1	501892.3	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.72E-04
632	ALL		502472.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-04
252	ALL	UCART1	502252.9	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-04
270	ALL	UCART1	502154.5	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-04
159	ALL	UCART1	501957.9	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-04
271	ALL	UCART1	502187.3	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-04
51	ALL	UCART1	501859.5	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-04
269	ALL	UCART1	502121.8	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.44E-04
224	ALL	UCART1	502023.4	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-04
272	ALL	UCART1	502220.1	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.31E-04
246	ALL	UCART1	502056.2	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-04
664	ALL		502415.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-04
137	ALL	UCART1	501925.1	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E-04
202	ALL	UCART1	501990.6	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-04
510	ALL		502528.4	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.22E-04
494	ALL		502528.4	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.19E-04
115	ALL	UCART1	501892.3	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.17E-04
526	ALL		502528.4	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.15E-04
268	ALL	UCART1	502089	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.13E-04
72	ALL	UCART1	501859.5	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04
478	ALL		502528.4	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.03E-04
541	ALL		502528.4	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.01E-04
273	ALL	UCART1	502252.9	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-04
639	ALL		502472.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.97E-04
180	ALL	UCART1	501957.9	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.94E-04
291	ALL	UCART1	502154.5	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.90E-04
292	ALL	UCART1	502187.3	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-04
8	ALL	UCART1	501826.7	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-04
556	ALL		502528.4	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.83E-04
290	ALL	UCART1	502121.8	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-04
245	ALL	UCART1	502023.4	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.76E-04
473	ALL		502528.4	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.74E-04
293	ALL	UCART1	502220.1	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-04
701	ALL		502359.4	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-04
267	ALL	UCART1	502056.2	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-04
223	ALL	UCART1	501990.6	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-04
93	ALL	UCART1	501859.5	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-04
158	ALL	UCART1	501925.1	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.63E-04
719	ALL		502303.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-04
575	ALL		502528.4	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59E-04
289	ALL	UCART1	502089	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-04
29	ALL	UCART1	501826.7	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.56E-04
201	ALL	UCART1	501957.9	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-04
294	ALL	UCART1	502252.9	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-04
136	ALL	UCART1	501892.3	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.43E-04
683	ALL		502415.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-04
312	ALL	UCART1	502154.5	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.33E-04
313	ALL	UCART1	502187.3	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.32E-04
594	ALL		502528.4	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-04
658	ALL		502472.1	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-04
50	ALL	UCART1	501826.7	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-04
311	ALL	UCART1	502121.8	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04
114	ALL	UCART1	501859.5	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04
266	ALL	UCART1	502023.4	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-04
288	ALL	UCART1	502056.2	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-04
314	ALL	UCART1	502220.1	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.19E-04
244	ALL	UCART1	501990.6	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.18E-04
179	ALL	UCART1	501925.1	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.16E-04
310	ALL	UCART1	502089	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-04
222	ALL	UCART1	501957.9	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.02E-04
613	ALL		502528.4	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-04
71	ALL	UCART1	501826.7	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-04
315	ALL	UCART1	502252.9	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-04
157	ALL	UCART1	501892.3	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.87E-04
135	ALL	UCART1	501859.5	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.83E-04
333	ALL	UCART1	502154.5	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.82E-04
334	ALL	UCART1	502187.3	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.82E-04
287	ALL	UCART1	502023.4	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-04
309	ALL	UCART1	502056.2	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.76E-04
200	ALL	UCART1	501925.1	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-04
332	ALL	UCART1	502121.8	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-04
265	ALL	UCART1	501990.6	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-04
720	ALL		502359.4	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.73E-04
335	ALL	UCART1	502220.1	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-04
7	ALL	UCART1	501794	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.69E-04
92	ALL	UCART1	501826.7	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E-04

665	ALL		502472.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-04
633	ALL		502528.4	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-04
331	ALL	UCART1	502089	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-04
243	ALL	UCART1	501957.9	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.58E-04
738	ALL		502303.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-04
702	ALL		502415.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-04
336	ALL	UCART1	502252.9	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-04
178	ALL	UCART1	501892.3	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.48E-04
28	ALL	UCART1	501794	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-04
308	ALL	UCART1	502023.4	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-04
113	ALL	UCART1	501826.7	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-04
221	ALL	UCART1	501925.1	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-04
355	ALL	UCART1	502187.3	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-04
354	ALL	UCART1	502154.5	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.37E-04
330	ALL	UCART1	502056.2	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-04
286	ALL	UCART1	501990.6	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.33E-04
353	ALL	UCART1	502121.8	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.32E-04
156	ALL	UCART1	501859.5	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-04
495	ALL		502584.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-04
356	ALL	UCART1	502220.1	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.27E-04
511	ALL		502584.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26E-04
49	ALL	UCART1	501794	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.25E-04
479	ALL		502584.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-04
640	ALL		502528.4	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-04
264	ALL	UCART1	501957.9	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.19E-04
527	ALL		502584.8	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-04
352	ALL	UCART1	502089	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.18E-04
199	ALL	UCART1	501892.3	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-04
474	ALL		502584.8	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-04
357	ALL	UCART1	502252.9	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-04
542	ALL		502584.8	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-04
134	ALL	UCART1	501826.7	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-04
70	ALL	UCART1	501794	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-04
684	ALL		502472.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-04
242	ALL	UCART1	501925.1	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.01E-04
329	ALL	UCART1	502023.4	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-04
376	ALL	UCART1	502187.3	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-04
307	ALL	UCART1	501990.6	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-04
375	ALL	UCART1	502154.5	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-04
177	ALL	UCART1	501859.5	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-04
557	ALL		502584.8	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.95E-04
351	ALL	UCART1	502056.2	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-04
374	ALL	UCART1	502121.8	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.93E-04
739	ALL		502359.4	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-04
377	ALL	UCART1	502220.1	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.88E-04
450	ALL		501738.7	3634747	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-04
285	ALL	UCART1	501957.9	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-04
91	ALL	UCART1	501794	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-04
220	ALL	UCART1	501892.3	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.81E-04
373	ALL	UCART1	502089	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04
576	ALL		502584.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-04
721	ALL		502415.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-04
659	ALL		502528.4	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.77E-04
155	ALL	UCART1	501826.7	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.76E-04
378	ALL	UCART1	502252.9	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04
6	ALL	UCART1	501761.2	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-04
757	ALL		502303.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-04
263	ALL	UCART1	501925.1	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-04
350	ALL	UCART1	502023.4	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04
198	ALL	UCART1	501859.5	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.64E-04
396	ALL	UCART1	502154.5	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-04
328	ALL	UCART1	501990.6	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-04
595	ALL		502584.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-04
397	ALL	UCART1	502187.3	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04
112	ALL	UCART1	501794	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04
372	ALL	UCART1	502056.2	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-04
27	ALL	UCART1	501761.2	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.58E-04
395	ALL	UCART1	502121.8	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-04
444	ALL		501724	3634831	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-04
398	ALL	UCART1	502220.1	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.51E-04
306	ALL	UCART1	501957.9	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-04
241	ALL	UCART1	501892.3	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.49E-04
176	ALL	UCART1	501826.7	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.47E-04
394	ALL	UCART1	502089	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.45E-04
703	ALL		502472.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.43E-04
48	ALL	UCART1	501761.2	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.41E-04
399	ALL	UCART1	502252.9	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-04
614	ALL		502584.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E-04
133	ALL	UCART1	501794	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-04
284	ALL	UCART1	501925.1	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-04
666	ALL		502528.4	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.34E-04
219	ALL	UCART1	501859.5	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.33E-04
371	ALL	UCART1	502023.4	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-04
349	ALL	UCART1	501990.6	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-04
417	ALL	UCART1	502154.5	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.29E-04
449	ALL		501713.8	3634792	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.28E-04
393	ALL	UCART1	502056.2	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04
418	ALL	UCART1	502187.3	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04
69	ALL	UCART1	501761.2	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.24E-04
416	ALL	UCART1	502121.8	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-04
262	ALL	UCART1	501892.3	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-04
327	ALL	UCART1	501957.9	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-04
197	ALL	UCART1	501826.7	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.19E-04
419	ALL	UCART1	502220.1	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-04
758	ALL		502359.4	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.16E-04
634	ALL		502584.8	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-04
154	ALL	UCART1	501794	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.15E-04
740	ALL		502415.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-04
415	ALL	UCART1	502089	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.13E-04

420	ALL	UCART1	502252.9	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E-04
305	ALL	UCART1	501925.1	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04
90	ALL	UCART1	501761.2	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04
240	ALL	UCART1	501859.5	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-04
392	ALL	UCART1	502023.4	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04
370	ALL	UCART1	501990.6	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04
776	ALL		502303.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-04
438	ALL	UCART1	502154.5	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-04
5	ALL	UCART1	501728.4	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.96E-04
414	ALL	UCART1	502056.2	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.95E-04
437	ALL	UCART1	502121.8	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04
175	ALL	UCART1	501794	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-04
439	ALL	UCART1	502187.3	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-04
283	ALL	UCART1	501892.3	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-04
480	ALL		502641.1	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-04
496	ALL		502641.1	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-04
685	ALL		502528.4	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-04
348	ALL	UCART1	501957.9	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-04
722	ALL		502472.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04
111	ALL	UCART1	501761.2	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.90E-04
218	ALL	UCART1	501826.7	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-04
641	ALL		502584.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.89E-04
512	ALL		502641.1	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04
440	ALL	UCART1	502220.1	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-04
475	ALL		502641.1	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87E-04
436	ALL	UCART1	502089	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-04
26	ALL	UCART1	501728.4	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-04
528	ALL		502641.1	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-04
326	ALL	UCART1	501925.1	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-04
441	ALL	UCART1	502252.9	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-04
261	ALL	UCART1	501859.5	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04
196	ALL	UCART1	501794	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04
391	ALL	UCART1	501990.6	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04
132	ALL	UCART1	501761.2	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04
543	ALL		502641.1	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04
413	ALL	UCART1	502023.4	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-04
47	ALL	UCART1	501728.4	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.70E-04
304	ALL	UCART1	501892.3	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.68E-04
435	ALL	UCART1	502056.2	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.67E-04
369	ALL	UCART1	501957.9	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-04
558	ALL		502641.1	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-04
660	ALL		502584.8	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.61E-04
239	ALL	UCART1	501826.7	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.60E-04
759	ALL		502415.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-04
68	ALL	UCART1	501728.4	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-04
153	ALL	UCART1	501761.2	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-04
347	ALL	UCART1	501925.1	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04
777	ALL		502359.4	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-04
217	ALL	UCART1	501794	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04
447	ALL		501682	3634783	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-04
577	ALL		502641.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04
282	ALL	UCART1	501859.5	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.52E-04
704	ALL		502528.4	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04
412	ALL	UCART1	501990.6	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-04
434	ALL	UCART1	502023.4	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.46E-04
325	ALL	UCART1	501892.3	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-04
89	ALL	UCART1	501728.4	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.44E-04
741	ALL		502472.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-04
390	ALL	UCART1	501957.9	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04
174	ALL	UCART1	501761.2	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04
596	ALL		502641.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.39E-04
260	ALL	UCART1	501826.7	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-04
368	ALL	UCART1	501925.1	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-04
238	ALL	UCART1	501794	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-04
667	ALL		502584.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-04
110	ALL	UCART1	501728.4	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.31E-04
303	ALL	UCART1	501859.5	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-04
4	ALL	UCART1	501695.6	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-04
615	ALL		502641.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-04
433	ALL	UCART1	501990.6	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-04
346	ALL	UCART1	501892.3	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-04
195	ALL	UCART1	501761.2	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-04
25	ALL	UCART1	501695.6	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-04
411	ALL	UCART1	501957.9	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-04
131	ALL	UCART1	501728.4	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-04
281	ALL	UCART1	501826.7	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.15E-04
723	ALL		502528.4	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-04
259	ALL	UCART1	501794	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-04
389	ALL	UCART1	501925.1	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.11E-04
46	ALL	UCART1	501695.6	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
324	ALL	UCART1	501859.5	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
778	ALL		502415.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
635	ALL		502641.1	3634919	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-04
446	ALL		501659.4	3634841	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04
216	ALL	UCART1	501761.2	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04
152	ALL	UCART1	501728.4	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04
445	ALL		501656	3634810	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-04
686	ALL		502584.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04
367	ALL	UCART1	501892.3	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04
760	ALL		502472.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
67	ALL	UCART1	501695.6	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-04
432	ALL	UCART1	501957.9	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-04
302	ALL	UCART1	501826.7	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.96E-04
481	ALL		502697.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.93E-04
476	ALL		502697.5	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04
497	ALL		502697.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04
642	ALL		502641.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04
345	ALL	UCART1	501859.5	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04
173	ALL	UCART1	501728.4	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-04

280	ALL	UCART1	501794	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-04
410	ALL	UCART1	501925.1	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-04
88	ALL	UCART1	501695.6	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-04
237	ALL	UCART1	501761.2	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-04
513	ALL		502697.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-04
388	ALL	UCART1	501892.3	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-04
529	ALL		502697.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-04
323	ALL	UCART1	501826.7	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04
109	ALL	UCART1	501695.6	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-04
742	ALL		502528.4	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04
194	ALL	UCART1	501728.4	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.76E-04
3	ALL	UCART1	501662.8	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-04
544	ALL		502697.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-04
705	ALL		502584.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04
366	ALL	UCART1	501859.5	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.73E-04
258	ALL	UCART1	501761.2	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04
661	ALL		502641.1	3634980	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-04
431	ALL	UCART1	501925.1	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-04
301	ALL	UCART1	501794	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70E-04
130	ALL	UCART1	501695.6	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.68E-04
24	ALL	UCART1	501662.8	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-04
559	ALL		502697.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-04
409	ALL	UCART1	501892.3	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-04
779	ALL		502472.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-04
344	ALL	UCART1	501826.7	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-04
45	ALL	UCART1	501662.8	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-04
578	ALL		502697.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-04
151	ALL	UCART1	501695.6	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-04
215	ALL	UCART1	501728.4	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-04
387	ALL	UCART1	501859.5	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-04
279	ALL	UCART1	501761.2	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.56E-04
172	ALL	UCART1	501695.6	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.53E-04
668	ALL		502641.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04
66	ALL	UCART1	501662.8	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04
322	ALL	UCART1	501794	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-04
597	ALL		502697.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.50E-04
430	ALL	UCART1	501892.3	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-04
365	ALL	UCART1	501826.7	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04
724	ALL		502584.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-04
761	ALL		502528.4	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-04
87	ALL	UCART1	501662.8	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04
236	ALL	UCART1	501728.4	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-04
193	ALL	UCART1	501695.6	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-04
616	ALL		502697.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04
408	ALL	UCART1	501859.5	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04
300	ALL	UCART1	501761.2	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-04
448	ALL		501615.2	3634804	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-04
108	ALL	UCART1	501662.8	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04
343	ALL	UCART1	501794	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04
687	ALL		502641.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04
386	ALL	UCART1	501826.7	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-04
2	ALL	UCART1	501630.1	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-04
150	ALL	UCART1	501662.8	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-04
257	ALL	UCART1	501728.4	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.27E-04
129	ALL	UCART1	501662.8	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04
214	ALL	UCART1	501695.6	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-04
429	ALL	UCART1	501859.5	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.23E-04
23	ALL	UCART1	501630.1	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.21E-04
171	ALL	UCART1	501662.8	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04
321	ALL	UCART1	501761.2	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04
128	ALL	UCART1	501630.1	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04
107	ALL	UCART1	501630.1	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04
477	ALL		502753.8	3634617	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04
743	ALL		502584.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04
364	ALL	UCART1	501794	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04
482	ALL		502753.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04
780	ALL		502528.4	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-04
44	ALL	UCART1	501630.1	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
498	ALL		502753.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
407	ALL	UCART1	501826.7	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
278	ALL	UCART1	501728.4	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-04
235	ALL	UCART1	501695.6	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04
514	ALL		502753.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04
86	ALL	UCART1	501630.1	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-04
706	ALL		502641.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04
65	ALL	UCART1	501630.1	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04
192	ALL	UCART1	501662.8	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04
149	ALL	UCART1	501630.1	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-04
85	ALL	UCART1	501597.3	3635001	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.05E-04
342	ALL	UCART1	501761.2	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.03E-04
106	ALL	UCART1	501597.3	3635015	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-04
385	ALL	UCART1	501794	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-04
299	ALL	UCART1	501728.4	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04
428	ALL	UCART1	501826.7	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04
1	ALL	UCART1	501597.3	3634948	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.99E-04
256	ALL	UCART1	501695.6	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-04
64	ALL	UCART1	501597.3	3634988	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-04
213	ALL	UCART1	501662.8	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-04
22	ALL	UCART1	501597.3	3634962	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-04
762	ALL		502584.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04
43	ALL	UCART1	501597.3	3634975	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04
170	ALL	UCART1	501630.1	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-04
127	ALL	UCART1	501597.3	3635028	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-04
725	ALL		502641.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04
363	ALL	UCART1	501761.2	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.88E-04
406	ALL	UCART1	501794	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-04
320	ALL	UCART1	501728.4	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.87E-04
277	ALL	UCART1	501695.6	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.84E-04
234	ALL	UCART1	501662.8	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-04

148	ALL	UCART1	501597.3	3635041	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-04
191	ALL	UCART1	501630.1	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.78E-04
384	ALL	UCART1	501761.2	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-04
617	ALL		502753.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04
341	ALL	UCART1	501728.4	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04
427	ALL	UCART1	501794	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04
298	ALL	UCART1	501695.6	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04
255	ALL	UCART1	501662.8	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04
781	ALL		502584.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04
744	ALL		502641.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-04
405	ALL	UCART1	501761.2	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-04
169	ALL	UCART1	501597.3	3635054	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-04
362	ALL	UCART1	501728.4	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-04
212	ALL	UCART1	501630.1	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
483	ALL		502810.1	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.59E-04
319	ALL	UCART1	501695.6	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-04
896	ALL		501511.3	3634952	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-04
643	ALL		502753.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04
499	ALL		502810.1	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-04
276	ALL	UCART1	501662.8	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04
897	ALL		501516.7	3634990	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-04
515	ALL		502810.1	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-04
763	ALL		502641.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-04
426	ALL	UCART1	501761.2	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-04
530	ALL		502810.1	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-04
383	ALL	UCART1	501728.4	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-04
340	ALL	UCART1	501695.6	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-04
545	ALL		502810.1	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-04
190	ALL	UCART1	501597.3	3635068	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E-04
560	ALL		502810.1	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04
297	ALL	UCART1	501662.8	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-04
233	ALL	UCART1	501630.1	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-04
669	ALL		502753.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-04
361	ALL	UCART1	501695.6	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-04
404	ALL	UCART1	501728.4	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04
579	ALL		502810.1	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04
895	ALL		501511.3	3634921	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-04
894	ALL		501522.1	3634835	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-04
782	ALL		502641.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.30E-04
598	ALL		502810.1	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-04
688	ALL		502753.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04
318	ALL	UCART1	501662.8	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-04
618	ALL		502810.1	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-04
382	ALL	UCART1	501695.6	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04
425	ALL	UCART1	501728.4	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04
893	ALL		501509.9	3634739	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04
211	ALL	UCART1	501597.3	3635081	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04
254	ALL	UCART1	501630.1	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04
892	ALL		501511.3	3634709	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-04
707	ALL		502753.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04
484	ALL		502866.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-04
339	ALL	UCART1	501662.8	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04
644	ALL		502810.1	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.10E-04
500	ALL		502866.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09E-04
403	ALL	UCART1	501695.6	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-04
891	ALL		501520.8	3634630	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-04
516	ALL		502866.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E-04
531	ALL		502866.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-04
726	ALL		502753.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-04
275	ALL	UCART1	501630.1	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-04
546	ALL		502866.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04
360	ALL	UCART1	501662.8	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.98E-04
561	ALL		502866.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04
670	ALL		502810.1	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04
424	ALL	UCART1	501695.6	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-04
232	ALL	UCART1	501597.3	3635094	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-04
580	ALL		502866.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-04
745	ALL		502753.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-04
381	ALL	UCART1	501662.8	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04
599	ALL		502866.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-04
689	ALL		502810.1	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-04
296	ALL	UCART1	501630.1	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-04
619	ALL		502866.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-04
402	ALL	UCART1	501662.8	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-04
764	ALL		502753.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.77E-04
708	ALL		502810.1	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04
442	ALL		501602.7	3635114	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-04
253	ALL	UCART1	501597.3	3635107	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-04
485	ALL		502922.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-04
645	ALL		502866.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
501	ALL		502922.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-04
317	ALL	UCART1	501630.1	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-04
517	ALL		502922.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-04
727	ALL		502810.1	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-04
274	ALL	UCART1	501597.3	3635121	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.66E-04
783	ALL		502753.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
532	ALL		502922.8	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
423	ALL	UCART1	501662.8	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-04
547	ALL		502922.8	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.62E-04
671	ALL		502866.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-04
338	ALL	UCART1	501630.1	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
562	ALL		502922.8	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
890	ALL		502149.6	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
295	ALL	UCART1	501597.3	3635134	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04
746	ALL		502810.1	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-04
889	ALL		502095.1	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-04
581	ALL		502922.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-04
690	ALL		502866.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-04
888	ALL		502040.6	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-04

600	ALL		502922.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-04
359	ALL	UCART1	501630.1	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-04
620	ALL		502922.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-04
765	ALL		502810.1	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04
316	ALL	UCART1	501597.3	3635147	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-04
887	ALL		501986.2	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-04
709	ALL		502866.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-04
380	ALL	UCART1	501630.1	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-04
486	ALL		502979.2	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04
882	ALL		502149.6	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-04
646	ALL		502922.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-04
502	ALL		502979.2	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04
881	ALL		502095.1	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-04
401	ALL	UCART1	501630.1	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
784	ALL		502810.1	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
337	ALL	UCART1	501597.3	3635160	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
728	ALL		502866.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
886	ALL		501931.7	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04
518	ALL		502979.2	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-04
880	ALL		502040.6	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-04
533	ALL		502979.2	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-04
422	ALL	UCART1	501630.1	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-04
548	ALL		502979.2	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-04
905	ALL		502909	3634272	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-04
358	ALL	UCART1	501597.3	3635174	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
747	ALL		502866.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
672	ALL		502922.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-04
563	ALL		502979.2	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-04
879	ALL		501986.2	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-04
885	ALL		501877.2	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-04
582	ALL		502979.2	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-04
691	ALL		502922.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04
379	ALL	UCART1	501597.3	3635187	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-04
911	ALL		502963.8	3634313	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04
906	ALL		502903.6	3634246	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04
601	ALL		502979.2	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04
878	ALL		501931.7	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-04
766	ALL		502866.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-04
874	ALL		502095.1	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-04
621	ALL		502979.2	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-04
710	ALL		502922.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04
913	ALL		502947.5	3634270	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04
873	ALL		502040.6	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04
400	ALL	UCART1	501597.3	3635200	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E-04
884	ALL		501822.7	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E-04
785	ALL		502866.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-04
487	ALL		503035.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-04
877	ALL		501877.2	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04
647	ALL		502979.2	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04
729	ALL		502922.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04
872	ALL		501986.2	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-04
503	ALL		503035.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04
421	ALL	UCART1	501597.3	3635213	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04
914	ALL		502965.6	3634266	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-04
519	ALL		503035.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-04
534	ALL		503035.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
898	ALL		503043.6	3634376	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
915	ALL		503000.6	3634292	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
912	ALL		503013.9	3634311	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
916	ALL		503023.5	3634327	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-04
871	ALL		501931.7	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04
748	ALL		502922.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04
867	ALL		502095.1	3633986	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04
549	ALL		503035.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04
883	ALL		501768.2	3634082	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-04
673	ALL		502979.2	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-04
907	ALL		502905	3634191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04
876	ALL		501822.7	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04
917	ALL		503037.4	3634331	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04
564	ALL		503035.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04
899	ALL		503061.3	3634388	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-04
866	ALL		502040.6	3633986	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-04
583	ALL		503035.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-04
692	ALL		502979.2	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04
918	ALL		503053.7	3634346	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04
767	ALL		502922.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-04
870	ALL		501877.2	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.02E-04
602	ALL		503035.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04
622	ALL		503035.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04
711	ALL		502979.2	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04
919	ALL		503072.4	3634345	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04
900	ALL		503087.2	3634382	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04
786	ALL		502922.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-04
875	ALL		501768.2	3634050	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04
908	ALL		502903.6	3634158	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-04
862	ALL		502095.1	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-04
488	ALL		503091.8	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04
869	ALL		501822.7	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04
730	ALL		502979.2	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04
648	ALL		503035.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04
861	ALL		502040.6	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04
504	ALL		503091.8	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-04
901	ALL		503103.5	3634385	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-04
520	ALL		503091.8	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-04
749	ALL		502979.2	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-04
535	ALL		503091.8	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-04
550	ALL		503091.8	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04
674	ALL		503035.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04
909	ALL		502905	3634127	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04

863	ALL	502422.1	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04
868	ALL	501768.2	3634018	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04
451	ALL	502804.3	3635417	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04
565	ALL	503091.8	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-04
768	ALL	502979.2	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04
902	ALL	503130.7	3634384	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04
584	ALL	503091.8	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04
693	ALL	503035.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.84E-04
857	ALL	502095.1	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04
603	ALL	503091.8	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-04
856	ALL	502040.6	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-04
712	ALL	503035.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04
910	ALL	502906.3	3634104	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04
623	ALL	503091.8	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04
787	ALL	502979.2	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-04
731	ALL	503035.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04
903	ALL	503159.2	3634384	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04
858	ALL	502422.1	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04
489	ALL	503148.2	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04
649	ALL	503091.8	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04
456	ALL	502812.5	3635466	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04
452	ALL	502842.8	3635418	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-04
505	ALL	503148.2	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-04
852	ALL	502095.1	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04
521	ALL	503148.2	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-04
750	ALL	503035.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04
864	ALL	502585.5	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04
536	ALL	503148.2	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04
851	ALL	502040.6	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-04
904	ALL	503182.3	3634381	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04
675	ALL	503091.8	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04
551	ALL	503148.2	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04
458	ALL	502804.3	3635510	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-04
769	ALL	503035.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04
566	ALL	503148.2	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-04
694	ALL	503091.8	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04
585	ALL	503148.2	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-04
853	ALL	502422.1	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04
457	ALL	502802.7	3635531	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04
865	ALL	502640	3633954	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-04
604	ALL	503148.2	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-04
453	ALL	502881.3	3635419	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-04
788	ALL	503035.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04
713	ALL	503091.8	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04
624	ALL	503148.2	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
847	ALL	502095.1	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-04
859	ALL	502585.5	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04
459	ALL	502803.5	3635554	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-04
846	ALL	502040.6	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04
732	ALL	503091.8	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04
490	ALL	503204.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-04
650	ALL	503148.2	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E-04
506	ALL	503204.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-04
751	ALL	503091.8	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-04
860	ALL	502640	3633922	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04
848	ALL	502422.1	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04
522	ALL	503204.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04
454	ALL	502916.5	3635415	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04
537	ALL	503204.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-04
676	ALL	503148.2	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
552	ALL	503204.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-04
770	ALL	503091.8	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
841	ALL	502095.1	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
854	ALL	502585.5	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
567	ALL	503204.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04
840	ALL	502040.6	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04
695	ALL	503148.2	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-04
586	ALL	503204.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04
842	ALL	502367.6	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-04
789	ALL	503091.8	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04
605	ALL	503204.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-04
714	ALL	503148.2	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04
460	ALL	502881.3	3635525	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04
455	ALL	502946.8	3635416	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-04
855	ALL	502640	3633890	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04
843	ALL	502422.1	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04
625	ALL	503204.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-04
733	ALL	503148.2	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04
849	ALL	502585.5	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
491	ALL	503260.9	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
651	ALL	503204.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04
507	ALL	503260.9	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-04
752	ALL	503148.2	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-04
523	ALL	503260.9	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04
836	ALL	502367.6	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04
538	ALL	503260.9	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04
850	ALL	502640	3633858	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04
677	ALL	503204.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04
771	ALL	503148.2	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04
553	ALL	503260.9	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04
837	ALL	502422.1	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04
461	ALL	502923.9	3635526	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-04
568	ALL	503260.9	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04
696	ALL	503204.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04
587	ALL	503260.9	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
844	ALL	502585.5	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
790	ALL	503148.2	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-04
464	ALL	503003.3	3635421	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
606	ALL	503260.9	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04

715	ALL	503204.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04
626	ALL	503260.9	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-04
734	ALL	503204.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-04
845	ALL	502640	3633826	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
833	ALL	502422.1	3633762	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04
492	ALL	503317.2	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
463	ALL	502996.7	3635470	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
652	ALL	503260.9	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-04
753	ALL	503204.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
508	ALL	503317.2	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
462	ALL	502966.4	3635530	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
838	ALL	502585.5	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-04
524	ALL	503317.2	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-04
539	ALL	503317.2	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04
772	ALL	503204.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04
678	ALL	503260.9	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04
554	ALL	503317.2	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-04
569	ALL	503317.2	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
839	ALL	502640	3633794	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
697	ALL	503260.9	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
791	ALL	503204.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-04
588	ALL	503317.2	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04
830	ALL	502422.1	3633730	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-04
716	ALL	503260.9	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04
607	ALL	503317.2	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04
834	ALL	502585.5	3633762	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04
627	ALL	503317.2	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04
735	ALL	503260.9	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
493	ALL	503373.5	3634648	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04
653	ALL	503317.2	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-04
754	ALL	503260.9	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
835	ALL	502640	3633762	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
509	ALL	503373.5	3634678	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-04
827	ALL	502422.1	3633698	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
525	ALL	503373.5	3634708	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-04
773	ALL	503260.9	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
540	ALL	503373.5	3634738	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
831	ALL	502585.5	3633730	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
679	ALL	503317.2	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-04
555	ALL	503373.5	3634768	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-04
570	ALL	503373.5	3634799	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
698	ALL	503317.2	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
792	ALL	503260.9	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-04
589	ALL	503373.5	3634829	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
832	ALL	502640	3633730	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
821	ALL	502367.6	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
717	ALL	503317.2	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-04
608	ALL	503373.5	3634859	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04
822	ALL	502422.1	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-04
628	ALL	503373.5	3634889	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
736	ALL	503317.2	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
828	ALL	502585.5	3633698	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04
823	ALL	502476.6	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
755	ALL	503317.2	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04
654	ALL	503373.5	3634950	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-04
824	ALL	502531.1	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
829	ALL	502640	3633698	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
774	ALL	503317.2	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
815	ALL	502367.6	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04
680	ALL	503373.5	3635010	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
816	ALL	502422.1	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04
793	ALL	503317.2	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
699	ALL	503373.5	3635040	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
825	ALL	502585.5	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04
817	ALL	502476.6	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04
718	ALL	503373.5	3635070	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04
826	ALL	502640	3633666	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
818	ALL	502531.1	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
737	ALL	503373.5	3635101	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
809	ALL	502367.6	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-04
810	ALL	502422.1	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
756	ALL	503373.5	3635131	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-04
819	ALL	502585.5	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
471	ALL	503457.6	3634855	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-04
811	ALL	502476.6	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
775	ALL	503373.5	3635161	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04
472	ALL	503469.2	3634855	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
820	ALL	502640	3633633	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
812	ALL	502531.1	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
794	ALL	503373.5	3635191	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04
470	ALL	503469.2	3634893	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-04
813	ALL	502585.5	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-04
814	ALL	502640	3633601	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.98E-05
465	ALL	503514.5	3634925	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70E-05
802	ALL	502531.1	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.56E-05
803	ALL	502585.5	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.40E-05
468	ALL	503547.2	3634944	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.29E-05
804	ALL	502640	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.23E-05
469	ALL	503568.4	3634878	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.20E-05
805	ALL	502694.5	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.05E-05
467	ALL	503561.7	3634987	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.02E-05
466	ALL	503585.7	3634933	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-05
806	ALL	502749	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-05
795	ALL	502531.1	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.85E-05
796	ALL	502585.5	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.72E-05
807	ALL	502803.5	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-05
797	ALL	502640	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-05
808	ALL	502858	3633537	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.50E-05
798	ALL	502694.5	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-05

799	ALL	502749	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-05
800	ALL	502803.5	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.08E-05
801	ALL	502858	3633473	NonCancer	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.92E-05

Appendix A-4

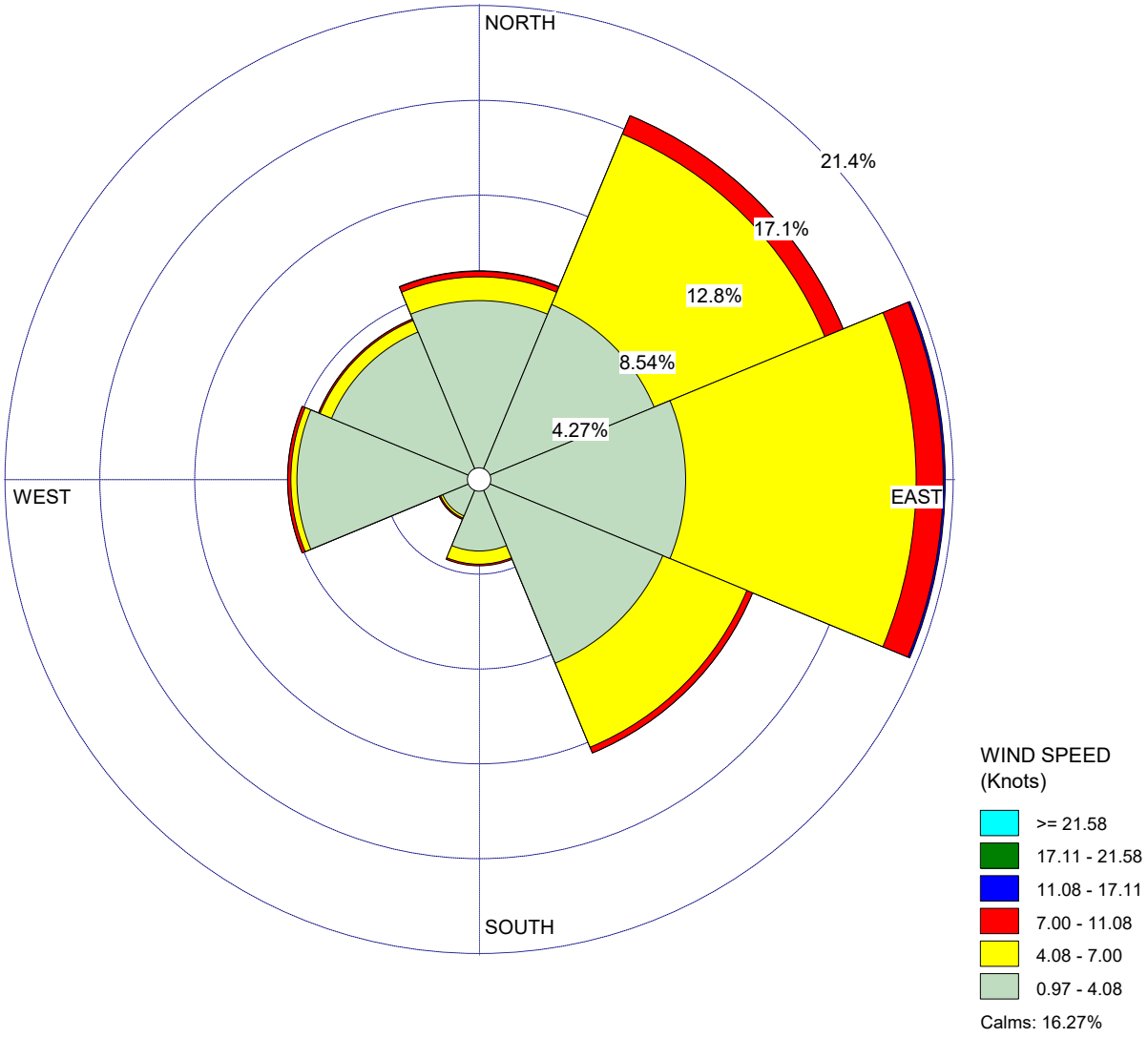
Operational Health Risk Screening

WIND ROSE PLOT:

Station #53143

DISPLAY:

Wind Speed
Flow Vector (blowing to)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2019 - 00:00** **End Date: 12/31/2021 - 23:59**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **16.27%**	TOTAL COUNT: **26265 hrs.**	
	AVG. WIND SPEED: **2.85 Knots**	DATE: **2/26/2024**	PROJECT NO.:

Santa Barbara County Air Pollution Control District
DICE Screening Tool — August 2018

Engine Data User Inputs

Dispersion

- Urban
- Rural

Meteolorogical Data Set

- (•) Santa Maria Airport
- ( ) Santa Barbara Airport

Building Downwash

- ( ) Include Building Downwash
- (•) No Building Downwash

Engine Size

315 bhp

Distance from Source to

Nearest Resident:

100 meters

Nearest Worker:

100 meters

Diesel PM Emission Factor

0.15 g/bhp-hr

Permitted Hours

52 hr/yr

DICE Screening Health Risk Outputs		SBCAPCD Board-Approved Significance Thresholds
Cancer Risk at the MEIR:	2.3 / million	≥10.0 / million
Chronic HI at the MEIR:	<0.1	>1.0

HI stands for "hazard index."
MEIR stands for "maximally exposed individual resident."
MEIW stands for "maximally exposed individual worker."

Santa Barbara County Air Pollution Control District
DICE Screening Tool — August 2018

Engine Data User Inputs

Dispersion

- Urban
- Rural

Meteolorogical Data Set

- Santa Maria Airport
- Santa Barbara Airport

Building Downwash

- Include Building Downwash
- No Building Downwash

Engine Size

315 bhp

Distance from Source to

Nearest Resident:

100 meters

Nearest Worker:

100 meters

Diesel PM Emission Factor

0.15 g/bhp-hr

Permitted Hours

52 hr/yr

DICE Screening Health Risk Outputs		SBCAPCD Board-Approved Significance Thresholds
Cancer Risk at the MEIR:	1.9 / million	≥10.0 / million
Chronic HI at the MEIR:	<0.1	>1.0

HI stands for "hazard index."
MEIR stands for "maximally exposed individual resident."
MEIW stands for "maximally exposed individual worker."

Name

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in gray areas.		
Author or updater		*Last Update*	March 5, 2024
Facility:	Santee Community Center		
ID#:			
Project #:			
Unit and Process#			

Operating Hours hr/yr	8,760.00			
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	1.20E+01	1.78E-02	0.00E+00	1.20E+01
100≤R<250 0.250	3.01E+00	4.46E-03	0.00E+00	3.01E+00
250≤R<500 0.040	4.81E-01	7.14E-04	0.00E+00	4.81E-01
500≤R<1000 0.011	1.32E-01	1.96E-04	0.00E+00	1.32E-01
1000≤R<1500 0.003	3.61E-02	5.35E-05	0.00E+00	3.61E-02
1500≤R<2000 0.002	2.41E-02	3.57E-05	0.00E+00	2.41E-02
2000<R 0.001	1.20E-02	1.78E-05	0.00E+00	1.20E-02

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

0

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel Engine Exhaust	**9901**	5.21E+00	1.00E-01	5.95E-04	1.20E+01	1.78E-02	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**1.20E+01**	**1.78E-02**	**0.00E+00**

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Diesel engine exhaust, particulate matter (Diesel PM)	9901

Appendix A-5
Energy Calculations

Construction

Source	Percent	Total MTCO2	Gallons Diesel	Gallons Gasoline
2025				
Off-road	82.3%	132	12,976	
Electricity	0.0%	0		
Worker	3.2%	5		587
Vendor	3.5%	6	552	
Hauling	10.9%	18	1,719	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*161*	*15,246*	*587*
2026				
Off-road	91.7%	173	16,920	
Electricity	0.0%	0		
Worker	4.4%	8		944
Vendor	3.9%	7	720	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*188*	*17,640*	*944*
Total Construction Period				
Off-road	87.4%	305	29,896	0
Electricity	0.0%	0	0	0
Worker	3.8%	13	0	1,531
Vendor	3.7%	13	1,271	0
Hauling	5.0%	18	1,719	0
Onsite Truck	0.0%	0	0	0
Total	***100.0%***	***349***	***32,886***	***1,531***

Operation

Source	Percent	Total MTCO2	Gallons Diesel	Gallons Gasoline
Mobile Exhaust	93.4%	1,577.80	29,972	144,784
Landscape Equipment	0.0%	0.19	18	
Electricity	4.2%	70.94		
Natural Gas Energy	1.3%	21.96		
Water and Wastewater	0.4%	5.91		
Solid Waste	0.4%	6.25		
Off-Road Equipment	0.0%	0.00	0	
Emergency Generators and Fire Pumps	0.4%	6.23	610	
Total	**100.0%**	**1689.08**	**30,601**	**144,784**

Type	Total	Units
Petroleum	175,385	gallons/year
Electricity	266,720	kWh/year
Natural Gas	400,288	kBTU/year

Constants		
Fuel	**KgCO2/Gallon**	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	**kg C / MMBtu**	**MMBtu / barrel**		**kg CO_2 / gallon**
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21

Appendix A-6

Sustainable Santee Checklist

Sustainable Santee Action Plan Consistency and Implementation Tracking Checklist

The Sustainable Santee Action Plan Project Consistency Checklist (Checklist) is intended to be a tool for development projects to demonstrate consistency with Santee's (City's) Sustainable Santee Action Plan, which is a qualified greenhouse gas (GHG) emissions reduction plan in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. This Checklist has been developed as part of the Sustainable Santee Action Plan implementation and monitoring process and will support the achievement of individual GHG reduction measures as well as the City's overall GHG reduction goals. In addition, this Checklist will further the City's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others.

CEQA Guidelines Section 15183.5 allows lead agencies to analyze the impacts associated with GHG emissions at a programmatic level in plan-level documents such as Climate Action Plans or sustainability plans, so that project-level environmental documents may tier from the programmatic review. Projects that meet the requirements of this Checklist will be deemed to be consistent with the Sustainable Santee Action Plan and will be found to have a less than significant contribution to cumulative GHG (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in this Checklist will be deemed to be inconsistent with the Sustainable Santee Action Plan and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. This GHG Checklist can be updated to reflect adoption of new GHG reduction strategies or to comply with any changes and updates in the Plan or local, State or federal regulations.

1. Project Information	
Contact Information	
Project No./Name:	Santee Community Center
Address:	10123 Riverwalk Drive, Santee
Applicant Name:	City of Santee
Contact Information:	
Project Description Characteristics	
1. What is the size of the Project (acres)?	3.57
2. Identify all Applicable Proposed Land uses:	Community center
a. Residential-Single Family (Indicate number of single-family units)	
b. Residential-Multifamily (Indicate number of multifamily units)	
c. Commercial (total square footage)	12,500
d. Industrial (total square footage)	
e. Other (describe)	
3. Provide a brief description of the project proposed:	Construction of 12,500 square foot community center with event space, office space, and support spaces.

2. Determining Land Use Consistency		
Checklist Item		
As the first step in determining the consistency with the Sustainable Santee Action Plan for the discretionary development projects, this section allows the City to determine the project's consistency with the land use assumptions used in the Plan.		
	Yes	**No**
1. Is the proposed project consistent with the existing General Plan and land use zoning designations? OR	X	
2. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that is identified in the Sustainable Santee Action Plan Land Use Buffer (see Appendix A, Table 11)?		
3. If the proposed project is not consistent with the existing land use plan, zoning designations, or Land Use Buffer, does the project include a land use plan and/or zoning designation ammendment that will result in an equivalent or less GHG-intensive project when compared to the existing designations?		

Notes:

For questions 1, if the answer is **Yes**, proceed to the Sustainable Santee Action Plan Consistency Checklist. If the answer is **No**, procced to question 2.

For question 2, if the answer is **Yes**, proceed to the Sustainable Santee Action Plan Consistency Checklist. If the answer is **No**, proceed to question 3.

For question 3, if the answer is **Yes** provide estimated project emissions under both existing and proposed designation (s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation. If the answer of question 3 is **No** then, in accordance with the City's Significance Determination Thresholds, the project's GHG impact may be significant. The project must nonetheless incorporate each of the applicable measures identified in the Checklist to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091.

Sustainable Santee Action Plan CEQA Project Consistency Checklist					Notes
Greenhouse Gas Reduction Measure	**Measure Applicability**				This checklist is to be filled out by the applicant
	Yes	**No**	**N/A**	**Description**	
Emissions Measures Category: Energy Efficiency					
Land Use Sector-Residential					
Goal 1. Increase Energy Efficiency in Existing Residential Units					Measure 1.1 is not on checklist because it focuses on minor residental alterations not subject to CEQA
Measure 1.2. For existing Residential Unit Permit for Major Modifications (more than 30% of dwelling unit size, including bathroom and kitchen) that is considered a Project under CEQA must implement energy efficiency retrofits recommended from City Energy Audit and explain the energy efficiency retrofits implemented.			X	The project is a non-residential project.	Measure 1.2 only applies if alteration is subject to CEQA
Goal 2. Increase Energy Efficiency in the New Residential Units					
Measure 2.1. New residential construction meet or exceed California Green Building Standards Tier 2 Voluntary Measures, such as obtaining green building ratings including LEED, Build it Green, or Energy Star Certified building certifications in scoring development and explain the measures implemented.			X	The project is a non-residential project.	
Land Use Sector-Commercial					Measure 3.1 is not on checklist because it focuses on minor alterations which are not subject to CEQA
Goal 3. Increase Energy Efficiency in Existing Commercial Units					
Measure 3.2. For existing commercial units of 10,000 sq. ft. or more seeking building permits for modifications representing 30% or more sq. ft, and considered a Project under CEQA must implement energy efficiency retrofits recommended by the City to meet California Green Building Standards Tier 1 Voluntary Measures and explain the retrofits implemented.			X	The project does not include modification to an existing commercial building.	Measure 3.2 only applies if alteration is subject to CEQA
Goal 4. Increase Energy Efficiency in New Commercial Units					
Measure 4.1. New commercial units meet or exceed California Green Building Standards Tier 2 Voluntary Measures such as obtain green building ratings including: LEED, Build it Green, or Energy Star Certified buildings certifications in scoring development and explain the measures implemented.	X			The project would be constructed in accordance with California's Title 24 Building Energy Efficiency Standards.	
Emissions Measures Category: Advanced Goals Measures					
Land Use Sector-Commercial					
Goal 5. Decrease Energy Demand through Reducing Urban Heat Island Effect					
Measure 5.1. Project utilizes tree planting for shade and energy efficiency such as tree planting in parking lots and streetscapes.	X			The project's landscaping would include a mix of trees, shrubs, and groundcover and comply with the City's Landscape regulations, Santee Municipal Code Chapter 13.36.	
Measure 5.2. Project uses light-reflecting surfaces such as enhanced cool roofs on commercial buildings.	X			The project would incorporate design measures to reduce the urban heat island effect.	
Emissions Measures Category: Transportation					
Land Use Sector-Residential and Commercial					
Goal 6. Decrease GHG Emissions through a Reduction in VMT					
Measure 6.1. Proposed project streets include sidewalks, crosswalks, and other infrastructure that promotes non-motorized transportation options.	X			The project would include pedestrian infrastructure and bicycle parking to promote non-motorized transportation options.	
Measure 6.2. Proposed project installs bike paths to improve bike transit.			X	There is an existing dedicated bicycle path on Riverwalk Drive adjacent to the project site.	

Land Use Sector-Residential and Commercial					
Goal 7: Increase Use of Electric Vehicles					
Measure 7.1. Install electric vehicle chargers in all new residential and commercial developments.	X			The proposed project will install 16 EV chargers as required by code and will allocate space for future EV chargers.	
a. For new Single-Family Residential, install complete 40 Amp electrical service and one e-charger.			X	The project is a non-residential project.	
b. For new Multifamily Residential, install e-chargers for 13 percent of total parking.			X	The project is a non-residential project.	
c. For new Office Space, Regional Shopping Centers, and Movie Theaters, install e-chargers for 5 percent of total parking spaces.			X	The project is not a office, shopping center, or movie theater land use.	
d. For new Industrial and other Land Uses employing 200 or more employees, install e-charges for 5 percent of total parking spaces.			X	The project is not an industrial land use and would not employ more than 200 employees.	
Land Use Sector-Residential and Commercial					
Goal 8. Improve Traffic Flow					
Measure 8.1. Implement traffic flow improvement program.			X	No traffic improvements required.	Projects that include traffic controls need to show consistency with one of these
a. Install smart traffic signals at intersections warranting a traffic signal, OR			X	No new traffic signals required.	
b. Install roundabout.			X	No new roundabouts required.	
Emissions Measures Category: Solid Waste					
Land Use Sector-Residential and Commercial					
Goal 9: Decrease GHG Emissions through Reducing Solid Waste Generation					
Measure 9.1. Reduce waste at landfills.	X			The proposed project would comply with the City's construction and demolition recycling ordinance (Sante Municipal Code Section 13.38.060	
waste.				and solid waste ordinance #3239-A. The project would provide on-stie recycling storage for collection.	
Emissions Measures Category: Clean Energy					
Land Use Sector-Residential and Commercial					
Goal 10. Decrease GHG Emissions through Increased Clean Energy Use					
Measure 10.1. Increase distributed energy generation within City of Santee by implementing the following applicable photovoltaic solar systems:					
a. Single-family residential to install at least 2kW per unit of PV solar systems, unless the installation is infeasible due to poor solar resources established in a solar feasibility study prepared by a qualified solar consultant submitted with an application			X	The project is a non-residential project.	
b. Multifamily residential to install at least 1kW per unit of PV solar systems, unless the installation is infeasible due to poor solar resources established in a solar feasibility study prepared by a qualified solar consultant submitted with an applicant's formal project submittal to City.			X	The project is a non-residential project.	
c. On commercial buildings, install at least 2 kW per square foot of building area (e.g., 2,000 sq. ft. = 3 kW) unless the installation is infeasible due to poor solar resources.	X			The project would include a solar photovoltaic system in compliance with this measure. Based on the 12,500 square feet of building the project would include an up to 18.75 kW system.	

Appendix B
Biological Technical Report

DRAFT

Biological Technical Report

Santee Community Center Project

APRIL 2025

Prepared for:

CITY OF SANTEE, DEVELOPMENT SERVICES DEPARTMENT
10601 Magnolia Avenue
Santee, California 92071

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Contact: Brock Ortega

Printed on 30% post-consumer recycled material.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Santee
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dBA	A-weighted decibel(s)
FESA	federal Endangered Species Act
MHPA	Multi-Habitat Planning Area
MM	Mitigation Measure
MND	mitigated negative declaration
MSCP	Multiple Species Conservation Program
Porter–Cologne Act	Porter–Cologne Water Quality Control Act
Project	Santee Community Center Project
RWQCB	Regional Water Quality Control Board
SWPPP	stormwater pollution prevention plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

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1 Introduction

This Biological Technical Report describes the existing biological conditions of the site proposed for the Santee Community Center Project (Project) within the City of Santee, California. Included in this report are a discussion of the biological survey methods and results, and the impacts to vegetation communities and potential special-status species evaluated under the California Environmental Quality Act (CEQA), the San Diego Multiple Species Conservation Program (MSCP) Plan (City of San Diego 1998), the Draft Santee MSCP Subarea Plan (City of Santee 2023), and the state and federal Endangered Species Acts. Additionally, measures are recommended to avoid, minimize, or mitigate potential impacts, where feasible, to less-than-significant levels.

1.1 Project Location, Background, and Description

The 5.20-acre Project site is in the southcentral portion of the City of Santee (City), which is within the East County region of San Diego County, as shown in Figure 1, Project Location. The Project site is located at 10123 Riverwalk Drive and is bound by Woodglen Vista Creek (i.e., a tributary to the San Diego River) to the east and south, the existing Cameron Family YMCA to the southwest, and the Sportsplex USA to the west. The Project site is in Section 22 of Township 15 South, Range 1 West, as depicted on the U.S. Geological Survey El Cajon, California, 7.5-minute topographic quadrangle map. The Assessor's Parcel Number of the Project site is 760-239-4200.

The Project site is currently a developed parking lot and associated park, adjacent to the Cameron Family YMCA. Woodglen Vista Creek, a tributary to the San Diego River, occurs along the eastern and southern boundaries of the Project site and contains the only native biological resources within the Project site vicinity (Figure 2, Biological Resources). Based on historical aerials (Google Earth 2023), the northwestern portion of the Project site was graded in 2001 as part of the development of the City's Town Center Community Park and the remaining portion of the Project site was graded in 2006 and established as a parking lot in 2009. Historically, Woodglen Vista Creek ran through the middle of the Project site but was redirected around the site during the previous grading efforts in 2006. The original path of Woodglen Vista Creek through the Project site is shown as a U.S. Geological Survey National Hydrography Dataset line in Figure 3, Hydrology. Since the development of the parking lot, coastal sage scrub and southern cottonwood–willow riparian forest has been restored within the Woodglen Vista Creek and designated as protected open space associated with the previous project.

The proposed Project would involve demolition of existing concrete and asphalt areas and construction of a new 12,500-square-foot two-story building that includes event space, office space, and support spaces. Exterior lighting would include parking lot and building security lighting. The exterior lighting would be shielded and directed away from adjacent properties. The site grading design would control runoff by directing stormwater through a piped storm drainage system and directing sheet flow over pedestrian pavement into stormwater retention basins located south and east of the Community Center building to prevent runoff from entering Woodglen Vista Creek. The Project site is separated from Woodglen Vista Creek by an existing wooden fence line and all proposed impacts would occur within the existing developed areas of the parking lot.

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2 Regulatory Setting

2.1 Federal

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to "take" any listed species; "take" is defined as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds Office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

2.1.3 Clean Water Act

The Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Boards (RWQCBs) administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found in the Code of Federal Regulations (CFR) at 33 CFR Parts 320 to 332. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in

conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Based on a recent court case ordering vacation of the Navigable Waters Protection Rule, USACE and the U.S. Environmental Protection Agency have halted implementation of the rule and are interpreting waters of the United States consistent with the pre-2015 regulatory regime until further notice. Per 33 CFR 328.3(a), waters of the United States are defined as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section; and
8. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA [the Clean Water Act] (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

The USACE/U.S. Environmental Protection Agency Rapanos Guidance states that USACE will regulate traditional navigable waters and adjacent wetlands, and relatively permanent waters tributary to traditional navigable waters and adjacent wetlands. Non-relatively permanent waters (those exhibiting less than 3 months of continuous surface flows) and their adjacent wetlands would be regulated if there is a significant nexus from the site to traditional navigable waters.

The State Water Resources Control Board has authority over wetlands through Section 401 of the CWA, as well as the Porter–Cologne Water Quality Control Act (Porter–Cologne Act), California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredge or fill material into waters of the United States) first obtain certification from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine RWQCBs. A request for certification is submitted to the RWQCB at the same time that an application is filed with USACE.

2.2 State

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050–2068) provides protection for and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the California Department of Fish and Wildlife (CDFW) under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

2.2.2 California Fish and Game Code

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. On July 10, 2023, Senate Bill 147 was signed into law and amends the California Fish and Game Code to allow a 10-year permitting mechanism for a defined set of projects within the renewable energy, transportation, and water infrastructure sectors. Furthermore, it is the responsibility of the CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Sections 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream, or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete certified CEQA document.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (see Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

Nesting Birds

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act.

2.2.3 California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the U.S. Bureau of Land Management's Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank (CRPR) 1 and 2 by the California Native Plant Society, and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service."

2.2.4 Porter–Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260[a]). The State Water Resources Control Board defines a waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). All waters of the United States are waters of the state. Waters of the state include wetlands, and the State Water Resources Control Board definition of wetlands includes the following:

1. Natural wetlands.
2. Wetlands created by modification of a surface water of the state.
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration.
    b. Specifically identified in a water quality control plan as a wetland or other water of the state.
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.
    d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

Wetlands that may not meet all of USACE's wetland delineation criteria are considered wetland waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2021). Additionally, aquatic resources that USACE determines to not be waters of the United States because they lack a significant nexus to a traditional navigable water or are above the ordinary high water mark limit of federal jurisdiction may also be considered waters of the state. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act.

2.3 Regional Resource Planning Context

2.3.1 Multiple Species Conservation Program Plan

The Project site is within the boundaries of the MSCP Plan (City of San Diego 1998). The MSCP Plan is a multijurisdictional habitat conservation planning program that involves USFWS, CDFW, the County of San Diego, the Cities of San Diego and Chula Vista, and other local jurisdictions and special districts. Local jurisdictions and special districts implement the MSCP Plan for their respective portions through subarea plans. The combination of the MSCP Plan and subarea plans serve as a habitat conservation plan pursuant to FESA Section 10(a)(1)(B), and as a Natural Community Conservation Plan pursuant to the California Natural Community Conservation Planning Act of 1991 (City of San Diego 1998).

The MSCP Plan study area encompasses 582,243 acres within the southwestern portion of San Diego County. As stated in the MSCP Plan, an objective of the MSCP is to conserve a connected system of biologically viable habitat lands in a manner that maximizes the protection of sensitive species and precludes the need for future listings of species as threatened or endangered. The MSCP Plan identifies a Multi-Habitat Planning Area (MHPA), which is the area within which the permanent MSCP Preserve is assembled and managed for its biological resources. The MHPA is defined in many areas by mapped boundaries in figures in the MSCP Plan and is also defined by quantitative targets for conservation of vegetation communities and goals and criteria for preserve design. The MSCP Plan targets 171,917 acres within the MHPA for conservation (City of San Diego 1998).

A total of 85 plant and animal species are "covered" by the MSCP Plan. The MSCP Plan Final Environmental Impact Report/Environmental Impact Statement identifies "Vegetation Community Conservation Target Areas" for conservation by subarea (Appendix B of the MSCP Plan [City of San Diego 1998]). A total of 2,067 acres is expected to be conserved within the Santee Subarea MHPA. With approval of each subarea plan and corresponding implementing agreement, each participating local jurisdiction receives permits and/or authorization to directly impact or take MSCP covered species. The covered species include species listed as endangered or threatened by FESA and/or CESA, as well as unlisted species. Table 3-5 in the MSCP Plan provides a list of the MSCP covered species, and includes specific conditions required for take authorizations (City of San Diego 1998).

2.3.2 Draft Santee MSCP Subarea Plan

The City has been preparing its subarea plan since the original approval of the San Diego MSCP Plan and is currently in the process of completing the Santee MSCP Subarea Plan. Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City. The current Draft Santee MSCP Subarea Plan seeks coverage for up to 23 species, and relies on a combination of hardline conservation areas, criteria-based upland standards areas, San Diego River conservation opportunities areas, and City-owned preserve lands to protect species and habitat (City of Santee 2023). Coverage for species is dependent on a number of factors, including multijurisdictional participation, adequate building of the preserve system, adequate protection of certain populations, permanent management funding, and other factors.

The Draft Santee MSCP Subarea Plan Preserve boundaries are a result of the City's efforts to refine and expand the MHPA boundaries, to better define conservation priorities within the City, and to formulate a habitat conservation plan under the MSCP Plan. Because the Draft Santee MSCP Subarea Plan is still in development, portions of the subarea plan may still change, including hardline preserve areas and covered species. As shown on Figure 1, the Project site and Woodglen Vista Creek are entirely outside of the preserve areas identified in the Draft Santee MSCP Subarea Plan (City of Santee 2023). Woodglen Vista Creek is managed by the City as existing protected open space but is not considered part of the Subarea Preserve areas.

3 Methods

Data regarding biological resources present within the Project site were obtained through a review of pertinent literature and field surveys conducted in 2023 and 2024; both are described in detail below. Survey conditions are provided in Table 1.

Table 1. Survey Conditions

Date	Hours	Personnel	Survey Focus	Survey Conditions
05/03/2023	09:01 a.m.–11:00 a.m.	Brock Ortega	Least Bell's Vireo Survey	55°F–57°F, 90% cc, 1–3 mph
05/13/2023	06:05 a.m.–08:30 a.m.	Brock Ortega	Least Bell's Vireo Survey	60°F–62°F, 100%–80% cc, 0–3 mph
05/23/2023	08:50 a.m.–10:55 a.m.	Brock Ortega	Least Bell's Vireo Survey	64°F–67°F, 70%–60% cc, 1–3 mph
06/03/2023	06:05 a.m.–07:55 a.m.	Brock Ortega	Least Bell's Vireo Survey	55°F–63°F, 100%–90% cc, 0–3 mph
06/18/2023	08:25 a.m.–10:55 a.m.	Brock Ortega	Least Bell's Vireo Survey	70°F–80°F, 20%–0% cc, 1–3 mph
06/27/2023	06:05 a.m.–08:20 a.m.	Brock Ortega	Least Bell's Vireo Survey	72°F–77°F, 50%–10% cc, 0–3 mph
07/07/2023	08:25 a.m.–11:00 a.m.	Brock Ortega	Least Bell's Vireo Survey	65°F–78°F, 50%–0% cc, 0–3 mph
01/25/2024	09:29 a.m.–11:36 a.m.	Callie Amoaku	Vegetation Mapping, Jurisdictional Aquatic Resource Assessment	57°F–59°F, 100% cc, 0 mph
04/10/2024	11:59 a.m.–2:48 p.m.	Katie Dayton	Vegetation Mapping, Rare Plant Survey – Pass 1	81°F–85°F; 0% cc; 0–3 mph wind
08/09/2024	8:00 a.m.–9:45 a.m.	Katie Dayton	Rare Plant Survey – Pass 2	69°F–76°F; 0% cc; 0–3 mph wind

Notes: cc = cloud cover; mph = miles per hour (wind).

3.1 Literature Review

Prior to conducting field surveys, Dudek biologists reviewed the latest CDFW California Natural Diversity Database (CDFW 2023a), California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2023), and USFWS Critical Habitat and species occurrence databases (USFWS 2023b) to identify special-status species that are known to occur or may potentially occur within the Project site based on the physical characteristics of the site (including biogeography, elevation, soils, and vegetation communities).

The following databases were reviewed prior to the jurisdictional aquatic resource assessment: historical aerial photographs (Google Earth 2023; NETR 2023); the U.S. Geological Survey's National Hydrography Dataset (USGS 2023); the U.S. Department of Agriculture Natural Resources Conservation Service's Web Soil Survey (USDA 2023a); and the USFWS's National Wetlands Inventory (USFWS 2023a).

3.2 Survey Methods

Vegetation mapping within the Project site was conducted on January 25, 2024, by Dudek biologist Callie Amoaku. Vegetation community classifications follow Holland (1986), as revised by Oberbauer et al. (2008). Vegetation communities and land covers were mapped in the field using a mobile data collection application. Vegetation surveys were conducted throughout the site on foot. Following the completion of fieldwork, vegetation polygons were digitized using ArcGIS, and GIS coverage was created. Acreage calculations of vegetation communities and land covers were determined using ArcGIS. An assessment for jurisdictional aquatic resources was conducted concurrently with the vegetation mapping.

Rare plant surveys for special-status plant species within the Project site were conducted on April 10, 2024, and August 9, 2024, by Dudek biologist Katie Dayton. The survey methods conformed to the California Native Plant Society Botanical Survey Guidelines (CNPS 2001), CDFW Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and the USFWS General Rare Plant Survey Guidelines (Cypher 2002). All plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. If special-status plant or wildlife species were encountered, field personnel recorded data points demarcating the edge of the polygon and assessed population numbers using the Esri ArcGIS mobile application. Latin names for plant species observed during the survey follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2023), and common names follow the CDFW California Natural Community List (CDFW 2023b) or the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (USDA 2023b).

All wildlife species detected during the field surveys by sight, vocalizations, burrows, tracks, scat, or other sign were recorded. The site was visually scanned with and without binoculars to identify wildlife. Latin and common names of animals follow Crother (2017) for reptiles and amphibians, the American Ornithological Society for birds (AOS 2023), and Wilson and Reeder (2005) for mammals.

4 Results

4.1 Vegetation Mapping and Land Covers

Based on species composition and general physiognomy, three vegetation communities or land cover types occur within the Project site and the surrounding buffer that overlaps Woodglen Vista Creek. Acreages for each vegetation community or land cover type are provided in Table 2, and their spatial distribution is shown in Figure 2. Descriptions for each vegetation community or land cover type are provided below.

Table 2. Vegetation Communities and Land Covers within the Project Site and Buffer

Vegetation Community/Land Cover Type	Holland/Oberbauer Code	Project Site (acres)	Project Site Buffer (acres)
Riparian/Bottomland Vegetation Communities			
Southern Cottonwood–Willow Riparian Forest	61330	0	3.64
Upland Vegetation Communities			
Diegan Coastal Sage Scrub	32500	0	0.14
Non-Native Communities and Land Cover Types			
Urban/Developed	12000	5.20	0.23
	Total	**5.20**	**4.01**

Note: Totals may not sum due to rounding.

Southern Cottonwood–Willow Riparian Forest (61330)

Southern cottonwood–willow riparian forest is described by Oberbauer et al. (2008) as a tall, open, broadleafed winter-deciduous riparian forest dominated by Fremont cottonwood (*Populus fremontii*) or black cottonwood (*Populus trichocarpa*), and various willow trees (*Salix* spp.). The shrub layer typically includes various willow species, mulefat (*Baccharis salicifolia*), and California sycamore (*Platanus racemosa*). This community typically occurs in overflow lands along rivers and streams (Oberbauer et al. 2008). Southern cottonwood–willow riparian forest totals 3.64 acres within the Project site buffer and occurs within Woodglen Vista Creek. This community consists of California sycamore, willows, coast live oak (*Quercus agrifolia*), American bulrush (*Schoenoplectus americanus*), and mulefat. Southern cottonwood–willow riparian forest would typically be considered a jurisdictional resource (i.e., wetland or riparian vegetation) subject to aquatic resource regulation.

Diegan Coastal Sage Scrub (32500)

Diegan coastal sage scrub is a native vegetation community. According to Oberbauer et al. (2008), Diegan coastal sage scrub is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonade berry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). Diegan coastal sage scrub totals 0.14 acres within the Project site buffer, is located adjacent to the riparian area associated with Woodglen Vista Creek, and consists of laurel sumac, toyon (*Heteromeles arbutifolia*), desertbroom (*Baccharis sarothroides*), western ragweed (*Ambrosia psilostachya*), and lemonade berry (Figure 2).

Urban/Developed (12000)

Urban/developed land consists of areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials (Oberbauer et al. 2008). Developed areas can include ornamental trees, planted shrubs, and other types of non-native vegetation. Urban/developed land covers the entire Project site (100%, 5.20 acres) and consists of a parking lot, ornamental landscaping, and an associated park, as well as a small portion of the Project site buffer (5%, 0.23 acres) associated with surrounding developed areas (Figure 2).

4.2 Plant and Wildlife Species

A total of 80 species of native or naturalized plants, 33 native (41%) and 47 non-native (59%), were recorded on the Project site and the buffer overlapping Woodglen Vista Creek (see Appendix A). The majority of the plant species within the Project site are associated with the ornamental trees and shrubs planted in association with the existing development on site. However, most of the native species recorded during surveys were associated with coastal sage scrub and southern cottonwood–willow riparian forest occurring with the Project site buffer.

Due to the lack of habitat (i.e., majority of site is currently a parking lot), very few wildlife species were observed within the Project site (i.e., seven total, consisting of six bird species and one mammal species). Two special-status bird species were observed within Woodglen Vista Creek: yellow warbler (*Setophaga petechia*) and least Bell's vireo (*Vireo bellii pusillus*). Appendix B includes all wildlife species observed within the Project site and buffer area overlapping Woodglen Vista Creek.

4.2.1 Special-Status Plant Species

Special-status plant species include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and species identified as rare by the California Native Plant Society (particularly CRPR 1A, presumed extinct in California; CRPR 1B, rare, threatened, or endangered throughout its range; and CRPR 2, rare or endangered in California, more common elsewhere). Appendix C provides a table of all special-status plant species whose geographic ranges fall within the general vicinity of the Project site. Special-status species' potential to occur within the Project site were evaluated based on known species distribution, species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. Each special-status species was assigned a rating of "not expected," "low," "moderate," or "high" potential to occur within the Project site based on relative location to known occurrences, vegetation community, soil, and elevation.

No special-status plant species were observed within the Project site during surveys, and due to lack of habitat no special-status species are expected to occur within the Project site. One special-status species, San Diego marsh-elder (*Iva hayesiana*), was observed within the native vegetation that occurs within Woodglen Vista Creek adjacent to the Project site (Figure 2).

There is no USFWS-designated Critical Habitat for any special-status plant species within the Project site or immediate vicinity.

4.2.2 Special-Status Wildlife Species

Special-status wildlife species include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and those designated as Species of Special Concern by CDFW and as sensitive by USFWS. Appendix D provides a table of all special-status wildlife species whose geographic ranges fall within the general vicinity of the Project site. Special-status species' potential to occur within the Project site were evaluated based on known species distribution, species-specific habitat preferences, and Dudek biologists' knowledge of regional biological resources. Each special-status species was assigned a rating of "not expected," "low," "moderate," or "high" potential to occur within the Project site based on relative location to known occurrences, vegetation community, soil, and elevation.

No special-status wildlife species were observed within the Project site during surveys, and due to lack of habitat none are expected to occur. One special-status species—yellow warbler—was observed during surveys and five other special-status species—two-striped gartersnake (*Thamnophis hammondii*), least Bell's vireo, yellow-breasted chat (*Icteria virens*), Townsend's big-eared bat (*Corynorhinus townsendii*), and western yellow bat (*Dasypterus xanthinus)*—have moderate or high potential to occur within the Project site buffer area associated with Woodglen Vista Creek. Yellow warbler was detected in two locations of Woodglen Vista Creek and this species likely uses much of the riparian habitat within the Project site buffer (Figure 2). Least Bell's vireo was observed approximately 650 feet southwest of the Project site within Woodglen Vista Creek but outside the Project site buffer (Figure 2). Although not observed during surveys, this species has a high potential to use the habitat occurring within the portion of Woodglen Vista Creek that overlaps the Project site buffer.

There is no USFWS-designated Critical Habitat for any special-status wildlife species within the Project site.

4.3 Jurisdictional Aquatic Resources

No jurisdictional aquatic resources were observed within the Project site during the jurisdictional aquatic resource assessment. There are potential jurisdictional aquatic resources (e.g., southern cottonwood–willow riparian forest, stream channel) located outside the Project site within Woodglen Vista Creek. However, these potential jurisdictional aquatic resources areas are slightly lower in elevation than the Project site and separated from the Project site by upland habitat (i.e., coastal sage scrub). The Project site is located outside areas mapped in the USFWS National Wetlands Inventory database but there are areas of Riverine and Freshwater Forested/Shrub Wetland in the USFWS National Wetlands Inventory database overlapping the southern cottonwood–willow riparian forest associated with Woodglen Vista Creek (USFWS 2023b) (Figure 3). Also, as shown on Figure 3, there is a U.S. Geological Survey National Hydrography Dataset flowline that runs north–south through the Project site. However, based on historical aerials (Google Earth 2023), the site was graded in 2006 and the feature represented by the National Hydrography Dataset flowline was redirected outside the Project site along its eastern boundary.

4.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The MSCP Plan (City of San Diego 1998) defines core and linkage areas as those maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP study area either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained.

The Project site is currently developed as a parking lot lacking native habitats and is not mapped as a core area or habitat linkage under the MSCP (City of San Diego 1998). Therefore, the Project site does not function as a wildlife corridor or habitat linkage. Additionally, as shown on Figure 1, the Project site is entirely outside of the preserve areas identified in the Draft Santee MSCP Subarea Plan (City of Santee 2023) that could also function to facilitate wildlife movement. However, the Project site is adjacent to Woodglen Vista Creek, a tributary to the San Diego River, which could potentially function as a wildlife corridor for local populations of common species. Larger species, like mule deer (*Odocoileus hemionus*) and mountain lion (*Puma concolor*), are not expected to use this highly urbanized portion of the Woodglen Vista Creek corridor due to lack of habitat (e.g., adjacent commercial and residential uses), human activity, and general lack of connectivity to larger core areas of suitable habitat. It is unlikely that bobcats would use this area for the same reasons. Species most likely to use this area include coyote (*Canis latrans*) and smaller mammal species such as raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*).

5 Project Impacts

This section addresses direct and indirect impacts to biological resources that would result from implementation of the Project, provides the significance determinations for proposed or potential impacts, and proposes mitigation. Cumulative impacts are addressed in the Project's mitigated negative declaration (MND).

5.1 Explanation of Findings of Significance

Impacts to sensitive vegetation communities, special-status plant and wildlife species, and jurisdictional aquatic resources, including wetlands, must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of a "significant" effect is not possible because the significance of an activity may vary with the setting. Appendix G of the CEQA Guidelines, however, does provide "examples of consequences which may be deemed to be a significant effect on the environment" (14 CCR 15064[e]). These effects include substantial effects on rare or endangered species of animal or plant or the habitat of the species. CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have a significant effect on the environment. Under that section, a proposed project may have a significant effect on the environment if the project has the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of a major period of California history or prehistory.

The following are the significance thresholds for biological resources provided in the CEQA Guidelines Appendix G Environmental Checklist, which states that a project would potentially have a significant effect if it does any of the following:

Impact BIO-1	Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
Impact BIO-2	Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
Impact BIO-3	Has 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.
Impact BIO-4	Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impedes the use of native wildlife nursery sites.
Impact BIO-5	Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact BIO-6 Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The evaluation of whether an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or wildlife species. Impacts may be important locally because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether that impact can be mitigated to a level below significance.

5.2 Definition of Impacts

Direct impacts refer to complete loss of a biological resource. For the purposes of this report, direct impacts refer to the area where vegetation clearing, grubbing, or grading replaces biological resources. Direct impacts were quantified by overlaying the proposed impact limits on the biological resources map of the Project site. Direct impacts would occur from construction of a new 12,500-square-foot two-story building that includes event space, office space, and support spaces.

Indirect impacts are reasonably foreseeable effects caused by a project's implementation on remaining or adjacent biological resources outside the direct disturbance zone. For purposes of this report, indirect impacts may affect areas associated with biological resources present within Woodglen Vista Creek adjacent to the Project site. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

Cumulative impacts refer to the combined environmental effects of a project and other relevant projects. These impacts may be minor when analyzed individually but become collectively significant as they occur over time. Cumulative impacts are addressed in the Project's mitigated negative declaration.

The evaluation of Project impacts is organized by the resource potentially affected: riparian and sensitive vegetation communities (special-status vegetation communities), special-status species, jurisdictional waters and wetlands, and wildlife movement.

5.3 Impact Analysis

The entire 5.20-acre Project site would be directly impacted with Project implementation. The acreage for the land cover type permanently impacted by the proposed Project is provided in Table 3, and its spatial distribution is shown in Figure 4, Impacts to Biological Resources.

Table 3. Impacts to Land Cover Types within the Project Site

Land Cover Type	Holland/Oberbauer Code	Permanent Impact (acres)
Urban/Developed	12000	5.20
	Total	**5.20**

Note: Totals may not sum due to rounding.

5.3.1 Impact BIO-1: Special-Status Species

5.3.1.1 Direct Impacts

No special-status plant or wildlife species were observed within the Project site during surveys, and due to lack of habitat, none are expected to occur. Therefore, no direct impacts would occur to special-status plant or wildlife species with Project implementation.

Direct impacts to nesting birds, protected under Section 3503 of the California Fish and Game Code, could occur within areas of the Project site containing ornamental trees as part of the current development's landscaping. Project implementation of Mitigation Measure (MM) BIO-1 (Pre-Construction Nesting Bird Survey) would reduce potential direct impacts to nesting birds to a less-than-significant level through performance of a nesting bird survey if construction occurs during the nesting season. Additionally, all trees removed as part of Project implementation, that could potentially provide nesting habitat for birds, would be replaced as directed by MM-BIO-4 (Tree Replacement, Encroachment, and Preservation). Therefore, no significant direct impacts are anticipated with Project implementation to nesting birds or their habitat.

Glass windows and tall glass panels would be used for the Community Center building's exterior, which could potentially result in an increase in bird strikes. Project design feature PDF-BIO-1 would require incorporation of glazing treatments along the north and south sides of the building to ensure that large areas of glass are visible to birds. Therefore, no significant direct impacts to birds from building strikes are anticipated with implementation of PDF-BIO-1.

The Project site does not occur within USFWS-designated Critical Habitat for plant or wildlife species. Therefore, no direct impacts would occur to critical habitat with Project implementation.

5.3.1.2 Indirect Impacts

Project implementation has the potential to result in indirect impacts to special-status wildlife species, specifically least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped gartersnake, Townsend's big-eared bat, and western yellow bat, as well as special-status plant species occurring within the Project site's buffer area that overlaps Woodglen Vista Creek.

Construction-Related (Short-Term): Potential short-term or temporary indirect impacts to least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped gartersnake, Townsend's big-eared bat, western yellow bat, and special-status plant species resulting from construction activities include the release of chemical pollutants; adverse effects from noise, vibration, and increased human presence; and nighttime lighting. These potential construction-related indirect impacts would be potentially significant absent mitigation.

Project implementation of MM-BIO-1 (Pre-Construction Nesting Bird Survey) would reduce potential indirect impacts from construction noise to a less-than-significant level through performance of a nesting bird survey if construction occurs during the nesting season. If nesting least Bell's vireo, yellow-breasted chat, and/or yellow warbler are identified, an adequate buffer will be implemented to ensure that effects from noise, vibration, and human presence are minimized. In addition, implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) will minimize indirect impacts to least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped gartersnake, Townsend's

big-eared bat, western yellow bat, and special-status plant species through biological monitoring, requiring a Worker Environmental Awareness Training that will cover the special-status resources and mitigation requirements for the Project, delineating Project boundaries, requiring that all vehicles and equipment be serviced in designated staging areas, and ensuring that construction will not be conducted at night. Project construction would be limited to the City's allowable construction hours of 7:00 a.m. to 7:00 p.m. and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects (MM-BIO-2).

Implementation of MM-BIO-1 (Pre-Construction Nesting Bird Survey) and MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of construction-related indirect impacts to special-status plant and wildlife species to less than significant with mitigation incorporated.

Long-Term: Potential long-term, indirect impacts that could result from Project implementation to suitable foraging and nesting habitat for least Bell's vireo, yellow-breasted chat, yellow warbler, two-striped gartersnake, Townsend's big-eared bat, western yellow bat, and special-status plants include chemical releases, such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts would be potentially significant absent mitigation.

The Project site is currently developed as a parking lot with landscaped features (i.e., planted trees) located throughout and a grassy field used for passive recreational activities. The proposed Project will also include landscaping (i.e., planted trees) surrounding the parking lot and Community Center, which shall be included in the Project's Landscape Plan. Therefore, the Project's proposed landscaping and subsequent irrigation needs would be similar to the site's existing conditions. However, the proposed Project will convert the existing grassy recreation field into an additional parking lot resulting in an increase in the amount of impervious surfaces, which would likely reduce the amount of irrigation when compared with existing conditions and increase the amount of stormwater runoff. Increased moisture associated with irrigation and runoff can attract invasive species such as Argentine ants (*Linepithema humile*), which can displace native ants that are potential pollinators and seed dispersers for special-status plant species, displace native insects that are the main prey base for many special-status wildlife species, and possibly help promote other non-native invertebrates such as earwigs and sowbugs. However, because the Project's landscaping irrigation would be similar to or reduced as compared to the existing conditions, and the proposed Project would include a series of catch basins, roof drainages and biofiltration basins to manage stormwater runoff, an increase in the potential indirect impacts to special-status species from Argentine ants is not anticipated.

Because the Project site is located within the City's Town Center zone, there are existing ambient noise levels resulting from surrounding recreation activities (e.g., traffic, baseball fields, outdoor events). Project-related operational noise levels would be associated with increased traffic, HVAC systems, emergency generator, and indoor and outdoor events. Most of the proposed operational events would occur indoors, and according to Table 3.13-4 in the Project's MND, are predicted to be less than 60 A-weighted decibels (dBA) (Leq) along the edge of the Project site adjacent to Woodglen Vista Creek, which is typically used by the Wildlife Agencies (i.e., USFWS and CDFW) as the noise threshold for wildlife species. Occasionally there will be certain outdoor events (e.g., 4th of July fireworks show) that could result in noise levels exceeding the 60 dBA (leq) threshold for a brief portion of the 24-hour day. However, special-status wildlife species are already being subjected to these types of occasional ambient noise levels from surrounding activities (e.g., the City's 4th of July fireworks show, Summer Concerts, and outdoor movie events occurring immediately south of the Project site at the Town Center Community Park East site

would also result in a similar noise level within Woodglen Vista Creek). Therefore, long-term operational noise impacts are less than significant.

The Project site and surrounding area contain existing sources of artificial nighttime light that are typical of an existing parking lot (e.g., streetlights, exterior building lights) and recreation fields (e.g., baseball field). Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts from proposed lighting as it would be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code, which states that lighting shall be shielded, or recessed, and directed downward and away from adjoining properties. Therefore, long-term lighting impacts are less than significant.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts to special-status plant and wildlife species by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to open space areas associated with Woodglen Vista Creek. Therefore, long-term indirect impacts to special-status species would be reduced to less than significant with mitigation incorporated.

5.3.2 Impact BIO-2: Sensitive Vegetation Communities

5.3.2.1 Direct Impacts

A total of 5.20 acres would be permanently impacted with Project implementation (Figure 4). Table 3 summarizes permanent direct impacts to land covers within the Project site. Communities listed by CDFW as high priority for inventory (i.e., State Rank 1, 2, or 3) are considered sensitive and typically require mitigation (CDFW 2023b). There are no sensitive vegetation communities with CDFW state rankings of 1, 2, or 3 within the Project site and therefore no impacts would occur to sensitive vegetation communities with Project implementation.

5.3.2.2 Indirect Impacts

Project implementation has the potential to result in indirect impacts to sensitive vegetation communities occurring adjacent to the Project site.

Construction-Related (Short-Term): Sensitive vegetation communities may be indirectly impacted during construction of the proposed Project. Potential short-term or temporary indirect impacts to sensitive vegetation communities resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and the adverse effect of invasive plant species. These potential construction-related, indirect impacts to sensitive vegetation communities would be potentially significant absent mitigation.

Implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of construction-related indirect impacts to sensitive vegetation communities to less than significant with mitigation incorporated.

Long-Term: Potential long-term, indirect impacts that could result from development near sensitive vegetation communities include chemical releases, such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to sensitive vegetation communities would be potentially significant absent mitigation.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize long-term indirect impacts by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to open space areas associated with Woodglen Vista Creek. Therefore, long-term indirect impacts to sensitive vegetation communities would be less than significant with mitigation incorporated.

5.3.3 Impact BIO-3: State or Federally Protected Wetlands

5.3.3.1 Direct Impacts

No jurisdictional aquatic resources, including state or federally protected wetlands, occur within the Project site. Therefore, no direct impacts to state or federally protected wetlands are anticipated with Project implementation, and no permits under Sections 401 or 404 of the CWA or under Sections 1600–1616 of the California Fish and Game Code are required.

5.3.3.2 Indirect Impacts

Project implementation has the potential to result in indirect impacts to jurisdictional aquatic resources occurring adjacent to the Project site associated with Woodglen Vista Creek.

Construction-Related (Short-Term): Jurisdictional aquatic resources of the United States/state may be indirectly impacted during construction. Potential short-term or temporary indirect impacts to jurisdictional aquatic resources resulting from construction activities include the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and unintentional clearing, trampling, or grading outside of the proposed construction zone. Construction-related indirect impacts to jurisdictional aquatic resources would be potentially significant absent mitigation.

Implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize construction-related indirect impacts through biological monitoring, requiring a Worker Environmental Awareness Training that will cover the special-status resources and mitigation requirements for the Project, delineating Project boundaries, implementing standard dust control measures, developing a stormwater pollution prevention plan, and requiring all vehicles and equipment to be serviced in designated staging areas. Therefore, construction-related indirect impacts to jurisdictional aquatic resources would be less than significant with mitigation incorporated.

Long-Term: Potential long-term indirect impacts that could result from development near jurisdictional aquatic resources of the United States/state include pollutants that could degrade water quality and habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which

could affect soil moisture, water penetration, surface flows, and erosion. Long-term indirect impacts to jurisdictional aquatic resources would be potentially significant absent mitigation.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize long-term indirect impacts by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to areas with state and federally protected waterways. Therefore, long-term indirect impacts to jurisdictional aquatic resources would be less than significant with mitigation incorporated.

5.3.4 Impact BIO-4: Wildlife Corridors and Habitat Linkages

5.3.4.1 Direct Impacts

The Project site is currently developed as a parking lot and is not mapped as a core area or habitat linkage under the MSCP (City of San Diego 1998). Therefore, the Project site does not function as a wildlife corridor or habitat linkage. Therefore, no direct impacts are anticipated to wildlife corridors and/or habitat linkages with Project implementation.

5.3.4.2 Indirect Impacts

Project implementation has the potential to result in indirect impacts to Woodglen Vista Creek, which occurs adjacent to the Project site and may function as a local wildlife corridor with connectivity to the San Diego River. However, Woodglen Vista Creek is surrounded by urban portions of the City so it is only a marginally valuable, local wildlife corridor (e.g., used by local populations of common species such as coyote, raccoon, striped skunk, and Virginia opossum).

Construction-Related (Short-Term): The Woodglen Vista Creek wildlife corridor may be indirectly impacted during construction of the proposed Project. Potential short-term or temporary indirect impacts to biological resources within the Woodglen Vista Creek wildlife corridor resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the Project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; the release of chemical pollutants; and the adverse effects of invasive plant species. These potential construction-related, indirect impacts to the Woodglen Vista Creek wildlife corridor would be potentially significant absent mitigation.

Implementation of MM-BIO-2 (Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of construction-related indirect impacts to the Woodglen Vista Creek wildlife corridor to less than significant with mitigation incorporated. Project construction would be limited to the City's allowable construction hours of 7:00 a.m. to 7:00 p.m. and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects (MM-BIO-2).

Long-Term: Potential long-term, indirect impacts that could result from development near the Woodglen Vista Creek wildlife corridor include chemical releases such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; nighttime lighting; and trampling of vegetation and soil

compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential long-term indirect impacts to the Woodglen Vista Creek wildlife corridor would be potentially significant absent mitigation.

Because the Project site is located within the City's Town Center zone, there are existing ambient noise levels resulting from surrounding recreation activities (e.g., traffic, baseball fields, outdoor events). Project-related operational noise levels would be associated with increased traffic, HVAC systems, emergency generator, and indoor and outdoor events. Most of the proposed operational events would occur indoors and, according to Table 3.13-4 in the Project's MND, are predicted to be less than 60 dBA (leq), which is typically used by the Wildlife Agencies (i.e., USFWS and CDFW) as the noise threshold for wildlife species. Occasionally there will be certain outdoor events (e.g. 4th of July fireworks show) that could result in noise levels exceeding the 60 dBA (leq) threshold for a brief portion of the 24-hour day. However, special-status wildlife species are already being subjected to these types of occasional ambient noise levels from surrounding activities (e.g., the City's 4th of July fireworks show, Summer Concerts, and outdoor movie events occurring immediately south of the Project site at the Town Center Community Park East site would also result in a similar noise level within Woodglen Vista Creek). Therefore, long-term operational noise impacts are less than significant.

The Project site contains sources of artificial nighttime light that are typical of an existing parking lot (e.g., streetlights, exterior building lights). Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts from the Project's lighting as it would be designed consistent with the requirements of Section 13.30.030(B) Nof the Santee Municipal Code, which states that lighting shall be shielded, or recessed, and directed downward and away from adjoining properties. Therefore, long-term lighting impacts are less than significant.

Implementation of MM-BIO-3 (Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources) would minimize the effect of long-term indirect impacts to the Woodglen Vista Creek wildlife corridor by requiring measures to ensure runoff is not altered from existing conditions and toxicants are not discharged, preparation of landscaping plans that will emphasize native species and not include species from the California Invasive Plant Council's Invasive Plant Inventory, and incorporation of barriers to prevent unauthorized public access to open space areas associated with Woodglen Vista Creek. Therefore, long-term indirect impacts to wildlife corridors would be reduced to less than significant with mitigation incorporated.

5.3.5 Impact BIO-5: Local Policies and Ordinances

City of Santee

The City's Urban Forestry Ordinance contains tree-related policies, regulations, and generally accepted standards for planting, trimming, and removing trees on public property and public rights-of-way (Santee Municipal Code, Section 8.06 [City of Santee 2020]). The ordinance gives the City control of all trees, shrubs, and other plantings in any street, park, public right-of-way, landscape maintenance district or easement, or other City-owned property. City staff review of development plans for the City-owned and maintained property would ensure that the proposed landscaping and maintenance requirements conform to the Urban Forestry Ordinance. The proposed site plan would require removal of existing City-owned trees. As such, tree replacement would occur at a 1:1 mitigation ratio with 15-gallon trees, as directed by MM-BIO-4 (Tree Replacement, Encroachment, and Preservation). Additionally, measures to minimize damage to the encroachment and preserved trees, as well as recommendations for long-

term maintenance and care for trees that will be retained on site, would be included in the Project's Landscape Plan. Therefore, the proposed Project would comply with the Urban Forestry Ordinance, and impacts would be less than significant with mitigation incorporated.

In the Conservation Element of the City of Santee General Plan, biological resources are discussed, and specific objectives and policies are presented (City of Santee 2003). The proposed Project does not conflict with any objectives or policies as presented in the Conservation Element of the General Plan. Therefore, impacts to local policies and ordinances would be less than significant and no mitigation measures are required.

5.3.6 Impact BIO-6: Habitat Conservation Plans

MSCP Plan and Draft Santee MSCP Subarea Plan

The Project site is within the boundaries of the MSCP Plan (City of San Diego 1998). The Draft Santee MSCP Subarea Plan would serve as a habitat conservation plan under the MSCP Plan (City of San Diego 1998) pursuant to Section 10(a)(1)(B) of FESA, and as a Natural Community Conservation Plan pursuant to the California Natural Community Conservation Planning Act of 1991. The Draft Santee MSCP Subarea Plan, once finalized, will contribute to the regional MSCP for preservation, mitigation for impacts, and conservation of sensitive biological resources within San Diego County. The Draft Santee MSCP Subarea Plan is also intended to provide cumulative mitigation for impacts to covered species within the City's jurisdiction, as long as projects are consistent with and covered by provisions of the Santee MSCP Subarea Plan, and to ensure sufficient biological resources are conserved to assist in the conservation and recovery of covered species under the MSCP.

Although the Draft Santee MSCP Subarea Plan has not yet been approved or permitted, it is used as the guidance document for projects occurring within the City. All Project impacts would occur outside of the Draft Santee MSCP Subarea Plan Preserve area. Additionally, MM-BIO-1 through MM-BIO-3 are proposed to prevent any direct or indirect impacts to special-status species, sensitive vegetation communities, and/or jurisdictional aquatic resources. Furthermore, Project implementation would not conflict with the provisions of the MSCP Plan or Draft Santee MSCP Subarea Plan, nor would it prevent the Draft Santee MSCP Subarea Plan from being approved or compromise continued implementation of the MSCP in San Diego County. Therefore, impacts to habitat conservation plans would be less than significant with mitigation incorporated.

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6 Mitigation Measures and Project Design Features

MM-BIO-1 Pre-Construction Nesting Bird Survey. Construction within all potential nesting resource areas within the Project site (i.e., ornamental trees) and areas of the Project site within 500 feet of the Woodglen Vista Creek should be avoided during the migratory bird nesting season (typically January 1 through September 30). If construction activities (i.e., grading, tree removal, external construction involving heavy equipment generating noise in excess of 60 A-weighted decibels [dBA] (leq)) must occur during the bird nesting season, an avian nesting survey of all potential nesting resource areas (e.g., ornamental trees) within the Project site and areas of the Woodglen Vista Creek within 500 feet of all impact areas must be conducted to determine the presence/absence of special-status species, protected migratory birds, and active nests. If least Bell's vireo (*Vireo bellii pusillus*), yellow-breasted chat (*Icteria virens*), and/or yellow warbler (*Setophaga petechia*) are identified during the surveys, then noise attenuation measures shall be required to ensure that noise levels from construction do not exceed a 60 dBA hourly average per hour at the edge of the riparian habitat or to the ambient noise level if it exceeds 60 dBA prior to construction. Construction noise monitoring shall be required to verify that noise levels at the edge of occupied habitat are maintained below 60 dBA hourly average unless an analysis completed by a qualified acoustician shows that noise generated by construction activities would not exceed 60 dBA hourly average at the edge of occupied habitat.

The avian nesting survey shall be performed by a qualified wildlife biologist within 14 days prior to the start of construction and one more survey pass within 24 hours of initiation of construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If construction activities are on hold for more than 30 days, then pre-construction surveys would need to be reinitiated. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species), existing nearby conditions (e.g., natural habitat versus roads or existing noisy activities), existing buffering features (e.g., topography, tall and dense trees, buildings), legal status of species (i.e., listed versus non-listed), general sensitivities of the species (e.g., disturbance tolerant or urban versus non disturbance tolerant), and other variables. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when an active nest buffer is in place. No Project activities shall encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that the nestlings have fledged and the nest is no longer active.

PDF-BIO-1 Bird Safe Buildings. All new building development shall provide bird-safe building design features in order to reduce the potential for bird strikes. Project design features include incorporating glazing treatments on the building façade to ensure that large areas of glass are visible to birds.

MM-BIO-2 Construction-Related Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with the Woodglen Vista Creek (i.e., within 500 feet of the Project site):

- **Biological Monitoring.** A qualified Project biologist approved by the City of Santee shall monitor ground-disturbing and vegetation-clearing activities for the duration of the Project construction to ensure that practicable measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources outside the Project footprint. Once ground-disturbing and vegetation-clearing activities are complete, the Project biologist shall conduct weekly checks to inspect construction fencing and ensure that all applicable requirements from the mitigation measures are being upheld until construction is completed.
- **Worker Environmental Awareness Training.** Prior to grading, a pre-construction meeting shall be required that includes a training session for Project personnel by a qualified biologist. The training shall include (1) a description of the species of concern and its habitats; (2) the general provisions of the applicable regulations pertaining to biological resources, including the Endangered Species Act and the Clean Water Act; (3) the need to adhere to the provisions of the Endangered Species Act, the Clean Water Act, and other applicable regulations; (4) the penalties associated with violating the provisions of the Endangered Species Act, Clean Water Act, and other applicable regulations; (5) the general measures that are being implemented to conserve the species of concern as they relate to the Project; and (6) the access routes to and Project site boundaries within which the Project activities must be accomplished. Additionally, the training shall include the measures and mitigation requirements for the applicable resources. Copies of the mitigation measures and any required permits from the resource agencies shall be made available to construction personnel.
- **Delineation of Property Boundaries.** Before beginning activities that would cause impacts, the contractor shall, in consultation with the biological monitor, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. In addition, any avoided environmental resources shall be clearly delineated. Prior to implementing construction activities, the biological monitor shall verify that the flagging clearly delineates the construction limits and any sensitive environmental resources to be avoided.
- **Standard Dust Control Measures.** Standard dust control measures as per the San Diego County Air Pollution Control District shall be implemented to reduce impacts on nearby plants and wildlife. Measures include controlling speed to 15 miles per hour or less on unpaved roads, replacing ground cover in disturbed areas as quickly as possible, frequently watering active work sites, installing shaker plates, and suspending excavation and grading operations during periods of high winds.
- **Stormwater Pollution Prevention Plan.** Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, the Contractor shall submit a stormwater pollution prevention plan (SWPPP) to the City of Santee that specifies best

management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sedimentation or any other pollutants from moving off site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Best management practice categories employed on site shall include erosion control, sediment control, and non-stormwater good housekeeping. Best management practices recommended for the construction phase shall include, but not be limited to, the following:

- Limiting grading to the minimum area necessary for construction, operation, and decommissioning of the Project
- Limiting vegetation disturbance/removal to the maximum extent practicable
- Implementing fiber rolls and sandbags around drainage areas and the site perimeter
- Stockpiling and disposing of demolition debris, concrete, and soil properly
- Installing a stabilized construction entrance/exit and stabilizing disturbed areas
- Installing proper protections for fueling and maintaining equipment and vehicles
- Managing waste, aggressively controlling litter, and implementing sediment controls
- Stabilizing soil in disturbed areas through revegetation

The following water quality measures shall be included in the SWPPP:

- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- The Project shall be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern, as feasible. Project activities that cannot be conducted without placing equipment or personnel in sensitive habitats shall be timed to avoid the breeding season of riparian species.
- Water pollution and erosion control plans shall be developed and implemented in accordance with the Regional Water Quality Control Board.
- Minimize Spills of Hazardous Materials. All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly handled and disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area. The staging area will be located on the south side of the Project site, away from Woodglen Vista Creek, and no stockpiles will be allowed adjacent to Woodglen Vista Creek.
- Wildlife Hazards. The following measures shall be implemented to ensure that wildlife do not become trapped, entangled, injured, or poisoned by construction activities:
  - Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape.
  - Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to

disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist or allowed to move off of the Project site on its own.

- Nets and mesh shall be made of loose weave material that is not fused at the intersections of the weave because nets with welded weaves present an entanglement risk.
- Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day.

- **Invasive Weeds.** To reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/).
- **Night Work.** All construction activities shall be conducted during the daytime, and lights shall not be kept on overnight in the construction area, as practicable. If night lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that will prevent light spillage or glare into the adjacent open space.

MM-BIO-3 Long-Term Indirect Impacts to Special-Status Species, Sensitive Vegetation Communities, and Jurisdictional Aquatic Resources. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans shall include the following to address potential indirect impacts to special-status species occurring within all suitable habitat associated with Woodglen Vista Creek (i.e., within 500 feet of the Project site):

- **Runoff:** Future development within 500 feet of suitable habitat for special-status species shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System, to ensure that the quantity and quality of runoff discharged is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into open space or suitable habitat for special-status species. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes. This can be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operation of runoff control systems.
- **Lighting:** Project lighting would be designed consistent with the requirements of Section 13.30.030(B) of the Santee Municipal Code. Night lighting shall be directed away from open space and/or suitable habitat for special-status species to protect species from direct night lighting. Shielding shall be incorporated in Project designs to ensure that ambient lighting is not increased.
- **Invasive Species:** Landscape Plans shall incorporate native species that occur in the region. Invasive, non-native plant species listed on the most recent California Invasive Plant Council's Invasive Plant Inventory (https://www.cal-ipc.org/plants/inventory/) with a rating of moderate or high shall not be included in landscaping.
- **Barriers:** The proposed Project shall incorporate barriers, where appropriate, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in open space and/or suitable habitat for special-status wildlife (e.g., Woodglen Vista Creek). Such

barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.

MM-BIO-4 Tree Replacement, Encroachment, and Preservation. Prior to the issuance of a notice to proceed to the Contractor and prior to the commencement of any construction, construction plans and the Project's Landscape Plan shall include the following to address tree removal, encroachment into protected zone, and retained trees:

- **Replacement:** The proposed site plan would require removal of City of Santee–owned trees. Tree replacement shall occur at a 1:1 mitigation ratio with 15-gallon trees and be included in the Project's Landscape Plan, which shall also include recommendations for long-term maintenance and care for regulated trees that will be retained on site.
- **Encroachment into Protected Zone and Retained Trees:** Additionally, tree protection measures shall be provided in the Project's Landscape Plan and designed to mitigate impacts from construction encroachment into the protected zone of any preserved and/or encroached upon City of Santee–owned trees. These tree protection measures shall be consistent with best management practices for tree protection on construction sites and would help minimize impacts to any preserved and/or encroached City of Santee–owned trees. These measures shall be implemented prior to, during, and following construction. This includes measures such as exclusion fencing and worker training to avoid direct impacts to trees, and measures such as irrigation and monthly inspections by a Certified Arborist to promote the long-term health of retained trees.

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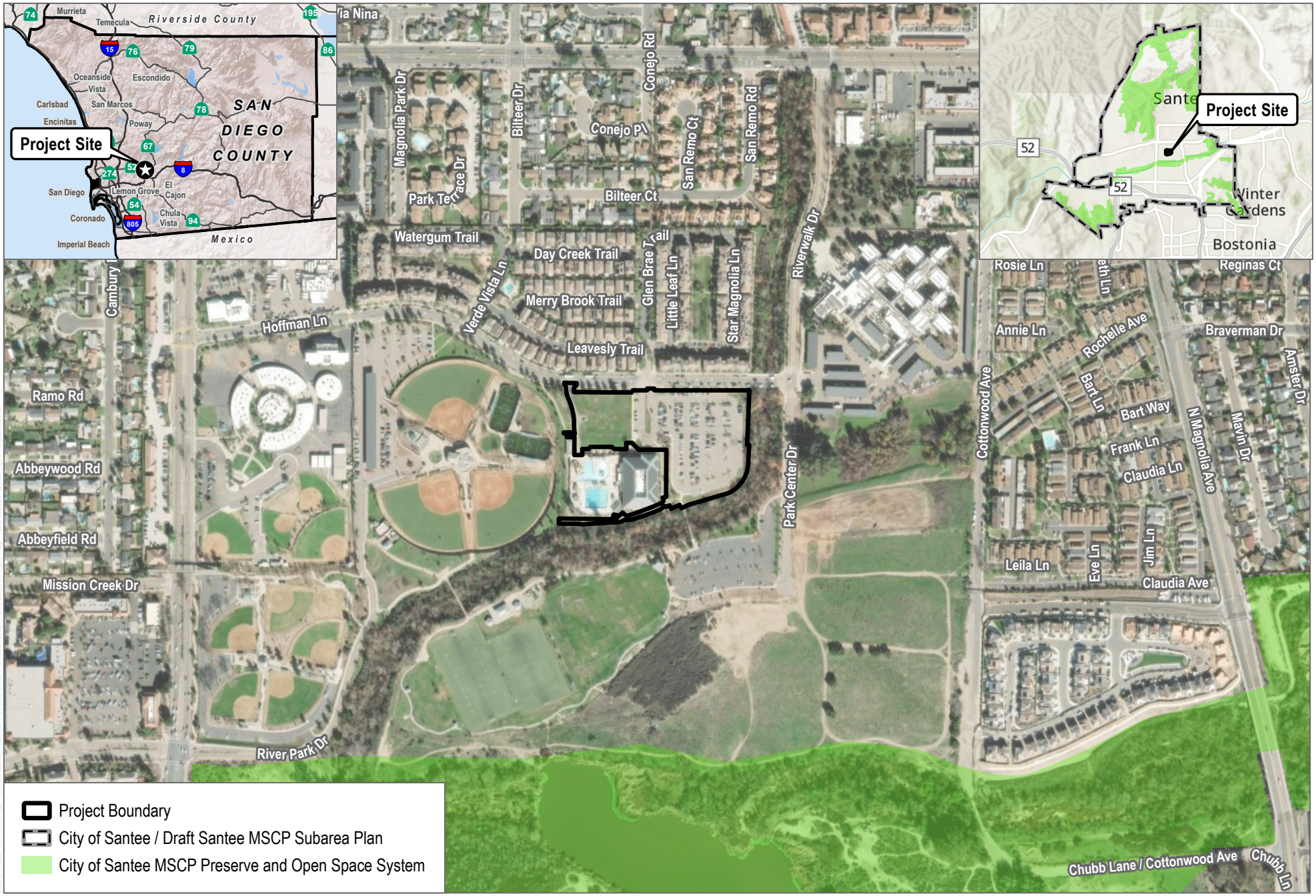
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SOURCE: Esri Imagery 2025

DUDEK

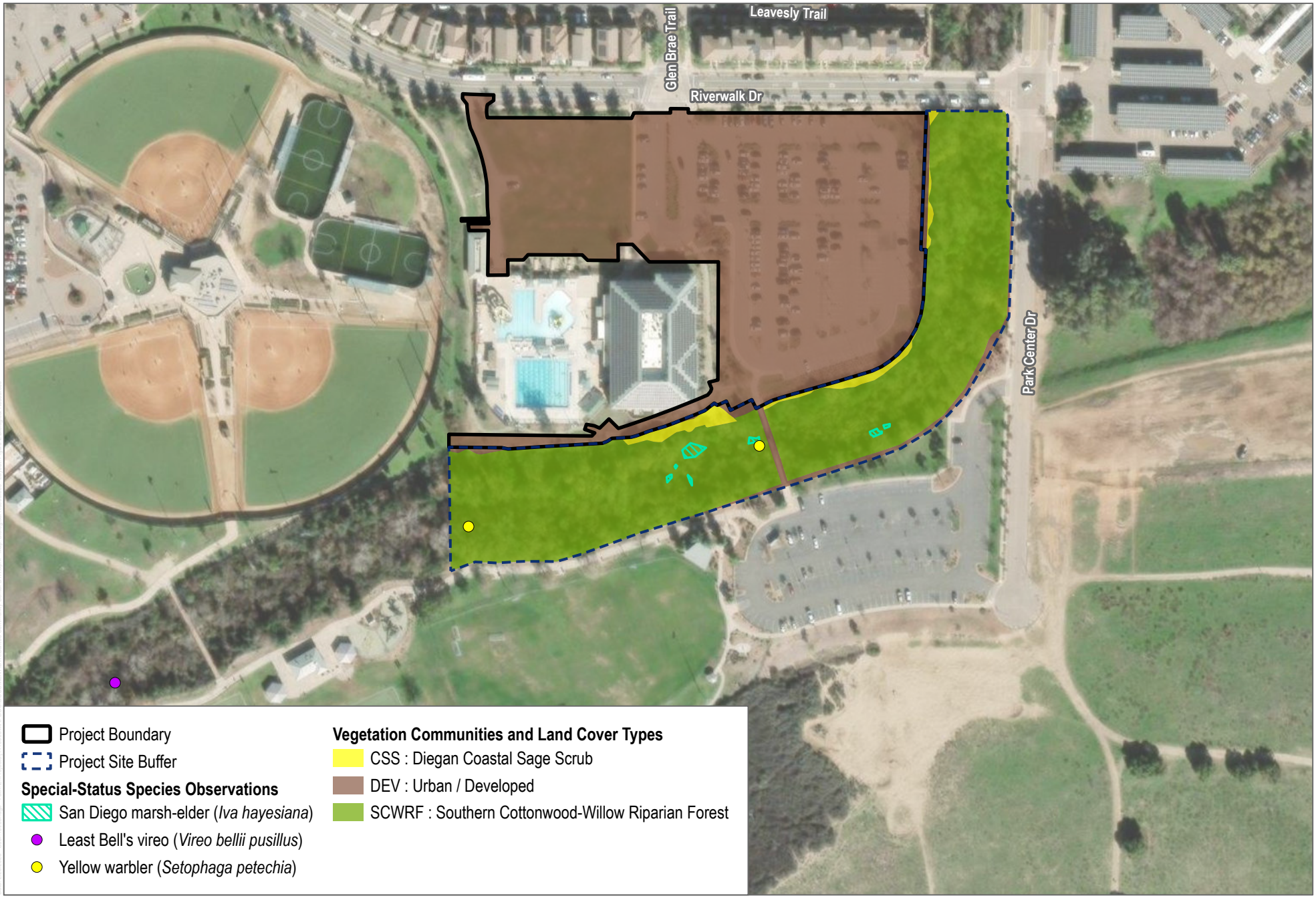
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FIGURE 1

Project Location

Biological Technical Report for the Santee Community Center Project

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SOURCE: Esri Imagery 2025

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0 100 200 Feet

FIGURE 2

Biological Resources

Biological Technical Report for the Santee Community Center Project

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SOURCE: Esri Imagery 2025

FIGURE 3

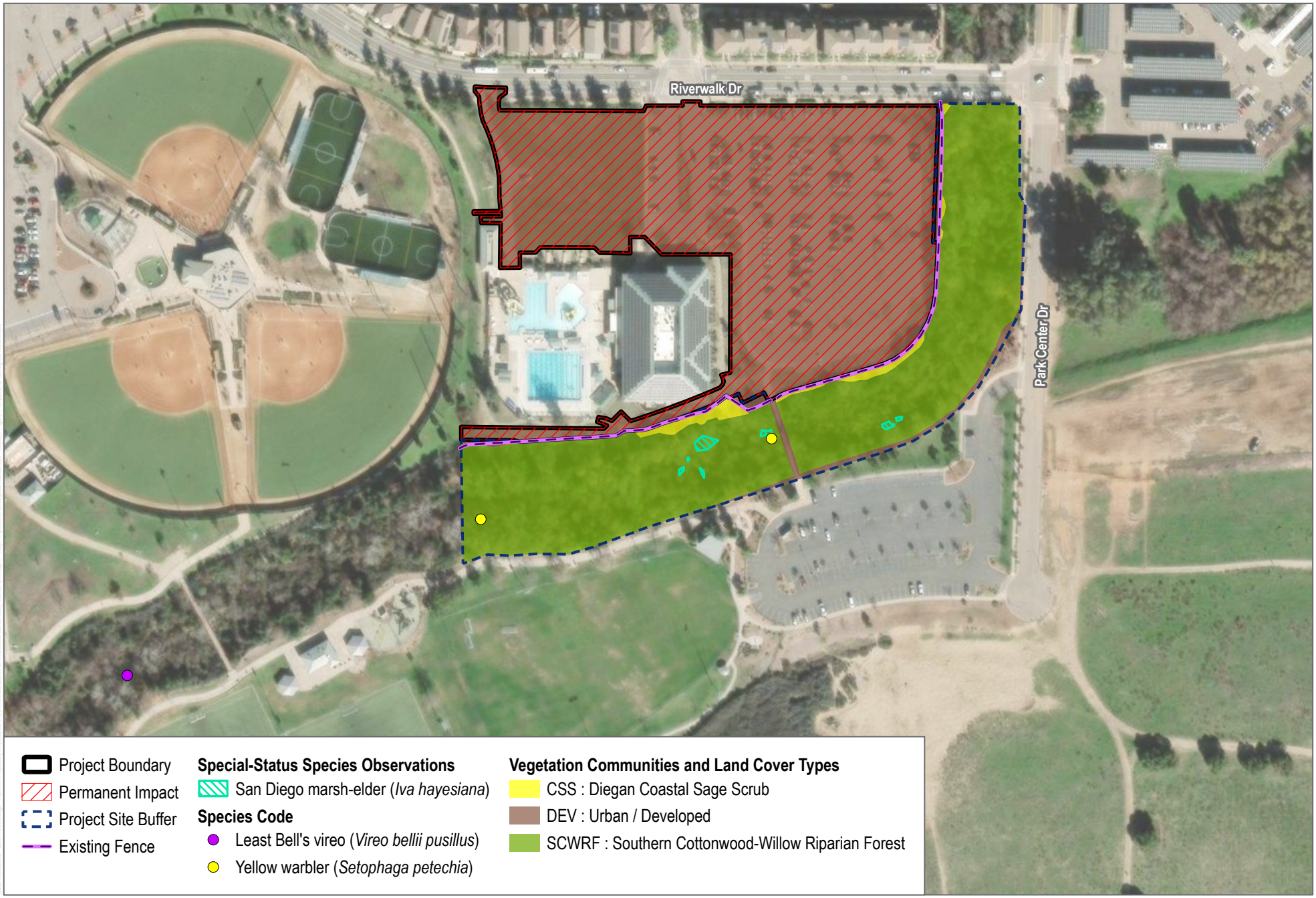
Hydrology

Biological Technical Report for the Santee Community Center Project

DUDEK

0 500 1,000 Feet

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SOURCE: Esri Imagery 2025

DUDEK

0 100 200 Feet

FIGURE 4

Impacts to Biological Resources

Biological Technical Report for the Santee Community Center Project

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Appendix A

Plant Species Observed on Site

Vascular Species

Eudicots

ANACARDIACEAE – SUMAC OR CASHEW FAMILY

Malosma laurina – laurel sumac
Rhus integrifolia – lemonade berry

ASTERACEAE – SUNFLOWER FAMILY

Ambrosia psilostachya – western ragweed
Artemisia douglasiana – Douglas' sagewort
Baccharis salicifolia ssp. *salicifolia* – mulefat
Baccharis sarothroides – desertbroom
* *Centaurea melitensis* – Maltese star-thistle
* *Cirsium vulgare* – bull thistle
* *Cotula australis* – Australian waterbuttons
* *Erigeron bonariensis* – asthmaweed
* *Hedypnois rhagadioloides* – crete weed
* *Helminthotheca echioides* – bristly oxtongue
Isocoma menziesii var. *vernonioides* – Menzies' goldenbush
Iva hayesiana – San Diego marsh-elder
* *Lactuca serriola* – prickly lettuce
Pluchea sericea – arrow weed
Pseudognaphalium biolettii – two-color rabbit-tobacco
* *Senecio vulgaris* – old-man-in-the-Spring
* *Sonchus asper* ssp. *asper* – spiny sowthistle
* *Sonchus oleraceus* – common sowthistle
* *Taraxacum officinale* – common dandelion

BORAGINACEAE – BORAGE FAMILY

Heliotropium curassavicum var. *oculatum* – seaside heliotrope

BRASSICACEAE – MUSTARD FAMILY

* *Hirschfeldia incana* – shortpod mustard
Lepidium lasiocarpum ssp. *lasiocarpum* – shaggyfruit pepperweed
* *Lepidium latifolium* – perennial pepper weed
Nasturtium officinale – watercress
* *Raphanus sativus* – cultivated radish

EUPHORBIACEAE – SPURGE FAMILY

* *Euphorbia rigida* – upright myrtle spurge

FABACEAE – LEGUME FAMILY

* *Bauhinia variegata* – orchid tree
* *Medicago polymorpha* – burclover
* *Melilotus indicus* – annual yellow sweetclover
* *Parkinsonia aculeata* – Jerusalem thorn

FAGACEAE – OAK FAMILY

Quercus agrifolia – coast live oak

GERANIACEAE – GERANIUM FAMILY

* *Erodium cicutarium* – redstem stork's bill
* *Erodium moschatum* – musky stork's bill
* *Geranium dissectum* – cutleaf geranium

MALVACEAE – MALLOW FAMILY

* *Malva parviflora* – cheeseweed mallow

Malvella leprosa – alkali mallow

MORACEAE – MULBERRY FAMILY

* *Morus alba* – white mulberry

MYOPORACEAE – EMU BUSHES FAMILY

* *Myoporum parvifolium* – slender myoporum

MYRSINACEAE – MYRSINE FAMILY

* *Lysimachia arvensis* – scarlet pimpernel

OLEACEAE – OLIVE FAMILY

Fraxinus velutina – velvet ash

ONAGRACEAE – EVENING PRIMROSE FAMILY

* *Oenothera speciosa* – pinkladies

OXALIDACEAE – OXALIS FAMILY

* *Oxalis corniculata* – creeping woodsorrel

PAPAVERACEAE – POPPY FAMILY

Eschscholzia californica – California poppy

PLANTAGINACEAE – PLANTAIN FAMILY

* *Plantago major* – common plantain

PLATANACEAE – PLANE TREE, SYCAMORE FAMILY

Platanus racemosa – California sycamore

PLUMBAGINACEAE – LEADWORT FAMILY

* *Limonium perezii* – Perez's sea lavender

POLYGONACEAE – BUCKWHEAT FAMILY

Eriogonum fasciculatum – California buckwheat

* *Polygonum aviculare* – prostrate knotweed
* *Rumex conglomeratus* – clustered dock

ROSACEAE – ROSE FAMILY

Heteromeles arbutifolia – toyon

Rosa californica – California rose

RUBIACEAE – MADDER FAMILY

Galium aparine – stickywilly

SALICACEAE – WILLOW FAMILY

Populus fremontii ssp. *fremontii* – Fremont cottonwood

Salix exigua – sandbar willow

Salix gooddingii – Goodding's willow

Salix lasiolepis – arroyo willow

SIMAROUBACEAE – QUASSIA OR SIMAROUBA FAMILY

* *Ailanthus altissima* – tree of heaven

TAMARICACEAE – TAMARISK FAMILY

* *Tamarix ramosissima* – tamarisk

VIBURNACEAE – MUSKROOT FAMILY

Sambucus mexicana – blue elderberry

Gymnosperms and Gnetophytes

PINACEAE – PINE FAMILY

* *Pinus* spp. – ornamental pine

Monocots

ARECACEAE – PALM FAMILY

* *Phoenix canariensis* – Canary Island date palm
* *Washingtonia robusta* – Washington fan palm

CYPERACEAE – SEDGE FAMILY

Cyperus eragrostis – tall flatsedge
Schoenoplectus acutus var. *occidentalis* – tule
Schoenoplectus californicus – California bulrush

JUNCACEAE – RUSH FAMILY

Juncus acutus ssp. *leopoldii* – southwestern spiny rush

POACEAE – GRASS FAMILY

* *Avena barbata* – slender oat
* *Bromus catharticus* – rescuegrass
* *Bromus diandrus* – ripgut brome
* *Bromus hordeaceus* – soft brome
* *Bromus rubens* – red brome
* *Cortaderia selloana* – Uruguayan pampas grass

Elymus condensatus – giant wild rye

* *Hordeum murinum* – mouse barley
* *Pennisetum setaceum* – fountain grass

Phragmites australis – common reed

* *Polypogon monspeliensis* – annual rabbitsfoot grass
* *Schismus barbatus* – common Mediterranean grass

* signifies introduced (non-native) species

Appendix B

Wildlife Species Observed on Site

Birds

Bushtits

AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus – bushtit

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

Tyrannus vociferans – Cassin's kingbird

Hawks

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Buteo lineatus – red-shouldered hawk

Jays, Magpies, and Crows

CORVIDAE – CROWS AND JAYS

Corvus brachyrhynchos – American crow

Vireos

VIREONIDAE – VIREOS

Vireo bellii pusillus – least Bell's vireo

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Setophaga petechia – yellow warbler

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Melozone crissalis – California towhee

Mammals

Squirrels

SCIURIDAE – SQUIRRELS

Otospermophilus beecheyi – California ground squirrel

Appendix C

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay, openings/annual herb/Apr–June/35–3,145	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered is very dense (i.e., no openings) and undisturbed clay soils are not present. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Acmispon prostratus	Nuttall's acmispon	None/None/1B.1	Coastal dunes, coastal scrub (sandy)/annual herb/Mar–June (July)/0–35	Not expected to occur. The site is outside of the species' known elevation range. This species has not been recorded within the vicinity (CNPS 2024).
Adolphia californica	California adolphia	None/None/2B.1	Chaparral, coastal scrub, valley and foothill grassland; clay/perennial deciduous shrub/Dec–May/35–2,425	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered and undisturbed clay soils are not present. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Allium marvinii	Yucaipa onion	None/None/1B.2	Chaparral (clay, openings)/ perennial bulbiferous herb/ Apr–May/2,490–3,490	Not expected to occur. The site is outside of the species' known elevation range, no undisturbed clay soils are present, and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Ambrosia chenopodiifolia	San Diego bur-sage	None/None/2B.1	Coastal scrub/perennial shrub/Apr–June/180–510	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2	Chaparral, Sonoran desert scrub; sandy/perennial shrub/Aug–Nov/35–1,640	Not expected to occur. No suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; alkaline (sometimes), clay (sometimes), disturbed areas (often), loam (sometimes), sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/ 65–1,360	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered and the site does not contain undisturbed clay soils. However, there is one historic and possibly extirpated CNDDB occurrence approximately 1,300 feet south of the site (CDFW 2024).
Aphanisma blitoides	aphanisma	None/None/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; gravelly (sometimes), sandy (sometimes)/annual herb/ Feb–June/ 5–1,000	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain gravelly or sandy soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Arctostaphylos glandulosa ssp. *crassifolia*	Del Mar manzanita	FE/None/1B.1	Chaparral (maritime, sandy)/perennial evergreen shrub/June–Apr/0–1,195	Not expected to occur. No suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Arctostaphylos otayensis	Otay manzanita	None/None/1B.2	Chaparral, cismontane woodland/perennial evergreen shrub/Jan–Apr/900–5,575	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Astragalus deanei	Dean's milk-vetch	None/None/1B.1	Chaparral, cismontane woodland, coastal scrub, riparian forest/perennial herb/Feb–May/245–2,280	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Astragalus oocarpus	San Diego milk-vetch	None/None/1B.2	Chaparral (openings), cismontane woodland/ perennial herb/May–Aug/ 1,000–5,000	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Atriplex coulteri	Coulter's saltbush	None/None/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline (sometimes), clay (sometimes)/perennial herb/ Mar–Oct/10–1,505	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Atriplex pacifica	south coast saltscale	None/None/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb/Mar–Oct/0–460	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Baccharis vanessae	Encinitas baccharis	FT/SE/1B.1	Chaparral (maritime), cismontane woodland; sandstone/perennial	Not expected to occur. No suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			deciduous shrub/Aug–Nov/ 195–2,360	
Bergerocactus emoryi	golden-spined cereus	None/None/2B.2	Chaparral, closed-cone coniferous forest, coastal scrub; sandy/perennial stem/ May–June/10–1,295	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed sandy soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/perennial bulbiferous herb/Apr–May/ 165–1,525	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed clay soils. However, there is a historic, but extirpated CNDDB occurrence/SDNHM specimen from 1983 located approximately 300 feet northwest of the site (CDFW 2024; SDNHM 2021).
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; clay (often)/perennial bulbiferous herb/Mar–June/ 80–3,670	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed clay soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1	Chaparral, cismontane woodland, closed-cone	Not expected to occur. No suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools; clay, mesic/perennial bulbiferous herb/May–July/100–5,550	
Calochortus dunnii	Dunn's mariposa-lily	None/SR/1B.2	Chaparral, closed-cone coniferous forest, valley and foothill grassland; gabbroic (sometimes), rocky/perennial bulbiferous herb/ (Feb) Apr–June/605–6,000	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Carex obispoensis	San Luis Obispo sedge	None/None/1B.2	Chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland; clay (often), gabbroic (sometimes), seeps (often), serpentinite (often)/perennial cespitose herb/Apr–June/35–2,690	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed clay soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2	Chaparral, closed-cone coniferous forest/perennial evergreen shrub/Apr–June/ 770–2,475	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Ceanothus otayensis	Otay Mountain ceanothus	None/None/1B.2	Chaparral (gabbroic, metavolcanic)/perennial evergreen shrub/Jan–Apr/ 1,965–3,605	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/2B.2	Chaparral/perennial evergreen shrub/Dec–May/5–1,245	Not expected to occur. No suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2,095	Not expected to occur. No suitable vegetation present.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct (Nov)/0–100	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None/None/1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools; clay (often)/annual herb/Apr–July/100–5,015	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed clay soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Clarkia delicata	delicate clarkia	None/None/1B.2	Chaparral, cismontane woodland; gabbroic (often)/ annual herb/Apr–June/ 770–3,280	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Clinopodium chandleri	San Miguel savory	None/None/1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland; gabbroic (sometimes), rocky (sometimes)/perennial shrub/Mar–July/395–3,525	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial shrub species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered and the site does not contain gabbroic or rocky soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	None/None/1B.2	Chaparral, cismontane woodland/perennial evergreen shrub/Apr–June/100–2,590	Not expected to occur. No suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Cordylanthus parviflorus	small-flowered bird's-beak	None/None/2B.3	Joshua tree "woodland," Mojavean desert scrub, Pinyon and juniper woodland/annual herb (hemiparasitic)/ Aug–Oct/2,295–7,220	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. This species has not been recorded within the vicinity (CNPS 2024).
Corethrogyne filaginifolia var. *incana*	San Diego sand aster	None/None/1B.1	Chaparral, coastal bluff scrub, coastal scrub/perennial herb/June–Sep/10–375	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Cylindropuntia californica var. californica	snake cholla	None/None/1B.1	Chaparral, coastal scrub/ perennial stem/Apr–May/ 100–490	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Deinandra conjugens	Otay tarplant	FT/SE/1B.1	Coastal scrub, valley and foothill grassland; clay/annual herb/(Apr)May–June/80–985	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed clay soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Deinandra floribunda	Tecate tarplant	None/None/1B.2	Chaparral, coastal scrub/ annual herb/Aug–Oct/ 230–4,000	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Dicranostegia orcuttiana	Orcutt's bird's-beak	None/None/2B.1	Coastal scrub/annual herb (*hemiparasitic*)/(Mar)Apr-July (Sep)/35–1,145	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Dudleya variegata	variegated dudleya	None/None/1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay/perennial herb/ Apr–June/10–1,900	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				contain undisturbed clay soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Dudleya viscida	sticky dudleya	None/None/1B.2	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub; Rocky/ perennial herb/May–June/ 35–1,805	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain rocky soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	None/None/1B.1	Chaparral, coastal scrub; mesic/perennial evergreen shrub/(July)Sep–Nov/ 100–1,965	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Eriodictyon sessilifolium	sessile-leaved yerba santa	None/None/2B.1	Coastal scrub; volcanic/ perennial shrub/July/ 560–560	Not expected to occur. The site is outside of the species' known elevation range. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered and there are no volcanic soils present. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Eriogonum evanidum	vanishing wild buckwheat	None/None/1B.1	Chaparral, cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland; gravelly	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			(sometimes), sandy (sometimes)/annual herb/ July–Oct/3,605–7,295	
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE/1B.1	Coastal scrub, valley and foothill grassland, vernal pools; mesic/annual/perennial herb/Apr–June/65–2,030	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Euphorbia abramsiana	Abrams' spurge	None/None/2B.2	Mojavean desert scrub, Sonoran desert scrub; sandy/ annual herb/(Aug)Sep–Nov/- 15–4,295	Not expected to occur. No suitable vegetation present.
Euphorbia misera	cliff spurge	None/None/2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub; rocky/perennial shrub/ (Oct)Dec–Aug/35–1,640	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain rocky soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/perennial stem/May–June/10–1,475	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not observed within the small amount of coastal sage scrub within the Project site buffer that has recovered and the site does not contain undisturbed soils. There are no

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Frankenia palmeri	Palmer's frankenia	None/None/2B.1	Coastal dunes, marshes and swamps (coastal salt), playas/ perennial herb/May–July/ 0–35	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Fraxinus parryi	chaparral ash	None/None/2B.2	Chaparral/perennial shrub/ Mar–May/700–2,030	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Fremontodendron mexicanum	Mexican flannelbush	FE/SR/1B.1	Chaparral, cismontane woodland, closed-cone coniferous forest; gabbroic, serpentinite/perennial evergreen shrub/Mar–June/ 35–2,345	Not expected to occur. No suitable vegetation present.
Galium proliferum	desert bedstraw	None/None/2B.2	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland; carbonate, rocky/annual herb/Mar–June/3,900–5,345	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Geothallus tuberosus	Campbell's liverwort	None/None/1B.1	Coastal scrub (mesic), vernal pools/ephemeral liverwort/ 35–1,965	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Grindelia hallii	San Diego gumplant	None/None/1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			grassland/perennial herb/ May–Oct/605–5,725	
Hesperocyparis forbesii	Tecate cypress	None/None/1B.1	Chaparral, closed-cone coniferous forest; clay, gabbroic (sometimes)/ perennial evergreen tree/ 260–4,920	Not expected to occur. No suitable vegetation present.
Heterotheca sessiliflora ssp. *sessiliflora*	beach goldenaster	None/None/1B.1	Chaparral (coastal), coastal dunes, coastal scrub/ perennial herb/Mar–Dec/ 0–4,015	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Horkelia truncata	Ramona horkelia	None/None/1B.3	Chaparral, cismontane woodland; clay, gabbroic/ perennial herb/May–June/ 1,310–4,265	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Hosackia crassifolia var. *otayensis*	Otay Mountain lotus	None/None/1B.1	Chaparral (metavolcanic, often disturbed areas)/perennial herb/May–Aug/1,245–3,295	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Hulsea californica	San Diego sunflower	None/None/1B.3	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest; Burned areas, Openings/ perennial herb/Apr–June/ 3,000–9,565	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/None/1B.2	Chaparral, coastal scrub (often disturbed areas, sandy)/ perennial shrub/Apr–Nov/ 35–820	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				contain sandy soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021).
Iva hayesiana	San Diego marsh-elder	None/None/2B.2	Marshes and swamps, playas/ perennial herb/Apr–Oct/ 0–1,640	This species was observed within the Project site buffer (i.e., San Diego river tributary). Not expected to occur within the Project site due to lack of suitable vegetation present.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), playas, vernal pools/ annual herb/Feb–June/ 5–4,000	Not expected to occur. No suitable vegetation present.
Lepechinia cardiophylla	heart-leaved pitcher sage	None/None/1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest/perennial shrub/Apr–July/1,705–4,490	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Lepechinia ganderi	Gander's pitcher sage	None/None/1B.3	Chaparral, closed-cone coniferous forest, coastal scrub, valley and foothill grassland; gabbroic (sometimes)/perennial shrub/June–July/ 1,000–3,295	Not expected to occur. The site is outside of the species' known elevation range.
Leptosyne maritima	sea dahlia	None/None/2B.2	Coastal bluff scrub, coastal scrub/perennial herb/ Mar–May/15–490	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Monardella breweri ssp. *microcephala*	small-headed monardella	None/None/2B.2	Chaparral, cismontane woodland, lower montane coniferous forest; disturbed areas (sometimes), granitic, openings/annual herb/ May–Aug/755–3,935	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Monardella hypoleuca ssp. *lanata*	felt-leaved monardella	None/None/1B.2	Chaparral, cismontane woodland/perennial rhizomatous herb/June–Aug/ 985–5,165	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Monardella viminea	willowy monardella	FE/SE/1B.1	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; alluvial terraces, washes/perennial herb/June–Aug/165–740	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not observed within the small amount of coastal sage scrub within the Project site buffer that has recovered and the site does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Nama stenocarpa	mud nama	None/None/2B.2	Marshes and swamps (lake margins, riverbanks)/ annual/perennial herb/ Jan–July/15–1,640	Not expected to occur. No suitable vegetation present.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, marshes and swamps (shallow freshwater), playas, vernal pools/annual herb/Apr–June/100–2,145	Not expected to occur. No suitable vegetation present.
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools; mesic/annual herb/Apr–July/10–3,965	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Nemacaulis denudata var. *denudata*	coast woolly-heads	None/None/1B.2	Coastal dunes/annual herb/Apr–Sep/0–330	Not expected to occur. No suitable vegetation present.
Nolina interrata	Dehesa nolina	None/SE/1B.1	Chaparral (gabbroic, metavolcanic, serpentinite)/ perennial herb/June–July/ 605–2,805	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/ Apr–Aug/50–2,165	Not expected to occur. No suitable vegetation present.
Packera ganderi	Gander's ragwort	None/SR/1B.2	Chaparral (burned areas, gabbroic outcrops)/perennial herb/Apr–June/1,310–3,935	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1	Vernal pools/annual herb/ Mar–July/295–655	Not expected to occur. No suitable vegetation present.
Pogogyne nudiuscula	Otay Mesa mint	FE/SE/1B.1	Vernal pools/annual herb/ May–July/295–820	Not expected to occur. No suitable vegetation present.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland; gravelly, sandy/perennial herb/(July) Aug–Nov (Dec)/0–6,885	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered and the site does not contain undisturbed soils. However, there is one historic CNDDB occurrence from 2011 approximately 2,000 feet southeast of the site (CDFW 2024).
Quercus cedrosensis	Cedros Island oak	None/None/2B.2	Chaparral, closed-cone coniferous forest, coastal	Not expected to occur. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			scrub/perennial evergreen tree/Apr–May/835–3,145	
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1	Chaparral, closed-cone coniferous forest, coastal scrub; clay, loam, sandy/ perennial evergreen shrub/ Feb–Apr (May–Aug)/50–1,310	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not recorded during the site visit within the small amount of coastal sage scrub within the Project site buffer that has recovered and undisturbed clay soils or loam and sandy are not present. There is a CNDDB occurrence from 2009 that overlaps the site (CNDDB 2024).
Ribes canthariforme	Moreno currant	None/None/1B.3	Chaparral, riparian scrub/ perennial deciduous shrub/ Feb–Apr/1,115–3,935	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Salvia munzii	Munz's sage	None/None/2B.2	Chaparral, coastal scrub/ perennial evergreen shrub/ Feb–Apr/375–3,490	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. This perennial species was not observed within the small amount of coastal sage scrub within the Project site buffer that has recovered and the site does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Senecio aphanactis	chaparral ragwort	None/None/2B.2	Chaparral, cismontane woodland, coastal scrub; alkaline (sometimes)/annual herb/Jan–Apr(May)/50–2,620	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				has not been recorded within the vicinity (CNPS 2024).
Sphaerocarpos drewiae	bottle liverwort	None/None/1B.1	Chaparral, coastal scrub; openings/ephemeral liverwort/295–1,965	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered is very dense (i.e., no openings) and does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Stemodia durantifolia	purple stemodia	None/None/2B.1	Sonoran desert scrub (often mesic, sandy)/perennial herb/(Jan) Apr–Dec/590–985	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Stylocline citroleum	oil neststraw	None/None/1B.1	Chenopod scrub, coastal scrub, valley and foothill grassland; clay/annual herb/Mar–Apr/ 165–1,310	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed clay soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).
Suaeda esteroa	estuary seablite	None/None/1B.2	Marshes and swamps (coastal salt)/perennial herb/ (Jan–May)July–Oct/0–15	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Tetracoccus dioicus	Parry's tetracoccus	None/None/1B.2	Chaparral, coastal scrub/ perennial deciduous shrub/ Apr–May/540–3,280	Not expected to occur. The site is outside of the species' known elevation range.
Triquetrella californica	coastal triquetrella	None/None/1B.2	Coastal bluff scrub, coastal scrub/moss/35–330	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers the majority of

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				the site was developed in 2009. The small amount of coastal sage scrub within the Project site buffer that has recovered does not contain undisturbed soils. There are no CNDDB occurrences or SDNHM specimens that overlap the site (CDFW 2024; SDNHM 2021). This species has not been recorded within the vicinity (CNPS 2024).

Notes: CNDDB = California Natural Diversity Database; SDNHM = San Diego Natural History Museum; Vicinity = recorded in El Cajon Quadrangle (CNPS 2024).

Status Legend

Federal

FE: Federally listed as endangered

FT: Federally listed as threatened

State

SE: State listed as endangered

SR: State listed as rare

CRPR: California Rare Plant Rank

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Rank

0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)

0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

References

CDFW (California Department of Fish and Wildlife). 2024. California Natural Diversity Database (CNDDB). RareFind 5: Commercial version. CDFW, Biogeographic Data Branch. https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx.

CNPS (California Native Plant Society). 2024. Rare Plant Inventory (online edition, v9-01 1.5). Sacramento, California: California Native Plant Society, Rare Plant Program. Accessed January 2024. www.rareplants.cnps.org.

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Appendix D

Special-Status Wildlife Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that recovered from past disturbances is associated with a tributary to the San Diego River, but this species has not been recorded within the vicinity (CDFW 2024) nor below the dams associated with the San Diego River and there are no streams within the site.
Spea hammondii	western spadefoot	FPT/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The coastal sage scrub within the Project site buffer that has recovered from past disturbances does not contain breeding habitat (vernal pools or ephemeral wetlands) for this species.
Reptiles				
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances does not contain sparse vegetation or sandy soils used by this species.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Arizona elegans occidentalis	California glossy snake	None/SSC	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	Not expected to occur. No suitable habitat present.
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances does not contain sparse vegetation, is very limited in size, and is surrounded by existing development.
Chelonia mydas	green sea turtle	FT/None	Shallow waters of lagoons, bays, estuaries, mangroves, eelgrass, and seaweed beds	Not expected to occur. No suitable vegetation present.
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC	Rocky areas within coastal scrub and chaparral	Not expected to occur. No suitable rocky areas present and the coastal sage scrub present within the Project site buffer is very minimal.
Crotalus ruber	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances is very limited in size and the San Diego River tributary is surrounded by development.
Actinemys pallida	southwestern pond turtle	FPT/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No suitable habitat present within the site. Suitable habitat may occur with the San Diego River tributary adjacent to the site; however, there are no CNDDB occurrences for this species within the vicinity (CDFW 2024).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Masticophis fuliginosus	Baja California coachwhip	None/SSC	In California, restricted to southern San Diego County where it is known from grassland and coastal sage scrub; open areas in grassland and coastal sage scrub	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances is very limited in size and the San Diego River tributary is surrounded by development. There are no CNDDB occurrences for this species within the vicinity (CDFW 2024).
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains, including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances is very limited in size and the San Diego River tributary is surrounded by development.
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances is very limited in size and does not contain small mammal burrows.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur within the Project site. No suitable habitat present within the site. Moderate potential to occur within suitable

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				habitat located within the San Diego River tributary adjacent to the site.
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur within the Project site. No suitable habitat within the site. Marginal suitable emergent wetlands present within the Project site buffer. Only known historically to occur at Santee Lakes (CDFW 2024).
Ammodramus savannarum (nesting)	grasshopper sparrow	None/SSC	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Not expected to occur. No grassland habitat present.
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to occur. The site is surrounded by development and no suitable open areas present for foraging or cliffs for nesting. There are no CNDDB occurrences for this species within the vicinity (CDFW 2024).
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. No grassland or open scrub habitat present. There are no CNDDB occurrences for this species within the vicinity (CDFW 2024).
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. No suitable foraging habitat present and this species no longer nests in San Diego County (SDNHM 2012). There are no CNDDB occurrences for this species within the vicinity (CDFW 2024).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	coastal cactus wren	None/SSC	Southern cactus scrub patches	Not expected to occur. No cactus scrub present within the site or immediate vicinity.
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren, or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur. No marine or estuarine shores present within the site or surrounding area.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. This species is not known to have nested in San Diego County for decades (SDNHM 2012). There are no CNDDB occurrences for this species within the vicinity (CDFW 2024).
Coturnicops noveboracensis	yellow rail	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Not expected to occur. No marsh/sedge meadows present within the site.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Not expected to occur on site. Low potential to occur within the San Diego River tributary area adjacent to the site. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The native habitat within the Project site buffer that has recovered from past disturbances is very limited in size. No suitable nesting habitat present within the site and limited nesting and foraging habitat adjacent to the site. There are no CNDDB occurrences for this species within the vicinity (CDFW 2024).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur within the site. No suitable nesting habitat present within the site. The San Diego tributary adjacent to the site could provide nesting habitat; however, there are no CNDDB occurrences for this species within the vicinity (CDFW 2024).
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur within the site due to lack of nesting and foraging habitat. Moderate potential to occur within the San Diego River tributary adjacent to the site.
Ixobrychus exilis (nesting)	least bittern	None/SSC	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Not expected to occur. No suitable marsh habitat present.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. No suitable habitat present.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	BCC/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (*Salicornia* spp.)	Not expected to occur. No coastal saltmarsh habitat present.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur within the site. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size and doesn't contain California sagebrush (*Artemisia californica*).
Rallus obsoletus levipes	Ridgway's rail	FE/FP, SE	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. No habitat present.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Setophaga petechia (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur within the site due to lack of nesting and foraging habitat. Observed within the San Diego River tributary adjacent to the site.
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to occur. No habitat present.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur within the site due to lack of nesting and foraging habitat. Observed within Woodglen Vista Creek, approximately 650 feet to the southwest of the site, and in the nearby section of the San Diego River, south of the site.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in trees and human-built structures	Not expected to occur. No open, dry habitats with rocky outcrops present for roosting or foraging habitats within the site or surrounding area.
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size, dense, and occurs within the San Diego River tributary.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size, dense, and occurs within the San Diego River tributary.
Choeronycteris mexicana	Mexican long-tongued bat	None/SSC	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings	Not expected to occur on site or within the San Diego River tributary adjacent to the site. No suitable roosting areas present within the site or surrounding area and the site is surrounded by development.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-built structures, and tunnels	Not expected to occur on site due to lack of suitable roosting habitat and lack of foraging habitat. Moderate potential to forage within the San Diego River tributary adjacent to the site but not expected to roost.
Dasypterus xanthinus	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Not expected to occur on site due to lack of suitable roosting and foraging habitat. Moderate potential to occur within the San Diego River tributary adjacent to the site.
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Not expected to occur on site or within the San Diego River tributary adjacent to the site. No suitable roosting areas present within the site or surrounding area and the site is surrounded by development.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur. The entire site was graded in 2006 and the

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size, occurs within the San Diego River tributary, and no middens were observed during the field survey.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur on site due to limited suitable roosting habitat and lack of foraging habitat.
Nyctinomops macrotis	big free-tailed bat	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	Not expected to occur on site due to limited suitable roosting habitat and lack of foraging habitat.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size, occurs within the San Diego River tributary, and is surrounded by existing development. No burrows were observed during the field survey.
Lasiurus frantzii	western red bat	None/SSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Low potential to occur on site due to limited suitable roosting habitat and lack of foraging habitat.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size and floral resources, occurs within the San Diego River tributary, and is surrounded by existing development.
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No vernal pools present.
Euphydryas editha quino	Quino checkerspot butterfly	FE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include *Plantago erecta*, *P. patagonica*, and *Antirrhinum coulterianum*, among others	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer that has recovered from past disturbances is very limited in size, lacks primary host plants, lacks clay soils preferred by primary host plants, has very limited flowering plants present for nectar sources, and the site is outside the USFWS recommended survey area.
Lycaena hermes	Hermes copper	FT/None	Mixed woodlands, chaparral, and coastal scrub	Not expected to occur. The entire site was graded in 2006 and the parking lot that covers most of the site was developed in 2009. The small amount of coastal sage scrub habitat within the Project site buffer

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				that has recovered from past disturbances is very limited in size, occurs within the San Diego River tributary, and is surrounded by existing development. This species host plants (California buckwheat [*Eriogonum fasciculatum*] and redberry buckthorn [*Rhamnus crocea])* were not observed during the field survey.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No vernal pools present.
Danaus plexippus plexippus pop. 1	monarch – California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	Not expected to occur within the site due to lack of suitable habitat, host plants (i.e., milkweed) and nectar plants. The site is not a known overwintering location.

Notes: CNDDB = California Natural Diversity Database; USFWS = U.S. Fish and Wildlife Service; Vicinity = recorded in El Cajon Quadrangle (CDFW 2024).

Status Legend

Federal

BCC: U.S. Fish and Wildlife Service—Bird of Conservation Concern
FC: Candidate for federal listing as threatened or endangered
FE: Federally listed as endangered
FT: Federally listed as threatened
FPT: Federally proposed for listing as threatened

State

FP: California Department of Fish and Wildlife Fully Protected species
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened
WL: CDFW Watch List species

References

CDFW (California Department of Fish and Wildlife). 2024. California Natural Diversity Database (CNDDB). RareFind 5: Commercial version. CDFW, Biogeographic Data Branch. https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx.

SDNHM (San Diego Natural History Museum). 2012. San Diego Natural History Museum, The Birds of San Diego County from the Bird Atlas Database. https://sdplantatlas.org/BirdAtlas/BirdPages.aspx.

Appendix C

Archaeological Resources Inventory Report

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

April 10, 2025 14169

Kyle Peterson
HMC Architects

Subject: Archaeological Resources Inventory Report for the Santee Community Center Project, City of San Santee, California

Dear Kyle Peterson:

This letter documents the negative archaeological resources inventory conducted by Dudek for the Santee Community Center Project (Project), located in the City of Santee, California (Figure 1). The proposed project would involve the construction of the Santee Community Center building (building), which will be two stories and include event space, office space, and support spaces that would total 12,500 gross square feet. The City of Santee (City) is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA). In accordance with CEQA, Dudek performed an archaeological resources inventory for the entire Project area. The Project area consists of an area up to 5.2 acres (Figure 2).

Dudek conducted a records search for the proposed project and the surrounding one-mile radius at the South Coastal Information Center (SCIC). The records search did not identify any archaeological resources within the Project area; however, 14 archaeological resources were identified within the one-mile radius. A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search was requested, and results were positive. Tribal outreach letters were mailed to tribal representatives on November 23, 2022. Two responses have been received, both indicating that there should be Tribal monitoring during ground disturbance, and requesting to participate in AB52 consultation.

Dudek archaeologists visited the Project area and confirmed its complete development. While no archaeological resources were identified within the Project area, 100% of the surface was obscured by development, including pavement and landscaping. The review of aerial photographs reveals that the Project area has been disturbed by previous surface grading and development activities. Additionally, the results of the record search show previous reports for archaeological and paleontological monitoring of mass grading in the Project area. No further archaeological management actions are recommended because the entire Project area has been developed, and had archaeological monitoring during the mass grading.

1 Project Description and Location

The proposed project site is located at 10123 Riverwalk Drive and is accessible from California State Route (SR)- 52 and SR-67. Vehicular access is provided via Riverwalk Drive. The Project area falls within Section 22 of Township 15 South, Range 1 West of the El Cajon, California 7.5-minute Quadrangle (Figure 1). The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west; open space and Town Center Community Park to the south; open space and Park Center Drive to the east; and the YMCA parking lot, Riverwalk Drive, and residential uses to the north.

The community center building would include an eastern and western wing, which are joined by the lobby and entrance area. There are two entrances to the proposed community center, the south entrance and the north entrance, both of which lead to the lobby area. Entry plazas are located outside of both entrances, which would include benches and landscaped areas. The lobby would include a reception area, access to both wings of the building, a staircase, and an elevator. The eastern wing would be one story tall and would include event space, storage, a kitchen, utilities, and an outdoor covered dining area (located south of the event space). The service yard and biofiltration basin would be located immediately east of the eastern wing. The first floor of the western wing would include office space, restrooms, storage, janitors' closet. The second floor would include event space, an event deck, concession space, restrooms, and storage. Amphitheater seating and bike storage would be located west of the western wing (Figure 2).

The project site would be modified to include sufficient parking for both the proposed Community Center building and the existing YMCA building. The existing asphalt parking lot would become the new east parking lot, and the existing grassy field would become the new west parking lot. The existing asphalt parking lot includes 270 regular stalls and 9 accessible stalls, while the new east and west asphalt parking lots would include a combined total of 275 regular stalls and 12 accessible stalls. Loading and unloading during events (i.e. deliveries and catering) would occur in the walled and gated utility yard located east of the proposed Community Center building.

The project would expand the existing driveway apron connecting to Riverwalk Drive, which would be the only off-site improvement. The driveway apron would be expanded to accommodate a secondary entrance and exit to the new west parking lot. The project would use existing on-site utility connections.

2 Regulatory Framework

2.1 CEQA and the California Register of Historic Resources

CEQA requires that all private and public activities not specifically exempted be evaluated for the potential to impact the environment, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, or place, which is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (Division I, Public Resources Code, Section 5021.1(b)).

Lead agencies have a responsibility to evaluate historical resources against the California Register of Historic Resources (CRHR, or California Register) criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a project which demolishes or alters those physical characteristics of a historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance.

The California Register is used in the consideration of historic resources relative to significance for purposes of CEQA. The California Register includes resources listed in, or formally determined eligible for the National Register of Historic Places (NRHP) and some California State Landmarks and Points of Historical Interest. Properties of local

significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the California Register, and they are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.), consisting of the following:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

2.2 Native American Historic Cultural Sites (California Public Resources Code section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NRHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

2.3 California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, required all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

2.4 California Health and Safety Code section 7050.5 and Public Resources Code Section 5097.98

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code

Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (California Health and Safety Code Section 7050.5[b]). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (California Health and Safety Code Section 7050.5[c]). In accordance with California Public Resources Code Section 5097.98(a), the NAHC will notify the Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. Within 48 hours of being granted access to the site, the MLD may recommend means of treatment or disposition, with appropriate dignity, of the human remains and associated grave goods.

2.5 Assembly Bill 52

California Assembly Bill 52, which took effect July 1, 2015, establishes a consultation process between California Native American Tribes and lead agencies in order to address tribal concerns regarding project impacts and mitigation to "tribal cultural resources" (TCR). Public Resources Code section 21074(a) defines TCRs and states that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A TCR is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either:

1. listed or eligible for listing in the CRHR or a local register of historical resources, or
2. determined by a lead agency to be a TCR.

2.6 City of Santee General Plan

Divided into nine elements, the Santee General Plan is a statement of intent by the City as to the future development of the community. This is accomplished through objectives and policies that serve as a long-term policy guide for physical, economic, and environmental growth. The Conservation Element of the Santee General Plan discusses water resources, land resources, archaeological and cultural resources, biological resources, and open space. Section 4.3 of the Conservation Element discusses archaeological, cultural, and historic resources known to be within the City. The goal of the Conservation Element is to conserve open space, natural, and cultural resources. The following objective and policies contained in the Conservation Element of the Santee

- General Plan are relevant to the analysis found in this section:
  - Objective 8.0: Preserve significant cultural resources.
    - Policy 8.1. The City shall require either the preservation of significant historic or prehistoric sites, or the professional retrieval of artifacts prior to the development of a site, consistent with the provisions of the California Environmental Quality Act. Preservation may include various measures including avoidance, preservation in place, incorporation into open space, or covering or capping. The type of preservation would depend upon the nature and significance of the archaeological resource and the practical requirements of the proposed land use.
    - Policy 8.2. The City should require curation of any recovered artifacts as a condition of any cultural resources mitigation program.

2.7 Guidelines for Determining Significance

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change:

> Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

The significance of an historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

- When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
- If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the

> Initial Study or Environmental Impact Report (EIR), if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5(d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

> When an initial study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
>
> 1. The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5); and
> 2. The requirement of CEQA and the Coastal Act.

Under CEQA, an EIR is required to evaluate any impacts on unique archaeological resources (California Public Resources Code section 21083.2.) A "unique archaeological resource" is defined as:

> [A]n archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
> 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
> 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

(California Public Resources Code section 21083.2(g)). An impact to a non-unique archaeological resource is not considered a significant environmental impact and such non-unique resources need not be further addressed in the EIR (Public Resources Code section 21083.2(a); CEQA Guidelines section 15064.5(c)(4)).

As stated above, CEQA contains rules for mitigation of "unique archaeological resources." For example, "[i]f it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

1. Planning construction to avoid archaeological sites.
2. Deeding archaeological sites into permanent conservation easements.
3. Capping or covering archaeological sites with a layer of soil before building on the sites.

4. Planning parks, greenspace, or other open space to incorporate archaeological sites." (Pub. Resources Code section 21083.2(b)(1)-(4).)

Public Resources Code section 21083.2(d) states that "[e]xcavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report."

The rules for mitigating impacts to archaeological resources to qualify as "historic resources" are slightly different. According to CEQA Guidelines section 15126.4(b), "[p]ublic agencies should, whenever feasible, seek to avoid damaging effects on any historic resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:

A. Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
B. Preservation in place may be accomplished by, but is not limited to, the following:
    1. Planning construction to avoid archaeological sites;
    2. Incorporation of sites within parks, greenspace, or other open space;
    3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site[; and]
    4. Deeding the site into a permanent conservation easement.

Thus, although section 21083.2 of the Public Resources Code, in addressing "unique archaeological sites," provides for specific mitigation options "in no order of preference," CEQA Guidelines section 15126.4(b), in addressing "historical resources of an archaeological nature," provides that "[p]reservation in place is the preferred manner of mitigating impacts to archaeological sites."

Under CEQA, "[w]hen data recovery through excavation is the only feasible mitigation," the lead agency may cause to be prepared and adopt a "data recovery plan," prior to any excavation being undertaken. The data recovery plan must make "provision for adequately recovering the scientifically consequential information from and about the historic resource." (CEQA Guidelines section 15126.4(b)(3)(C).) The data recovery plan also "must be deposited with the California Historical Resources Regional Information Center." (*Ibid*.) Further, "[i]f an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation." (*Ibid*.)

However, "[d]ata recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center." (CEQA Guidelines Section 15126.4(b)(3)(D).)

3 Results

3.1 Records Search

3.1.1 Previous Cultural Resources Reports

Dudek performed a California Historical Resources Information Systems (CHRIS) records search of the Project area and a one-mile radius at the South Coastal Information Center (SCIC) on October 10, 2022. The records search results revealed that 71 previous archaeological resources studies have been conducted within one-mile of the Project area. Of the 71 previous studies, four studies intersect the Project area and are listed in Table 1 below. These studies consist of two monitoring reports, a regional archaeological survey, and an archaeological resources inventory report. Overall, the entire Project area has been previously studied and resulted in negative results in the Project area. This includes the 2007 monitoring reports (SD-11189 and SD-11190) for the Town Center Community Park Mass Grading, which includes all of the Project area. No archaeological resources were found during this monitoring. The studies that do not intersect the area are included in Confidential Appendix A.

Table 1. Reports Intersecting Project Area

Report Number	Authors	Date	Title
SD-00546	San Diego State University Foundation	1975	An Archaeological Survey of the San Diego River Valley
SD-08888	Kyle Consulting	2003	Cultural Resource Survey for the Town Center Park, City of Santee, California
SD-11189	Brian F. Smith and Associates	2007	Results of Archaeological Monitoring at Town Center Community Park Mass Grading, Santee, California (CIP 2004-31) (Negative Archaeological Monitoring Report)
SD-11190	Brian F. Smith and Associates	2007	Paleontological Monitoring Report, Town Center Community Park Mass Grading Project, City of Santee, San Diego County, California (CIP2004-31)

3.1.2 Previously Recorded Cultural Resources

The SCIC records search did not identify any archaeological resources within the Project area. The records search did identify 14 archaeological resources within the one-mile search radius of the Project area (Table 2). Of the total 14 resources identified in the one-mile buffer, six are prehistoric resources, six are historic, and two are dual components. Fifty-five historic addresses were recorded within the one-mile search area, with none intersecting the Project area. The results of the records search and all DPR forms are attached as part of Confidential Appendix A.

Table 2. Previously Recorded Archaeological Resources in the One-Mile Record Search Radius

Primary Number	Trinomial (CA-)	Age	Description	In/Out of Project Area
P-37-005669	SDI-005669	Prehistoric	Site: artifact scatter and midden	Out
P-37-007603	SDI-007603	Prehistoric	Site: artifact scatter and midden	Out
P-37-009245	SDI-009245	Historic	Site: trash scatter from 30's/40's	Out
P-37-009248	SDI-009248	Historic	Site: farm complex	Out
P-37-020175	—	Historic	Building	Out
P-37-025303	—	Prehistoric	Isolate: flake	Out
P-37-028466	—	Prehistoric	Isolate: 3 flakes in tilled field	Out
P-37-030482	SDI-019370	Prehistoric	Site: habitation	Out
P-37-032655	SDI-020693	Historic	Site: trash scatter from 30's/40's	Out
P-37-032878	SDI-020778	Multicomponent	Site: prehistoric habitation, historic trash	Out
P-37-035505	—	Historic	Building	Out
P-37-035815	SDI-021860	Prehistoric	Site: lithic scatter	Out
P-37-037786	SDI-022504	Historic	Site: Fanita Rancho remnants	Out
P-37-039090	SDI-022955	Multicomponent	Site: bedrock milling and 1891 Santee School location	Out

3.2 Archival Research

In addition to the SCIC records search, Dudek conducted an on-line review of historic aerial photographs of the Project area and general vicinity, to help determine the possible development and land use of the Project area in the past. Historic aerial photographs of the Project area were available for, 1953, 1964, 1966, 1968, 1971, 1978, 1980-1991, 1993-2000, 2002, 2003, 2005, 2009, 2010, 2012, 2014, 2016, 2019, and 2020 (NETR 2022). The historical aerials from 1953 to 1981 revealed that the Project area was undeveloped. Aerials show dirt roads roughly correlating to today's Park Center Drive, and Riverwalk Drive present on the earliest images. In 1972 the Rio Seco school complex was completed to the west-northwest of the Project area. The tributary to the San Diego River that runs on the south and eastern borders of the Project area are shown to be essentially in the same place as today's maps, however it is rarely shown with water. In 1994 the area to the east of the Project area was graded and dragged to create two baseball fields. Between 2001 and 2005 the ball fields and surrounding area were revamped, graded and developed into the Cameron Family YMCA facility. Between 2005 and 2009 the Project area was graded and developed into the parking lot for the YMCA. This development included the finishing of Riverwalk Drive and Park Center Drive. A pedestrian bridge was added in 2010, connecting the southwestern corner of the Project area to the south bank of the tributary.

3.3 NAHC and Tribal Correspondence

Dudek requested a NAHC search of the SLF on September 13, 2022 for the Project area. The SLF consists of a database of known Native American resources. These resources may not be included in the SCIC database. The

results of the SLF were received on November 9, 2022 and were positive and the NAHC recommended contacting the Barona Group of the Capitan Grande and the Viejas Band of Kumeyaay Indians, with instruction to also contact the Kumeyaay Cultural Repatriation Committee via phone. The NAHC response also included a list of 17 other Native American representatives for tribes that are traditionally affiliated with the Project area. The NAHC correspondence is included in the Appendix B.

Letters with a map and description of the planned Project were sent to the17 Native American individuals and organizations on November 23, 2022. Responses are paraphrased below:

> Ray Teran of the Viejas Band of Kumeyaay Indians responded on November 10, 2022. His response indicated that the Project area holds cultural significance to Viejas and that cultural resources have been located within or adjacent to the proposed project. No specific location information or descriptions were provided. He further requests that Kumeyaay Cultural Monitor be on site for ground disturbing activities.
>
> Angelina Gutierrez of the San Pasqual Band of Mission Indians responded on December 8, 2022, indicating that the Project area was within the Traditional Use Area and that they would like to engage in formal government-to-government consultation under AB-52.

Any additional responses to the letters will be forwarded to the City and included in subsequent drafts of the report.

In compliance with Assembly Bill 52, the City, as lead agency, is responsible for conducting government to government consultation with pertinent tribal entities. For information regarding Assembly Bill 52, please refer to the Project's CEQA document.

3.4 Intensive Pedestrian Survey

Dudek archaeologists Jessica Colston and Philip Sharp-Garcia conducted site visits of the proposed Project area on November 7, 2022 and April 9, 2025, respectively. The site visits employed standard archaeological procedures and techniques consistent with the Secretary of the Interior Standards. Five-meter interval survey transects were conducted in an east-west direction for any area of the Project area that was not covered by asphalt or landscaping. Within the transects, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials.

The Project area is flat and almost completely developed as a parking lot, with landscaped transitions on the southern and eastern borders with the San Diego Riverbank. Ground visibility was poor (0-5%) overall, due to the 90% coverage by the parking lot. The southern and eastern borders are landscaped and lush with foliage. This foliage obscured most of the ground visibility. Modern debris (e.g., refuse, plastic fragments, irrigation pipes, glass fragments) is strewn throughout the Project area. The pedestrian surveys did not identify any archaeological resources within the Project area.

4 Summary and Management Considerations

4.1 Archaeological Recommendations

Dudek's archaeological resources inventory of the Project indicates that there is low sensitivity for identifying intact subsurface archaeological deposits during Project implementation. The SCIC records search and the site visit did not identify any archaeological resources within the Project area; however, 14 archaeological resources were identified within the one-mile radius. The review of aerial photographs also reveals the Project area has been disturbed by mass grading activities. The previous development of the Project area for the Town Center Community Park was monitored for cultural resources and yielded negative results. A site visit of the Project area confirmed that the Project area has been completely developed and did not identify any archaeological resources. Due to a lack of evidence for cultural resources within the project site, Dudek recommends that no further archaeological management is necessary beyond standard measures to address unanticipated discoveries of cultural resources and human remains.

The City, informed by Native American outreach, has determined that cultural resources monitoring is required during project implementation. The mitigation measures below will ensure the identification and proper treatment of any archaeological resources discovered during project implementation.

MM-CUL-01 Unanticipated Discovery of Archaeological Resources

If potential archaeological resources are uncovered during grading, the Applicant shall be required to halt all construction work occurring within 100 feet of the find until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards can evaluate the material to determine whether it is a "unique cultural resource" as defined in Section 21083.2 (g) of the CEQA Statutes. If the new discovery is evaluated and found to be significant under CEQA and avoidance is not feasible, additional work such as data recovery may be warranted. A data recovery plan shall be developed by the qualified archaeologist in consultation with the City and Native American representatives, if applicable. round disturbance can continue only after the resources has been properly mitigated and with approval by the City..

MM-CUL-2 Archaeological Monitoring

The qualified archaeologist, or an archaeological monitor (working under the direct supervision of the qualified archaeologist), shall observe all initial ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The qualified archaeologist, in coordination with the applicant and the City, may reduce or discontinue monitoring if it is determined by the qualified archaeologist that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the project site. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed below). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City and any Native American groups who request a copy. A copy of the final report shall be filed at the South Coastal Information Center (SCIC).

A Native American Monitor of Kumeyaay descent shall be present for any pre-construction meeting and for all ground disturbing activities associated with the project. Should any cultural or tribal cultural resources be discovered, no further grading shall occur in the area of the discovery until the City Planner, or designee, with concurrence from the Native American Monitor, are satisfied that treatment of the resource has occurred. In the event that a unique archaeological resource or tribal cultural resource is discovered, and in accordance with Public Resources Code Section 21083.2(b)(1), (2), and (4), the resource shall be moved and buried in an open space area of the Project site, such as slope areas, which will not be subject to further grading activity, erosion, flooding, or any other ground disturbance that has the potential to expose the resource. The on-site area to which the resource is moved shall be protected in perpetuity as permanent open space. No identification of the resource shall be made on-site; however, the Applicant shall plot the new location of the resource on a map showing latitudinal and longitudinal coordinates and provide that map to the Native American Heritage Commission (NAHC) for inclusion in the Sacred Lands File (SLF). Disposition of the resources shall be at the discretion of the City of Santee, but in accordance with the foregoing.

In the event of the unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within 100 feet) of the discovery until it can be evaluated by the qualified archaeologist in consultation with the Native American monitor. Construction shall not resume until the qualified archaeologist has conferred with the applicant and the City on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the applicant and the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and the City shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resources, beyond those which are scientifically important, are considered.

If human remains are encountered, all work shall halt in the vicinity (within 100 feet) of the discovery and the San Diego County Coroner will be contacted in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. The applicant and the City will also be notified. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate a Most Likely Descendant (MLD) for the remains per PRC Section 5097.98. The MLD shall complete the inspection of the site within 48 hours of being granted access and shall provide recommendations for the treatment of the remains. Until the landowner has conferred with the MLD, the applicant will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices.

Should you have any questions relating to this report and its findings, please do not hesitate to contact me at 760.815.6642 or jcolston@dudek.com.

Respectfully Submitted,

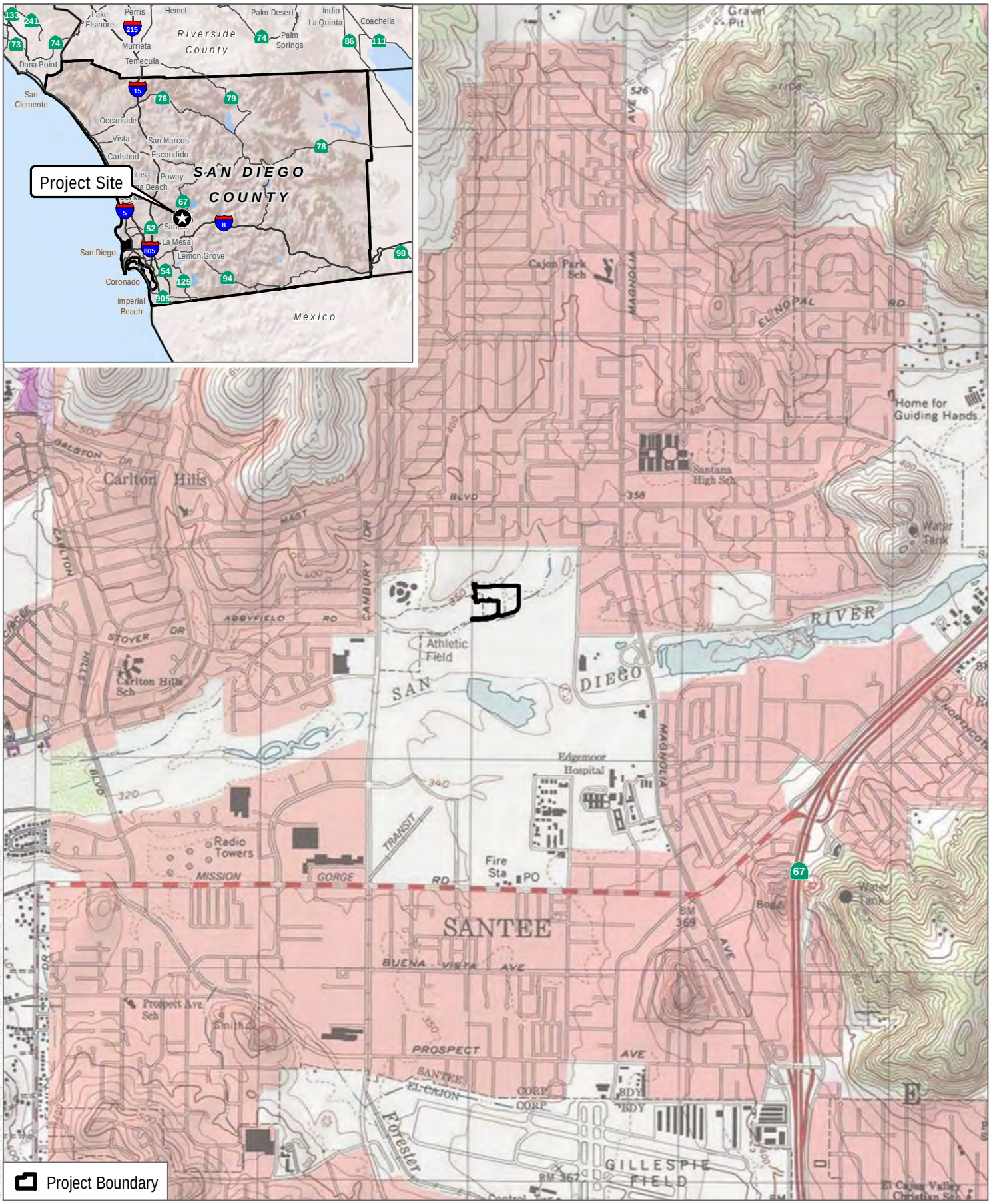
Jessica Colston
Archaeologist

Att.: *Figure 1, Record Search*
Figure 2, Project APE
National Archaeological Database Information
Confidential Appendix A, SCIC Records Search Results
Appendix B, NAHC Correspondence and Tribal Outreach
cc: *Matthew DeCarlo, Micah Hale, Dudek*

5 References

City of Santee General Plan. 2003. Accessed December 12, 2022. https://www.cityofsanteeca.gov/home/showpublisheddocument/7199/636336570186700000

NETR (National Environmental Title Research). 2022. Address search for 10123 Riverwalk Dr, Santee, CA 92071. Accessed December 12, 2022. http://www.historicaerials.com/.



SOURCE: USGS 7.5-minute Series El Cajon Quadrangle
Township 15S / Range1W / Section 22

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Santee Community Center Project



SOURCE: SANGIS 2020, 2022

DUDEK

0 50 100 Feet

FIGURE 2

Project Area

Santee Community Center Project

National Archaeological Database (NADB) Information

Authors:	Jessica Colston, Matthew DeCarlo MA, RPA., Micah Hale PhD, RPA.
Firm:	Dudek
Project Proponent:	HMC Architects
Report Date:	April 2025
Report Title:	Archaeological Resources Inventory Report for the Santee Community Center Project, City of Santee, California
Type of Study:	Archaeological Resources Inventory
Resources:	None
USGS Quads:	El Cajon, California, Township 15 South, Range 1 West, Section 22
Acreage:	5.2-acres
Permit Numbers:	N/A
Keywords:	Inventory, Negative, City of Santee, San Diego River, Santee School

Confidential Appendix A

SCIC Records Search Results

Appendix B

NAHC Correspondence and Tribal Outreach

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

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

November 9, 2022

Matthew DeCarlo
Dudek

Via Email to: mdecarlo@dudek.com

Re: Santee Recreation Center Project, San Diego County

Dear Mr. DeCarlo:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Barona Group of the Capitan Grande and the Viejas Band of Kumeyaay Indians on the attached list for information. Please also contact the Kumeyaay Cultural Repatriation Committee via phone at (760) 803-5694 for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

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

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Diego County
11/9/2022

Barona Group of the Capitan Grande
Raymond Welch, Chairperson
1095 Barona Road Diegueno
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
counciloffice@barona-nsn.gov

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 Diegueno
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 368 - 4382
Fax: (619) 445-9126
ceo@ebki-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno
Alpine, CA, 91901
Phone: (619) 933 - 2200
Fax: (619) 445-9126
michaelg@leaningrock.net

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
clint@redtailenvironmental.com

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Inaja-Cosmit Band of Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. Diegueno
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village
Lisa Cumper, Tribal Historic Preservation Officer
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4855
lcumper@jiv-nsn.gov

Jamul Indian Village
Erica Pinto, Chairperson
P.O. Box 612 Diegueno
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817
epinto@jiv-nsn.gov

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 Kwaaymii
Pine Valley, CA, 91962 Diegueno
Phone: (619) 709 - 4207

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

La Posta Band of Diegueno Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road Diegueno
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Santee Recreation Center Project, San Diego County.

Native American Heritage Commission
Native American Contact List
San Diego County
11/9/2022

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 Diegueno
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

San Pasqual Band of Diegueno Mission Indians
Allen Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

San Pasqual Band of Diegueno Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 Diegueno
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

Sycuan Band of the Kumeyaay Nation
Kristie Orosco, Kumeyaay Resource Specialist
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 6917

Sycuan Band of the Kumeyaay Nation
Cody Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

Viejas Band of Kumeyaay Indians
John Christman, Chairperson
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337

Viejas Band of Kumeyaay Indians
Ernest Pingleton, Tribal Historic Officer, Resource Management
1 Viejas Grade Road Diegueno
Alpine, CA, 91901
Phone: (619) 659 - 2314
epingleton@viejas-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Santee Recreation Center Project, San Diego County.

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. John Christman, Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Rd.
Alpine, CA 91901

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Christman,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

As part of the cultural resources study prepared for the proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on November 9, 2022, which stated that the SLF search identified the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project area, please contact me directly at (760) 815-6642 or at jcolston@dudek.com within 30 days of receipt of this letter.

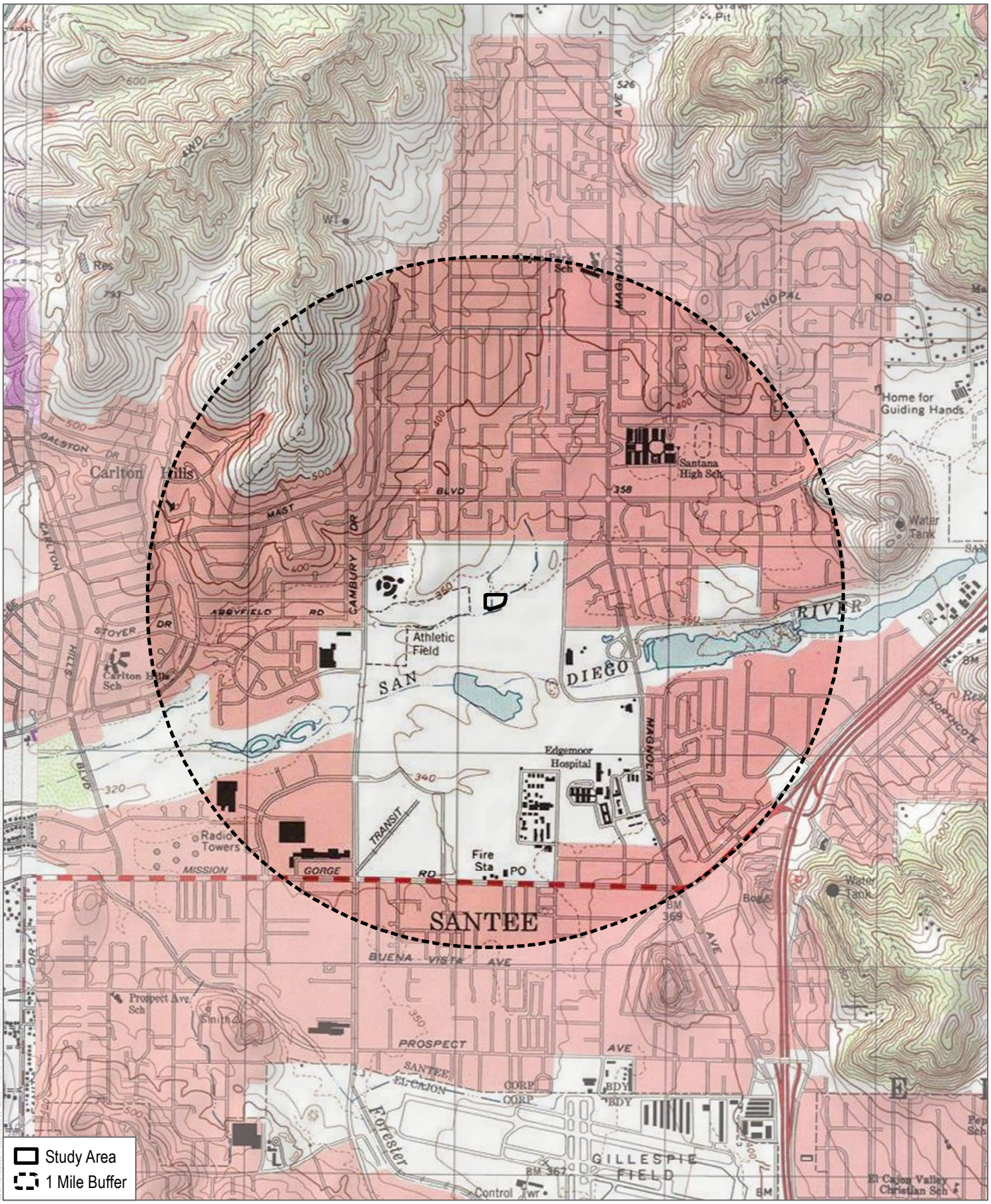
Please note that this letter does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. AB 52 is a process between the lead agency and California Native American Tribes concerning potential impacts to tribal cultural resources. Tribes that wish to be notified of projects for the purposes of AB 52 must contact the lead agency, City of Santee, in writing (pursuant to Public Resources Code Section 21080.3.1 (b)).

Respectfully,



Archaeologist
DUDEK
Phone: (760) 815-6642
Email: jcolston@dudek.com

Attachments: *Figure 1. Records search area Map.*



SOURCE: USGS 7.5-Minute Series El Cajon Quadrangle
Township 15S; Range 1W; Sections 22

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

FIGURE 1

Records Search

Santee Community Center Project

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Ms. Lisa Cumper, THPO
Jamul Indian Village
P.O. Box 612
Jamul, CA 91935

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Cumper,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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Respectfully,



Archaeologist
DUDEK
Phone: (760) 815-6642
Email: jcolston@dudek.com

Attachments: *Figure 1. Records search area Map.*

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. John Flores, Environmental Coordinator
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA 92082

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Flores,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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Respectfully,



Archaeologist
DUDEK
Phone: (760) 815-6642
Email: jcolston@dudek.com

Attachments: *Figure 1. Records search area Map.*

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. Michael Garcia, Vice Chairperson
Ewiiaapaayp Tribe
4054 Willows Road
Alpine, CA 91901

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Garcia,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

As part of the cultural resources study prepared for the proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on November 9, 2022, which stated that the SLF search identified the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project area, please contact me directly at (760) 815-6642 or at jcolston@dudek.com within 30 days of receipt of this letter.

Please note that this letter does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. AB 52 is a process between the lead agency and California Native American Tribes concerning potential impacts to tribal cultural resources. Tribes that wish to be notified of projects for the purposes of AB 52 must contact the lead agency, City of Santee, in writing (pursuant to Public Resources Code Section 21080.3.1 (b)).

Respectfully,



Archaeologist
DUDEK
Phone: (760) 815-6642
Email: jcolston@dudek.com

Attachments: *Figure 1. Records search area Map.*

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. Allen E. Lawson, Chairperson
San Pasqual Band of Diegueno Mission Indians
P.O. Box 365
Valley Center, CA 92082

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Lawson,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. Clint Linton, Director of Cultural Resources
Ipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, CA 92070

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Linton,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. Michael Linton, Chairperson
Mesa Grande Band of Dieguneo Mission Indians
P.O. Box 270
Santa Ysabel, CA 92070

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Linton,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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November 23, 2022

Ms. Carmen Lucas,
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA 91962

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Lucas,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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ENCINITAS, CALIFORNIA 92024
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November 23, 2022

Mr. Cody Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA 92019

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Martinez,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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ENCINITAS, CALIFORNIA 92024
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November 23, 2022

Ms. Javaughn Miller, Tribal Administrator
La Posta Band of Diegueno Mission Indians
8 Crestwood Rd.
Boulevard, CA 91905

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Miller,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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November 23, 2022

Ms. Kristie Orosco, Resource Specialist
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA 92019

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Orosco,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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Respectfully,



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ENCINITAS, CALIFORNIA 92024
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November 23, 2022

Ms. Rebecca Osuna, Chairperson
Inaja-Cosmit Band of Indians
2005 S. Escondido Blvd.
Escondido, CA 92025

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Osuna,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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Archaeologist
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MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Ms. Gwendolyn Parada, Chairperson
La Posta Band of Diegueno Mission Indians
8 Crestwood Rd.
Boulevard, CA 91905

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Parada,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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605 THIRD STREET
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T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA 92070

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Perez,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

November 23, 2022

Mr. Ernest Pingleton, Tribal Historic Officer
Viejas Band of Kumeyaay Indians
1 Viejas Grade Rd.
Alpine, CA 91901

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Pingleton,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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November 23, 2022

Mr. Robert Pinto, Chairperson
Ewiaapaayp Tribe
4054 Willow Rd.
Alpine, CA 91901

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Mr. Pinto,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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November 23, 2022

Ms. Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA 91935

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Pinto,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

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November 23, 2022

Ms. Angela Elliott Santos, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA 91905

Subject: ***Information Request for the Santee Community Center Project in City of Santee, San Diego County, California***

Dear Ms. Santos,

The Santee Community Center Project is located in the City of Santee (City), San Diego County, California. The project site is located in a developed urban area of the City. The project site is bound by the Cameron Valley YMCA and Sportsplex USA to the west. This area falls within the following PLSS area: Township 15S/ Range 1W – Section 22, El Cajon Quadrangle, CA 1:24,000 USGS maps (Figure 1).

As part of the cultural resources study prepared for the proposed project, Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on November 9, 2022, which stated that the SLF search identified the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural resources that may exist within or near the proposed project area, please contact me directly at (760) 815-6642 or at jcolston@dudek.com within 30 days of receipt of this letter.

Please note that this letter does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. AB 52 is a process between the lead agency and California Native American Tribes concerning potential impacts to tribal cultural resources. Tribes that wish to be notified of projects for the purposes of AB 52 must contact the lead agency, City of Santee, in writing (pursuant to Public Resources Code Section 21080.3.1 (b)).

Respectfully,



Archaeologist
DUDEK
Phone: (760) 815-6642
Email: jcolston@dudek.com

Attachments: *Figure 1. Records search area Map.*

Jessica Colston

From: Ray Teran <rteran@viejas-nsn.gov>
Sent: Thursday, November 10, 2022 12:08 PM
To: Jessica Colston; Ernest Pingleton; Matthew DeCarlo
Subject: RE: Santee Community Center PN 14169

Jessica, THX for the info. The entire San Diego River plane is littered with village/gathering locations. As such, please see below.

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the APE-DE of the proposed project.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

If you wish to utilize Viejas cultural monitors (Viejas rate is $54.15/hr. plus GSA mileage), please call Ernest Pingleton at 619-655-0410 or email, epingleton@viejas-nsn.gov, for contracting and scheduling. Thank you.

From: Jessica Colston <jcolston@dudek.com>
Sent: Thursday, November 10, 2022 12:01 PM
To: Ray Teran <rteran@viejas-nsn.gov>; Ernest Pingleton <epingleton@viejas-nsn.gov>; Matthew DeCarlo <mdecarlo@dudek.com>
Subject: Santee Community Center PN 14169

Hi Ray,
I wanted to reach out to provide you with the Santee Community Center Project's description. I have also attached the map and mock up documents, since they show pretty well the current area and the proposed development.

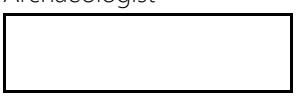
The Project description is as follows:

The Santee Community Center would involve the development of a 12,500 SQ Ft, 2 story structure adjacent to the current city-owned YMCA. The development would consist of removing the current parking lot surface for the building footprint, as well as some of the adjacent landscaping on the south side of the parking lot. This is followed by excavation, grading for the pad. It is anticipated that utility trenching will also be required.

Please reach out to me if you have any further questions.

Safe Travels,

Jessica Colston
Archaeologist



605 Third Street, Encinitas, CA 92024
Cell: 760.815.6642

IPAI

SAN PASQUAL BAND OF MISSION INDIANS

SAN PASQUAL RESERVATION

TRIBAL COUNCIL

Stephen W. Cope
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Vice Chairman

Jenny Alto
Secretary-Treasurer

Roberta Cameron
Councilman

Melody S. Arviso
Councilman

December 8, 2022

DUDEK
Jessica Colston
Archaeologist
605 Third Street
Encinitas Ca 92024

RE: Santee Community Project

Dear Mrs. Colston,

The San Pasqual Band of Mission Indians Tribal Historic Preservation Office has received your notification of the project referenced above. This letter constitutes our response on behalf of Desiree M. Whitman THPO of the San Pasqual Band of Diegueno Indians.

We have consulted our maps and determined that the project as described is not within the boundaries of the recognized San Pasqual Indian Reservation. It is, however, within the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). Furthermore, As the project progresses, we would like to engage in formal government-to-government consultation under AB-52 so that San Pasqual can have a voice in the development of the measures that will be taken to protect these sites and mitigate any adverse impacts. We would appreciate being given access to any cultural resource reports that have been or will be generated during the environmental review process so we can contribute most effectively to the consultation process.

We appreciate your involvement with your initiative and look forward to working with you on future efforts. If you have questions or need additional information, please do not hesitate to contact me by telephone at 760-651-5142 or angelinag@sanpasqualtribe.org

Sincerely,

Angelina Gutierrez

Angelina Gutierrez
Tribal Historic Preservation Office, Deputy THPO/Monitor Supervisor
San Pasqual Band of Mission Indians

Appendix D
Geotechnical Report

GEOTECHNICAL INVESTIGATION REPORT
SANTEE COMMUNITY CENTER
SANTEE, CALIFORNIA

Prepared for:

HMC Architects
8910 University Center Lane, #650
San Diego, CA 92122

Prepared by:

GROUP DELTA CONSULTANTS, INC
32 Mauchly, Suite B
Irvine, California 92618

Group Delta Project Number IR786
June 15, 2022

GROUP DELTA

HMC Architects
8910 University Center Lane, #650
San Diego, CA 92122

June 15, 2022
Group Delta Project No. IR786

Attention: Kyle Peterson, AIA, LEED AP, DBIA
Managing Manager

Subject: Geotechnical Investigation Report
Santee Community Center
Santee, California

Dear Kyle:

Group Delta Consultants, Inc. (Group Delta) is pleased to submit this geotechnical investigation report for the proposed Santee Community Center Phase 1 project located in the City of Santee, California. This report and our associated geotechnical services were provided in general accordance with our consulting agreement with HMC Group (HMC), dated January 12, 2022.

We appreciate the opportunity to provided geotechnical services for this project. If you have any questions pertaining to this report, or if we can be of further service, please do not hesitate to contact us at (949) 450-2100.

Yours Sincerely,
Group Delta Consultants, Inc.

REGISTERED PROFESSIONAL ENGINEER
MICHAEL JAMES GIVENS
NO. 3145
Exp. 9/30/2023
GEOTECHNICAL
STATE OF CALIFORNIA

Michael Givens, PhD, PE, GE, PG
Associate Engineer

Giovani Valdivia
Staff Engineer

Distribution: Addressee (1 PDF file via email)

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GEOTECHNICAL INVESTIGATION REPORT
SANTEE COMMUNITY CENTER
SANTEE, CALIFORNIA

1.0 INTRODUCTION

This report presents our geotechnical investigation and recommendations for design of the proposed Santee Community Center in Santee, California. The project site is located adjacent to the Cameron Family YMCA at 10123 Riverwalk Drive in the City of Santee. The project site is shown in Figure 1, Site Location Map.

1.1 Project Description

It is our understanding that the proposed building is part of phase one of three phases, consisting of the development of the primary Community Center. The proposed Community Center will have an approximate area of 12,500 square feet consisting of dedicated facilities for teens and seniors, lobby space, multi-purpose rooms, administrative offices, and storage. Other associated improvements include parking facilities and landscape architecture. A conceptual development plan is presented in Figure 2.

The finish floor elevation of the proposed Community Center is not available at the time of preparing this report and it has been assumed at grade (with no basement).

1.2 Scope of Work

The objective of this report was to provide geotechnical recommendations for design and construction for the proposed development. Our scope of work for the project includes the following task:

- Review of the available published geotechnical and geologic reports, maps, and subsurface data for the project site and surrounding area.
- Perform three geotechnical borings to evaluate the subsurface conditions.
- Perform laboratory testing to quantify physical and engineering properties of the subsurface soils.
- Evaluate geologic and seismic hazards including local seismicity, surface fault rupture, ground shaking, liquefaction, and other considered geologic hazards.
- Evaluate seismic design parameters in accordance with the 2022 California Building Code (CBC).
- Provide geotechnical recommendations for site development earthwork, including removal of unsuitable soils, excavations, placement of compacted fill/backfill, and reuse of excavated materials.
- Provide geotechnical recommendations for support of the proposed structures.

- Evaluate the corrosivity of the on-site soils.
- Provide pavement design recommendations.
- Prepare this report presenting the results of our investigation, conclusions, and recommendations.

1.3 Site Description

The project site is a 12,500 square feet rectangular shaped area east of Cameron Family YMCA, within the parking lot area. The project site is currently occupied by an asphalt concrete (AC) paved parking lot used for the YMCA. The site is relatively flat with an elevation of approximately 345 feet above mean sea level. The southern and eastern limits of the property has slopes that descend into the Woodglen Vista Creek.

2.0 FIELD EXPLORATION AND LABORATORY TESTING

2.1 Field Exploration

The field exploration program was performed on February 17, 2022 and consisted of drilling three (3) hollow stem auger borings (B-1 through B-3) to a maximum depth of 50 feet below ground surface (bgs). The locations of these explorations are shown in Figure 3. A detailed explanation of the field exploration including boring logs is presented in Appendix A.

2.2 Laboratory Testing

Laboratory tests were performed on selected soil samples obtained during the field exploration to help characterize the subsurface materials and to evaluate their index and engineering properties. The performed tests are identified on the boring logs in Appendix A. A detailed description of the laboratory testing program including test results is presented in Appendix B. The laboratory testing program consisted of the following:

- Moisture content and dry density
- Grain size distribution and percent passing No. 200 sieve
- Atterberg Limits
- Direct Shear
- Expansion index test
- Corrosivity tests (pH, sulfates, chlorides and electrical resistivity)
- R-Value test

3.0 GEOLOGY AND SUBSURFACE CONDITIONS

3.1 Geology

The subject site is located within the Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges are characterized by a series of northwest trending mountain ranges separated by valleys, with a coastal plain of subdued landforms. The mountain ranges are underlain primarily by Mesozoic metamorphic rocks that were intruded by plutonic rocks of the southern California batholith, while the coastal plain is underlain by subsequently deposited marine and nonmarine sedimentary formations.

In general the project site is underlain at depth by early Cretaceous age undivided tonalite and granodiorite (Map Symbol – Kgr, referred to as Granitic Rock in this report) covered by Holocene young alluvial deposits (Map Symbol – Qya). The young alluvial deposits are associated with the San Diego River and generally consist of poorly to well graded sandy soils. Not presented in the geologic map, but identified during our field investigation was surficial fill material. A regional geologic map of the project site is illustrated in Figure 4 and the pertinent units are discussed below.

3.2 Fill

Undocumented fill is soil where there is no record of compaction testing and/or observation by a Geotechnical Engineer's representative. Undocumented fill depths ranged from 4 to 10 feet were encountered in our exploratory borings. As described in the boring logs, the fill generally consists of clayey sand (SC) with approximately 38 to 42 percent fines with trace to little gravel. Deeper fills could be present anywhere within the site and could locally extend deeper.

3.3 Alluvium

The Holocene-age young alluvial fan deposits (Map Symbol – Qya) are associated with the San Diego River. The alluvial deposits at the project site generally consist of loose to medium dense sands (SM, SP-SM, SW, SW-SM) to a depth of 28 feet below ground surface.

3.4 Granitic Rock

Early Cretaceous-age granitic rock (Map Symbol Kgr) comprised of tonalite and granodiorite is believed to underlie the entire site at depth. Decomposed granitic rock materials were encountered in our exploratory Boring B-1 at a depth of about 28 feet. As described in the boring logs, the granitic rock materials encountered are gray in color and highly weathered for the depth explored. Granitic rock weathered to well graded sand with silt or clay (SW-SC, SW-SM).

3.5 Groundwater

Groundwater was encountered at depths between 14.5 to 16.1 feet bgs (between 331.0 and 328.9 feet above MSL) during our field investigation. The State Water Resources Control Board website (GeoTracker, 2021) provides depth to groundwater data from 2002 to 2013 at the former RCP Block & Brick Inc. site located at 9631 N. Magnolia Avenue, about ¼-mile southeast of the site. The data indicates groundwater depths ranging from about 328.2 to 330.7 feet above MSL in the 8 monitoring wells installed at that site (SCS Engineers, 2013).

Groundwater levels may fluctuate over time due to changes in the water surface elevation and flow rate within the Woodglen Vista Creek, as well as variations in rainfall, irrigation and site drainage conditions.

4.0 SEISMICITY AND GEOLOGIC HAZARDS

Potential seismic hazards during an earthquake include ground rupture, strong ground shaking, seismic slope instability, liquefaction and dynamic settlement, and earthquake induced flooding due to tsunamis or dam failures. Potential geologic hazards include landslides, erosion, subsidence, volcanic eruptions, and poor soil conditions (compressible, collapsible or expansive soils). Each of the potential hazards is discussed in more detail below.

4.1 Ground Rupture

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. The closest known active fault is the Mission Gorge located at a distance of approximately 10.4 km away from the project site as shown in Figure 5. Therefore, ground surface rupture due to active faulting is not considered a potential hazard at the project site.

4.2 Earthquake Ground Motions

Similar to most sites in southern California, the project site is susceptible to strong ground motions generated during earthquakes on nearby faults. The intensity of ground motion is dependent on the distance between the fault and the project site, the magnitude of the earthquake, and the subsurface soil conditions. These seismic hazards and their potential impact at the project site are discussed below.

Design ground motion parameters and response spectra were developed for the project site in accordance with the 2022 California Building Code (CBC) and the American Society of Civil Engineers (ASCE) 7-16 standard for essential facilities. Based on the underlying geology and subsurface exploration data the site classification for seismic design is Site Class D per Chapter 20 of ASCE 7-16. Mapped seismic design parameters for the project site using the USGS Seismic Design Maps web application are presented in Table 1.

Table 1: Mapped Seismic Design Parameters per CBC 2022 / ASCE 7-16

Latitude: 32.85076° Longitude: -116.97683°	
Site Class	D
Mapped MCE Spectral Response Acceleration at Short Period (S_S)	0.77
Mapped MCE Spectral Response Acceleration at Period of 1 Second (S_1)	0.283
Site Coefficient, F_a	1.192
Site Coefficient, F_v	2.034
Adjusted MCE Spectral Response Acceleration at Short Period (S_{MS})	0.918
Adjusted MCE Spectral Response Acceleration at Period of 1 Second (S_{M1})	0.576
Design Earthquake Spectral Response Acceleration at Short Period (S_{DS})	0.612[(1)]
Design Earthquake Spectral Response Acceleration at Period of 1 Second (S_{D1})	0.384[(2)]
Peak Ground Acceleration Adjusted for Site Class (PGA_M)	0.419

Notes
[(1)] For $T \leq 1.5\ T_s$, S_{DS} should be used only to obtain Cs using Equation 12.8-2.
[(2)]: If S_{D1} is used to obtain C_S with either equation 12.8-3 or 12.8-4 of ASCE 7-16, the value must be increased by a factor of 1.5. This may only be used for $T > 1.5\ T_S$.

4.3 Liquefaction and Seismically-Induced Settlement

Liquefaction involves the sudden loss in strength of a saturated, cohesionless soil (sand and non-plastic silts) caused by the build-up of pore water pressure during cyclic loadings, such as those produced by an earthquake. This increase in pore water pressure can temporarily transform the soil into a fluid mass, resulting in a vertical settlement, and can also cause lateral ground deformations. Typically, liquefaction occurs in areas where these three simultaneous conditions exist:

- Loose to medium dense cohesionless soils
- Groundwater within 50 feet of the surface
- Strong shaking, such as caused by an earthquake

The project site is mapped within a liquefaction zone identified by City of Santee in their General Plan, Geotechnical/Seismic Hazard Map, 2020 (Figure 6.). The project site is considered to have a moderate to high liquefaction potential.

Liquefaction triggering analyses was performed using simplified procedures recommended by NCEER (Youd and Idriss, 1997, 2001) for SPTs. The analyses uses a peak ground acceleration value for the 2,475-year return period earthquake (PGA_M) based on ASCE 7-16 of 0.42g and a moment magnitude of M_w 6.4 computed using the USGS based on the Dynamic U.S. 2014 (v4.2) deaggregation tool (https://earthquake.usgs.gov/hazards/interactive/). A design groundwater of 14.5 feet was used in the analyses.

Potential liquefiable layers were encountered at a depth between 14.5 and 28 feet bgs. The soils consist of loose to medium dense sandy soils. The potential for liquefaction to occur at the project site under the design earthquake is considered high. Liquefaction-induced settlement was calculated on the order of 4 inches. Dry seismic settlements above this depth are calculated at less than 0.1 inches. Differential settlement from the liquefaction induced settlements could be on the order of 2. The values reported are using the NCEER (Youd and Idriss, 1997, 2001) method for SPTs. Liquefaction triggering and liquefaction-induced settlement calculations are provided in Appendix C.

4.4 Landslides and Lateral Spreads

The project site is mapped as marginally susceptible to landslide based on City of Santee General Plan, Geotechnical/Seismic Hazard Map, 2020 (Figure 6). The project site is relatively flat with some embankments built up to the south and east near the Woodglen Vista Creek. Based on our review of an existing contour map the adjacent slopes are approximately 7 feet high and are sloped at approximate 4H:1V.

Two-dimensional limit equilibrium slope stability analyses were performed using the computer program SLIDE to assess the adjacent slopes for overall stability considering static, seismic and rapid drawdown conditions. Soil strength parameters for the analyses were selected based on our field and laboratory testing as summarized in Appendix A and B. The analyses were performed using Spencer's (1967) method of slices and the results are summarized in Table 2 and the calculations are presented in Appendix C.

Global stability under seismic loading conditions were conducted using a pseudo-static horizontal acceleration coefficient (k_h) equal to 2/3 x PGA = 0.279. Initial check for the seismic condition includes liquefied soil strengths evaluated according to Idriss and Boulanger (2008) to evaluate the potential for lateral spreading. A factor of safety greater than 1.1 for the aforementioned condition indicates a relatively small displacement and adequate stability, while a lower factor of safety requires a displacement analysis. The factor of safety was less than 1.1 and indicates a potential for lateral spreading. The horizontal displacements were calculated using a Newmark type simplified procedure recommended by Bray and Travasarou (2007). The estimated displacement is summarized in Table 2.

Table 2: Summary of Global Stability

Static Case	"Seismic Case – Pseudo-Static (Lateral Spreading)" with Reduced Liquefaction Strengths		
Factor of Safety	**Factor of Safety (k_h = 2/3 PGA)**	**K_y**	**Lateral Spreading Displacement (in)**
4.8	<1.1	0.14	8.6

4.5 Expansive Soils

The onsite near surface materials are generally clayey sands. A laboratory test was performed on one sample of the near surface materials that had a measured Expansion Index (EI) value of 68 as shown in Appendix B. This indicates a medium expansion potential (51<EI<90) based on American Society for Testing and Materials (ASTM) D4829 standard. Considering that moderately expansion soils are present at the project site, remedial grading should be performed to remove expansive materials or alternatively, foundations can be designed to resist these expansion pressures.

4.6 Flooding, Seiches and Tsunamis

The project site is located in a flood hazard zone X, areas with reduced flood risk due to levee, as established by the Federal Emergency Management Agency (FEMA) in Figure 7. The project site is located adjacent to Woodglen Vista Creek that is at a lower elevation. Consequently, the potential for flooding due to seiches or dam failures is considered to be low.

The project site is located at an elevation of about 340 feet above MSL and a distance of about 20 miles away from the coastal region and therefore, the potential for hazard associated with tsunami impact is negligible.

5.0 KEY GEOTECHNICAL FINDINGS

The proposed development is feasible from a geotechnical standpoint, provided that the recommendations presented in this report are implemented. A summary of key geotechnical findings is provided below.

- The upper 4 to 10 feet of the subsurface soils are undocumented fill that consists of predominantly clayey sand material that can have variable strengths. Remedial grading recommendations are provided in Section 7.3.1.2.
- Potentially liquefiable soils are present at the site between a depth of 14.5 to 28 feet bgs that could result in approximately 4 inches of liquefaction-induced settlement and a seismic differential settlement on the order of 2 inches. Measures such as post-tension slabs, mat foundations and/or ground improvement should be considered to mitigate the effects of the total and differential settlements. Lateral spreading is estimated to be on the order of 8.5-inches and shallow footings on ground improvement should be tie together.
- Groundwater was encountered at a depth of about 14.5 feet bgs. No basements are proposed, however, excavations extending near groundwater may encounter unstable bottoms. Excavations that extend within 5 feet or less of groundwater table should consider lighter construction equipment to avoid developing a “pumping” subgrade that would require remedial subgrade stabilization.

- Medium expansive soils were encountered in the upper 4 to 10 feet at the site. Foundations should be designed to resist the expansive soils as recommended in Section 6.2 or the upper 4 feet of soils from final grade should be removed and replaced with non-expansive material as recommended in Section 7.3.1.2.
- Laboratory tests results indicate that the onsite soils may be very corrosive to buried ferrous metals. A corrosion consultant may be contacted for specific corrosion control recommendations.
- Onsite infiltration is not feasible due to the presence of shallow groundwater and near surface soils that have an infiltration rate of less than 0.001 inches per hour as discussed in Section 6.1.

6.0 FOUNDATION RECOMMENDATIONS

6.1 General

City of Santee has commenced the predesign for the proposed Santee Community Center project. Community Center building will be part of phase one of a total of three phases. We understand that a two-story building is planned to be built at the project site. No basement levels are planned for this development.

Considering the subsurface soils are prone to liquefaction-induced settlements on the order of 4-inches and lateral spreading maybe on the order of 8.5-inches, it is recommended to use shallow foundations with grade beams or a reinforced mat foundation situated on ground improvement. Slabs on grade will need to be designed for the expansive nature of the onsite soils or slabs on grade will require removal and replacement of at least 4 feet below final grade to mitigate onsite expansive soils.

Pile foundations are not recommended for the building considering the need to account for the presence of sandy material below groundwater, presence of bedrock and the potential for lateral spreading. Drilled piles would most likely be needed for embedment into the bedrock and to accommodate the lateral spreading kinematic loads. Drilling would be prone to caving sands during construction and use of casings and/or “wet” method construction would be required. An experienced contractor specializing in these conditions would be required. It is most likely more cost effective to control overall settlement with ground improvement and there is a lower risk of constructability issues.

6.2 Community Center Structure

6.2.1 Post-Tensioned Slabs or Reinforced Mat Slab Foundations

6.2.1.1 Subgrade Reaction and Expansive Soil Design Parameters

The existing near surface soils at the project site consist of clayey sands. These materials generally have a medium expansion potential (51<EI<90). Site preparation and compaction requirements

should follow recommendations provided in Section 7.3. A post-tensioned slab or mat thickness and reinforcement should be designed by the project structural engineer using parameters in Table 3 and considering liquefaction-induced .

Table 3. Post-Tensioned Slab Foundation Design Recommendations

Design Parameter		Value
Plasticity Index		20-30
Expansion Index		51-90
Percent Passing No. 200 Sieve		80
Thornthwaite Moisture Index		-20
Depth of Constant Soil Suction (feet)		9
Center Lift	Edge Moisture Variation Distance, e_m, (feet)	5.3
	Center Lift, y_m, (inches)	-0.5
Edge Lift	Edge Moisture Variation Distance, e_m, (feet)	2.7
	Edge Lift, y_m, (inches)	1.0

The modulus of subgrade reaction concept can be used in the design of mat foundations and slabs-on-grade. The modulus of subgrade reaction is not an intrinsic property of the soil since it also depends on the dimensions and stiffness of the slab and the stress level. The mat slab foundation should be designed for settlements and bending moments using a value of 150 pci for the normalized modulus of subgrade reaction coefficient K_{v1} (namely, corresponding to a 1-foot square bearing plate). Depending on the level of ground improvement, this value may be increased and should be coordinated with the ground improvement specialty contractor. To ensure rigidity of the foundation a subgrade reaction coefficient, K_v, should be used based on Terzaghi (1955) and is defined as:

$$K_v = K_{v1} * [(m + 0.5)/1.5m] * [(B+1)/2B]^2$$

where “B” is the width of the foundation measured in feet, and “m” is the ratio of length over width of a rectangular foundation. The flat concrete slab of the mat system should, at a minimum, have continuous two-way reinforcing at the top and the bottom and be designed by the project structural engineer.

6.2.1.2 Bearing Capacity and Settlement

An allowable average bearing pressure of 1,000 psf and a maximum allowable bearing of 1,500 psf for concentrated areas may be used for design if the remedial measure presented in Section 7.3.1.2 are followed. For planning purposes, an allowable bearing pressure of 2,000 psf can be anticipated if ground improvement is extended to the bottom of the foundation as discussed in Section 7.2. The final bearing capacity should be confirmed by the ground improvement specialty contractor. The allowable bearing pressure may be increased by one-third for short term wind or seismic loads. The expected total post-construction (static) settlement of a PT slab or mat foundation with the allowable bearing pressure is expected to be less than

1.5 inches of static settlement. The static differential settlement is expected to be less than ¾-inch over a distance of 40 feet. The foundation should be situated a minimum of 18 inches below the lowest adjacent soil grade.

The total static-plus-seismic settlement under PGA_M seismic settlement analysis will be on the order of 4 to 5-inches and a differential of 2 inches. The dry seismic are negligible and the large settlements are associated with the liquefaction induced settlements as discussed in Section 4.3. Mat foundations shall be designed to accommodate the expected vertical differential settlements per ASCE 7-16 Section 12.13.1.

6.2.1.3 Lateral Resistance

Resistance to lateral loads can be provided by friction developed between the bottom of footings and the supporting soil, and by the passive soil pressure developed on the face of the footing. An allowable passive resist of 300 pounds per cubic foot (pcf) and a coefficient of friction of 0.35 may be used for lateral sliding resistance of footings. Both values include a factor of safety of at least 1.5 and both passive and sliding resistance may be used in combination without reduction. The allowable lateral resistance may be increased by one-third for short term wind or seismic loads.

6.2.2 Shallow Foundations with Grade Beams and Ground Improvement

The Community Center can be supported by shallow foundations if they are horizontally tied with grade beams, founded over ground improvement as discussed in Section 7.2 and remedial grading is performed in accordance with 7.3.1.2. The seismic-induced permanent horizontal ground displacement exceeds 3 inches if the design earthquake is realized and ASCE 7-19 Section 12.13.9.2.1.1 shall be followed.

Final ground improvement layout shall be designed by a specialty contractor as discussed in Section 7.2. The ground improvement will be controlled by allowable settlements, that should not exceed 1.5 inches of total (static-plus-seismic) and should be evaluated by the specialty contractor as part of their submittal to support their plans. For planning purposes, spread footings situated on ground improvement as discussed in Section 7.2 is expected to accommodate an allowable dead-plus-live load pressure of at least 4,000 pounds per square foot (psf). The static differential settlement should be less than ½-inch over a distance of 40 feet. Ground improvement should be placed after remedial grading to remove and replace 4 feet of soil below the slab if the slab is not designed to accommodate expansive forces of the existing soils. Shallow footings should have a minimum dimension of 2 feet and shallow continuous footings should have a minimum width of 1.5 feet. Locate the bottoms of all footings at least 18 inches below the lowest adjacent grade.

Resistance to lateral loads recommendations from Section 6.2.1.3 apply for shallow footings.

6.3 Slope Setback

As per section 1808.7.2 of the 2022 CBC, which references Figure 1808.7.1 of the 2022 CBC, the distance between the face of the footing from the face of descending slopes should be at least the smaller of H/3 and 40 feet, where H is the height of the slope.

6.4 Soil Corrosion Potential

Near surface soils collected from Boring B-1 were tested to evaluate the corrosion potential of subsurface materials. The tests include pH, electrical resistivity, soluble chloride and soluble sulfate concentrations are summarized in Table 4 and attached at Appendix B.

Table 4: Corrosion Potential Test Results

Sample/Depth	pH	Resistivity [Ohm-cm]	Sulfate Content [ppm]	Chloride Content [ppm]
B-1 @ 1'- 5'	8.87	830	<100	<100

Based on pH, sulfate content and chloride content of the test sample, the near surface soils are considered not corrosive to concrete. The following correlation can generally be used between electrical resistivity and the corrosion potential of soils in contact with buried metals:

Electrical Resistivity (Ohm-Cm)	Corrosion Potential
Less than 1,000	Severe
1,000 to 2,000	Corrosive
2,000 to 10,000	Moderate
Greater than 10,000	Mild

On the basis of the laboratory testing, the onsite soils are very corrosive to buried metals. Typical corrosion control measures may be incorporated into the design, such as providing adequate concrete cover or protective coatings for steel reinforcement, and coating or providing sacrificial anodes as needed for buried metal pipes. Adequate cover for steel below grade shall follow ACI 318 guidelines. Group Delta does not practice corrosion engineering and our evaluation and recommendations are preliminary in nature. For further guidance and verification of our preliminary results, a corrosion specialist should be consulted.

6.5 Stormwater Infiltration

The City of Santee BMP Design Manual (2016) states that the depth to groundwater beneath the base of any infiltration BMP must be greater than 10 feet for infiltration BMPs to be allowed. The groundwater was encountered between 14.5 and 16.1 feet at the site during our investigation and would require the invert of any BMP to be situated in the upper 5 feet. The upper 5 feet of soil consists

of clayey sands that are not suitable for infiltration. The hydraulic conductivity of the clayey sands was estimated to be less than 0.001 inches per hour utilizing the Hazen empirical equation that is a function of the grain size diameter corresponding to 10 percent passing as determined by ASTM D422. Consequently, the invert of the BMP system would need to extend within 10 feet of the measured groundwater and onsite infiltration is not considered feasible for the project.

6.6 Retaining Walls

Retaining walls should be placed on 2 feet of compacted fill that is prepared as discussed in Section 7.3. The continuous footings should have a minimum width of 18-inches and have a minimum embedment of at least 18-inches below the lowest adjacent grade. Footings with this minimum width and embedment may be designed for an allowable dead-plus-live pressure of 1,500 pounds per square foot (psf). The allowable bearing pressure may be increased by one-third when considering temporary loads associated with wind and seismic loading. Short-term static settlements for footings are expected to be less than 1-inch. Differential settlements will be less than ½-inch over a distance of 40-feet. Estimated liquefaction-induced settlements may be on the order of 4-inches if a design level earthquake is realized. Retaining walls typically can accommodate large displacements without collapse. However, if any retaining wall is considered a critical component to the structure, then ground improvement could be utilized to limit vertical displacements.

The magnitude of lateral earth pressure depends on wall movement. Cantilever retaining walls free to yield at the top at least 0.2 percent of the wall height may be designed for active pressure conditions. Active earth pressure for design may be taken as an equivalent fluid unit weight of 34 pcf for level backfill. The pressure does not include seepage forces or surcharge loads. Surcharge loads within a 1H:1V plane extending back and up from the base of the wall should be accounted for in design. For uniform areal surcharge loading the lateral pressure on the wall may be taken as a uniformly distributed pressure equal to 28 percent of the vertical pressure for active condition. Other surcharge loading conditions should be evaluated on a case-by-case basis.

The wall should be designed to resist an active pressure combined with a seismic increment of lateral earth pressure when the retained height H is 6-feet or greater. The combined active static and seismic lateral earth pressure were computed based on a horizontal acceleration coefficient k_h of 0.14g that is based on one third of PGA_M. The combined active static and seismic lateral earth pressure is equivalent to a fluid with a density of 53 pcf. Therefore, a seismic increment of 19 pcf may be used for design of seismic earth pressure.

Retaining wall backfill should be compacted to at least 90% relative compaction based on ASTM D1557. Backfill should not be placed until walls have achieved adequate strength. Heavy compaction equipment, which could cause distress to the walls, should not be used within 5-feet of the wall. We recommend that all retaining walls be backfilled with very low expansion granular soils (EI<20) and a Sand Equivalent (SE) of not less than 20. The shallow onsite material is considered expansive and import material will be required.

All walls should be constructed with a properly designed drainage system to prevent buildup of hydrostatic pressures behind the wall. This may consist of gravel and filter fabric or geocomposite panel drains discharging through weep holes or subdrains.

6.7 Ancillary Structures

Ancillary structures for the project are anticipated to be non-occupancy structures such as trash enclosures, site fence walls, etc. and recommendations provided in Section 6.6 may be used. In addition, associated pavement recommendations for trash enclosures are provided in Section 6.10.2.

6.8 Pole Type Foundation

Light poles may be supported on pole-type foundation. Pole-type foundation may be designed per Section 1807.3, Embedded Posts and Poles, of the CBC 2022. Equation 18-1 may be used for a non-constrained condition, and Equations 18-2 and 18-3 may be used for a constrained condition. S1 and S3, the allowed lateral soil bearing pressure may be taken as 200 psf. The allowable soil bearing pressure may be increased by one-third for short term wind or seismic loads.

6.9 Slab-on-Grade

6.9.1 Interior Slabs

Site preparation and compaction requirements should follow the recommendations provided in Section 7.3.1. Concrete slabs should have a minimum thickness of 4 inches and should have a minimum reinforcement with 6x6 W2.9/2.9 welded wire mesh or equivalent. All slab reinforcement should be properly supported to ensure the desired placement. In addition, final design of the foundation should be in accordance with ASCE 7-19 Section 12.13.9.2.1. The actual slab thickness and reinforcement should be designed by the project structural engineer. Building slabs should be either designed for the expansive soils or the upper 4 feet of soil should be removed and replaced with non-expansive material.

6.9.1.1 Moisture Protection

To reduce the potential for moisture transmission through slabs where moisture sensitive floor covering will be installed, we recommend that a vapor barrier be used. In accordance with ACI 302.2R-06, the material must comply with the requirements of ASTM E1745, “Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs,” and have a permeance of less than 0.01 perms per ASTM E96. The installation of the moisture barrier should comply with ASTM E1643. Concerning whether to place two inches of sand over the retarder, reference is made to ACI 302.2R, Section 7.2, which states that the anticipated benefits and risks associated with the location of the vapor retarder should be

reviewed on a case by case basis with all appropriate parties, considering anticipated project conditions and the potential effects of concrete curing, cracking, and curling.

6.9.2 Exterior Slabs

Exterior slabs and sidewalks should be at least 4-inches thick, and should be constructed on at least 2 feet of very low expansion (EI<20) compacted soil, as recommended in Section 7.3.1.

6.10 Pavement Design

6.10.1 Flexible Pavements

Asphalt concrete pavement design was conducted in general accordance with the Caltrans Highway Design Manual (Caltrans, 2020). In order to aid in pavement analyses, R-Value tests were conducted on shallow subgrade samples collected from Borings B-2 during the field investigation. The test result is provided in Appendix B and the test indicted an R-Value of 20. Table 5 provides recommendations for pavement sections considering alternative base sections for clayey subgrade and sandy subgrade conditions for several traffic index (TI) values considering a 20-year design.

Table 5: Preliminary Flexible Pavement Design Sections

Traffic Index (TI)	Asphalt Concrete (HMA) Thickness (inches)	Class II Aggregate Base Thickness (inches)
4.5	3.0	5.0
5	3.0	7.0
5.5	3.0	9.0
6	3.5	9.5
6.5	4.0	10.0

The asphalt concrete thickness can be divided into base and finish courses. The uppermost 1-foot of subgrade soil should be scarified immediately prior to constructing the new pavements, brought to about optimum moisture content and compacted to at least 95 percent relative compaction. All aggregate bases should also be compacted to at least 95 percent relative compaction. Aggregate base should conform to Section 200-2 of the Standard Specifications for Public Works Construction (*SSPWC)*. Asphalt concrete should conform to Section 203-6 of the *SSPWC* or Section 39 of the Caltrans Standard Specifications. We recommend that asphalt concrete be compacted to between 91 and 97 percent of the Rice density per ASTM D2041.

6.10.2 Rigid Concrete Pavements

Rigid concrete pavements may be desirable in certain areas where heavy equipment may induce large pavement loads, such as a fire access road or near trash bin storage locations. Portland Cement Concrete (PCC) pavement design was conducted in accordance with a simplified design

procedure (Chapter 4) of the Portland Cement Association. The methodology is based on a 20-year design life. For design, it was assumed that aggregate interlock would be used for load transfer across control joints. The subgrade soils were assumed to provide “medium” subgrade support and the concrete modulus of rupture at 28-days was assumed to be 600 pounds per square inch (psi). Based on these assumptions, we recommend that the PCC pavement sections at the site consist of 6-inch of concrete placed over 6 inches of compact aggregate base.

Crack control joints should be constructed for all PCC slabs on a maximum spacing of 12-feet, each way.

7.0 CONSTRUCTION CONSIDERATIONS

7.1 Plan Review

Detail design and foundation and grading plans should be reviewed by Group Delta prior to beginning construction. Design loads and final structural configuration should be reevaluated to ensure conformance to the recommendations and findings of this report.

7.2 Ground Improvement

7.2.1 Depth Range of Ground Improvement

Ground improvement should be performed to mitigate the potential for liquefaction-induced settlements and differential movements from undocumented fill. The final design of the ground improvement should be based on permissible displacement allowed during a seismic event to avoid risk of collapse or other project damage goals. The minimum zone of improvement should extend from the bottom of footings to a few feet into the weathered bedrock layer below the lowest liquefiable layer. For planning purposes, the ground improvement may be assumed from El. 333 to El. 315 feet. Ground improvement is required to extend from El. 315 feet to the bottom of footings if shallow foundations are utilized as discussed in Section 6.2.2.

7.2.2 Methods of Ground Improvement

In general, methods to mitigate liquefaction include methods that mix soil and cement (soil mixing and jet grouting), grouts that permeate the soil pores (permeation grouting), and densification methods (compaction grouting, vibroflotation, or stone columns). Considering the readily accessible nature of the project site and the depths of needed improvements are between 13 feet and 30 feet below ground surface, a densification method is well suited for the project.

Compaction grouting would be the most effective method to densify the potentially liquefiable soils and limit liquefaction-induced settlements. Compaction grouting involves injecting grout into the ground in a grid pattern that displaces and compacts the surrounding soils. The grout columns have an added benefit in that they are rigid inclusions that provide additional resistance to further restrict lateral spreading. Pre- and post-grouting cone penetration tests (CPTs) can be performed to indicate the effectiveness of the improvement.

Stone columns are a more cost effective option that could be utilized for reducing liquefaction-induced settlements as well as providing adequate bearing to improve the undocumented fill at the site. Stone columns construction involves the introduction of rock material into the native material by downhole vibratory methods. Stone column construction is often referenced as vibro-replacement or vibro-displacement that can be a top or bottom feed process to install stone columns to the targeted depths. Alternative to vibration methods include rammed aggregate piers (RAP) that are installed by drilling and ramming lifts of well-graded aggregate to form the high-density columns.

A qualified soil improvement contractor should be selected and provide design of the mix proportions, depth, spacing, and size of the zone of treatment based on the target foundation design parameters and their design requirements for the selected ground improvement method. Quality control procedures for installation and verification of material strengths will be developed once the method of ground improvement has been selected.

7.2.3 Areal Extent of Ground Improvement

Compaction grouting and stone columns would both be placed in grid patterns for the entire area of the foundation and should extend at least five feet laterally from the foundation of the building.

7.3 Earthwork

Grading and earthwork should be conducted in general accordance with the applicable local grading ordinance and the requirements of the 2022 California Building Code. The following recommendations are provided regarding specific aspects of the proposed earthwork construction. These recommendations should be considered subject to revision based on the conditions observed by our personnel during grading.

7.3.1 Site Preparation

7.3.1.1 Clearing and Grubbing

The area that will be developed should be cleared and grubbed of all improvements, and vegetation in general accordance with Section 300-1 of the Standard Specifications for Public Works Construction [SSPWC] (Green Book, 2018).

Existing subsurface utilities that are to be abandoned should be removed and the excavations backfilled and compacted as described in Section 7.3.2. Alternatively, abandoned utilities may be grouted with a two-sack sand-cement slurry under the observation of Group Delta. After clearing and grubbing the site, remedial grading should be performed in the building and other general improvement areas as recommended in the following sections.

7.3.1.2 Remedial Grading

Approximately 4 to 10 feet of undocumented fill as discussed in Section 3.4 was identified at the site that consists of predominantly clayey sand material that can have variable strength. The undocumented fill below the proposed building should be removed to at least 7 feet below the existing grade or at least 4 feet from the bottom of slab, whichever is deeper. The removal areas should extend laterally at least 5 feet beyond the edge of the footings in all directions. As an alternative, ground improvement may be utilized to improve the undocumented fill as discussed in Section 7.2. If the slab on grade is not designed for expansive soils of the existing soils, then removal and replacement of at least 4 feet below final grade is required. The replacement soils should meet the requirements noted in Section 7.3.3.

In general the exposed subgrade at the bottom of overexcavation should be proof rolled with loaded heavy equipment under Group Delta's observation to disclose any areas of deeper unsuitable soils. Areas of soft, loose, wet, pumping, or otherwise unsuitable soils should be further excavated or stabilized as recommended by Group Delta in the field. After proof-rolling the exposed subgrade should be scarified to a depth of 6 inches, brought to slightly above optimum moisture content, and compacted as described in Section 7.3.2. The excavation may then be backfilled from bottom of overexcavation to the planned finish subgrade with compacted fill.

7.3.2 Fill Compaction

All fill and backfill should be placed at slightly above optimum moisture content using equipment that is capable of producing a uniformly compacted product. In general, the minimum recommended relative compaction is 90 percent of the maximum dry density based on ASTM D1557. All fill placed within the proposed building areas and below foundations should be compacted to at least 95 percent relative compaction. Sufficient observation and testing should be performed by Group Delta so that an opinion can be rendered as to the compaction achieved. Rocks or concrete fragments greater than 4 inches in maximum dimension should not be used in structural fill.

7.3.3 Imported Fills

Imported fill sources, if any, should be observed and tested prior to hauling onto the site to evaluate the suitability for use. Imported fill materials should consist of granular soil with less than 35 percent passing the No. 200 sieve based on ASTM D 1140 and an EI less than 20 based on ASTM D4829. More stringent requirements may apply for soils to be used for specific purposes. Samples of the proposed import should be tested by Group Delta in order to evaluate the suitability of these soils for their proposed use. During grading operations, soil types may be encountered by the contractor that do not appear to conform to those discussed in this report. In that case, Group Delta should be notified in order to evaluate the suitability of these soils for their proposed use.

7.3.4 Temporary Excavations and Shoring

The contractor is responsible for excavation safety, and all excavations should comply with the current California and Federal Occupational Safety and Health Administration (OSHA) requirements (29 CFR-Part 1926, Subpart P), as applicable. For planning purposes OSHA Type C soils may be assumed for temporary excavations, which allows for temporary slopes up to 20 feet high at a gradient of 1.5:1 (horizontal: vertical). Unshored excavations should not extend below a 1:1 plane extending down from any improvements or foundations to be protected in place.

If sloping or benching is not practical due to space constraints, temporary shoring may be used. Vertical temporary excavations deeper than 5 feet should be shored. No surcharge loads should be permitted within a horizontal distance equal to the height of cut or 5 feet, whichever is greater from the top of the excavation, unless the shoring is designed for surcharge loading. All shoring should comply with OSHA regulations and 29 CFR Part 1926 guidelines and be observed and deemed safe by the designated competent person on site. The designated competent person should observe all excavations to determine the safety prior to excavation. Shoring designs may utilize the following soil parameters:

- Unit Weight: 120 pcf
- Friction Angle: 32 degrees
- Active Coefficient (K_a): 0.307
- At-Rest Coefficient (K_0): 0.470

For design of cantilevered temporary shoring, where the surface of the backfill is level, it can be assumed that drained soils will exert a lateral pressure equal to that developed by a fluid with a density of 37 pcf. Surcharge loads from equipment or stockpiled material should be kept behind the top of the temporary excavations a horizontal distance equal to the depth of the excavation, or the shoring should be designed for the additional pressure. Foundation and traffic loads from adjacent areas should also be added to the lateral earth pressures.

For design of temporary rigid shoring such as braced shoring or trench shields in sandy soils, we recommend the use of a rectangular lateral pressure of 24H psf, where H is the height of the shoring in feet. In addition, 47 percent of any surcharge load should be included as a uniform rectangular loading on the shoring. For traffic loads no larger than highway trucks, the surcharge may be taken as a uniform lateral pressure of 100 psf. Other surcharge loads may be evaluated by Group Delta on a case-by-case basis.

Surface drainage should be controlled and prevented from running down the temporary excavations or down the face of the shoring. Ponding water should not be allowed within the excavation.

7.4 Utility Trenches

Excavations for utility trenches should be readily accomplished with conventional excavating equipment. All shoring and excavation should comply with current OSHA regulations and be observed by the designated competent person on site.

The bedding for any new sewer and water service pipelines should be a minimum of 4 inches thick and should consist of clean sand, No. 4 concrete aggregate or gravel, and should have a sand equivalent of not less than 30. The pipe zone material, which extends to a level 12 inches above the pipe should consist of sand and should have a sand equivalent of no less than 30, and a maximum rock size of 1 inch. All imported materials should be approved by the project geotechnical engineer before being brought on site.

Trench zone backfill extends from a level 12 inches above the pipe to the finished subgrade. In general, on-site excavated materials are suitable as backfill. Any boulders or cobbles larger than 3 inches in any dimensions, or any organics or other deleterious materials, should be removed before backfilling. We recommend that all backfill should be placed in lifts not exceeding six to eight inches in thickness and be compacted to at least 90% of relative compaction as determined by the ASTM D1557. Mechanical compaction will be required to accomplish compaction above the bedding along the entire pipeline alignments. Jetting or flooding of backfill should not be permitted.

In backfill areas, where mechanical compaction of soil backfill is impractical due to space constraints, 2-sack slurry (CLSM) may be substituted for compacted backfill.

7.5 Construction Observation and Testing

The Geotechnical Engineer should observe subgrade preparation, backfill and fill placement. Excavation bottom should be observed and approved by the Geotechnical Engineer prior to placement of concrete, steel, piping, or backfill materials. Sufficient in-place field density tests should be performed during fill placement to verify that the entire fill is placed in accordance with the recommendations provided in the geotechnical report and applicable codes.

8.0 LIMITATIONS

This investigation was performed per generally accepted Geotechnical Engineering principles and practice. The professional engineering work and judgments presented in this report meet the standard of care of our profession at this time. No other warranty, expressed or implied, is made. This report has been prepared for HMC Architects, the City of Santee, and its design consultants. It may not contain sufficient information for other parties or other purposes and should not be used for other projects or other purposes without review and approval by Group Delta.
The recommendations for this project, to a high degree, are dependent upon proper quality control of site grading, fill and backfill placement, and paving. The recommendations are made contingent on the opportunity for Group Delta to observe the earthwork operations. This firm

should be notified of any pertinent changes in the project, or if conditions are encountered in the field, which differs from those described herein. If parties other than Group Delta are engaged to provide such services, they must be notified that they will be required to assume complete responsibility for the geotechnical phase of the project and must either concur with the recommendations in this report or provide alternate recommendations.

9.0 REFERENCES

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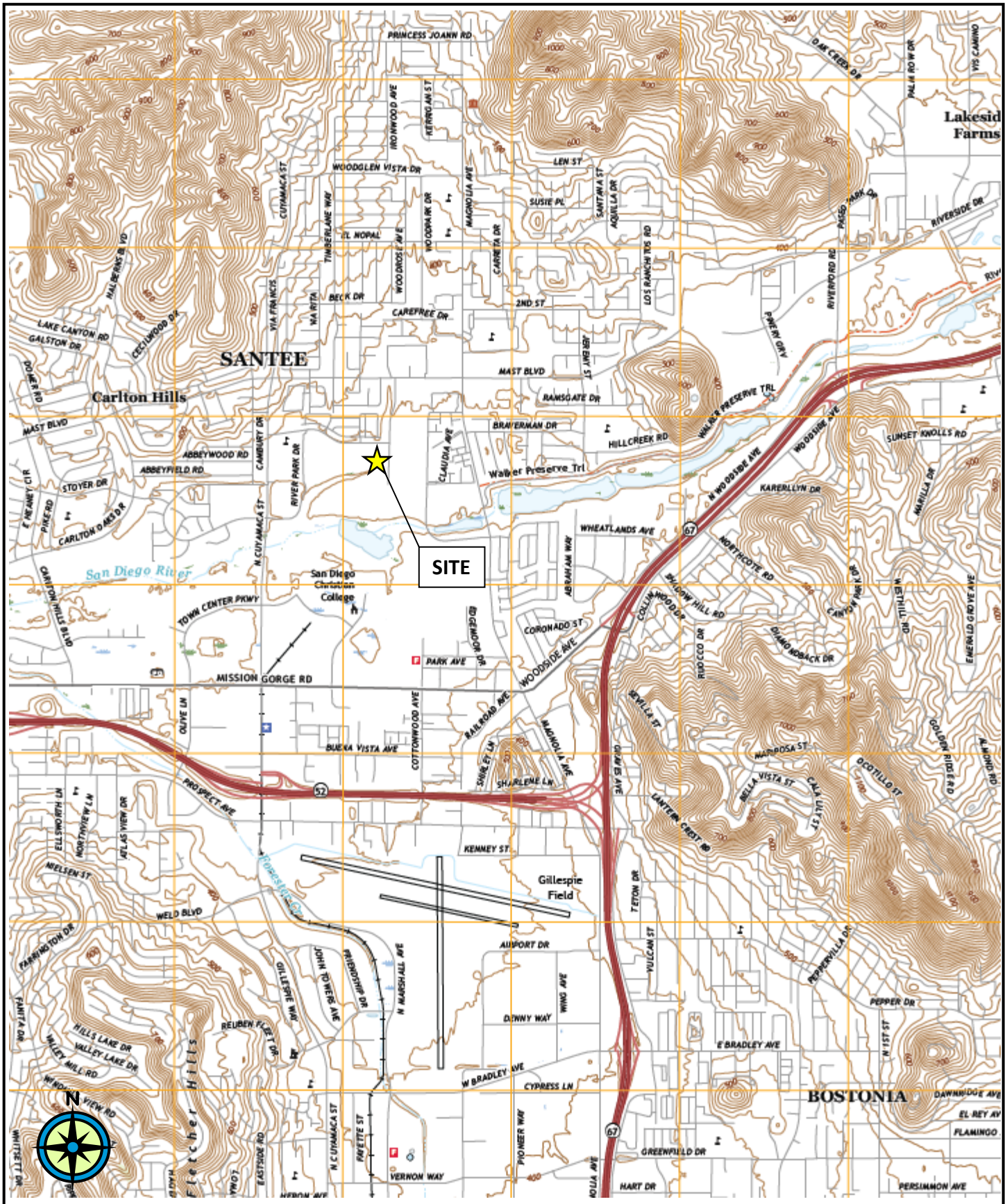
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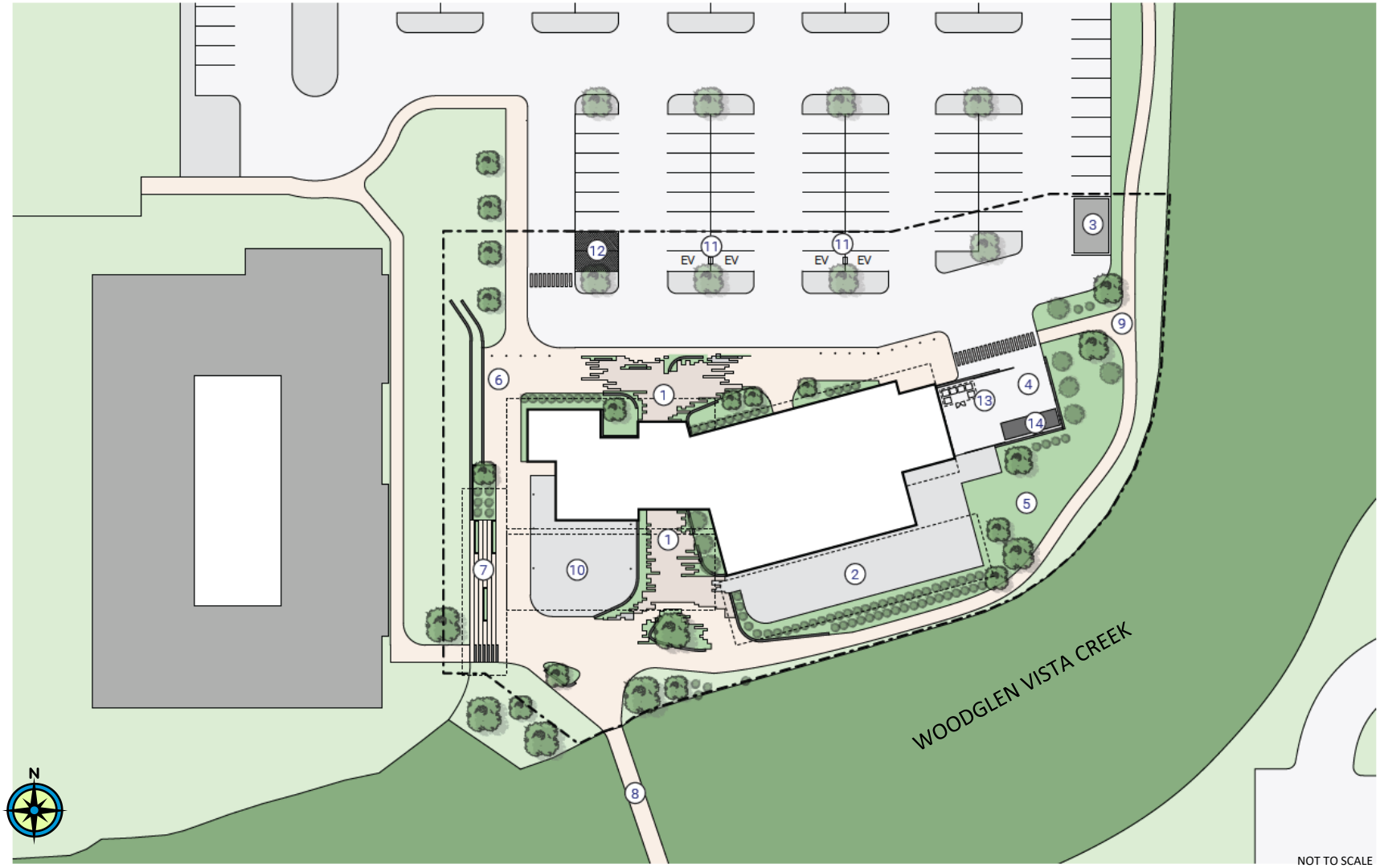
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FIGURES



Reference: USGS, US Topo 7.5 Minute Map for El Cajon Quadrangle, CA 2021

GROUP DELTA	GROUP DELTA CONSULTANTS, INC. ENGINEERS AND GEOLOGISTS 32 MAUCHLY, SUITE B IRVINE, CA 92618 (949) 450-2100	Figure Number: **1**
	Project Name: Santee Community Center, Santee CA	Project Number: IR786
	SITE LOCATION MAP	



Phase 1 Location (Community Center)

Note: Site Plan taken from HMC Architects 100% Schematic Design Package

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IRVINE, CA 92618 (949) 450-2100

Figure Number: **2**

Project Name:
Santee Community Center
Santee, CA

Project Number:
IR789

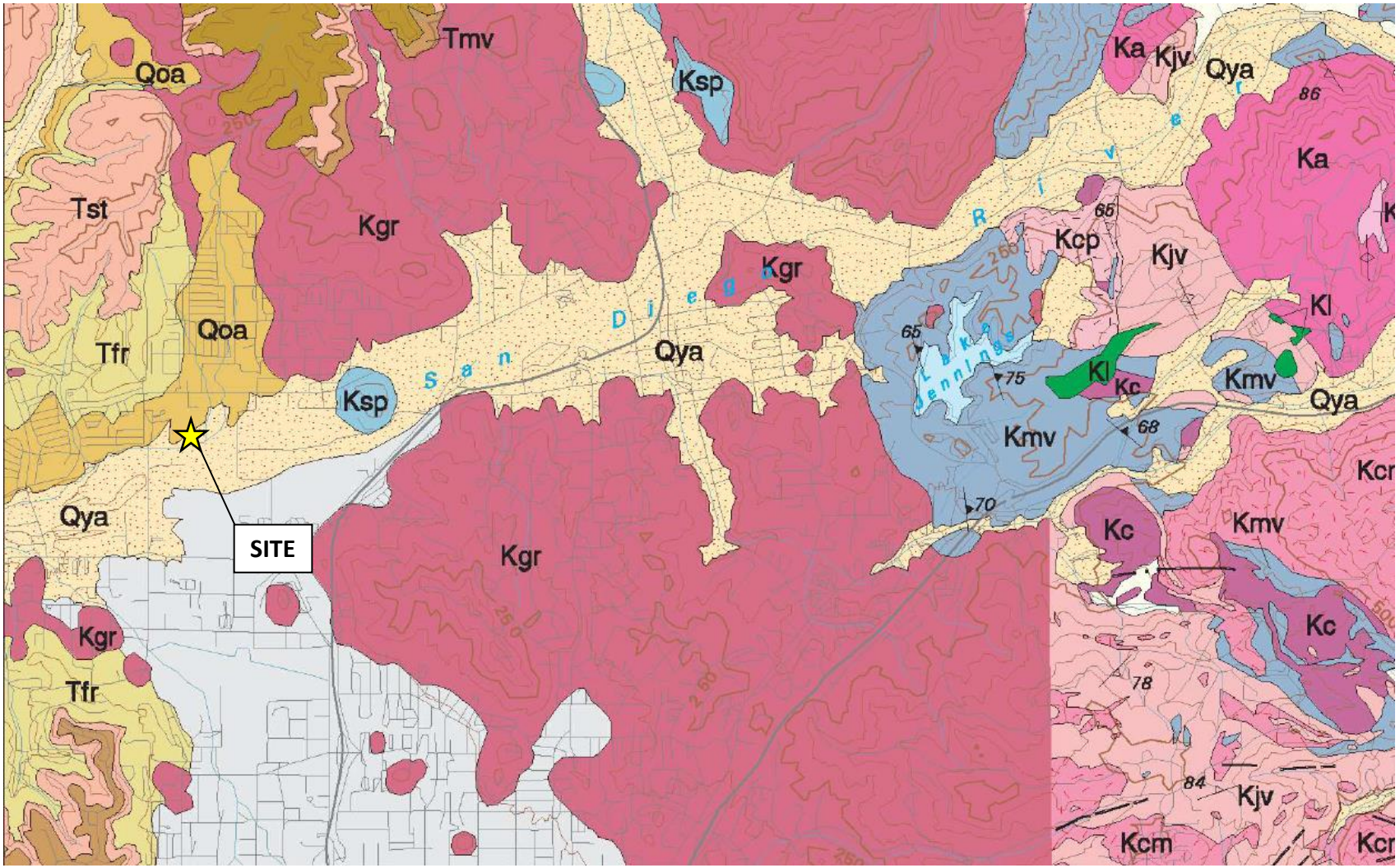
SITE CONCEPTUAL PLAN



B-1

Approximate Boring Location

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	Project Name: Santee Community Center Santee, CA	Project Number: IR786
	EXPLORATION LOCATION PLAN	



NOT TO SCALE

Qya – Young alluvium (Holocene)

Qoa – Older alluvium (Holocene and Pleistocene)

Ksp – Santiago Peak Volcanics (Early Cretaceous)

Tfr – Friars Formation (Eocene)

Kgr – Granitoid rocks (Early Cretaceous)

GROUP DELTA	**GROUP DELTA CONSULTANTS, INC.** ENGINEERS AND GEOLOGISTS 32 MAUCHLY, SUITE B IRVINE, CA 92618 (949) 450-2100	Figure Number: 4
	Project Name: Santee Community Center Santee, CA	Project Number: IR789
	Regional Geologic Map	



Reference: USGS Quaternary Faults, NSHM 2014 Fault Sources https://usgs.maps.arcgis.com/apps/webappviewer/index.html

NSHM 2014 Fault Sources

- Normal
- Strike Slip
- Thrust
- Unassigned

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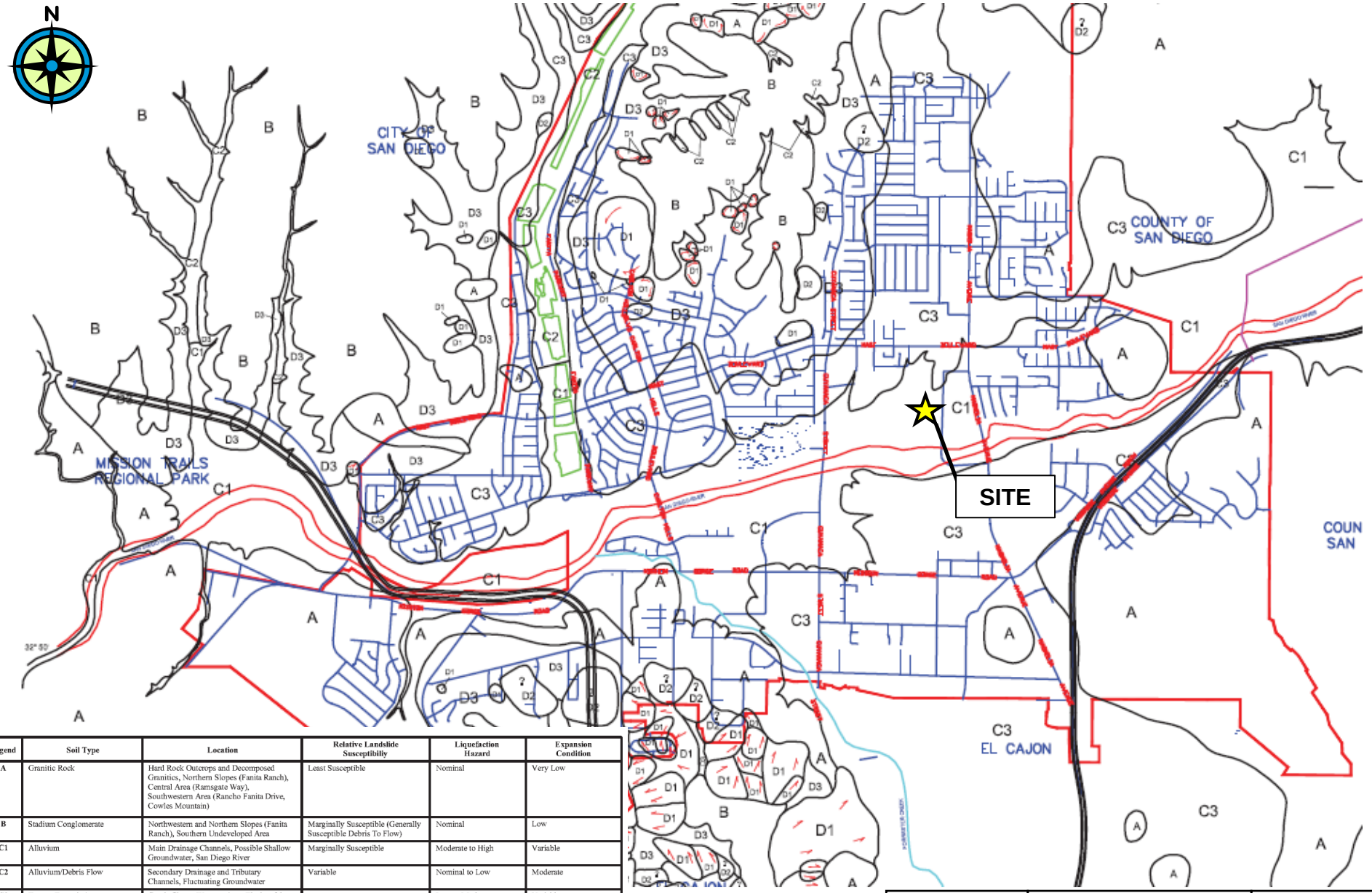
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IRVINE, CA 92618 (949) 450-2100

Figure Number: 5

Project Name: Santee Community Center Santee, CA

Project Number: IR789

REGIONAL FAULT MAP



Legend	Soil Type	Location	Relative Landslide Susceptibility	Liquefaction Hazard	Expansion Condition
A	Granitic Rock	Hard Rock Outcrops and Decomposed Granitics, Northern Slopes (Fanita Ranch), Central Area (Ramsgate Way), Southwestern Area (Rancho Fanita Drive, Cowles Mountain)	Least Susceptible	Nominal	Very Low
B	Stadium Conglomerate	Northwestern and Northern Slopes (Fanita Ranch), Southern Undeveloped Area	Marginally Susceptible (Generally Susceptible Debris To Flow)	Nominal	Low
C1	Alluvium	Main Drainage Channels, Possible Shallow Groundwater, San Diego River	Marginally Susceptible	Moderate to High	Variable
C2	Alluvium/Debris Flow	Secondary Drainage and Tributary Channels, Fluctuating Groundwater	Variable	Nominal to Low	Moderate
C3	Terrace Deposits/ Older Alluvium	Gentle Slopes Western Area, Flanks of the San Diego River Valley (Carlton Oaks Drive), Central Area (Woodpark Drive)	Generally To Marginally susceptible (Where Underlain by Friars Formation)	Low to Moderate	Variable
D1	Landslides Confirmed	Sloping Southern Area (Route 125 and Fanita Drive, Fanita Ranch, Carlton Hills)	Most Susceptible	Nominal	Moderate to High
D2	Landslides Possible	Various Areas Throughout Friars Formation	Most Susceptible	Nominal	Moderate to High
D3	Friars Formation	Northern Slopes (Cuyamaca Street, Lake Canyon Road, Fanita Ranch) And Southern Slopes (Mesa Heights Road, Route 125)	Most Susceptible	Nominal	Moderate to High

REFERENCES:
City of Santee General Plan, Geotechnical/Seismic Hazard Map, Figure 8-3, 2020

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IRVINE, CA 92618 (949) 450-2100

FIGURE NO.: **6**

PROJECT NAME:
Santee Community Center
Santee, CA

PROJECT NO.: IR786

LIQUEFACTION ZONE MAP



Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

GROUP DELTA

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IRVINE, CA 92618 (949) 450-2100

FIGURE NO.: 7

PROJECT NAME: Santee Community Center, Santee, CA

PROJECT NO.: IR786

FLOOD HAZARD ZONE MAP

APPENDIX A
FIELD INVESTIGATION

APPENDIX A
FIELD INVESTIGATION

INTRODUCTION

The subsurface conditions at the project site were investigated by performing borings as described below. A summary of field explorations (Table A-1), boring record legend, key for soil classification, boring records, drive hammer energy calibrations, and other relevant information are presented in the attachments to this appendix. Specific details for each boring are presented in the title block of each boring record.

Prior to beginning the exploration program, access permission and drilling permits were obtained as necessary. Subsurface utility maps were reviewed prior to selecting locations for subsurface investigations. Underground Service Alert (USA) was notified, and each exploration location was cleared for underground utilities using geophysical techniques as needed. Approved traffic control plans were implemented where necessary during field activities. The exploration methods are described in the following sections.

SOIL DRILLING AND SAMPLING

Drilling, Logging, and Soil / Rock Classification

Borings were performed by Group Delta's drilling subcontractors under the continuous technical supervision of a Group Delta field engineer or geologist, who visually inspected the soil samples, maintained detailed records of the borings, measured groundwater levels, and visually / manually classified the soils in accordance with the ASTM D 2488 and the Unified Soil Classification System (USCS). Logging and classification was performed in general accordance with Caltrans "Soil and Rock Logging, Classification, and Presentation Manual (2010 Edition)". A Boring Record Legend, Key for Soil Classification, and boring records are presented in the attachments to this appendix.

Sampling

Bulk samples of soil cuttings were collected at selected depths and drive and/or push samples were collected at a typical interval of 5 feet from the borings (closer or wider sample spacing was employed where considered necessary or appropriate). The sampling was performed using Standard Penetration Test (SPT) samplers in accordance with ASTM D 1586, Ring-Lined "California" Split Barrel samplers in accordance with ASTM D 3550, and/or Thin-Walled "Shelby" Tube Samplers in accordance with ASTM D 1587.

Bulk samples were collected from auger cuttings and placed in plastic bags.

SPT drive samples were obtained using a 2-inch outside diameter and 1.375-inch inside diameter split-spoon sampler without lining. The soil recovered from the SPT sampling was sealed in plastic bags to preserve the natural moisture content.

Modified California ("MODCAL") drive samples were collected with a 3.0 inch outside diameter (OD) (unless indicated otherwise on the boring record) ring-lined split barrel sampler with a 2.42-inch inside diameter (ID) cutting shoe. The sampler barrel is lined with 18-inches of metal rings for sample collection and has an additional length of waste barrel. Stainless steel or brass liner rings for sample collection are 1-inch high, 2.42-inch inside diameter, and 2.5-inch outside diameter. California samples were removed from the sampler, retained in the metal rings, and placed in sealed plastic canisters to prevent loss of moisture.

At each sampling interval, the drive samplers were fitted onto sampling rod, lowered to the bottom of the boring, and driven 18 inches or to refusal (50 blows per 6 inches) with a 140-lb hammer free-falling a height of 30-inches (unless otherwise indicated on the boring record).

Shelby tube samplers (if used) were pushed to collect undisturbed samples of soft to stiff cohesive soils where encountered. The samples were secured within the tubes and the tubes were sealed with plastic caps and electric tape in the field to prevent moisture loss.

Compared to the SPT, the California sampler provides less disturbed samples. Shelby Tubes provide the least sample disturbance and are considered undisturbed.

Penetration Resistance

SPT blow counts adjusted to 60% hammer efficiency (N_{60}) are routinely used as an index of the relative density of coarse-grained soils, and are sometimes used (but less reliable) to estimate consistency of cohesive soils. For samples collected using non-SPT samplers, different hammer weight and drop height, and/or efficiency different than 60%, correction factors can be applied to estimate the equivalent SPT N60 value following the approach of Burmister (1948) as follows:

$$N^*_{60} = N_R * C_E * C_H * C_S$$

where

N^*_{60} = equivalent SPT N_{60}

N_R = Raw Field Blowcount (blows per foot)

C_E = Hammer Efficiency Correction = Er_i / 60%

C_H = Hammer Energy Correction = (W * H) / (140 lb * 30 in)

C_S = Sampler Size Correction = $[(2.0\text{ in})^2-(1.375\text{ in})^2]/[D_o^2-D_i^2]$

Er_i = hammer efficiency, %

W= actual drive hammer weight, lbs

H = actual drive hammer drop, inch

D_o, D_i = actual sampler outside and inside diameter, respectively, inches

Burmister's correction assumes that penetration resistance (blowcount) is inversely proportional to the hammer energy. For a hammer other than a 140# hammer with 30" drop the hammer energy correction is equal to the ratio of the theoretical hammer energy (weight times drop) to the theoretical SPT hammer energy, or C_H = (W * H) / (140 lb * 30 in).

Burmister's correction assumes that penetration resistance (blowcount) is proportional to the annular end area of the drive sampler. For example, California drive samplers with Do=3 inch and Di=2.42 inch the sampler size correction factor is the ratio of the annular area of an SPT split spoon to that of the California Sampler, or C_S =[2.02-1.3752]/[32-2.422] = 0.67.

To normalize the field SPT and California blowcounts to a hammer with 60% efficiency, an energy correction factor equal to Hammer Efficiency (%) / 60% was applied to the field blowcounts. Hammer efficiency was determined by Pile Driving Analyzer (PDA) measurement and/or by published correlations with the CME Automatic Hammer blow count rate (USBR, 1999). Hammer efficiency measurements are presented in the attachments to this appendix.

The correction factors applied to obtain N^*_{60} are shown in the "NOTES" section of the boring record title block. Corrected N^*_{60} are primarily used, with due engineering judgment, for qualitative assessment of in place density or consistency.

Relative Density and Consistency

Equivalent SPT N^*_{60} values were used as the basis for classifying relative density of granular/cohesionless soils. Wherever possible consistency classification of cohesive soils was based on undrained shear strength estimated in the field with a pocket penetrometer and/or Torvane or by testing in the laboratory. Where pocket penetrometer or other tests could not be performed, consistency of cohesive soils was estimated by correlations to Equivalent SPT N^*_{60}. The correlations for consistency and relative density are shown in the Boring Record Legend in the attachments to this appendix. Drive sample field blow counts, SPT N^*_{60} values, pocket penetrometer/Torvane readings, and corresponding density/consistency classifications are presented on the boring records.

Borehole Abandonment

At the completion of the drilling groundwater was measured (where possible) and the borings were abandoned by backfilling the borehole with as indicated on the records. Where necessary excess cuttings and drilling fluids were placed in 55-gallon drums, sampled, and tested for contaminants, temporarily stored at an approved location, and legally disposed of off-site. The surface was patched with cold mix asphalt concrete or quickset concrete, as necessary. Notes describing the borehole abandonment are presented in the title block of each boring record.

Sample Handling and Transport

Geotechnical samples were sealed to prevent moisture loss, packed in appropriate protective containers, and transported to the geotechnical laboratory for further examination and geotechnical testing.

Laboratory Testing

The soil samples were further examined and tested in the laboratory and classified in accordance with the Unified Soil Classification System following ASTM D 2487 and D 2488 (see the Key for Soil Classification in the attachments to this appendix). Field classifications presented on the records were modified where necessary on the basis of the laboratory test results. Descriptions of the laboratory tests performed and a summary of the results are presented in Appendix B.

LIST OF ATTACHMENTS

Tables

Summary of Field Explorations

Figures

Boring Record Legend

Key for Soil Classification

Boring Records

Hammer Efficiency Calibrations

Summary of Field Explorations

Table A-1: Summary of Field Explorations

Exploration No.	Completion Date	Ground Surface Elevation (feet)	Total Depth (feet)	Groundwater	
				Depth (feet)	Elevation (feet)
B-1	2/17/22	345	50.0	16.1	328.9
B-2	2/17/22	346	21.5	15.9	330.1
B-3	2/17/22	345.5	21.5	14.5	331.0

Boring Record Legend, Key for Soil Classification, and Boring Records

GROUP DELTA

SOIL IDENTIFICATION AND DESCRIPTION SEQUENCE

Sequence		Refer to Section		Required	Optional
		Field	Lab		
1	Group Name	2.5.2	3.2.2	●	
2	Group Symbol	2.5.2	3.2.2	●	
	Description Components				
3	Consistency of Cohesive Soil	2.5.3	3.2.3	●	
4	Apparent Density of Cohesionless Soil	2.5.4		●	
5	Color	2.5.5		●	
6	Moisture	2.5.6		●	
7	Percent or Proportion of Soil	2.5.7	3.2.4	●	◍
	Particle Size	2.5.8	2.5.8	●	◍
	Particle Angularity	2.5.9			○
	Particle Shape	2.5.10			○
8	Plasticity (for fine-grained soil)	2.5.11	3.2.5		○
9	Dry Strength (for fine-grained soil)	2.5.12			○
10	Dilatency (for fine-grained soil)	2.5.13			○
11	Toughness (for fine-grained soil)	2.5.14			○
12	Structure	2.5.15			○
13	Cementation	2.5.16		●	
14	Percent of Cobbles and Boulders	2.5.17		●	
	Description of Cobbles and Boulders	2.5.18		●	
15	Consistency Field Test Result	2.5.3		●	
16	Additional Comments	2.5.19			○

Describe the soil using descriptive terms in the order shown

Minimum Required Sequence:

USCS Group Name (Group Symbol); Consistency or Density; Color; Moisture; Percent or Proportion of Soil; Particle Size; Plasticity (optional).

◍ = optional for non-Caltrans projects

Where applicable:

Cementation; % cobbles & boulders;
Description of cobbles & boulders;
Consistency field test result

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010)

HOLE IDENTIFICATION

Holes are identified using the following convention:

H-YY-NNN

Where:
H: Hole Type Code
YY: 2-digit year
NNN: 3-digit number (001-999)

Hole Type Code	Description
A	Auger boring (hollow or solid stem, bucket)
R	Rotary drilled boring (conventional)
RC	Rotary core (self-cased wire-line, continuously-sampled)
RW	Rotary core (self-cased wire-line, not continuously sampled)
P	Rotary percussion boring (Air)
HD	Hand driven (1-inch soil tube)
HA	Hand auger
D	Driven (dynamic cone penetrometer)
CPT	Cone Penetration Test
O	Other (note on LOTB)

Description Sequence Examples:

SANDY lean CLAY (CL); very stiff; yellowish brown; moist; mostly fines; some SAND, from fine to medium; few gravels; medium plasticity; PP=2.75.

Well-graded SAND with SILT and GRAVEL and COBBLES (SW-SM); dense; brown; moist; mostly SAND, from fine to coarse; some fine GRAVEL; few fines; weak cementation; 10% GRANITE COBBLES; 3 to 6 inches; hard; subrounded.

Clayey SAND (SC); medium dense, light brown; wet; mostly fine sand,; little fines; low plasticity.

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BORING RECORD LEGEND #1

GROUP SYMBOLS AND NAMES

Graphic / Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND
GP	Poorly graded GRAVEL Poorly graded GRAVEL with SAND
GW-GM	Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND
GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)
GP-GM	Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND
GP-GC	Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)
GM	SILTY GRAVEL SILTY GRAVEL with SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND
SW	Well-graded SAND Well-graded SAND with GRAVEL
SP	Poorly graded SAND Poorly graded SAND with GRAVEL
SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL
SW-SC	Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)
SP-SM	Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL
SP-SC	Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)
SM	SILTY SAND SILTY SAND with GRAVEL
SC	CLAYEY SAND CLAYEY SAND with GRAVEL
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL
PT	PEAT
	COBBLES COBBLES and BOULDERS BOULDERS

Graphic / Symbol	Group Names
CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
OH	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY elastic ELASTIC SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND

FIELD AND LABORATORY TESTS

C	Consolidation (ASTM D 2435-04)
CL	Collapse Potential (ASTM D 5333-03)
CP	Compaction Curve (CTM 216 - 06)
CR	Corrosion, Sulfates, Chlorides (CTM 643 - 99; CTM 417 - 06; CTM 422 - 06)
CU	Consolidated Undrained Triaxial (ASTM D 4767-02)
DS	Direct Shear (ASTM D 3080-04)
EI	Expansion Index (ASTM D 4829-03)
M	Moisture Content (ASTM D 2216-05)
OC	Organic Content (ASTM D 2974-07)
P	Permeability (CTM 220 - 05)
PA	Particle Size Analysis (ASTM D 422-63 [2002])
PI	Liquid Limit, Plastic Limit, Plasticity Index (AASHTO T 89-02, AASHTO T 90-00)
PL	Point Load Index (ASTM D 5731-05)
PM	Pressure Meter
PP	Pocket Penetrometer
R	R-Value (CTM 301 - 00)
SE	Sand Equivalent (CTM 217 - 99)
SG	Specific Gravity (AASHTO T 100-06)
SL	Shrinkage Limit (ASTM D 427-04)
SW	Swell Potential (ASTM D 4546-03)
TV	Pocket Torvane
UC	Unconfined Compression - Soil (ASTM D 2166-06) Unconfined Compression - Rock (ASTM D 2938-95)
UU	Unconsolidated Undrained Triaxial (ASTM D 2850-03)
UW	Unit Weight (ASTM D 4767-04)
VS	Vane Shear (AASHTO T 223-96 [2004])

SAMPLER GRAPHIC SYMBOLS

- Standard Penetration Test (SPT)
- Standard California Sampler
- Modified California Sampler
- Shelby Tube
- Piston Sampler
- NX Rock Core
- HQ Rock Core
- Bulk Sample
- Other (see remarks)

DRILLING METHOD SYMBOLS

- Auger Drilling
- Rotary Drilling
- Dynamic Cone or Hand Driven
- Diamond Core

WATER LEVEL SYMBOLS

- First Water Level Reading (during drilling)
- Static Water Level Reading (after drilling, date)

DEFINITIONS FOR CHANGE IN MATERIAL

Term	Definition	Symbol
Material Change	Change in material is observed in the sample or core, and the location of change can be accurately measured.	———
Estimated Material Change	Change in material cannot be accurately located because either the change is gradational or because of limitations in the drilling/sampling methods used.	- - - - - - - -
Soil/Rock Boundary	Material changes from soil characteristics to rock characteristics.	~~~~~

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010)

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BORING RECORD LEGEND #2

CONSISTENCY OF COHESIVE SOILS

Descriptor	Shear Strength (tsf)	Pocket Penetrometer, PP Measurement (tsf)	Torvane, TV. Measurement (tsf)	Vane Shear, VS. Measurement (tsf)
Very Soft	< 0.12	< 0.25	< 0.12	< 0.12
Soft	0.12 - 0.25	0.25 - 0.50	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.50	0.50 - 1.0	0.25 - 0.50	0.25 - 0.50
Stiff	0.50 - 1.0	1.0 - 2.0	0.50 - 1.0	0.50 - 1.0
Very Stiff	1.0 - 2.0	2.0 - 4.0	1.0 - 2.0	1.0 - 2.0
Hard	> 2.0	> 4.0	> 2.0	> 2.0

APPARENT DENSITY OF COHESIONLESS SOILS

Descriptor	SPT N_{60} - Value (blows / foot)
Very Loose	0 - 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	> 50

MOISTURE

Descriptor	Criteria
Dry	No discernable moisture
Moist	Moisture present, but no free water
Wet	Visible free water

PERCENT OR PROPORTION OF SOILS

Descriptor	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

PARTICLE SIZE

Descriptor		Size (in)
Boulder		> 12
Cobble		3 - 12
Gravel	Coarse	3/4 - 3
	Fine	1/5 - 3/4
Sand	Coarse	1/16 - 1/5
	Medium	1/64 - 1/16
	Fine	1/300 - 1/64
Silt and Clay		< 1/300

PLASTICITY OF FINE-GRAINED SOILS

Descriptor	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled, and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll, and not much time is required to reach the plastic limit; it cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

CONSISTENCY OF COHESIVE SOILS VS. N_{60}

Description	SPT N_{60} (blows / foot)
Very Soft	0 - 2
Soft	2 - 4
Medium Stiff	4 - 8
Stiff	8 - 15
Very Stiff	15 - 30
Hard	> 30

Ref: Peck, Hansen, and Thornburn, 1974, "Foundation Engineering", Second Edition

Note: Only to be used (with caution) when pocket penetrometer or other data on undrained shear strength are unavailable. Not allowed by Caltrans Soil and Rock Logging and Classificaton Manual, 2010

CEMENTATION

Descriptor	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010), with the exception of consistency of cohesive soils vs. N_{60}.

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BORING RECORD LEGEND #3

ROCK GRAPHIC SYMBOLS


IGNEOUS ROCK


SEDIMENTARY ROCK


METAMORPHIC ROCK

BEDDING SPACING

Descriptor	Thickness or Spacing
Massive	> 10 ft
Very thickly bedded	3 to 10 ft
Thickly bedded	1 to 3 ft
Moderately bedded	3-5/8 inches to 1 ft
Thinly bedded	1-1/4 to 3-5/8 inches
Very thinly bedded	3/8 inch to 1-1/4 inches
Laminated	< 3/8 inch

WEATHERING DESCRIPTORS FOR INTACT ROCK

	Diagnostic Features					
	Chemical Weathering-Discoloration-Oxidation		Mechanical Weathering and Grain Boundary Conditions	Texture and Solutioning		
Descriptor	Body of Rock	Fracture Surfaces		Texture	Solutioning	General Characteristics
Fresh	No discoloration, not oxidized	No discoloration or oxidation	No separation, intact (tight)	No change	No solutioning	Hammer rings when crystalline rocks are struck.
Slightly Weathered	Discoloration or oxidation is limited to surface of, or short distance from, fractures; some feldspar crystals are dull	Minor to complete discoloration or oxidation of most surfaces	No visible separation, intact (tight)	Preserved	Minor leaching of some soluble minerals may be noted	Hammer rings when crystalline rocks are struck. Body of rock not weakened.
Moderately Weathered	Discoloration or oxidation extends from fractures usually throughout; Fe-Mg minerals are "rusty"; feldspar crystals are "cloudy"	All fracture surfaces are discolored or oxidized	Partial separation of boundaries visible	Generally preserved	Soluble minerals may be mostly leached	Hammer does not ring when rock is struck. Body of rock is slightly weakened.
Intensely Weathered	Discoloration or oxidation throughout; all feldspars and Fe-Mg minerals are altered to clay to some extent; or chemical alteration produces in situ disaggregation (refer to grain boundary conditions)	All fracture surfaces are discolored or oxidized; surfaces are friable	Partial separation, rock is friable; in semi-arid conditions, granitics are disaggregated	Altered by chemical disintegration such as via hydration or argillation	Leaching of soluble minerals may be complete	Dull sound when struck with hammer; usually can be broken with moderate to heavy manual pressure or by light hammer blow without reference to planes of weakness such as incipient or hairline fractures or veinlets. Rock is significantly weakened.
Decomposed	Discolored of oxidized throughout, but resistant minerals such as quartz may be unaltered; all feldspars and Fe-Mg minerals are completely altered to clay		Complete separation of grain boundaries (disaggregated)	Resembles a soil; partial or complete remnant rock structure may be preserved; leaching of soluble minerals usually complete		Can be granulated by hand. Resistant minerals such as quartz may be present as "stringers" or "dikes".

Note: Combination descriptors (such as "slightly weathered to fresh") are used where equal distribution of both weathering characteristics is present over significant intervals or where characteristics present are "in between" the diagnostic feature. However, combination descriptors should not be used where significant identifiable zones can be delineated. Only two adjacent descriptors shall be combined. "Very intensely weathered" is the combination descriptor for "decomposed to intensely weathered".

RELATIVE STRENGTH OF INTACT ROCK

Descriptor	Uniaxial Compressive Strength (psi)
Extremely Strong	> 30,000
Very Strong	14,500 - 30,000
Strong	7,000 - 14,500
Medium Strong	3,500 - 7,000
Weak	700 - 3,500
Very Weak	150 - 700
Extremely Weak	< 150

ROCK HARDNESS

Descriptor	Criteria
Extremely Hard	Specimen cannot be scratched with pocket knife or sharp pick; can only be chipped with repeated heavy hammer blows
Very hard	Specimen cannot be scratched with pocket knife or sharp pick; breaks with repeated heavy hammer blows
Hard	Specimen can be scratched with pocket knife or sharp pick with heavy pressure; heavy hammer blows required to break specimen
Moderately Hard	Specimen can be scratched with pocket knife or sharp pick with light or moderate pressure; breaks with moderate hammer blows
Moderately Soft	Specimen can be grooved 1/6 in. with pocket knife or sharp pick with moderate or heavy pressure; breaks with light hammer blow or heavy hand pressure
Soft	Specimen can be grooved or gouged with pocket knife or sharp pick with light pressure, breaks with light to moderate hand pressure
Very Soft	Specimen can be readily indented, grooved, or gouged with fingernail, or carved with pocket knife; breaks with light hand pressure

CORE RECOVERY CALCULATION (%)

$$\frac{\Sigma \text{ Length of the recovered core pieces (in.)}}{\text{Total length of core run (in.)}} \times 100$$

RQD CALCULATION (%)

$$\frac{\Sigma \text{ Length of intact core pieces} > 4 \text{ in.}}{\text{Total length of core run (in.)}} \times 100$$

FRACTURE DENSITY

Descriptor	Criteria
Unfractured	No fractures
Very Slightly Fractured	Lengths greater 3 ft
Slightly Fractured	Lengths from 1 to 3 ft, few lengths outside that range
Moderately Fractured	Lengths mostly in range of 4 in. to 1 ft, with most lengths about 8 in.
Intensely Fractured	Lengths average from 1 in. to 4 in. with scattered fragmented intervals with lengths less than 4 in.
Very Intensely Fractured	Mostly chips and fragments with few scattered short core lengths

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010)

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BORING RECORD LEGEND #4

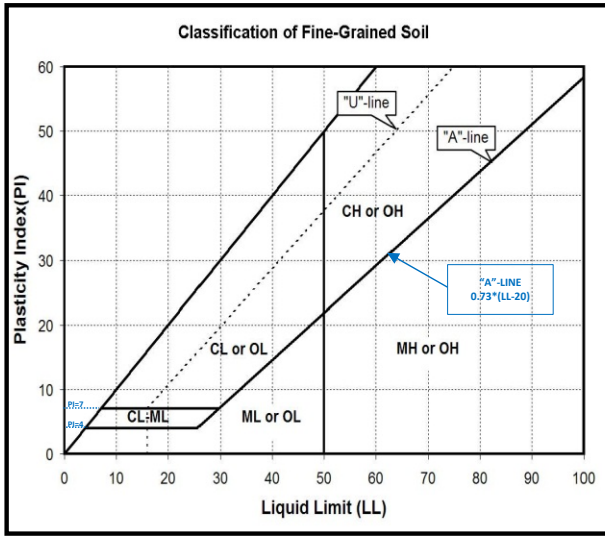
CLASSIFICATION OF INORGANIC FINE GRAINED SOILS (Soils with ≥50% finer than No. 200 Sieve)

GROUP SYMBOL				GROUP NAME
CL	<30% plus No. 200	<15% plus No. 200		Lean clay
		15-25% plus No. 200	%sand ≥%gravel	Lean clay with sand
			%sand <%gravel	Lean clay with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy lean clay
			≥15% gravel	Sandy lean clay with gravel
		% sand < % gravel	<15% sand	Gravelly lean clay
			≥15% sand	Gravelly lean clay with sand
ML	<30% plus No. 200	<15% plus No. 200		Silt
		15-25% plus No. 200	%sand ≥%gravel	Silt with sand
			%sand <%gravel	Silt with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy silt
			≥15% gravel	Sandy silt with gravel
		% sand < % gravel	<15% sand	Gravelly silt
			≥15% sand	Gravelly silt with sand
CH	<30% plus No. 200	<15% plus No. 200		Fat clay
		15-25% plus No. 200	%sand ≥%gravel	Fat clay with sand
			%sand <%gravel	Fat clay with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy fat clay
			≥15% gravel	Sandy fat clay with gravel
		% sand < % gravel	<15% sand	Gravelly fat clay
			≥15% sand	Gravelly fat clay with sand
MH	<30% plus No. 200	<15% plus No. 200		Elastic silt
		15-25% plus No. 200	%sand ≥%gravel	Elastic silt with sand
			%sand <%gravel	Elastic silt with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy elastic silt
			≥15% gravel	Sandy elastic silt with gravel
		% sand < % gravel	<15% sand	Gravelly elastic silt
			≥15% sand	Gravelly elastic silt with sand

Reference:
ASTM D 2487 and 2488

Laboratory Classification of Clay and Silt

REFERENCE: Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010).



CL: LL<50; above A-Line.

CH: LL≥50; above A-Line.

ML: LL<50; below A-Line, or PI<4, or Non-Plastic

MH: LL≥50; below A-Line.

CL-ML: above A-Line and PI=4 to 7

CL/CH, ML/MH: at or near LL=50

ML/CL, MH/CH: at or near the A-Line

Field Identification of Clays and Silts

Group Symbol	Dry Strength	Dilatancy	Toughness	Plasticity
ML	None to low	Slow to rapid	Low or thread cannot be formed	Low to nonplastic
CL	Medium to high	None to slow	Medium	Medium
MH	Low to medium	None to slow	Low to medium	Low to medium
CH	High to very high	None	High	High

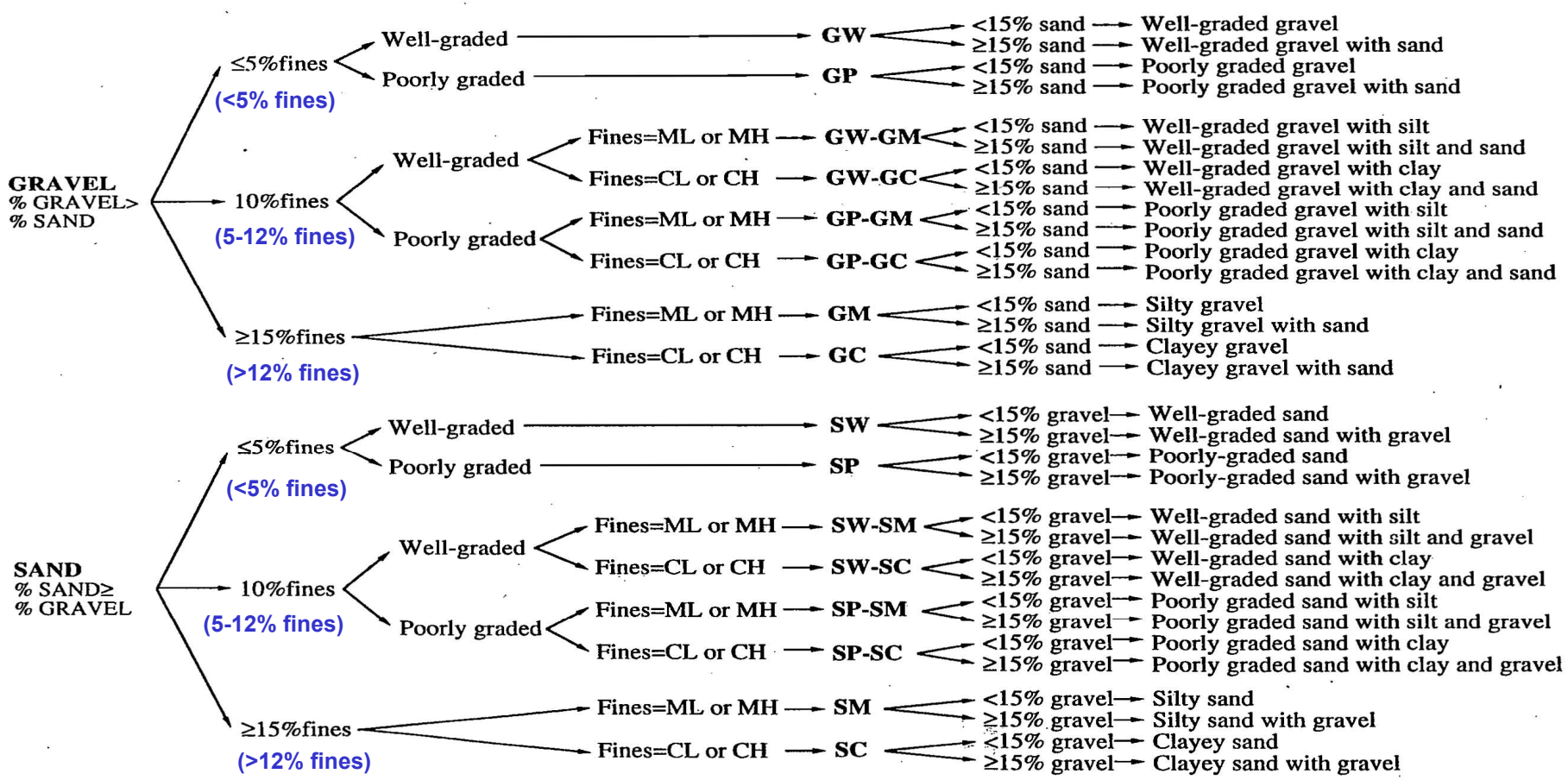
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KEY FOR SOIL CLASSIFICATION #1

CLASSIFICATION OF COARSE-GRAINED SOILS (Soils with <50% "fines" passing No. 200 Sieve)



Reference:

ASTM D 2487 and 2488

Note: Values estimated to nearest 5% to be used for visual identification, values in parentheses to be used for classification when based on laboratory grain size data.

Granular Soil Gradation Parameters

Coefficient of Uniformity: $C_u = D_{60}/D_{10}$

Coefficient of Curvature: $Cc = D_{30}^2 / (D_{60} \times D_{10})$

D_{10} = 10% of soil is finer than this diameter

D_{30} = 30% of soil is finer than this diameter

D_{60} = 60% of soil is finer than this diameter

Group Symbol	Gradation or Plasticity Requirement
SW	$C_u > 6$ and $1 \leq C_c \leq 3$
GW	$C_u > 4$ and $1 \leq C_c \leq 3$
GP or SP	Clean gravel or sand not meeting requirement for SW or GW
SM or GM	Non-plastic fines or below A-Line or PI<4
SC or GC	Plastic fines or above A-Line and PI>7

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KEY FOR SOIL CLASSIFICATION #2

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
Santee Community Center	IR786	**B-1**

SITE LOCATION	START	FINISH	SHEET NO.
Santee, CA	2/17/2022	2/17/2022	1 of 2

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
Tri-County	DIEDRICH D120	Hollow Stem Auger	S. Narveson	M. Givens

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
Hammer: 140 lbs., Drop: 30 in.	85	8	50	345	▽ 16.1 / *328.9* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk; SPT (1.4"); MC (2.4")	N_{60} =1.42 N_{SPT} =0.95N_{MC}	AFTER DRILLING ▼ 16.1 / *328.9*

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	SPT N^*_{60}	RECOVERY (%)	RQD (%)	MOISTURE (%)	DRY DENSITY (pcf)	ATTERBERG LIMITS (LL:PI)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1								43:16	-200 PI EI CR			ASPHALT: 4-inch AGGREGATE BASE: 6-inch CLAYEY SAND (SC): very dark grey (2.5YR 3/1); moist; little SAND; few GRAVEL; medium plasticity (FILL). (Fines = 42.5%)
5	340		R-2-2 R-2-1	3 5 6	11	10			13	95		DS			CLAYEY SAND (SC): loose to medium dense; dark grey (2.5YR 4/1); trace of GRAVEL; medium plasticity (ALLUVIUM).
10	335		S-3	2 3 7	10	14									SILTY SAND (SM): medium dense; dark grey (2.5YR 4/1); moist; fine grained SAND; some fines; non-plastic; micaceous.
15	330		R-4-2 R-4-1	3 6 7	13	12			20	95		-200			Well-graded SAND (SW): medium dense; greyish brown (2.5YR, 5/2); wet; fine to coarse grained SAND; trace fines and GRAVELS; slightly micaceous. (Fines = 4.7%)
20	325		S-5	1 2 4	6	9						-200			Loose; dark greyish brown (2.5YR 4/2); thinly bedded; iron oxide stainning. (Fines = 2.9%)
25	320		R-6-2 R-6-1	3 7 8	15	14			31	91		-200			Poorly-graded SAND with SILT (SP-SM): medium dense; dark greyish brown (2.5YR 4/2); wet; fine to medium grained SAND; trace of fine GRAVEL; slighlty micacenous. (Fines = 5%) GRANITIC ROCK: massive; grey (5YR, 6/1); highly weathered to decomposed; soft; Well-graded SAND with CLAY (SW-SC): very dense; wet; fine to coarse grained

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32 Mauchly, Suite B
Irvine, CA 92618

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FIGURE
A-2 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
Santee Community Center	IR786	**B-1**

SITE LOCATION	START	FINISH	SHEET NO.
Santee, CA	2/17/2022	2/17/2022	2 of 2

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
Tri-County	DIEDRICH D120	Hollow Stem Auger	S. Narveson	M. Givens

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
Hammer: 140 lbs., Drop: 30 in.	85	8	50	345	▽ 16.1 / *328.9* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk; SPT (1.4"); MC (2.4")	N_{60} =1.42 N_{SPT} =0.95N_{MC}	AFTER DRILLING ▼ 16.1 / *328.9*

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	SPT N^*_{60}	RECOVERY (%)	RQD (%)	MOISTURE (%)	DRY DENSITY (pcf)	ATTERBERG LIMITS (LL:PI)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			S-7	50/3"	REF	REF									SAND; few to little fines; non-plastic to low plasticity.
35	310		S-8	60/3"	REF	REF									Iron oxide stainning
40	305		S-9	50/2"	REF	REF									Trace of iron oxide staining.
45	300		S-10	50/2"	REF	REF									
50	295		S-11	50/1"	REF	REF									Boring terminated at 50 feet below the existing ground surface (bgs). Groundwater was encountered at 16.1 feet bgs Backfilled with Cement and bentonite gel.
55	290														

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32 Mauchly, Suite B
Irvine, CA 92618

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FIGURE
A-2 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
Santee Community Center	IR786	**B-2**

SITE LOCATION	START	FINISH	SHEET NO.
Santee, CA	2/17/2022	2/17/2022	1 of 1

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
Tri-County	DIEDRICH D120	Hollow Stem Auger	S. Narveson	M. Givens

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
Hammer: 140 lbs., Drop: 30 in.	85	8	21.5	346	▽ 15.9 / *330.1* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk; SPT (1.4"); MC (2.4")	N_{60} =1.42 N_{SPT} =0.95N_{MC}	AFTER DRILLING ▼ 15.9 / *330.1*

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	SPT N^*_{60}	RECOVERY (%)	RQD (%)	MOISTURE (%)	DRY DENSITY (pcf)	ATTERBERG LIMITS (LL:PI)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
	345														ASPHALT: 4-inch AGGREGATE BASE: 6-inch CLAYEY SAND (SC): dark gray (2.5YR 4/1); moist; little GRAVEL and cobble; medium plasticity (FILL).
			B-1									R			
5	340		S-2	18 8 8	16	23						-200			Poorly-graded SAND with SILT (SP-SM): medium dense; moist; fine to medium grained SAND; few fines (ALLUVIUM). (Fines = 9.5%)
10	335		R-3-2 R-3-1	14 23 27	50	48									No recovery.
15	330		S-4	4 4 2	6	9						-200			Well-graded SAND (SW): loose; grey (2.5YR 5/1); wet; fine to coarse grained SAND; trace of fines; trace of fine GRAVEL. (Fines = 3.1%)
20	325		R-5-2 R-5-1	12 9 13	22	21			37	90					SILTY SAND (SM): medium dense; very dark gray (2.5YR 3/1); wet; fine grained SAND; some fines; trace of GRAVEL; non-plastic; micaceous. Boring terminated at 21.5 feet below the existing ground surface (bgs). Groundwater was encountered at 15.9 feet bgs. Backfilled with Cement and Bentonite gel.
25	320														

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GROUP DELTA CONSULTANTS
32 Mauchly, Suite B
Irvine, CA 92618

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FIGURE
A-3

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
Santee Community Center	IR786	**B-3**

SITE LOCATION	START	FINISH	SHEET NO.
Santee, CA	2/17/2022	2/17/2022	1 of 1

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
Tri-County	DIEDRICH D120	Hollow Stem Auger	S. Narveson	M. Givens

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
Hammer: 140 lbs., Drop: 30 in.	85	8	21.5	345.5	▽ 14.5 / *331.0* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk; SPT (1.4"); MC (2.4")	N_{60} =1.42 N_{SPT} =0.95N_{MC}	AFTER DRILLING ▼ 14.5 / *331.0*

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	SPT N^*_{60}	RECOVERY (%)	RQD (%)	MOISTURE (%)	DRY DENSITY (pcf)	ATTERBERG LIMITS (LL:PI)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
	345														ASPHALT: 3-inch AGGREGATE BASE: 6-inch CLAYEY SAND (SC): very dark grey (2.5YR 3/1); moist; little GRAVEL and cobble; medium plasticity (FILL).
			B-1												
5	340		R-2-2 R-2-1	2 11 11	22	21						PA			Medium dense; fine grained SAND; some fines; few GRAVEL. (Gravel = 7%, Sand = 55%, Fines = 38%)
10	335		S-3	9 5 5	10	14									Lean CLAY with SAND (CL): medium stiff to stiff; very dark (2.5YR 3/1); moist; little fine grained SAND; little GRAVEL and cobble; medium plasticity; PP = 1.0 tsf. SILTY SAND (SM): medium dense; dark gray (5YR 4/1); wet; fine grained SAND; some fines; non-plastic; micaceous (ALLUVIUM).
15	330		R-4-2 R-4-1	3 4 4	8	8			46	73		-200			SANDY SILT (ML): loose; dark grey (5YR 4/1); wet; some fine grained SAND; non-plastic; micaceous. (Fines = 50.5%)
20	325		S-5	2 5 7	12	17									Well-graded SAND (SW): medium dense; grayish brown (2.5YR 5/2); wet; fine to coarse grained SAND; trace of fines; trace of fine GRAVEL.
25	320														Boring terminated at 21.5 feet below the existing ground surface (bgs). Groundwater was encountered at 15.9 feet bgs. Backfilled with Cement and Bentonite gel.

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32 Mauchly, Suite B
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FIGURE
A-4

Hammer Efficiency Calibration

For the Mobile Drill 77 at the calibration borehole, the average energy transfer ratio from individual sample depths ranged from 81-87%.

Table 5: Summary of SPT results

Sample Depth (ft)	Average ETR (%)	Average BPM (bpm)
5	81.0	51
10	82.6	52
15	87.2	51
20	85.4	51

For an overall transfer ratio of:

SPT Rig	Overall Transfer Efficiency	Hammer Operating Rate (BPM)
Drill Rig 01	89	50
Drill Rig 35	86	56
Drill Rig 78	85	50
Drill Rig 72	81	52
Drill Rig 77	84	51

We appreciate the opportunity to be of assistance to you. Please do not hesitate to contact us if you have any questions regarding this report, or if we may be of further service.

Respectfully,

GRL Engineers, Inc.



Camilo Alvarez, P.E.

Gabriela Wong, EIT

APPENDIX B
LABORATORY TESTING

B.1 General

The laboratory testing was performed using appropriate American Society for Testing and Materials (ASTM) and Caltrans Test Methods (CTM).

Modified California drive samples, Standard Penetration Test (SPT) drive samples and bulk samples collected during the field investigation were carefully sealed in the field to prevent moisture loss. The samples of earth materials were then transported to the laboratory for further examination and testing. Tests were performed on selected samples as an aid in classifying the earth materials and to evaluate their physical properties and engineering characteristics. Laboratory testing for this investigation included:

- Soil Classification: USCS (ASTM D 2487) and Visual Manual (ASTM D 2488);
- Moisture content (ASTM D 2216) and Dry Unit Weight (ASTM D 2937);
- Atterberg Limits (ASTM D 4318);
- Grain Size Distribution (ASTM D 422) & % Passing #200 Sieve (ASTM D 1140);
- Direct Shear (ASTM D 3080);
- Expansion Index (D 4829);
- Soil Corrosivity:
    - pH (CTM 643);
    - Water-Soluble Sulfate (ASTM D 516, CTM 417);
    - Water-Soluble Chloride(Ion-Specific Probe, CTM 422);
    - Minimum Electrical Resistivity (CTM 643);
- Resistance R-Value (CTM 301).

A summary of laboratory test results is presented in Table B-1. Brief descriptions of the laboratory testing program and test results are presented below.

B.2 Soil and Rock Classification

Earth materials recovered from subsurface explorations were classified in general accordance with Caltrans' "Soil and Rock Logging Classification Manual, 2010". The subsurface soils were classified visually / manually in the field in accordance with the Unified Soil Classification System (USCS) following ASTM D 2488; soil classifications were modified as necessary based on testing in the laboratory in accordance with ASTM D 2487. The details of the soil and rock classification systems and boring records presenting the classifications are presented in Appendix A.

B.3 Moisture Content and Dry Unit Weight

The in-situ moisture content of selected bulk, SPT and Ring samples was determined by oven drying in general accordance with ASTM D 2216. Selected California Ring samples were trimmed flush in the metal rings and wet weight was measured. After drying, the dry weight of each sample was measured, volume and weight of the metal containers was measured, and moisture content and dry density were calculated in general accordance with ASTM D 2216 and D 2937. Results of these tests are presented in Table B-1 and on the boring records in Appendix A.

B.4 Atterberg Limits

Characterization of the fine-grained fractions of soils was evaluated using the Atterberg Limits. This test includes Liquid Limit and Plastic Limit tests to determine the Plasticity Index in accordance with ASTM D 4318. Results of these tests are presented on the boring records in Appendix A, are summarized in Table B-1, and are attached at the end of this Appendix.

B.5 Grain Size Distribution and Percent Passing No. 200 Sieve:

Representative samples were dried, weighed, soaked in water until individual soil particles were separated, and then washed on the No. 200 sieve. The percentage of fines (soil passing No. 200 sieve) was determined for selected samples in accordance with ASTM D 1140. For selected samples the washed fraction retained on the No. 200 sieve was then screened on a No. 4 sieve, and the fraction retained on No. 4 was weighed to determine the percentage of gravel. For selected samples, the washed material retained on No. 200 sieve was shaken through a standard stack of sieves in accordance with ASTM D 422 to determine the grain size distribution. The relative proportion (or percentage) by dry weight of gravel (retained on No. 4 sieve), sand (passing No. 4 and retained on No. 200 sieve), and fines (passing No. 200 sieve) are listed on the boring records in Appendix A and summarized in Table B-1.

B.6 Direct Shear Test

To determine the drained shear strength parameters of the on-site soils, direct shear tests were performed on selected in situ samples in accordance with ASTM D 3080. After the initial weight and volume measurements were made, the sample was placed in the shear machine, and a selected normal load was applied. The sample was saturated or kept at field moisture (to model worst case field conditions), allowed to consolidate under the selected normal load, and then sheared to failure. Shear rate was selected to maintain drained conditions. Shear stress and vertical/horizontal sample deformations were monitored throughout the test. The process was repeated on additional samples of the same soil

material at two additional normal loads. The test results are presented at the end of this appendix.

B.7 Expansion Index

The expansion potential of the site soils was estimated using the Expansion Index Test in accordance with ASTM D 4829. The results of this test are listed in Table B-1.

B.8 Soil Corrosivity

Tests were performed in order to determine corrosion potential of site soils on concrete and ferrous metals. Corrosivity testing included minimum electrical resistivity and soil pH (Caltrans method 643), water-soluble chlorides (Orion 170A+ Ion Probe or Caltrans Test Method 422), and water-soluble sulfates (ASTM D 516). The test results are summarized presented at the end of this appendix.

B.9 R-Value

Resistance "R" Value tests were performed by stabilometer method on selected bulk samples of the subgrade soils. The tests were conducted in general accordance with CTM 301. The test results are attached at the end of this appendix.

B.10 List of Attached Figures

The following tables and figures are attached and complete this appendix:

Tables

Summary of Laboratory Test Results

Figures

Atterberg Limits Test Results
Grain Size Analysis Test Results
Direct Shear Test Results
Corrosion Test Results
R-Value Test Results

Boring No.	Sample No.	Depth (ft)	Sample Type	Geologic Unit	USCS Group Symbol	SPT N*60 (blows/ft)	Undrained Shear Strength, Su (ksf)			Moisture Content (%)	Dry Unit Weight (pcf)	Total Unit Wt (pcf)	Atterberg Limits			Grain Size Distribution (%) by dry weight			Clay	Other Tests
							Pocket Pen.	Mini Vane	UU Test				LL	PL	PI	Gravel	Sand	Fines		
B-1	B-1	0.0	BULK		SC								43	16	27			42.5		-200, PI, EI, CR
B-1		5.0	MC		SC	10														DS
B-1	R-2-2	5.5			SC					13.0	95	107								
B-1	R-2-1	6.0			SC															
B-1	S-3	10.0	SPT		SM	14														
B-1		15.0	MC		SW	12												4.7		-200
B-1	R-4-2	15.5			SW															
B-1	R-4-1	16.0			SW					20.0	95	114								
B-1	S-5	20.0	SPT		SW	9												2.9		-200
B-1		25.0	MC		SP-SM	14												5.0		-200
B-1	R-6-2	25.5			SP-SM															
B-1	R-6-1	26.0			SP-SM					31.0	91	119								
B-1	S-7	30.0	SPT		SW-SC	REF														
B-1	S-8	35.0	SPT		SW-SC	REF														
B-1	S-9	40.0	SPT		SW-SC	REF														
B-1	S-10	45.0	SPT		SW-SC	REF														
B-1	S-11	50.0	SPT		SW-SC	REF														
B-2	B-1	0.8	BULK		SC															R
B-2	S-2	5.0	SPT		SP-SM	23												9.5		-200
B-2		10.0	MC		SP-SM	48														
B-2	R-3-2	10.5			SP-SM															
B-2	R-3-1	11.0			SP-SM															
B-2	S-4	15.0	SPT		SW	9												3.1		-200
B-2		20.0	MC		SM	21														
B-2	R-5-2	20.5			SM															
B-2	R-5-1	21.0			SM					37.0	90	123								
B-3	B-1	0.8	BULK		SC															
B-3		5.0	MC		SC	21										7	55	38		PA
B-3	R-2-2	5.5			SC															
B-3	R-2-1	6.0			SC															

GROUP DELTA CONSULTANTS. INC.
32 Mauchly, Suite B
Irvine, California 92618
Voice: (949) 450-2100 Fax: (949) 450-2108
www.GroupDelta.com

TABLE B-1: Summary of Laboratory Results

Project: Santee Community Center

Location: Santee, CA

Number: IR786

GDC TABLE B-1 (2014) IR786 - SANTEE COMMUNITY CENTER.GPJ GDC2013.GDT 3/16/22

Boring No.	Sample No.	Depth (ft)	Sample Type	Geologic Unit	USCS Group Symbol	SPT N*60 (blows/ft)	Undrained Shear Strength, Su (ksf)			Moisture Content (%)	Dry Unit Weight (pcf)	Total Unit Wt (pcf)	Atterberg Limits			Grain Size Distribution (%) by dry weight			Clay	Other Tests
							Pocket Pen.	Mini Vane	UU Test				LL	PL	PI	Gravel	Sand	Fines		
B-3	S-3	10.0	SPT		CL	14														
B-3		15.0	MC		ML	8												50.5		-200
B-3	R-4-2	15.5			ML															
B-3	R-4-1	16.0			ML					46.0	73	107								
B-3	S-5	20.0	SPT		SW	17														

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Irvine, California 92618
Voice: (949) 450-2100 Fax: (949) 450-2108
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TABLE B-1: Summary of Laboratory Results

Project: Santee Community Center

Location: Santee, CA

Number: IR786

GDC TABLE B-1 (2014) IR786 - SANTEE COMMUNITY CENTER.GPJ GDC2013.GDT 3/16/22

GROUP DELTA CONSULTANTS, INC.
ENGINEERS AND GEOLOGISTS
9245 ACTIVITY ROAD, SUITE 103
SAN DIEGO, CALIFORNIA 92126

STANDARD METHOD FOR ATTERBERG LIMITS
ASTM D4318

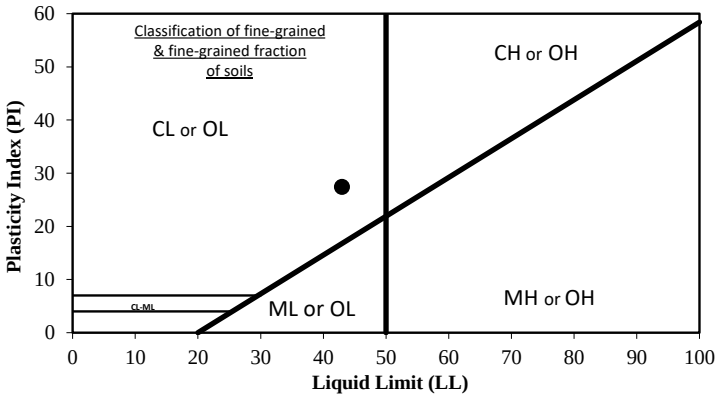
REVISION 0, DATED 1/31/15

Project Name: HMC - Santee
Project No. : IR786
Sample No.: B-1
Sample Location: 1-5'

Tested By : J. Krehbiel **Date:** 03/09/22
Data Input By: J. Krehbiel **Date:** 03/10/22
Checked By: JLK **Date:** 03/10/22

	PLASTIC LIMIT		LIQUID LIMIT			
TEST NO.	1	2	1	2	3	4
Number of Blows [N]			35	27	17	
Wet Wt. of Soil + Cont. (gm.)	17.98	17.71	28.66	27.53	28.33	
Dry Wt. of Soil + Cont. (gm.)	17.06	16.81	23.50	22.77	23.14	
Wt. of Container (gm.)	11.18	11.04	11.17	11.71	11.48	
Moisture Content (%) [Wn]	**15.65**	**15.60**	**41.85**	**43.04**	**44.51**	

LIQUID LIMIT	**43**
PLASTIC LIMIT	**16**
PLASTICITY INDEX	**27**
PI at "A" - Line = 0.73(LL-20) =	**16.8**
One - Point Liquid Limit Calculation	$LL=Wn(N/25)^{0.121}$



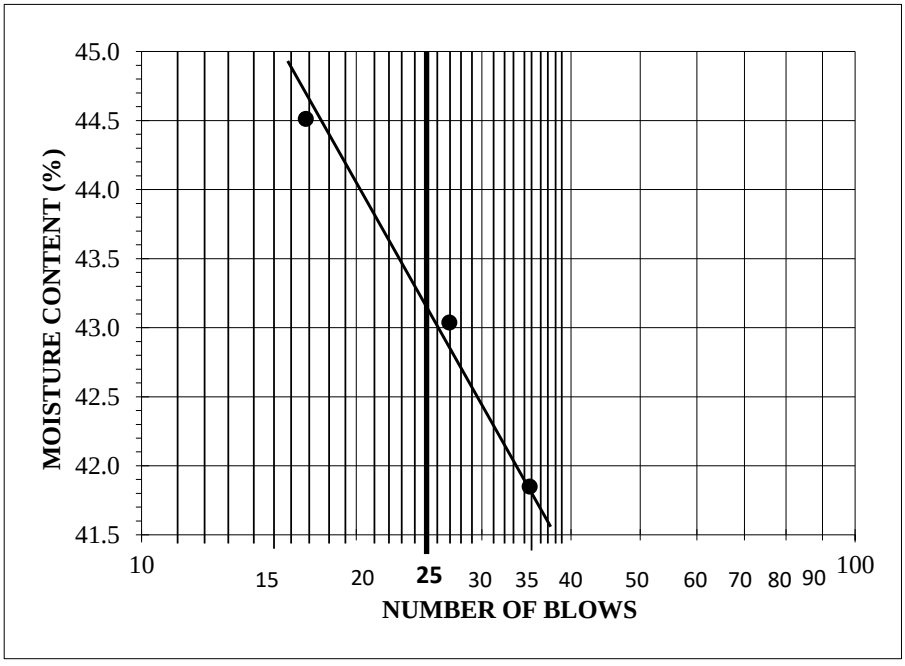
PROCEDURES USED

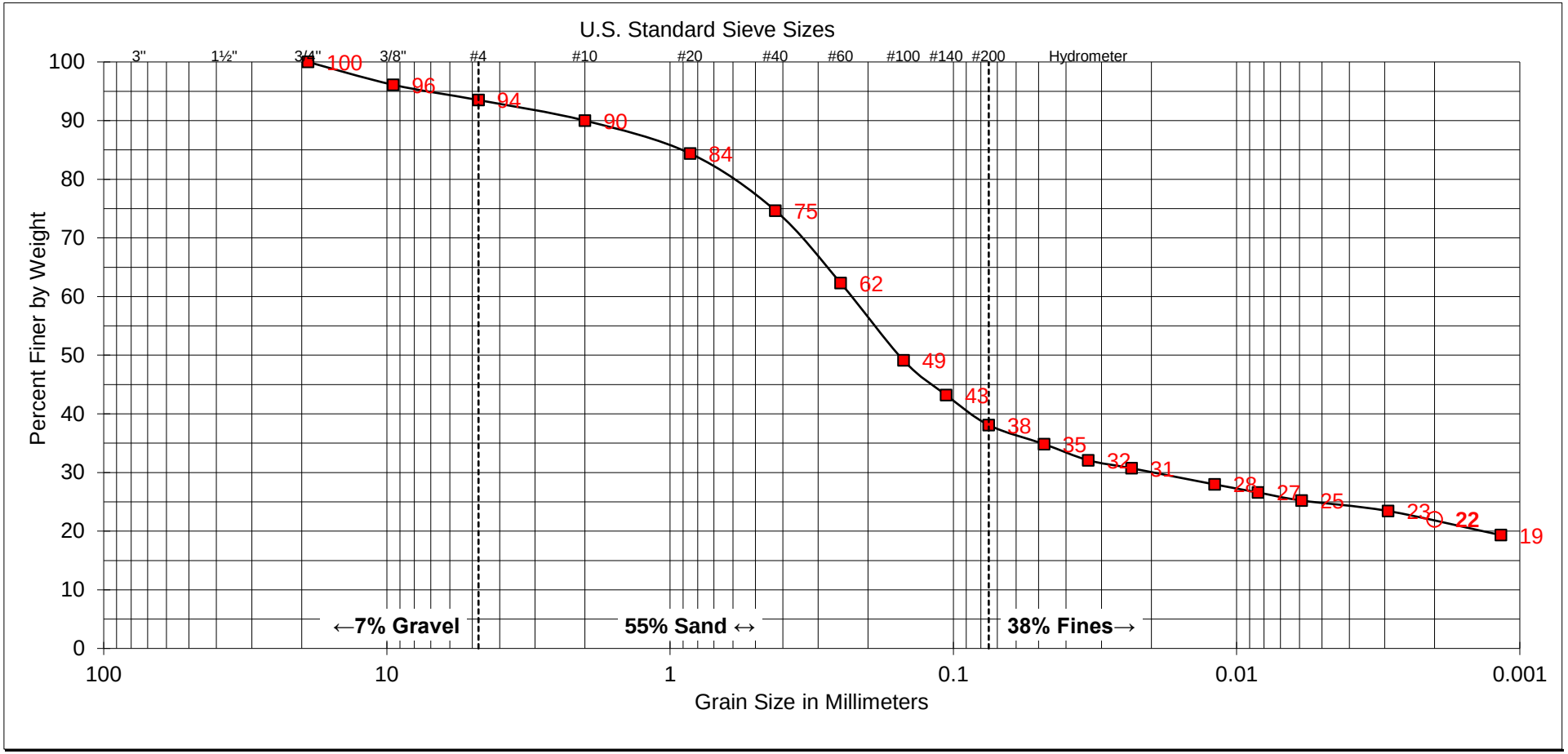
☐ Wet Preparation
Multipoint Wet Preparation

☒ Dry Preparation
Multipoint Dry Preparation

☒ Procedure A
Multipoint Test

☐ Procedure B
One-point Test





COARSE	FINE	COARSE	MEDIUM	FINE	SILT AND
GRAVEL		SAND			CLAY

SAMPLE
SAMPLE NUMBER: B-3
SAMPLE DEPTH: 5'

UNIFIED SOIL CLASSIFICATION: SC

DESCRIPTION: CLAYEY SAND

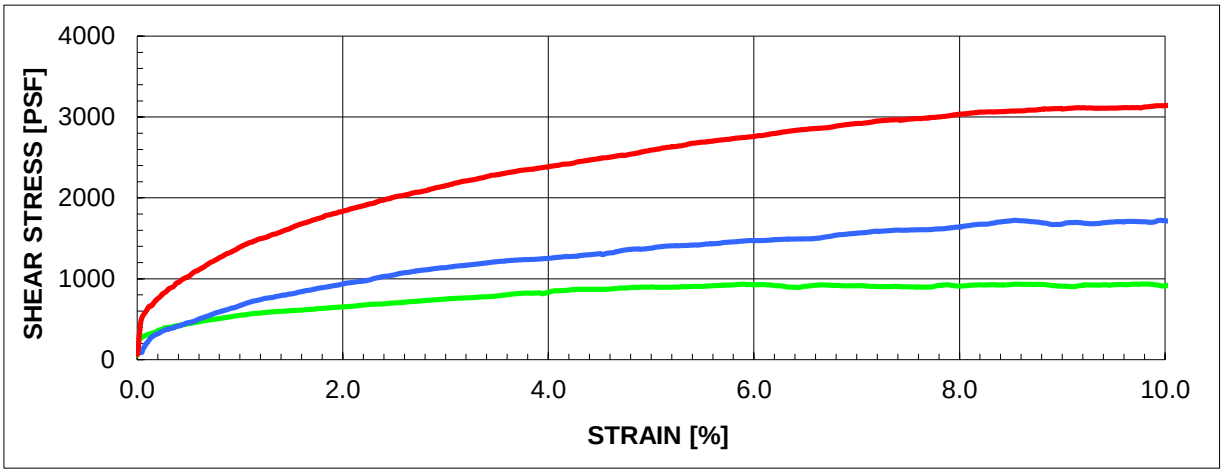
ATTERBERG LIMITS	
LIQUID LIMIT:	--
PLASTIC LIMIT:	--
PLASTICITY INDEX:	--

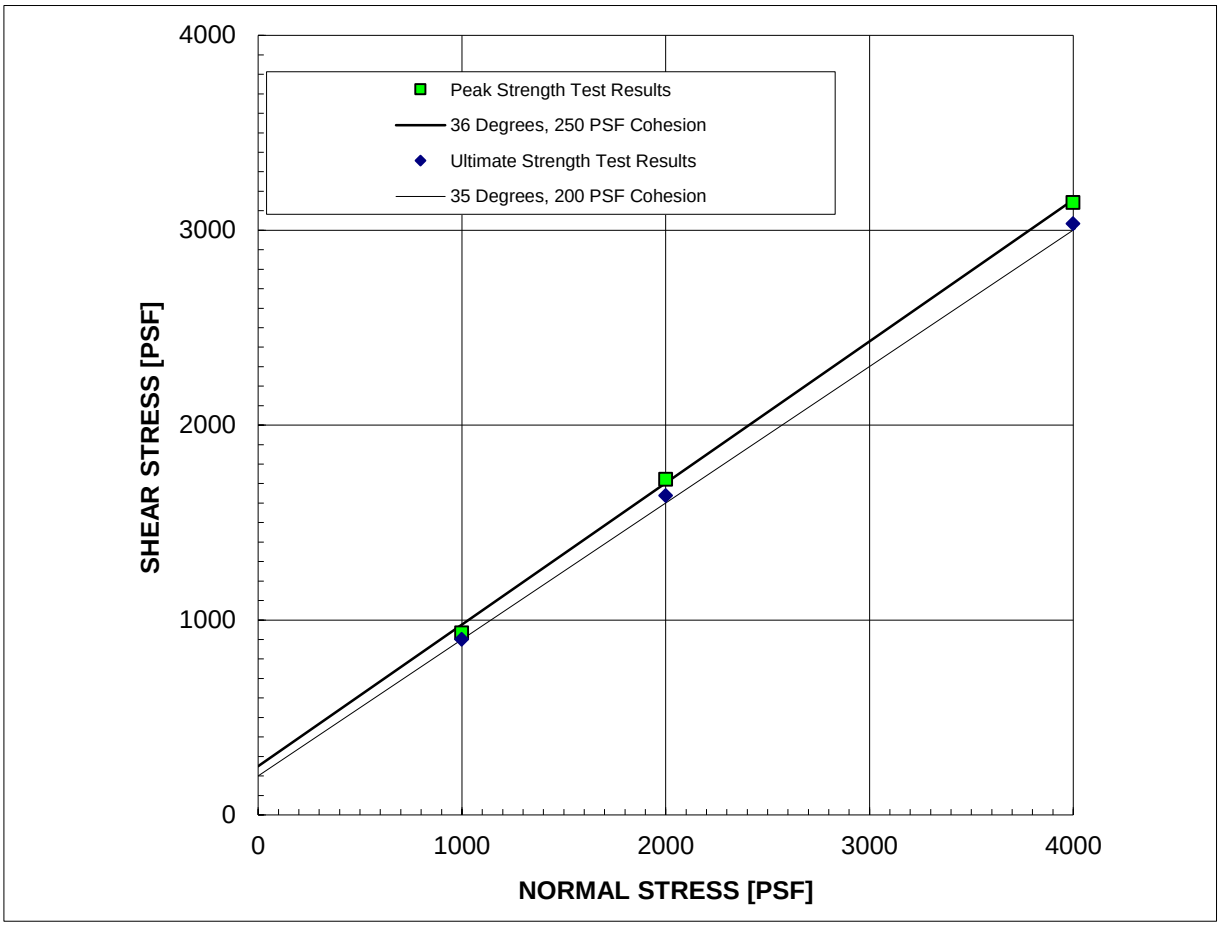
GROUP DELTA

SOIL CLASSIFICATION

Project No. IR786

FIGURE B-1.1





SAMPLE: B-1 @ 5'

Description:
Yellowish brown clayey sand (SC)

STRAIN RATE: 0.0010 IN/MIN
(Sample was consolidated and drained)

	PEAK	ULTIMATE
ϕ'	36 ^{o}	35 ^{o}
C'	250 PSF	200 PSF

	IN-SITU	AS-TESTED
γ_d	92.3 PCF	92.3 PCF
w_c	15.0 %	23.0 %

GROUP DELTA

DIRECT SHEAR TEST RESULTS

Project No. IR786
FIGURE B-1.1

GROUP DELTA CONSULTANTS, INC.
ENGINEERS AND GEOLOGISTS
9245 ACTIVITY ROAD, SUITE 103
SAN DIEGO, CALIFORNIA 92126

STANDARD TEST METHOD FOR EXPANSION INDEX (ASTM D4829)

REV.1, DATED 1/31/15

PROJECT: HMC - Santee Community Center
SAMPLE NUMBER: B-1 @ 1-5'
PROJECT NO.: IR786
SAMPLE DESCRIPTION: Dk.yellowish brown clayey sand (SC)
TESTED BY: J. Krehbiel DATE: 3/10/2022 CHECKED BY: JLK SAMPLED BY: SRN
LOCATION _____ % COARSE: _____ Page____ of ____

MOISTURE CONTENT	TRIAL NO.	NO. 1	NO. 2	NO. 3	
	WET SOIL WEIGHT	**269.6**			g
	DRY SOIL WEIGHT	**244.5**			g
A	MOISTURE (((WET - DRY) / DRY) X 100)	10.3%			%
RING PREPARATION					
B	WET WEIGHT OF SOIL AND RING	**597.0**			g
C	RING WEIGHT	**200.8**			g
D	WET WEIGHT OF SOIL (B - C)	396.2			g
E	DRY WEIGHT OF SOIL (D / ((A /100)+1))	359.2			g
F	DRY DENSITY OF SOIL (E * 0.3016)	108.3			g
G	CALCULATE (2.7 * A * F)	3011.8			
H	CALCULATE (168.5 - F)	60.2			
J	SAMPLE SATURATION (G / H)	50.0%			%

DIAL READINGS

K	INITIAL SETUP READING	0.200	in
L	10 MINUTE DRY READING	0.200	in
M	24 HOUR WET READING	0.268	in
N	EXPANSION INDEX ((M - L) * 1000)	**68**	EI

Remarks (if any) _____

FINAL MOISTURE CONTENT

O	WET WEIGHT OF SOIL AND RING	**635.6**	g
P	DRY WEIGHT OF SOIL AND RING	**555.2**	g
Q	WEIGHT OF WATER (O - P)	80.4	g
R	DRY WEIGHT OF SOIL (P - C)	354.4	g
S	MOISTURE CONTENT ((Q/R)* 100)	22.7%	%

EXPANSION INDEX CORRECTION

T	CALCULATE (50 - J)	
U	CALCULATE ((65 + N) / (220 - J))	
V	CALCULATE (T * U)	
	CORRECTED EXPANSION INDEX (N - V)	

CORROSIVITY TEST RESULTS
(ASTM D516, CTM 643)

SAMPLE	pH	RESISTIVITY (OHM-CM)	SULFATE CONTENT (%)	CHLORIDE CONTENT (%)
B-1 @ 1 - 5'	*8.87*	*830*	*0.05*	*0.01*

CORROSIVITY PARAMETERS

SULFATE CONTENT (%)	SULFATE EXPOSURE	CEMENT TYPE
0.00 to 0.10	Negligible	--
0.10 to 0.20	Moderate	II, IP(MS), IS(MS)
0.20 to 2.00	Severe	V
Above 2.00	Very Severe	V plus pozzolan

SOIL RESISTIVITY (OHM-CM)	GENERAL DEGREE OF CORROSIVITY TO FERROUS METALS
0 to 1,000	Very Corrosive
1,000 to 2,000	Corrosive
2,000 to 5,000	Moderately Corrosive
5,000 to 10,000	Mildly Corrosive
Above 10,000	Slightly Corrosive

CHLORIDE (CI) CONTENT (%)	GENERAL DEGREE OF CORROSIVITY TO METALS
0.00 to 0.03	Negligible
0.03 to 0.15	Corrosive
Above 0.15	Severely Corrosive

GROUP DELTA CONSULTANTS
9245 Activity Road, Suite 103
San Diego, CA 92126

Project Name: Santee Community Center
Project Number: IR786

SAMPLE NO.: B-2 **SAMPLE DATE:** 2/17/22

SAMPLE LOCATION: 1' - 5' **TEST DATE:** 3/10/22

SAMPLE DESCRIPTION: Yellowish brown clayey sand (SC)

LABORATORY TEST DATA

	TEST SPECIMEN	1	2	3	4	5	
A	COMPACTOR PRESSURE	120	160	220			[PSI]
B	INITIAL MOISTURE	4.0	4.0	4.0			[%]
C	BATCH SOIL WEIGHT	1200	1200	1200			[G]
D	WATER ADDED	130	115	105			[ML]
E	WATER ADDED (D*(100+B)/C)	11.3	10.0	9.1			[%]
F	COMPACTION MOISTURE (B+E)	15.3	14.0	13.1			[%]
G	MOLD WEIGHT	2088.5	2103.2	2017.6			[G]
H	TOTAL BRIQUETTE WEIGHT	3187.0	3191.9	3133.6			[G]
I	NET BRIQUETTE WEIGHT (H-G)	1098.5	1088.7	1116.0			[G]
J	BRIQUETTE HEIGHT	2.50	2.45	2.47			[IN]
K	DRY DENSITY (30.3*I/((100+F)*J))	115.5	118.1	121.0			[PCF]
L	EXUDATION LOAD	2812	4802	6065			[LB]
M	EXUDATION PRESSURE (L/12.54)	224	383	484			[PSI]
N	STABILOMETER AT 1000 LBS	44	39	31			[PSI]
O	STABILOMETER AT 2000 LBS	117	104	84			[PSI]
P	DISPLACEMENT FOR 100 PSI	4.55	3.99	3.86			[Turns]
Q	R VALUE BY STABILOMETER	17	25	37			
R	CORRECTED R-VALUE (See Fig. 14)	17	25	37			
S	EXPANSION DIAL READING	0.0008	0.0030	0.0041			[IN]
T	EXPANSION PRESSURE (S*43,300)	35	130	178			[PSF]
U	COVER BY STABILOMETER	0.76	0.68	0.57			[FT]
V	COVER BY EXPANSION	0.27	1.00	1.37			[FT]

TRAFFIC INDEX:	4.5
GRAVEL FACTOR:	1.58
UNIT WEIGHT OF COVER [PCF]:	130
R-VALUE BY EXUDATION:	20
R-VALUE BY EXPANSION:	22
R-VALUE AT EQUILIBRIUM:	20

*Note: Gravel factor estimated from pavement section using CTM 301, Section C, Part b.

REV. 2, DATED 1/31/15

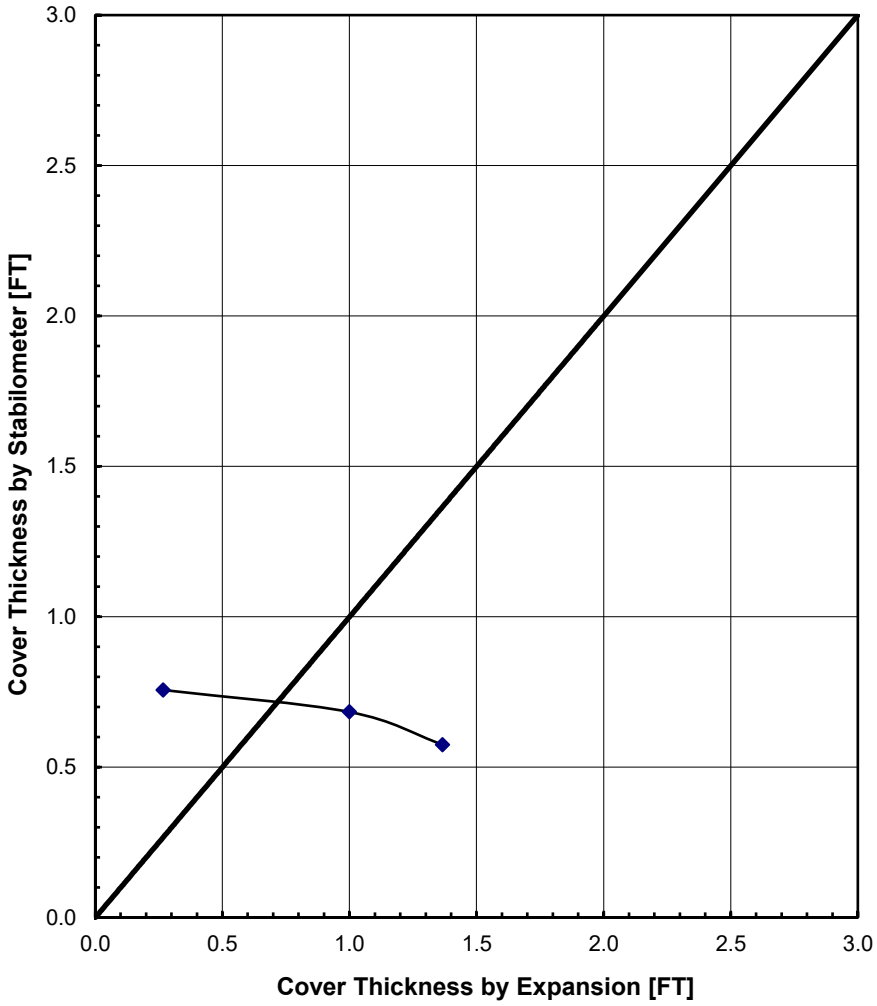
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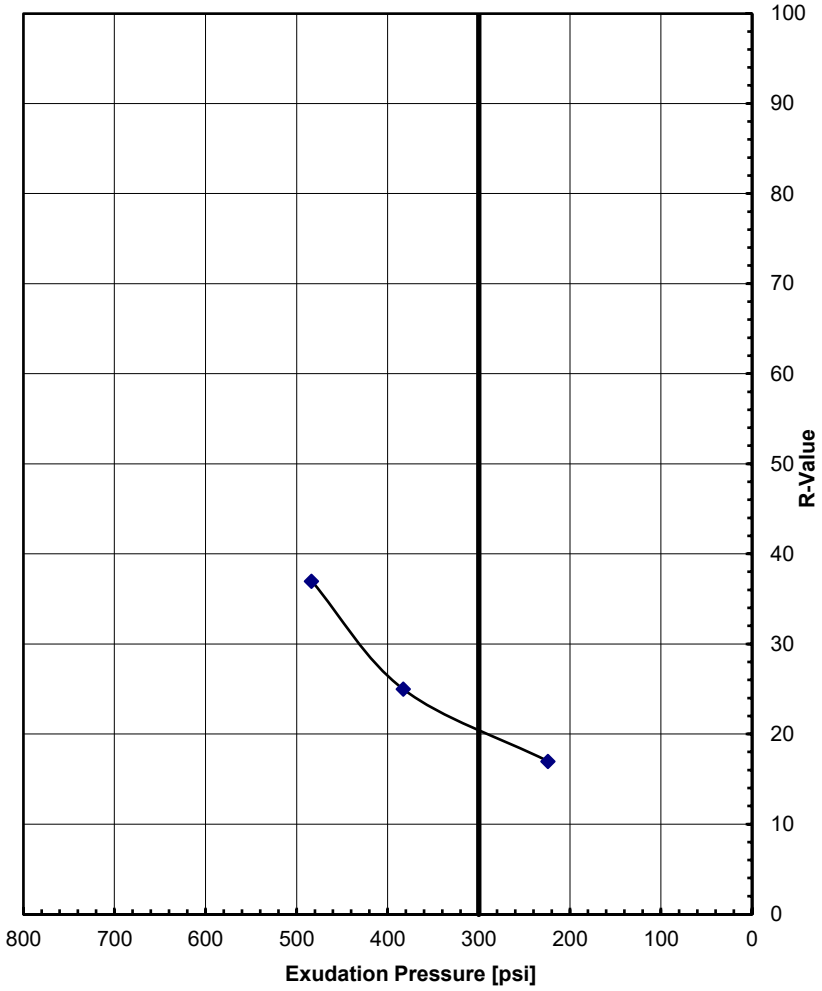
R-VALUE TEST RESULTS
CT301

Project No. IR786
FIGURE 1.1

Sample: B-2, 1' - 5'

R-Value at Equilibrium: 20





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COVER AND EXUDATION CHARTS

Project No. IR786

FIGURE 1.2

Liquefaction Triggering Assessment and Settlement Calculation
Standard Penetration Tests

NCEER (2001)

Settlement Calculation per Tokimatsu & Seed (1987)

From Tokimastu & Seed (1987)

Mw	Neq	Vol. Strain Ratio
8.50	26	1.25
7.50	15	1.00
6.75	10	0.85
6.00	5	0.60
5.25	2 - 3	0.40

Borehole No	B-1	
Ground Elevation (NAVD 88)	345.00	ft
Water Depth (Exploration)	16.10	ft
Water Depth (Design)	14.50	ft
Station		ft

A_{max}	0.42	g
M_w	6.40	
MSF	1.50	Triggering
MSF_{Vol}	0.78	Settlement

Energy Ratio	85	%
Settlement FS <=	1.0	
Finished Grade El.	345.00	ft
	User Input	

Borehole diameter (mm) Correction C_B

115	1
150	1.05
200	1.15

El. Top of Bedrock (ft): 317

Elevation	SPT Depth	SPT Corrected Depth	Thickness	Design Depth	Design Depth	Soil Parameters			Soil Stress			Demand		Bore Hole			Blow Counts (N)		Blow Count Correction Factors				Cyclic Resistance										Demand	Results	Dry Sand								Saturated Sand	Settlement			$F_{s,not\ adjusted}$
ft	ft	ft	ft	ft	m	pcf		%	psf	psf	psf	psf		in	mm			Corrected															Above Gasp	degree	psf	ksf		%					%		in	in	Elevation)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
340	5	5	8.5	5	1.5	115	SC	43	575	0	575	575	0.99	8.0	203	MC	11	7	1.42	1.15	0.75	1.00	9	1.7	15	5.00	1.20	23	0.26	1.00	0.40	0.27	N.A.	32	372	957	1.6E-04	0.05	-3.78	-3.07	0.04	0.18	-	0.04	0.04	3.74	N.A.
333	10	12	6.5	12	3.7	120	SM	43	1,415	0	1,415	1,415	0.97	8.0	203	SPT	10	10	1.42	1.15	0.80	1.00	13	1.2	16	5.00	1.20	24	0.28	1.00	0.41	0.27	N.A.	32	915	1,522	2.5E-04	0.07	-3.36	-2.94	0.05	0.18	-	0.05	0.04	3.70	N.A.
327	15	18	5.5	18	5.5	120	SW	5	2,135	119	2,016	1,917	0.96	8.0	203	MC	13	9	1.42	1.15	0.85	1.00	12	1.02	12	0.00	1.00	12	0.13	1.00	0.20	0.29	0.69	32	1,240	1,628	3.4E-04	-	-	-	-	0.19	2.19	2.19	1.44	3.66	0.69
322	20	23	4.5	23	7.0	120	SW	3	2,735	431	2,304	2,205	0.95	8.0	203	SPT	6	6	1.42	1.15	0.95	1.00	9	0.96	9	0.00	1.00	9	0.10	0.98	0.15	0.32	0.47	32	1,426	1,565	4.5E-04	-	-	-	-	0.21	2.78	2.78	1.50	2.22	0.47
318	25	27	3.0	27	8.2	120	SP-SM	5	3,215	680	2,535	2,435	0.93	8.0	203	MC	15	10	1.42	1.15	0.95	1.00	16	0.91	14	0.00	1.00	14	0.15	0.96	0.22	0.34	0.65	32	1,575	1,922	4.3E-04	-	-	-	-	0.22	2.00	2.00	0.72	0.72	0.65
316	30	29	4.0	29	8.8	150	BR	10	3,515	805	2,710	2,610	0.93	8.0	203	SPT	100	100	1.42	1.15	0.95	1.00	100	0.9	100	0.87	1.02	100	too dense	0.94	too dense	0.34	2.00	32	1,688	3,808	2.3E-04	-	-	-	-	0.23	-	-	0.00	0.00	2.00
310	35	35	5.5	35	10.7	150	BR	10	4,415	1,179	3,236	3,136	0.89	8.0	203	SPT	100	100	1.42	1.15	1.00	1.00	100	0.8	100	0.87	1.02	100	too dense	0.90	too dense	0.34	2.00	32	2,028	4,174	2.6E-04	-	-	-	-	0.23	-	-	0.00	0.00	2.00
305	40	40	5.0	40	12.2	150	BR	10	5,165	1,491	3,674	3,574	0.85	8.0	203	SPT	100	100	1.42	1.15	1.00	1.00	100	0.8	100	0.87	1.02	100	too dense	0.87	too dense	0.34	2.00	32	2,311	4,456	2.7E-04	-	-	-	-	0.22	-	-	0.00	0.00	2.00
300	45	45	5.0	45	13.7	150	BR	10	5,915	1,803	4,112	4,012	0.80	8.0	203	SPT	100	100	1.42	1.15	1.00	1.00	100	0.7	100	0.87	1.02	100	too dense	0.85	too dense	0.32	2.00	32	2,595	4,721	2.7E-04	-	-	-	-	0.22	-	-	0.00	0.00	2.00
295	50	50	2.5	50	15.2	150	BR	10	6,665	2,115	4,550	4,450	0.75	8.0	203	SPT	100	100	1.42	1.15	1.00	1.00	100	0.7	100	0.87	1.02	100	too dense	0.83	too dense	0.31	2.00	32	2,878	4,972	2.8E-04	-	-	-	-	0.21	-	-	0.00	0.00	2.00

Simplified Procedure for Estimating Earthquake Induced Deviatoric Slope Displacements
by Jonathan D. Bray and Thaleia Travasarou
Journal of Geotechnical and Geonvironmental Engineering, ASCE, V. 133(4), pp. 381-392, April 2007

SEE NOTES BELOW FOR GUIDANCE IN THE USE OF SPREADSHEET

Input Parameters			
Yield Coefficient (ky)	0.14		Based on pseudostatic analysis
Initial Fundamental Period (Ts)	0.16	seconds	1D: Ts=4H/Vs 2D: Ts=2.6H/Vs
Degraded Period (1.5Ts)	0.24	seconds	
Moment Magnitude (M_w)	6.4		
Spectral Acceleration (Sa(1.5Ts))	0.918	g	

Additional Input Parameters		
Probability of Exceedance #1 (P1)	84	%
Probability of Exceedance #2 (P2)	50	%
Probability of Exceedance #3 (P3)	16	%
Displacement Threshold (d_threshold)	30	cm

Intermediate Calculated Parameters			
Non-Zero Seismic Displacement Est (D)	21.83	cm	eq. (5) or (6)
Standard Deviation of Non-Zero Seismic D	0.66		

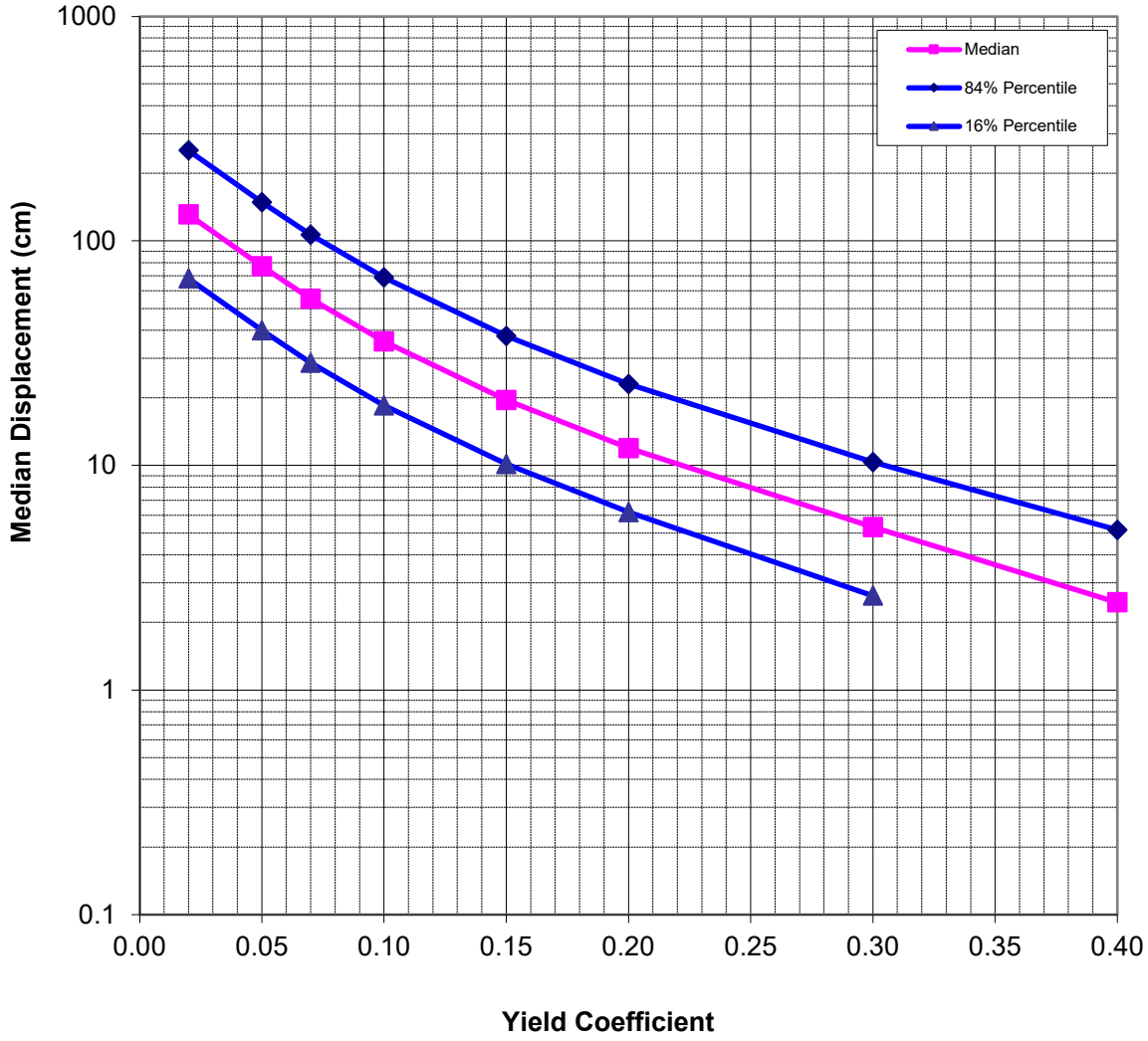
Results			
Probability of Negligible Displ. (P(D=0))	0.00		eq. (3)
D1	11.3	cm	calc. using eq. (7)
D2	21.8	cm	calc. using eq. (7)
D3	42.1	cm	calc. using eq. (7)
P(D>d_threshold)	0.32		eq. (7)

Notes

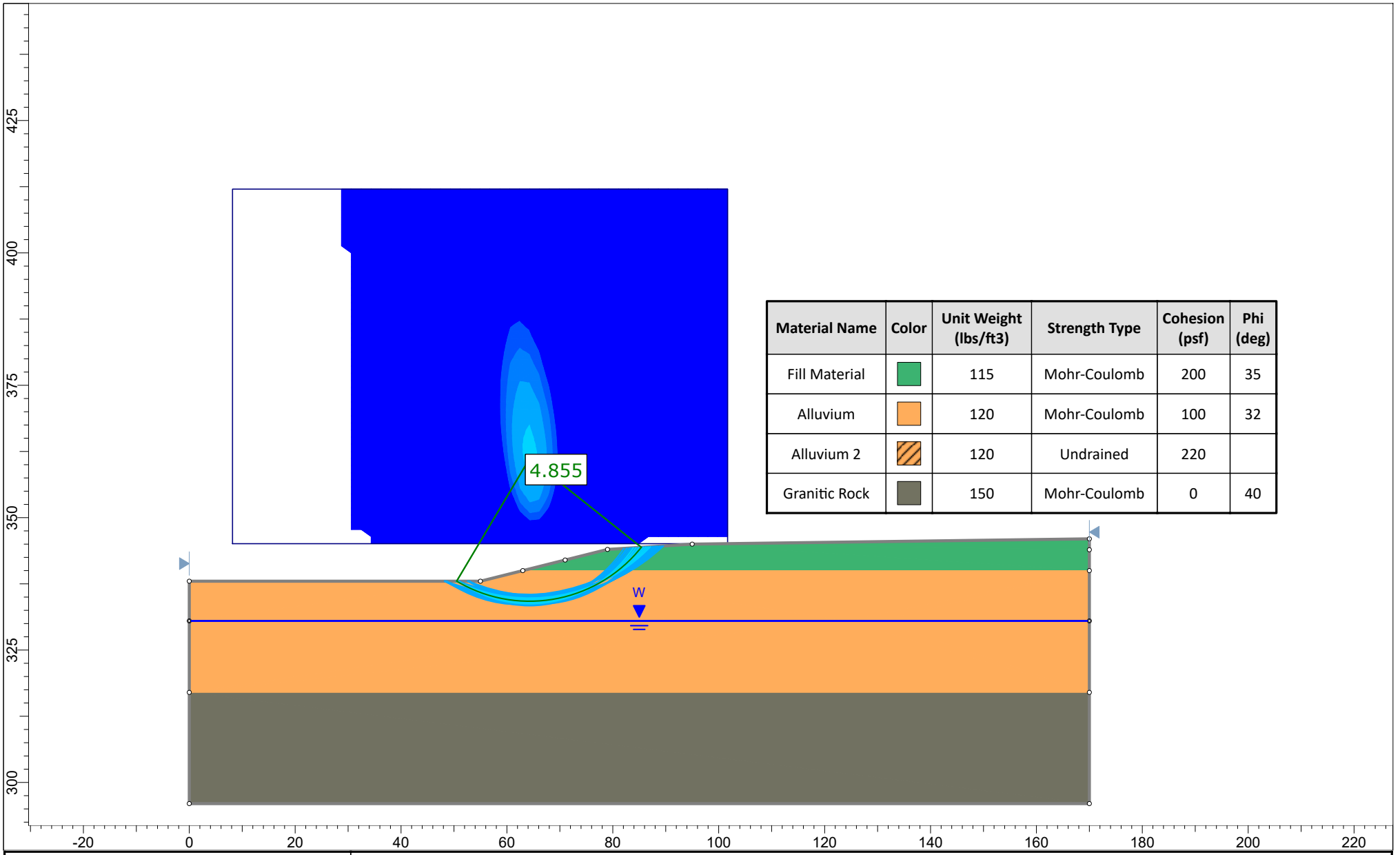
1. Values highlighted in blue are input parameters, and results are presented in the table with the yellow heading.
2. Probability of Exceedance is the desired probability of exceeding a particular displacement value.
3. Displacements D1, D2, and D3 correspond to P1, P2, and P3, respectively.
   (e.g., the probability of exceeding displacement D1 is P1)
4. The 16%, 50%, and 84% percentile displacement values at selected ky values are shown to the right.
5. Calculated seismic displacements are due to deviatoric deformation only (add in volumetrically induced movement).
6. ky may range between 0.01 and 0.5, Ts between 0 and 2 s, Sa between 0.002 and 2.7 g, M between 4.5 and 9
7. Rigid slope is assumed for Ts < 0.05 s
8. When a value for D is not calculated, D is < 1cm
9. ky may be estimated using the simplified equations shown below.
10. Examples of how Ts is estimated are shown below.
11. Vs = weighted avg. shear wave velocity for the sliding mass, e.g., for 2 layers, Vs = [(h1)(Vs1) + (h2)(Vs2)]/(h1 + h2)

Dependence on ky

ky	P(D="0")	D (cm)	Dmedian (cm)	D-84% (cm)	D-16% (cm)
0.020	0.00	131.1	131.1	252.6	68.0
0.05	0.00	77.2	77.2	148.7	40.0
0.07	0.00	55.2	55.2	106.4	28.6
0.1	0.00	35.6	35.6	68.7	18.5
0.15	0.00	19.6	19.6	37.7	10.1
0.2	0.00	12.0	12.0	23.0	6.2
0.3	0.03	5.4	5.3	10.4	2.6
0.4	0.17	2.9	2.5	5.2	<1



Simplified Procedure for Estimating Earthquake Induced Deviatoric Slope Displacements
by Jonathan D. Bray and Thaleia Travasarou
Journal of Geotechnical and Geonvironmental Engineering, Vol 133, No. 4, pp. 381-392, April 2007

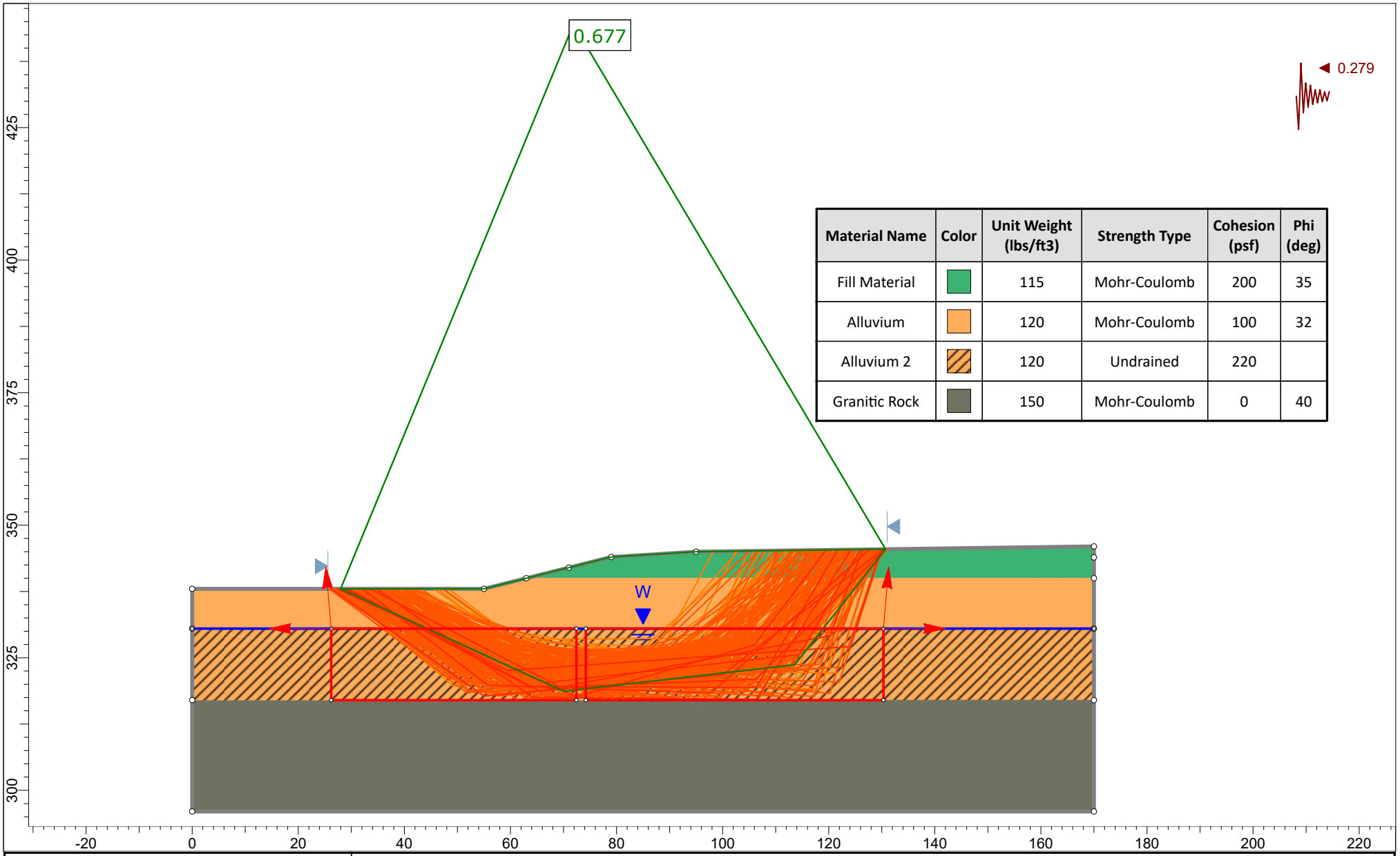


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Fill Material		115	Mohr-Coulomb	200	35
Alluvium		120	Mohr-Coulomb	100	32
Alluvium 2		120	Undrained	220	
Granitic Rock		150	Mohr-Coulomb	0	40

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SLIDEINTERPRET 8.010

Project	IR786 Santee Community Center				
Analysis Description	Static				
Drawn By	GV	*Scale*	1:300	*Company*	Group Delta
Date	3/18/22			*File Name*	Existing.slmd

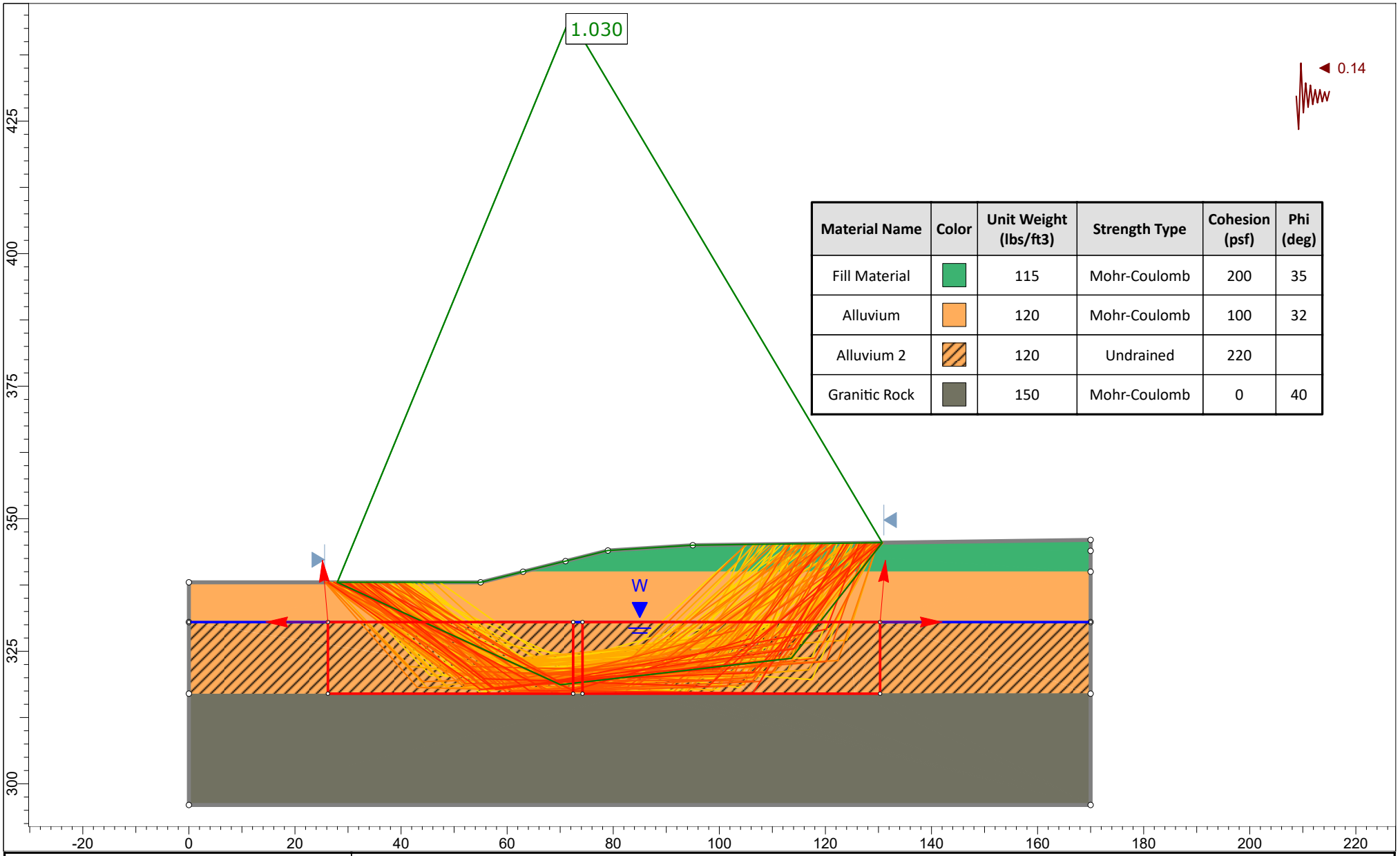


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Fill Material		115	Mohr-Coulomb	200	35
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Alluvium 2		120	Undrained	220	
Granitic Rock		150	Mohr-Coulomb	0	40

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SLIDEINTERPRET 8.010

Project	IR786 Santee Community Center				
Analysis Description	Seismic				
Drawn By	GV	Scale	1:300	Company	Group Delta
Date	3/18/22			File Name	Existing.slmd



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Fill Material		115	Mohr-Coulomb	200	35
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SLIDEINTERPRET 8.010

Project	IR786 Santee Community Center				
Analysis Description	Ky Run				
Drawn By	GV	Scale	1:300	Company	Group Delta
Date	3/18/22			File Name	Existing.slmd

GROUP DELTA

HMC Architects
8910 University Center Lane, #650
San Diego, California, 92122

January 11, 2024
Group Delta Project No. IR753

Attention: **HMC Architects**
8910 University Center Lane, #650
San Diego, CA 92122

June 15, 2022
Group Delta Project No. IR786

Attention: Kyle Peterson, AIA, LEED AP, DBIA
Managing Manager

Subject: Review of Foundation Plans, Grading Plans and Specifications
Santee Community Center
Santee, California

Dear Mr. Segesman,

We have reviewed the foundation plans, grading plans and specification for the Santee Community Center project located at 10129 Riverwalk Drive, Santee, California. The 100% Construction Document plans dated August 28, 2023 and Specifications dated August 25, 2023 were prepared by HMC Architects and contained the reviewed items. The plans and specifications have been prepared in accordance with the geotechnical recommendations presented in Group Delta Consultants, Inc. report entitled "Geotechnical Investigation Report, Santee Community Center, Santee, California," dated June 15, 2022. The ground improvement plans specified on the plans are to be prepared by others and should be reviewed by Group Delta or the City's Geotechnical consultant prior to construction for concurrence with our recommendations.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, express or implied, is made as to the professional advice included in this letter.

Please let us know if you have any questions or require any additional information.

Sincerely,
Group Delta Consultants, Inc.



Michael J. Givens, PhD, PE, GE, PG
Associate Geotechnical Engineer

Appendix E
Hazardous Materials Assessment

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

MEMORANDUM

To:	Caitlin Munson, Dudek
From:	Audrey Herschberger, Stephanie Chao, Dudek
Subject:	Hazardous Materials Assessment for Santee Community Center
Date:	April 17, 2025
Attachments:	A – Figure 1, Project Location
	B - Historic Aerial Photographs

This hazardous materials assessment was conducted for the proposed Santee Community Center Project (project), which proposes development in the downtown area of the City of Santee, in the southwestern portion of San Diego County. The proposed project site is 5.20 acres of a current parking lot, grass field, and paved walking paths located north and east of and adjacent to a city-owned YMCA facility, located at 10123 Riverwalk Drive (Attachment A, Site Map). The project site is situated directly south of Riverwalk Drive, 0.03 miles west of Park Center Drive, and adjoining a channelized tributary to the north and west. The project site can be accessed from Riverwalk Drive to the north.

The proposed project would involve the construction of the Santee Community Center building, which would be two stories and include event space, office space, and support spaces and would total 12,500 gross square feet. Proposed project activities would include partial removal of existing parking, site preparation, grading/land improvement, paving, and construction of the proposed Community Center.

The purpose of this hazardous materials assessment is to determine if there are any potential environmental concerns on the project site related to hazardous materials and/or waste. This hazardous materials assessment consists of a review and summary of regulatory agency records, historical aerial photographs, and potential site hazards due to hazardous material pipelines and/or oil and gas wells.

1 Physical Setting

The project site is located in the downtown area of the City of Santee. The average elevation of the project site ranges approximately between 340 to 355 feet above mean sea level (Google Earth 2023). Surrounding land uses include residential, commercial, and recreational. The project site is bounded by Riverwalk Drive to the north, a YMCA to the southwest, a sports complex to the west, and a channelized tributary adjacent to the south and east (Attachment A). The San Diego River, which flows northeast–southwest, is located approximately 0.21 miles south of the project site.

Dudek consulted the online California Water Board Groundwater Information System for information about public supply wells in the project site area (SWRCB 2025a). No wells were identified on the project site. The nearest water

supply well was identified approximately 0.32 miles southeast of the project site. No depth to water was identified for nearby wells through the GAMA system. Dudek consulted GeoTracker for groundwater depth information through nearby groundwater monitoring and cleanup sites (SWRCB 2025b). The nearest groundwater data were identified approximately 0.28 miles northeast of the project site, within a monitoring well network consisting of 23 wells (Circle K#2955, GeoTracker Site ID T0607302618). The well nearest the project site had a depth to groundwater that ranged from 5.91 feet below top of casing when it was first measured in December 2010 to 11.40 feet below top of casing when it was measured most recently in October 2016.

Dudek conducted a search for oil and gas wells within 1 mile of the project site (CalGEM 2025). No oil and gas wells were identified within 1 mile of the project site.

Dudek reviewed the National Pipeline Mapping System online database (USDOT 2025). The National Pipeline Mapping System map did not identify any gas transmission or hazardous liquid pipelines, liquefied natural gas plants, breakout tanks, accidents, or incidents on or within 1 mile of the project site.

2 Online Regulatory Databases

2.1 Cortese List Sites

Government Code Section 65962.5 requires the California Environmental Protection Agency to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of Hazardous Waste and Substances sites from Department of Toxic Substances Control Envirostor database (California Health and Safety Codes 25220, 25242, 25356, and 116395);
2. List of LUST Sites by County and Fiscal Year from the State Water Resources Control Board GeoTracker database (California Health and Safety Code 25295);
3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (California Water Code Section 13273[e] and 14 CCR Section 18051);
4. List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (California Water Code Sections 13301 and 13304); and
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the California Health and Safety Code, identified by the Department of Toxic Substances Control.

Dudek conducted a search of the above-described databases that provide information on Cortese List sites. The project site was not identified on these Cortese List databases. While multiple sites were identified with 1 mile of the project site, based on the environmental conditions, distance from the project site, and regulatory status of each of the Cortese List sites, it was determined that there were no sites that may have potentially impacted the environmental conditions of the project site.

2.2 Non-Cortese List Hazardous Materials Sites

Dudek also reviewed other online databases that provide environmental information on release and cleanup cases in the State of California. While these databases are not included in the Cortese List, they may provide additional information regarding potential environmental contamination on the project site. Table 1 provides a summary of the databases searched.

Table 1. Online Database Listings

Database	Details
California Environmental Protection Agency (CalEPA) https://siteportal.calepa.ca.gov/nsite/	The CalEPA Regulated Site Portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. Data sources include California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxics Release Inventory (TRI) (CalEPA 2025).
Department of Toxic Substance Control (DTSC) EnviroStor https://www.envirostor.dtsc.ca.gov/	The DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons for further investigation (DTSC 2025).
Regional Water Quality Control Board (RWQCB) GeoTracker http://geotracker.waterboards.ca.gov/	The California RWQCB's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, various unregulated projects, and permitted facilities. Sites include Leaking Underground Storage Tanks, Department of Defense, Cleanup Program, Irrigated Lands, Oil and Gas Production, Permitted Underground Storage Tanks, and Land Disposal Sites (SWRCB 2025b).
San Diego County Department of Environmental Health and Quality https://publicservices.sandiegocounty.gov/CitizenAccess/Default.aspx	The San Diego County Department of Environmental Health and Quality online database for public records includes permit records, reports and correspondence, underground storage tank compliance information, complaints, industrial compliance inspection files, and food facility and public swimming pool inspection reports.

The project site was identified in the San Diego DEHQ database (DEHQ 2025) and CalEPA Regulated Site Portal (CalEPA 2025). Various permit records were identified for the adjoining property located at 10123 Riverwalk Drive, the Cameron Family YMCA (also recorded as YMCA of San Diego), dating from December 2002 to April 2023. The permits and records were in relation to facility remodeling, pool installation, and resurfacing and modifications of the facility's pools. Two temporary food vendor permits were also identified for 10123 Riverwalk Drive, issued in March 2023. No records were identified that would indicate a potential impact of hazardous waste or materials to the project site. An inspection report from December 2022 notes use and disposal of pool chemicals (County of San Diego 2022). Pool chemicals are also recorded in the CalEPA Regulated Site Portal, including sodium hypochlorite, sodium bicarbonate, and hydrochloric acid. Four violations are noted by CalEPA between 2014 and 2017. The nature

of the violations is not noted; however, subsequent inspections completed between 2017 and 2022 were completed without violations. There are no comments regarding releases or mishandling of hazardous materials.

Three geotechnical borings were reported on the project site, which were completed at the southeastern corner of the site. Water was identified approximately 16 feet below ground surface (Group Delta 2022). Soil samples from each boring were analyzed for metals, volatile organic compounds, and petroleum hydrocarbons. No contaminants of concern were identified above normal background concentrations.

Multiple sites within 0.50 miles of the project site were identified as permitted handlers or emitters of hazardous materials. These listings are administrative, and do not indicate an unregulated or reportable release of hazardous materials to the environment. Multiple sites were also identified as contaminated sites (release sites). All of these sites have received regulatory closure, indicating the releases have been cleaned up or remediated to the satisfaction of the regulatory agency. Some of these closed sites, despite cleanup efforts, have remaining environmental contamination and received a low-risk regulatory closure or have institutional controls placed on the property. However, based on site characterization, regulatory status of each site, distance from the project site, and current land use designations, none of the identified sites are considered likely to have impacted the environmental conditions of the project site.

3 Historical Aerial Photographs

Dudek reviewed historical aerial photographs obtained from Historic Aerials by NETR Online for 1953, 1966, 1978, 1985, 1996, 2005, 2014, 2020, and 2022 (Attachment B; NETR 2025). The most recent Google Earth image dated December 2022 (Google Earth 2022) was also reviewed. The photographs provided background information to assess the possibility of past activities that could present environmental concerns for the project site. The aerial photographs are described in Table 2.

Table 2. Aerial Photographs

Date	Description
1953	The project site is vacant with an unimproved road that runs to the south and east of the project site. The surface area of the project site appears to have been mowed for potential agricultural use. The areas directly adjoining the project site appear similar to the project site while the surrounding areas of the project site appear to be vacant and undeveloped.
1966	The project site appears to have less definitive mowing or cultivation lines observed and appears similar to unused vacant land. Apparent commercial and residential structures are observed in the surrounding area, approximately 0.25 miles north, northeast, west, and southeast of the project site.
1978	The project site appears similar to the 1966 aerial photograph. Increased development has occurred in the surrounding areas.
1985	The project site appears similar to the 1978 aerial photograph. A small structure is observed just south of the project site. Further development has occurred in the surrounding areas.
1996	The project site appears similar to the 1985 aerial photograph. The small structure previously observed south of the project site in the 1985 aerial photograph is no longer present. The area adjoining to the southwest of the project site appears to be undergoing development where previous vegetation has been cleared. Increased development is observed in the surrounding areas north and southeast of the project site.

Table 2. Aerial Photographs

Date	Description
2003	The eastern portion of the subject property appears undeveloped and covered with grass. The western portion of the subject property and southwestern adjoining property are under development and formerly vegetated areas have been graded and excavated. Construction equipment and vehicles appear to be staged on the project site. The surrounding areas appear similar to the 1996 aerial photograph, with increased development to the southeast.
2005	Further development has occurred on the western portion of the project site and in the area adjoining to the southwest. There is now an apparent recreational facility to the southwest with at least one large, roofed structure with multiple outdoor pools. The western portion of the project site appears to be an associated parking lot and lawn. Increased development has occurred in the surrounding area to the southeast of the project site. The rest of the surrounding areas appear similar to the 1996 aerial photograph.
2009	The project site now appears to be entirely developed as a parking lot for the southwestern adjoining recreational facility. More area appears to be under construction farther to the west. Increased vegetation adjoining to the east and south around a channelized tributary is observed. A road has been constructed to the north (Riverwalk Drive) leading to the recreational facility, and another development to the northeast (nursing facility) is observed. Increased residential development is observed north of the project site with increased recreational development observed west and south of the project site.
2014	The western portion of the project site is now a grass field, while the eastern portion remains a parking lot. The recreational facility adjoining to the west is complete with baseball diamonds and additional buildings. Increased residential development is observed north of the project site with increased recreational development observed west and south of the project site.
2020, 2022	The project site, adjoining properties, and surrounding areas appear similar to the 2014 aerial photograph.

Source: Attachment B

4 Fire Insurance Maps

A search for historical Sanborn fire insurance maps was conducted using the Library of Congress Geography and Map Reading Room's online search database (LOC 2025). Sanborn maps provide information regarding the historical uses of the project site and surrounding properties. Sanborn maps typically exist for cities with populations of 2,000 or more; the coverage is dependent on the location of the project site within the city limits. Sanborn maps were not available within the vicinity of the project site.

5 Summary and Conclusions

The project site, 5.20 acres, is located in the City of Santee, in the southwestern portion of San Diego County. The project site is of even topography (340 to 355 feet amsl) in a space currently used as a parking lot and green space. The project site is bounded by commercial development (consisting of a YMCA) to the southwest, Riverwalk Drive to the north, a sports complex to the west, and a channelized tributary to the south and east. The proposed project involves development of a 12,500 square foot Community Center inclusive of dedicated facilities for teens

and seniors, lobby space, multipurpose rooms, administrative offices and storage, parking, infrastructure improvements to support the new facilities, and landscaped common areas.

The project site was vacant and predominantly unused until its use as a parking lot began between 2005 and 2009. Development of the YMCA to the southwest of the project site, which included development of the western portion of the project site, began in approximately 2003. Development of residential, commercial, and recreational properties in the surrounding areas began in the 1970s; adjoining properties to the east, south, and north were developed between 2005 and 2014. Three geotechnical borings were completed on the project site in 2022. Water was identified approximately 16 feet below ground surface.

The project site was not listed on the Cortese List databases. Review of other regulatory databases revealed release and cleanup cases, including Cortese List sites, within 0.5 miles of the project site. Based on a review of the available information, there are no cases that could have potentially impacted the project site.

7 Potential Impacts

Based on the information reviewed for this hazardous materials assessment, Dudek did not identify any potential impacts to the project site.

8 References

CalEPA (California Environmental Protection Agency). 2025. CalEPA Regulated Site Portal. Accessed April 9, 2025. https://siteportal.calepa.ca.gov/nsite/.

CalGEM (California Geologic Energy Management). 2025. California Geologic Energy Management Division, online Well Finder database. Accessed April 9, 2025. https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx.

County of San Diego. 2022. UPFP Inspection Checklist, YMCA of San Diego County/Cameron Facility. December 13, 2022.

DEHQ (San Diego County Department of Environmental Health and Quality). 2025. Citizen Access. DEHQ Search Applications. Accessed April 9, 2025. https://publicservices.sandiegocounty.gov/CitizenAccess/Default.aspx.

DTSC (Department of Toxic Substances Control). 2025. California Department of Toxic Substances Control online database. Accessed April 9, 2025. https://www.envirostor.dtsc.ca.gov/public/.

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Google Earth. 2022. Google Earth Imagery Date December 1, 2022.

LOC (Library of Congress, Geography & Map Reading Room). 2025. Sanborn Fire Insurance Maps Online Checklist. Accessed April 9, 2025. https://www.loc.gov/rr/geogmap/sanborn/.

NETR. 2025. Historic Aerials. Accessed on April 9, 2025. https://www.historicaerials.com/.

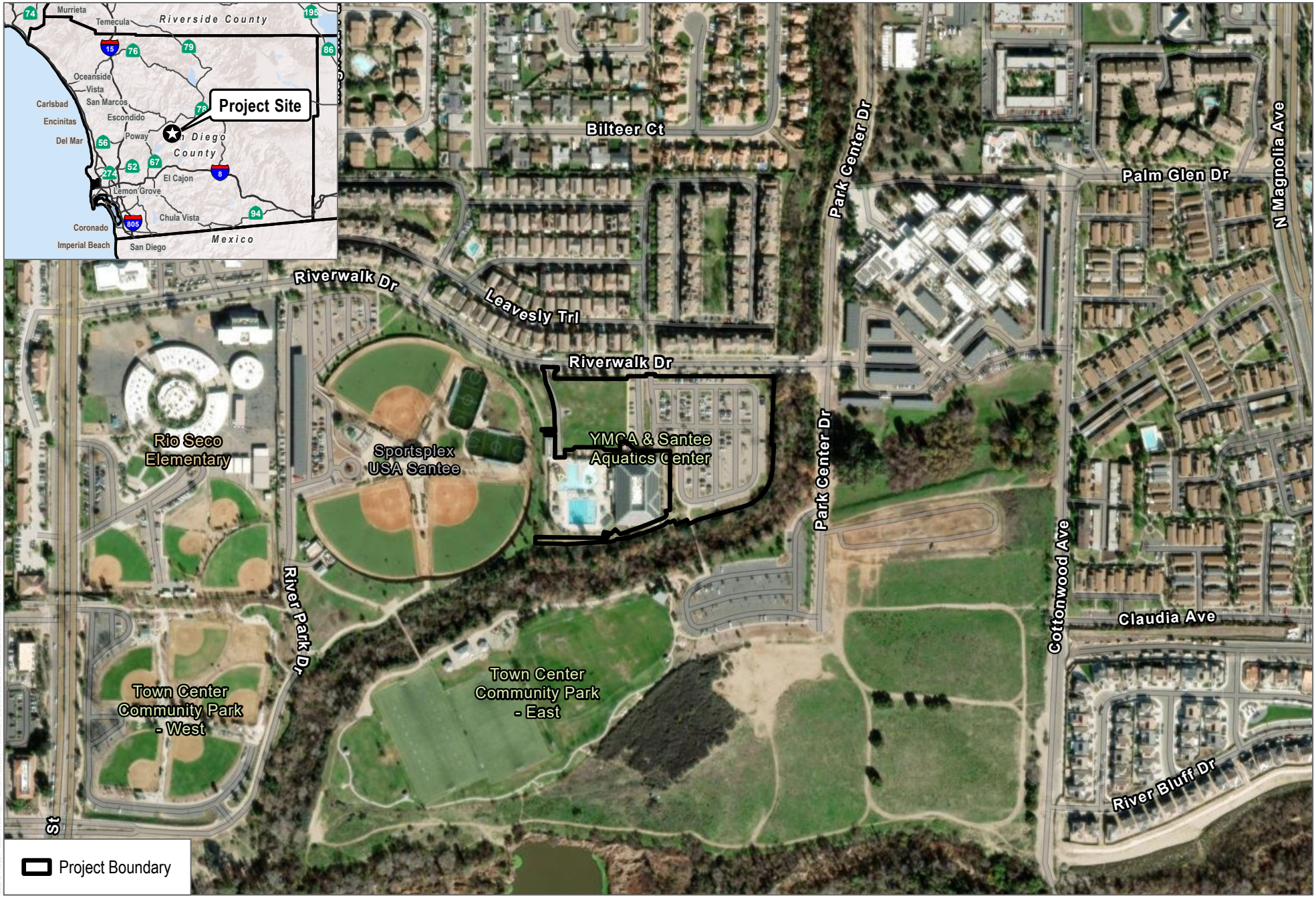
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SWRCB. 2025a. California Water Boards, Groundwater Information System. Accessed April 9, 2025. https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/.

SWRCB. 2025b. California Water Quality Control Board online database. Accessed April 9, 2025. https://geotracker.waterboards.ca.gov.

Attachment A

Figure 1, Project Location



SOURCE: Maxar 2022

El Cajon Quadrangle - Township 15S Range 1W Section 22

DUDEK

0 200 400 Feet

FIGURE 1

Project Location

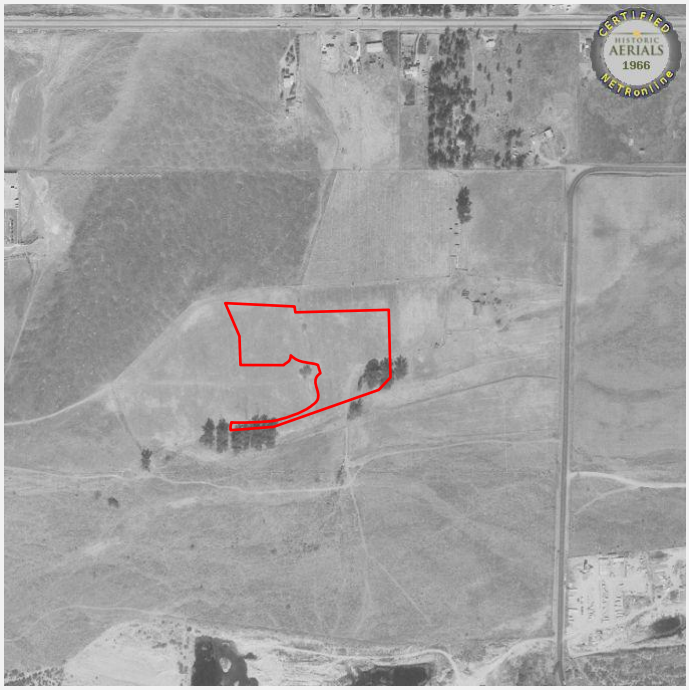
Santee Community Center Initial Study/Mitigated Negative Declaration

Attachment B

Historical Aerial Photographs



Aerial 1. Aerial photograph of the project site from 1953.



Aerial 2. Aerial photograph of the project site from 1966.



Aerial 3. Aerial photograph of the project site from 1978.



Aerial 4. Aerial photograph of the project site from 1985.



Aerial 5. Aerial photograph of the project site from 1996.



Aerial 6. Aerial photograph of the project site from 2003.



Aerial 7. Aerial photograph of the project site from 2005.



Aerial 8. Aerial photograph of the project site from 2009.



Aerial 9. Aerial photograph of the project site from 2014.



Aerial 10. Aerial photograph of the project site from 2020.

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Appendix F
Hydrology Technical Memorandum

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

MEMORANDUM

To:	Kyle Peterson, HMC Architects
From:	Eric Schniewind, Dudek
Subject:	Hydrology Technical Memorandum for Santee Community Center Project
Date:	April 17, 2025
Attachments:	A – Drainage Study for Santee Community Center, Psomas, February, 2025
	B – Storm Water Quality Management Plan (SWQMP), Psomas, February, 2025

This memorandum describes the existing hydrology and water quality setting and regulatory requirements related to stormwater runoff that would apply to development associated with the proposed Santee Community Center (Project or proposed Project) in the City of Santee, California. The Project site is located at the southwest corner of Riverwalk Drive and Park Center Drive adjacent to an existing City-owned YMCA facility at 10123 Riverwalk Drive. The proposed facility would include a 12,500-square-foot structure and a new parking lot to be located north of the existing YMCA facility. The following provides information and resources that can be used in support of the environmental review pursuant to the California Environmental Quality Act.

1 Environmental Setting

1.1 Regional Hydrology

1.1.1 Los Coches Creek – San Diego River Watershed

The Project site is located within the San Diego River watershed, which is approximately 45 miles long and extends from the mountains in the Cleveland National Forest to the Pacific Ocean (SWRCB 2024). The river flows through unincorporated areas of San Diego (including the community of Lakeside), the City of Santee, and the City of San Diego. The Los Coches Creek is a tributary to San Diego River and drains a mostly urbanized watershed until it joins the San Diego River in the lower portion of the river. The lower 20 miles of the San Diego River has been adversely affected by various human activities including various mining projects, abandoned mining pits, mining waste, urban runoff pollutants, and also encroachment of invasive, non-native plant species, which has degraded water quality, beneficial uses, and habitats. As a result, the lower 20 miles of the San Diego River is on the U.S. Environmental Protection Agency (EPA) Impaired Waters 303(d) list for bifenthrin (an insecticide), chlordane (pesticide), chloride, color, cyfluthrin (insecticide), cypermethrin (insecticide), bacteria, nitrogen, dissolved oxygen, permethrin, phosphorus, total dissolved solids, and turbidity (RWQCB 2024). Los Coches Creek is also on the 303(d) list for bacteria, nitrogen, phosphorus, and selenium (RWQCB 2024).

1.1.2 San Diego River Valley Groundwater Basin

The Project site is located within the San Diego River Valley Groundwater Basin (Basin No. 9-15), which includes the smaller subbasin known as the Santee Basin (Carollo Engineers 2021). The Santee Basin is designated by the Department of Water Resources, in accordance with the Sustainable Groundwater Management Act (SGMA), to be a very low priority basin (DWR 2024). The basin is unadjudicated and not critically overdrafted. The Pueblo water rights are the key water rights doctrine that governs allocation of surface water and groundwater of the San Diego River (Carollo Engineers 2021). As a result, this basin is not subject to the requirements of developing a groundwater sustainability plan because of the low priority designation.

Water supply for the City of Santee is provided by Padre Dam Municipal Water District that only pumps a small amount of groundwater from the basin to supplement the recycled water system (Carollo Engineers 2021). During the period of 2016 to 2020, the volume of water pumped from the basin has ranged from 0 to 198 acre-feet per year. Instead, water supply is primarily imported from the San Diego County Water Authority (SDCWA). This potable water supply is imported from the California State Water Project (North Bay, South Bay, and California Aqueducts) and the Colorado River (Los Angeles and Colorado River Aqueducts) by the Metropolitan Water District of Southern California (Metropolitan). The water supply is treated at Metropolitan's Skinner Treatment Plant near Temecula, California, and then released into SDCWA's system.

1.2 Existing Project Site Stormwater Drainage

The portion of the Project site where the community center is proposed currently consists of a parking lot and landscaped areas along the southern portion of the site (Attachment A). Stormwater runoff currently occurs as sheet flow toward the south of the parking lot where it is conveyed via two existing earthen swales and discharged into Woodglen Vista Creek, a tributary to San Diego River. The portion of the site that would be developed into a parking lot is currently covered in grass where stormwater drains to three existing grate inlets that convey runoff via a storm drainpipe to the west and into Woodglen Vista Creek (Attachment A).

1.3 Proposed Project Site Stormwater Drainage

As proposed, the new community center would be located on a portion of the existing parking lot with the remaining portion redesigned and a separate new parking lot located north of the existing YMCA. Stormwater would be managed through a series of catch basins, roof drainages, and a total of 8 biofiltration basins (5 basins located to the south and east of the proposed building and 3 basins located on the west and south edge of the proposed parking lot). The catch basins and roof drainages would convey runoff to the biofiltration basins. Off-site flows from the northern portion of the existing parking lot would be intercepted by a new cross gutter at the north end of the site and conveyed to the existing earthen swale, bypassing the treatment basins, and ultimately discharging into Woodglen Vista Creek similar to existing conditions (Attachment A). The runoff from the new parking lot would be conveyed via surface flow to the three biofiltration basins located in the landscaped areas of the parking lot, and then conveyed to Woodglen Creek.

The total amount of impervious surfaces after development would increase from the current condition of 45.7% impervious surfaces (71% impervious in the community center location and 16% impervious in the proposed parking lot location) to approximately 77% impervious (78% for the community center location and 76% at the parking lot) (Attachment A). As a result, the calculated 100-year, 6-hour peak storm flow would increase from

22.4 cubic feet per second to 26.2 cubic feet per second in the proposed condition (Attachment A). The design of the proposed stormwater drainage control features are in accordance with the San Diego County Hydraulic Design Manual and the San Diego County Project Clean Water's Stormwater Technical Guide.

1.4 Flood Zones

The Project site is not located in a 100-year floodplain, although the southwestern corner of the site does abut against a flood hazard zone (FEMA 2024).

1.5 Water Supply

As previously noted, water supply for the City of Santee is provided by Padre Dam Municipal Water District that sources the majority of its water from SDCWA. SDCWA obtains its water from three sources: imported California State Water Project water, Colorado River water, and desalinated water from the Carlsbad Desalination Plant. The Padre Dam Municipal Water District's water supplies also include recycled water and a very small amount of groundwater used to supplement the recycled water system (Carollo Engineers 2021).

The current water usage on site is unknown but limited to possible irrigation demands and assumed to be relatively low. According to the 2020 Urban Water Management Plan (UWMP), the Padre Dam Municipal Water District can meet projected water demands out to 2045 under normal, single dry year, and multiple (5) year scenarios (Carollo Engineers 2021).

2 Regulatory Setting

2.1 Federal

2.1.1 Clean Water Act

Increasing public awareness and concern for controlling water pollution led to the enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA) (33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives)

The Los Angeles Regional Water Quality Control Board (RWQCB) is responsible for the protection of the beneficial uses of waters within the proposed Project area. RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan for the Los Angeles Region has identified

existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A total maximum daily load defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. RWQCB has developed total maximum daily loads for select reaches of water bodies.

Section 401 of the Clean Water Act (Water Quality Certification)

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a U.S. Army Corps of Engineers Section 404 permit) obtain certification from the state, requiring that discharge to waters of the United States would comply with provisions of the CWA and with state water quality standards. For example, an applicant for a permit under Section 404 of the CWA must also obtain water quality certification per Section 401 of the CWA. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers prior to discharging dredged or fill material into waters of the United States unless such a discharge is exempt from CWA Section 404. For the Project area, the Los Angeles RWQCB provides the water quality certification required under Section 401 of the CWA.

Section 402 of the Clean Water Act

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC 1342). In California, EPA has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES program to address stormwater discharges from construction sites that disturb land equal to or greater than 1 acre and less than 5 acres (small construction activity). The regulations also require that stormwater discharges from small Municipal Separate Storm Sewer Systems (MS4s) be regulated by a NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ (i.e., the General Construction Permit). Post-construction stormwater controls to satisfy requirements of the NPDES program are permitted under the Phase II Small MS4 Permit (Order No. 2013-001 DWQ effective July 1, 2013).

To obtain coverage under the Construction General Permit, a project applicant must provide a Notice of Intent, a stormwater pollution prevention plan (SWPPP), and other documents required by Attachment B of the Construction General Permit. The SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of best management practices (BMPs), and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. On September 2, 2009, SWRCB issued a new NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002 - as amended by 2010-0014-DWQ and 2012-0006-DWQ) that became effective July 1, 2010.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or fill material into waters of the United States, which include wetlands adjacent to national waters (33 USC 1344). This permitting program is administered by the U.S. Army Corps of Engineers and enforced by EPA.

2.1.2 National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. The Federal Emergency Management Agency (FEMA) is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

2.1.3 Federal Antidegradation Policy

The Federal Antidegradation Policy (40 CFR 131.12) requires states to develop statewide antidegradation policies and identify methods for implementing them. Pursuant to the Code of Federal Regulations (CFR), state antidegradation policies and implementation methods shall, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

2.2 State

2.2.1 Senate Bill 610 and Senate Bill 221: Water Supply Assessments and Water Supply Verifications

Senate Bill (SB) 610 and SB 221, effective January 1, 2002, improve the linkage between certain land use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative record. Under Water Code Section 10912(a), projects subject to the California Environmental Quality Act requiring a water supply assessment include residential development of more than 500 dwelling units; shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space; commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space; hotels, motels, or both having more than 500 rooms; industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area; mixed-use projects that include one or more of the projects specified; or a project that would demand an amount of water equivalent to or greater than the amount required by a 500-dwelling-unit project. A fundamental source document for compliance with SB 610 is the UWMP, which can be

used by the water supplier to meet the standard for SB 610. The proposed Project does not meet the requirements for a water supply assessment to be prepared.

2.2.2 California Water Code Section 10610 et seq., Urban Water Management Planning Act

California urban water providers are required by state law to develop an UWMP to ensure sufficient water supplies are available to meet the long-term needs of their customers during normal, dry, or multiple-dry years. The Urban Water Management Planning Act requires urban water suppliers, which provide water for municipal purposes to more than 3,000 customers or supply more than 3,000 acre-feet of water annually, to develop an UWMP every 5 years, in the years ending in 0 and 5.

In the act, the California Legislature declared that the waters of the state are a limited and renewable resource subject to ever-increasing demands; that the conservation and efficient use of urban water supplies are of a statewide concern; that successful implementation of plans is best accomplished at the local level; that conservation and efficient use of water shall be actively pursued to protect both the people of the state and their water resources; that conservation and efficient use of urban water supplies shall be a guiding criterion in public decisions; and that urban water suppliers shall be required to develop water management plans to achieve conservation and efficient use.

The Padre Dam Municipal Water District's 2020 UWMP has been prepared in compliance with these requirements of the act, as well as the additional reporting requirements of the Water Conservation Act of 2009. The UWMP is intended to serve as a general, flexible, and open-ended document that periodically can be updated to reflect changes in regional water supply trends, conservation policies, and water use efficiency policies.

2.2.3 Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as the Sustainable Groundwater Management Act (SGMA), which requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically overdrafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably and requires Groundwater Sustainability Plans for crucial (i.e., medium to high priority) groundwater basins in California. The San Diego River Valley Groundwater Basin (which includes the Santee Basin) is not subject to SGMA requirements.

2.2.4 California Porter-Cologne Water Quality Control Act

Since 1973, the California SWRCB and its nine RWQCBs have been delegated the responsibility for administering permitted discharge into the waters of California. The Project site falls within the jurisdiction of the San Diego RWCQB. The Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.; California Code of Regulations, Title 23, Division 3, Chapter 15) provides a comprehensive water-quality management system for the protection of California waters. Under the act, "any person discharging waste, or proposing to discharge waste,

within any region that could affect the quality of the waters of the state" must file a report of the discharge with the appropriate RWQCB. Pursuant to the act, the RWQCB may then prescribe "waste discharge requirements" that add conditions related to control of the discharge. The Porter-Cologne Water Quality Control Act defines "waste" broadly, and the term has been applied to a diverse array of materials, including nonpoint source pollution. When regulating discharges that are included in the federal SWA, the state essentially treats waste discharge requirements and NPDES as a single permitting vehicle. In April 1991, SWRCB and other state environmental agencies were incorporated into the California Environmental Protection Agency.

RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and nonpoint (e.g., stormwater runoff) sources. RWQCB implements the NPDES program by issuing construction and industrial discharge permits.

Under the NPDES permit regulations, BMPs are required as part of a SWPPP. EPA defines BMPs as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the United States." BMPs include "treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage" (40 CFR 122.2).

2.2.5 CALGreen

The California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations, also known as CALGreen, is designed to improve public health, safety, and general welfare by using design and construction methods that reduce the negative environmental impact of development and to encourage sustainable construction practices. CALGreen provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including, but not limited to, site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and local agencies to aim for a higher standard of development.

2.2.6 California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, while a Water Conservation District (Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the California Legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

2.2.7 Assembly Bill 3030 – Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to "fix and collect

fees and assessments for groundwater management" (Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (Water Code Section 10754.3).

2.3 Regional

2.3.1 San Diego Regional Water Quality Control Board

As previously detailed, the Project site is located within the jurisdiction of the San Diego RWQCB. The San Diego RWQCB authorizes NPDES permits that ensure compliance with wastewater treatment and discharge requirements. The San Diego RWQCB enforces wastewater treatment and discharge requirements for properties near and surrounding the Project site.

2.3.2 Municipal Separate Storm Sewer System Permit

The County of San Diego (County) and its copermittee cities, including the City of Santee, have a joint Municipal Separate Storm Sewer System NPDES permit (MS4 Permit) (Permit Order No. R9-2013-0001, NPDES Permit No. CAS0109266) that was amended by Order Nos. R9-2015-0001 (adopted February 11, 2015) and R9-2015-0100 (adopted November 18, 2015. The MS4 Permit is intended to implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The permittees listed under the joint permit have the authority to develop, administer, implement, and enforce stormwater management programs within their own jurisdiction.

Urban stormwater runoff is defined in the MS4 Permit as including stormwater and dry weather flows from a drainage area that reaches a receiving water body or subsurface. The permit regulates the discharge of all wet- and dry-weather urban stormwater runoff within the County and the jurisdictions of its copermittees. Pursuant to Provision B of Order No. R9-2013-0001, as amended, the copermittees must develop a water quality improvement plan for each of the watershed management areas in the San Diego Region. The water quality improvement plans guide the copermittees' jurisdictional runoff management programs toward achieving improved water quality in MS4 discharges and receiving waters.

2.3.3 County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance (Effective February 26, 2016)

In order to protect water resources and to improve water quality, the County developed a Watershed Protection Program that would provide controls on the stormwater conveyance system and protect receiving waters. Other purposes of the program are to enable the use of management practices by the County and its citizens that will reduce the adverse effects of non-stormwater and polluted stormwater discharges to the stormwater conveyance system and receiving waters; to secure benefits from the use of stormwater as a resource; and to ensure the County is compliant with applicable state and federal law and California RWQCB Order No. R9-2013-0001, NPDES No. CAS0109266 as amended by Order Nos. R9-2015-0001 and R9-2015-0100. The County prepared the 2020 BMP Design Manual, which provides guidance for land development and public improvement projects to comply with the 2013 MS4 Permit (Order No. R9-2013-0001 as amended by Order Nos. R9-2015-0001 and R9-2015-0100). The BMP Design Manual provides guidance for the implementation of stormwater quality control measures in new

development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges.

2.4 Local

2.4.1 Santee Municipal Code – Stormwater

Chapter 9.06 of the City of Santee Municipal Code provides the stormwater management and discharge control requirements for new development and redevelopment projects in the City. Projects are required to implement BMPs for both operation and construction activities. Illicit discharges and illicit connections are prohibited as well as spills, dumping, or disposal of any solid or liquid waste including any pollutant as defined in Section 502(6) of the CWA, 33 USC Section 1362(6), or incorporated into California Water Code Section 13373.

3 Impact Analysis

Water Quality Standards and Waste Discharge Requirements

Construction

The proposed Project would involve earthwork activities and soil disturbance over the course of construction that could expose soils to the effects of wind and water erosion and sedimentation and other pollutants associated with construction activity could be released from accidental spills or unauthorized releases. Standard construction management practices, as required through the City and the statewide NPDES Construction General Permit, would minimize construction-related impacts on water quality. The Construction General Permit would require implementation of a SWPPP to address potential construction-related impacts on water quality. The SWPPP must specify the location, type, and maintenance requirements for BMPs necessary to prevent stormwater runoff from carrying construction-related pollutants into the City's municipal storm drain system.

The standard requirements contained in a SWPPP are sufficient to minimize the Project's potential to violate water quality standards or waste discharge requirements during construction. Therefore, construction-related impacts of the Project on water quality would be less than significant.

Operation

Redevelopment of the Project site would involve changes to existing drainage patterns and would result in an increase in impervious surfaces from 45.7% to 77%. As a result, the proposed changes to the site use could become a source of pollution from incidental spills of vehicle oils and other pollutants that can be conveyed by storm and landscape irrigation flows. However, all proposed improvements would be required to adhere to existing drainage control requirements including the MS4 NPDES permit and the City's drainage control requirements (Municipal Code Chapter 9.06). Prior to issuance of a building permit, the Project applicant would be required to submit drainage control plans to the City for review and approval. As part of these requirements, the plans would identify post-construction BMPs that are consistent with Low Impact Development requirements and meet all applicable MS4 and City requirements. The proposed Project would include a total of 8 biofiltration basins and use of the existing earthen swale to manage stormwater runoff. These post-construction BMPs would meet the City's requirements and would be consistent with the County's 2020 BMP Design Manual. Adherence to these drainage

control requirements would be adequate to protect the water quality of stormwater discharged off site. Therefore, compliance with these existing regulatory requirements for drainage control design measures would reduce potential impacts related to water quality standards and waste discharge requirements to a less-than-significant level.

Groundwater Supplies

There are no groundwater extraction wells currently on the Project site and no extraction wells are proposed as part of the Project. The underlying groundwater basin, San Diego River Valley Groundwater Basin, is considered by the Department of Water Resources to be a low priority basin and not subject to the requirements of SGMA.

The proposed Project may require dewatering activities during construction due to reported groundwater levels at 14.5 feet below ground surface during the geotechnical investigation (Group Delta 2022). However, even if considered necessary for completion of construction for foundations or utility corridors, the dewatering would be temporary and likely involve only relatively small quantities of groundwater.

The proposed Project would be served by the Padre Dam Municipal Water District that sources the majority of its water from SDCWA. SDCWA obtains its water from imported surface waters (California State Water Project water and Colorado River water) and desalinated water from the Carlsbad Desalination Plant. Groundwater is only used to supplement the recycled water system (Carollo Engineers 2021). In addition, according to the 2020 UWMP, the Padre Dam Municipal Water District can meet projected water demands out to 2045 under normal, single dry year, and multiple (5) year scenarios (Carollo Engineers 2021).

Therefore, while the Project would increase the water demand at the site, the proposed Project would not contribute to depletion of groundwater or interfere with recharge of a managed groundwater supply source. Impacts would be less than significant.

Flooding and Water Quality

As noted above, the proposed Project would result in an increase in the amount of impervious surfaces at the site that could increase off-site discharges if not managed appropriately. However, in accordance with MS4 Permit requirements and local City drainage control requirements, all runoff from the Project would be required to include post-construction drainage control BMPs that can attenuate peak stormwater flows from the site (Attachment A and Attachment B). The proposed Project would include 8 biofiltration basins to provide both water quality and flow attenuation consistent with the City requirements. Therefore, with adherence to the MS4 Permit and local City drainage control requirements (Municipal Code Chapter 9.06), the proposed changes to drainage patterns would not result in on- or off-site flooding or other adverse effects related to stormwater quantity or quality. There would also be no other sources of polluted runoff that are not already discussed above.

The Project site is not located in a flood hazard zone (FEMA 2024), and is therefore not at threat for impeding or redirecting flood flows.

Overall, the Project would adhere to the existing drainage control regulatory requirements of the NPDES MS4 Permit and City drainage control requirements such that the proposed changes in drainage patterns would have a less-than-significant impact related to erosion/siltation, flooding, capacities of existing infrastructure, or impeding or redirecting flood flows.

4 Conclusion

As described above, the proposed improvements would adhere to existing stormwater drainage control requirements (e.g., NPDES MS4 Permit and City Municipal Code Chapter 9.06) and provide on-site treatment and detention of stormwater flows compared to existing conditions that can reduce impacts to less-than-significant levels. Water supply is primarily sourced from imported water and very little groundwater; however, even so, according to the current UWMP, the proposed water demand for the projected future can be met in normal, single dry year, and multiple dry year scenarios until 2045.

5 References

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DWR (California Department of Water Resources). 2024. "SGMA Groundwater Basin Prioritization Dashboard" [interactive map application]. Accessed January 10, 2024. https://gis.water.ca.gov/app/bp-dashboard/final/.

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Attachment A

Drainage Study for Santee Community Center, Psomas, February 2025

DRAINAGE STUDY

FOR

SANTEE COMMUNITY CENTER

10129 Riverwalk Drive
Santee, CA 92071

February 2025

Prepared for
City of Santee
10601 Magnolia Ave.
Santee, CA 92071
(619) 258-4100

Prepared by
PSOMAS

401 B Street
Suite 1600
San Diego, CA 92101
Psomas Project No. 5HMC010100

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B. Proposed Conditions Drainage Study Map

C. FEMA Floodplain Map

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A. Existing Condition Rational Method Results

B. Proposed Condition Rational Method Results

C. Storm Drain Sizing

1.0 Project Data

Table 1 - Project Data

Project Name/Number	Santee Community Center
Project Location	10129 Riverwalk Drive Santee, CA 92071
Project Type and Description	Santee Community and parking lot
Total Project Site Area (acres)	2.31 acres
Total New Impervious Surface Area	47,063 square feet
Total Replaced Impervious Surface Area	64,220 square feet
Total Pre-Project Impervious Surface Area	64,220 square feet (45.7%)
Total Post-Project Impervious Surface Area	111,283 square feet (77.1%)
Net Impervious Area	47,063 square feet (increase)
Design Storm Frequency and Depth	2.5 inches (100-year, 6-hour) 5.0 inches (100-year, 24-hour)

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2.0 Engineer's Declaration Statement

I, Sarah Curran, as the Engineer of Record, hereby take responsible charge for the information included within this Drainage Report. I declare that this report has been prepared in accordance with the applicable City of Santee standards and regulations.

Sarah Curran, PE RCE #C69620



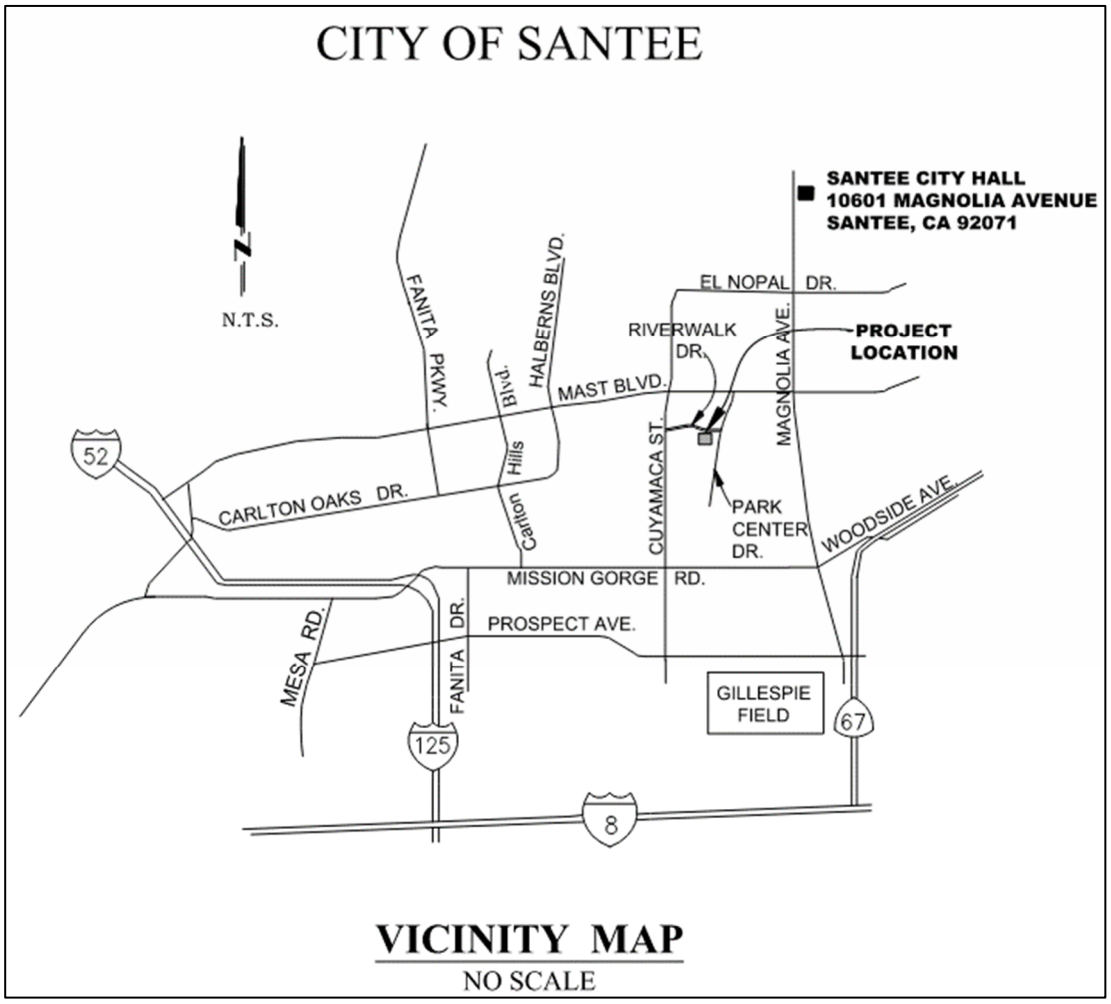
3.0 Setting

3.1 Project Description and Location

This project proposes a new community center to be constructed on City-owned property in the Santee Town Center Community Park adjacent to an existing City-owned YMCA facility located at 10123 Riverwalk Drive. The project will include dedicated facilities for teens and seniors, lobby space, multi-purpose rooms, administrative offices and storage, occupying approximately 12,500 square feet as well as a new parking lot to be located just north of the existing YMCA facility. The project's site improvements will include complimentary drought tolerant landscape architecture, storm water compliance, environmental documentation, realignment of adjacent parking facilities and replacement of displaced parking and accessibility compatibility with adjacent features.

The vicinity map for the project site is illustrated in Figure 1.

Figure 1-Project Vicinity Map



4.0 Hydrologic Method and Criteria

4.1 Existing Conditions and Drainage

The site currently consists of a parking lot and landscape area along the southern portion of the site. Existing drainage is conveyed via surface flow through the project site from the northwest end of the parking lot to the south. Runoff is then conveyed via two existing earthen swales then discharged into Woodglen Vista Creek and ultimately flows to the San Diego River.

The site of the new parking lot currently consists of a grass area that drains to three existing grate inlets that convey the drainage via storm drain pipe to the west then discharges into Woodglen Vista Creek.

4.2 Proposed Site Layout, Grading, and Drainage

The proposed site features one building and two covered outdoor event spaces. The project will also redesign a portion of the existing parking lot and create a new parking lot to replace the displaced parking. The site has drainage inlets in the landscaped areas and area drains in the plazas. There are three biofiltration basins located along the southern edge of the site. Drainage of the site is conveyed via catch basins and roof drainage is piped to the biofiltration basins and will then discharge into Woodglen Vista Creek. From the creek, the water will flow to the San Diego River. Offsite flows from the northern portion of the existing parking lot with be intercepted by a new cross gutter at the north end of the project site and conveyed to the existing earthen swale, bypassing the proposed treatment basins, and ultimately discharging into Woodglen Vista Creek similarly to the pre-development condition.

The drainage for the new parking lot is conveyed via surface flow to three biofiltration basins located in the landscaped areas of the parking lot. This drainage will then discharge into Woodglen Vista Creek and ultimately flow to the San Diego River.

The site has been evaluated for flooding risk using the FEMA Flood Insurance Rate Map (Panel 1651G) provided within the Maps section of this report. The site is within Zone X, which encompasses areas outside of the 0.2% annual chance floodplain. The area south of the site within Woodglen Vista Creek falls within the Zone AE which includes areas that are subject to the 1% annual chance of flood and have base flood elevations determined. For this area directly south of the site, the base flood elevation is determined to be approximately 339 feet. The finish floor of the proposed Community Center building is set at 350.5 feet, which lies above the required 1’ increase above the base flood elevation.

4.3 Rational Method Analysis

The proposed hydrology was modeled using the San Diego County Hydrology Manual Rational Method. The Rational Method formula estimates the peak rate of runoff at any location in a watershed as a function of the drainage area (A), runoff coefficient (C), and rainfall intensity (I) for a duration equal to the time of concentration (Tc), expressed as follows:

Q = C I A

Where:

Q = peak discharge, in cubic feet per second (cfs)

C = runoff coefficient, proportion of the rainfall that runs off the surface (no units)

I = average rainfall intensity for a duration equal to the Tc for the area, in inches per hour (Note: If the computed Tc is less than 5 minutes, use 5 minutes for computing the peak discharge, Q)

A = drainage area contributing to the design location, in acres

In accordance with the manual, calculations consist of both the 100-year return period, 24-hour duration storm and the 100-year, 6-hour duration storm, applying a Type II storm. According to the isopluvial maps the 100-year, 24-hour rainfall depth for Santee, CA is 5.0 inches; and the depth of the 6-hour storm is 2.5 inches. The runoff coefficients were determined based on the soil type of the native soil, and the percent impervious according to equation:

C = 0.90 x (% Impervious) + Cp x (1 - % Impervious)

Where: Cp = Pervious Coefficient Runoff Value for the soil type C = 0.30 in/hr

5.0 Hydrologic Results

The 100-year, 6-hour peak flow rates for the pre-project and post-project conditions based on the Rational Method results are provided in Table 4.1. The project area is approximately 4.02 acres.

Table 4.1 – Summary of Existing and Proposed Peak Discharge Rates

Drainage Basin ID	Existing Condition		Proposed Condition	
	Area (acres)	100-yr, 6-hr Peak Flow Rate (cfs)	Area (acres)	100-yr, 6-hr Peak Flow Rate (cfs)
Basin 1A	3.78	18.4	2.00	10.1
Basin 1B			0.61	3.2
Basin 1C			0.17	0.8
Basin 1D			0.38	1.9
Basin 1E			0.46	2.5
Basin 1F			0.16	0.8
Basin 2A	1.39	4.0	0.40	1.9
Basin 2B			0.28	1.6
Basin 2C			0.71	3.4

The peak run-off calculations provided within Appendix A and B demonstrate that unmitigated run-off rates are increased in the proposed condition, as compared to the existing condition. This is a result of increases in impervious area runoff. The project specific SWQMP includes the hydromodification design of permanent storm water management BMPs that are intended to mitigate for the increase in run-off, consistent with the City of Santee BMP Design Manual.

6.0 Hydraulic Methodology and Criteria

6.1 Criteria

Hydraulic calculations were performed in conformance with the San Diego County Hydraulic Design Manual, dated September 2014 and the City of Santee's Public Works Standards, dated September 1982.

6.2 Storm Drain Design

Pipe sizes were calculated using Manning's equation, with an additional 30% sizing factor to account for losses. The major proposed storm drains will be constructed of reinforced concrete pipe (RCP) and the area drains will be constructed using polyvinyl chloride (PVC). The Manning's roughness coefficient "n" used for the hydraulic calculations for RCP/PVC is 0.013. The Manning's Equation calculation spreadsheet that was used for the pipe sizing is located in Appendix C.

6.3 Energy Dissipater Design

Energy dissipaters (i.e. riprap) at the storm drain outfalls will be specified using the San Diego Regional Standard Drawings ("D" Series) drawing number D-40, which provides rock classifications for design velocities entering riprap outfalls.

7.0 Hydraulic Results

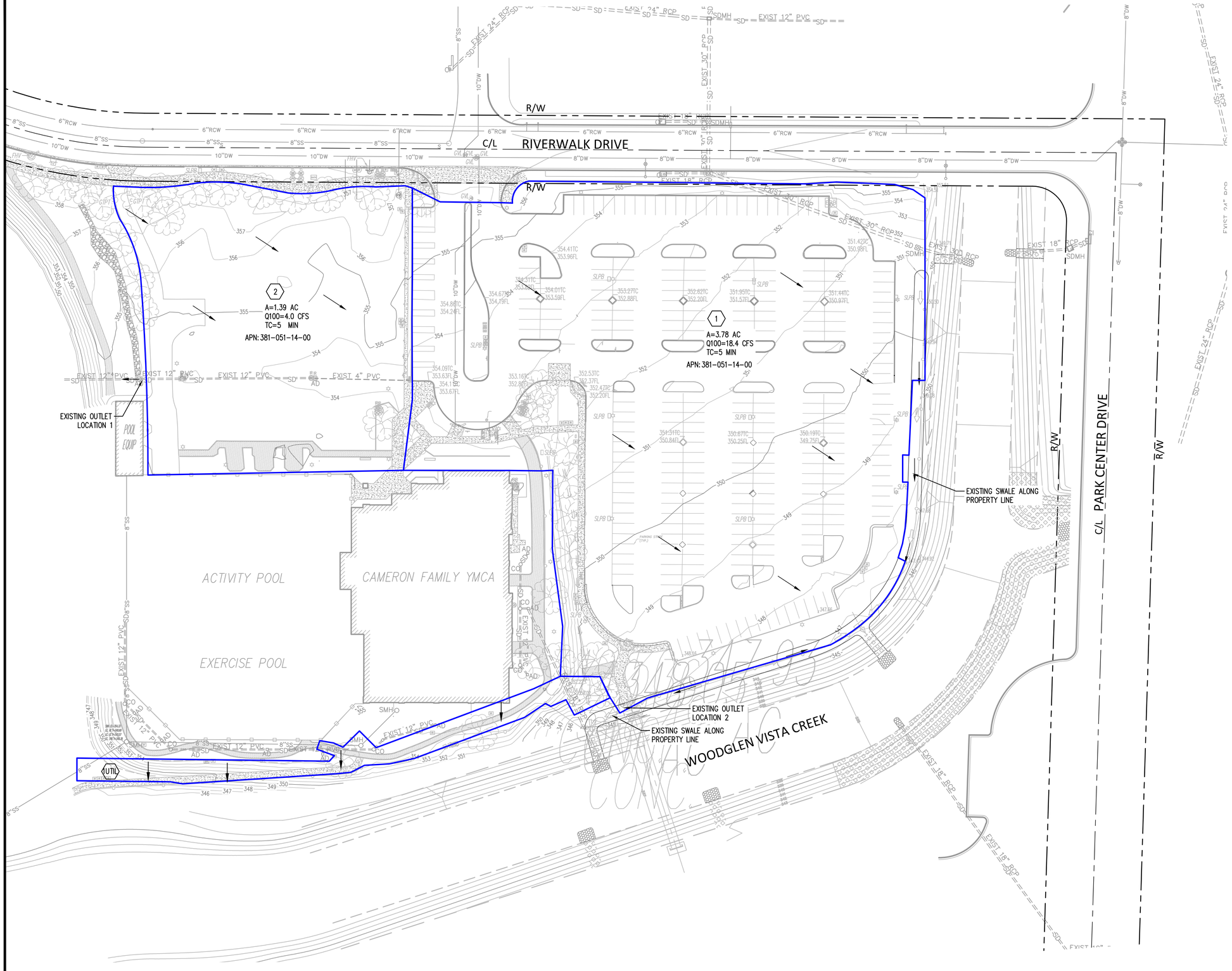
7.1 Storm Drain Results

See storm drain pipe sizing calculations in Appendix C.

8.0 Conclusion

The design of the stormwater control measures, and other stormwater pollution control are in accordance with the current edition of the San Diego County Project Clean Water's Stormwater Technical Guide and the California Stormwater Quality Association (CASQA).

MAPS



LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- SIDEWALK UNDERDRAIN
- CATCH BASIN
- CLEANOUT
- X% — SLOPE ARROW
- 500 — NEW CONTOUR
- x 505.50 — NEW SPOT ELEVATION
- 500 — EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 — EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 — EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 — NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE — RIDGE LINE
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- PUBLIC UTILITIES EASEMENT LINE
- DRAINAGE FLOW ARROW
- DRAINAGE AREA BOUNDARY
- XX — SUBCATCHMENT IDENTIFICATION

A=AREA (ACRES)
Q=6-HOUR, 100-YEAR STORM EVENT (CFS)
TC=TIME OF CONCENTRATION (MIN)

NORTH 1" = 20'

20' 0' 20' 40' 60'

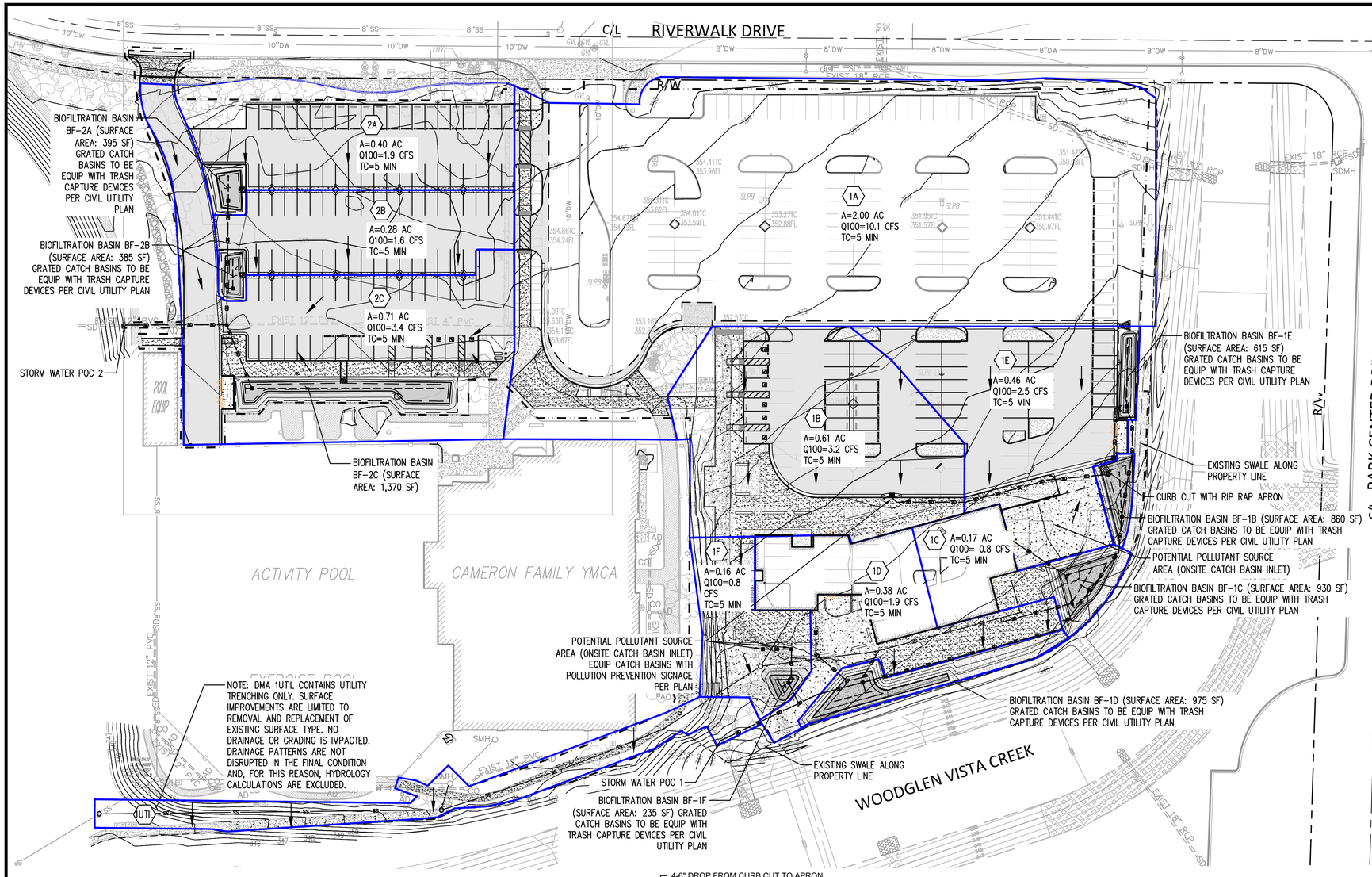
GRAPHIC SCALE
1 INCH = 20 FEET

SANTEE COMMUNITY CENTER

PRE-DEVELOPMENT DRAINAGE CONDITION

FIGURE A1

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961-2800 (619) 961-2392 fax
www.psomas.com



LEGEND

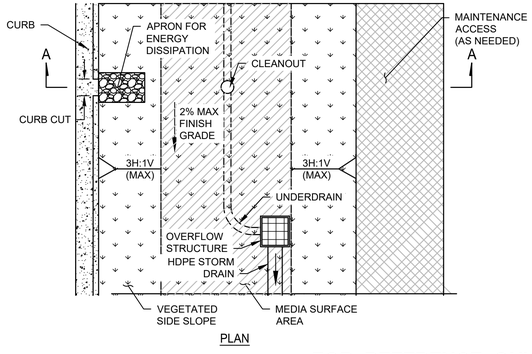
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- x 505.50 NEW SPOT ELEVATION
- 500 EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE RIDGE LINE
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- PUBLIC UTILITIES EASEMENT LINE
- DRAINAGE AREA BOUNDARY
- 1B SUBCATCHMENT IDENTIFICATION

A=AREA (ACRES)
Q=6-HOUR, 100-YEAR STORM EVENT (CFS)
TC=TIME OF CONCENTRATION (MIN)

GENERAL NOTES:

1. HYDRAULIC SOIL GROUP = C
2. APPROXIMATE DEPTH TO GROUND WATER = 14.5 – 16.1 FT BELOW EXISTING SURFACE
3. NO EXISTING NATURAL HYDROLOGIC FEATURES EXIST WITHIN THE PROJECT LIMITS.
4. THERE ARE NO POTENTIAL CRITICAL COURSE SEDIMENT YIELD AREAS LOCATED WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.
5. THE CITY OF SANTEE, AS THE PROJECT OWNER, IS RESPONSIBLE FOR THE MAINTENANCE OF PROPOSED BMPS, INCLUDING BIOFILTRATION BASINS AND TRASH CAPTURE DEVICES.

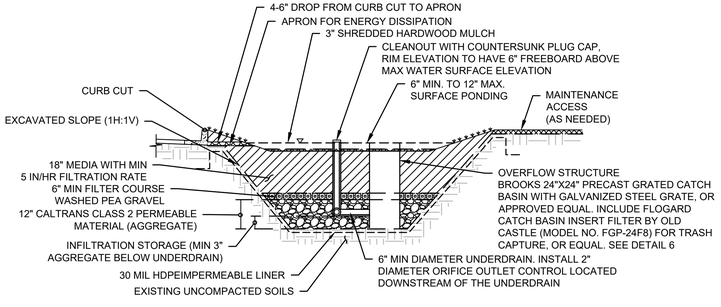
DMA DATA TABLE		
DMA TITLE	TRIBUTARY SIZE (AC)	DRAINS TO
1A	2.00	EXISTING POINT OF DISCHARGE (NO IMPROVEMENTS PROPOSED)
1B	0.61	BF-1B
1C	0.17	BF-1C
1D	0.38	BF-1D
1E	0.46	BF-1E
1F	0.16	BF-1F
2A	0.40	BF-2A
2B	0.28	BF-2B
2C	0.71	BF-2C
1UTIL	0.22	NATURAL SURFACE FLOW PRESERVED



PLAN

FOR REFERENCE ONLY
BIOFILTRATION BASIN DETAIL

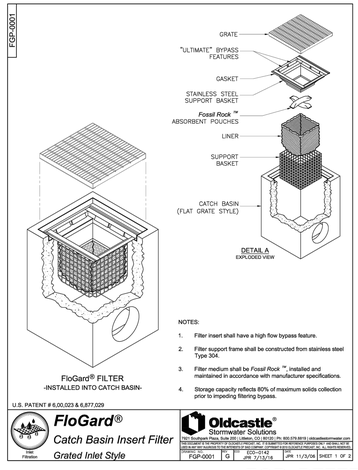
N.T.S.

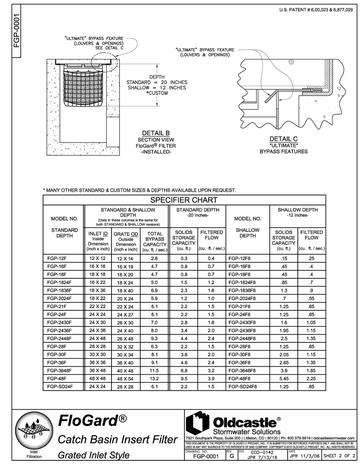


SECTION A-A

BIOFILTRATION PROTECTION DURING CONSTRUCTION:

1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.
6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.



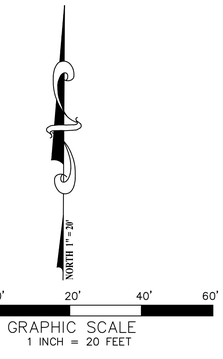


MODEL NO. STANDARD DEPTH	STANDARD & SHALLOW DEPTH (Units in these columns to be same for both STANDARD & SHALLOW versions) INLET @ Inside (Nominal) (Inch x Inch)	GRATE OR Outside (Nominal) (Inch x Inch)	TOTAL BYPASS STORAGE (Cu. Ft.)	SOLIDS STORAGE (Cu. Ft.)	FILTERED FLOW (Gpm @ 1 Fpm)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4
FGP-18F	16 X 16	16 X 19	4.7	0.8	0.7
FGP-18F	16 X 16	16 X 20	4.7	0.8	0.7
FGP-1824F	16 X 22	16 X 24	5.0	1.5	1.2
FGP-1836F	16 X 36	16 X 40	6.9	2.3	1.8
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4
FGP-28F	28 X 28	32 X 32	8.3	2.2	1.5
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9
FGP-5024F	24 X 24	28 X 28	8.1	2.2	1.5

MODEL NO. SHALLOW DEPTH	SHALLOW DEPTH (12 Inches) SOLIDS STORAGE (Cu. Ft.)	FILTERED FLOW (Gpm @ 1 Fpm)
FGP-12FB	.15	.25
FGP-18FB	.45	.4
FGP-18FB	.45	.4
FGP-1824FB	.85	.7
FGP-1836FB	1.3	.9
FGP-2024FB	.7	.55
FGP-21FB	1.25	.85
FGP-24FB	1.25	.85
FGP-2430FB	1.6	1.05
FGP-2436FB	1.95	1.15
FGP-2448FB	2.5	1.35
FGP-28FB	1.25	.85
FGP-30FB	2.05	1.15
FGP-36FB	2.65	1.35
FGP-3648FB	3.9	1.65
FGP-48FB	5.45	2.25
FGP-5024FB	1.25	.85

FOR REFERENCE ONLY
FLOGARD CATCH BASIN INSERT FILTER

NTS



SANTEE COMMUNITY CENTER

POST-DEVELOPMENT DRAINAGE CONDITION

FIGURE A2

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961–2800 (619) 961–2392 fax
www.psomas.com

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was provided in digital format by the USDA National Agriculture Imagery Program (NAIP). this information was photogrammetrically compiled at a scale of 1:24,000 from aerial photography dated 2009.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

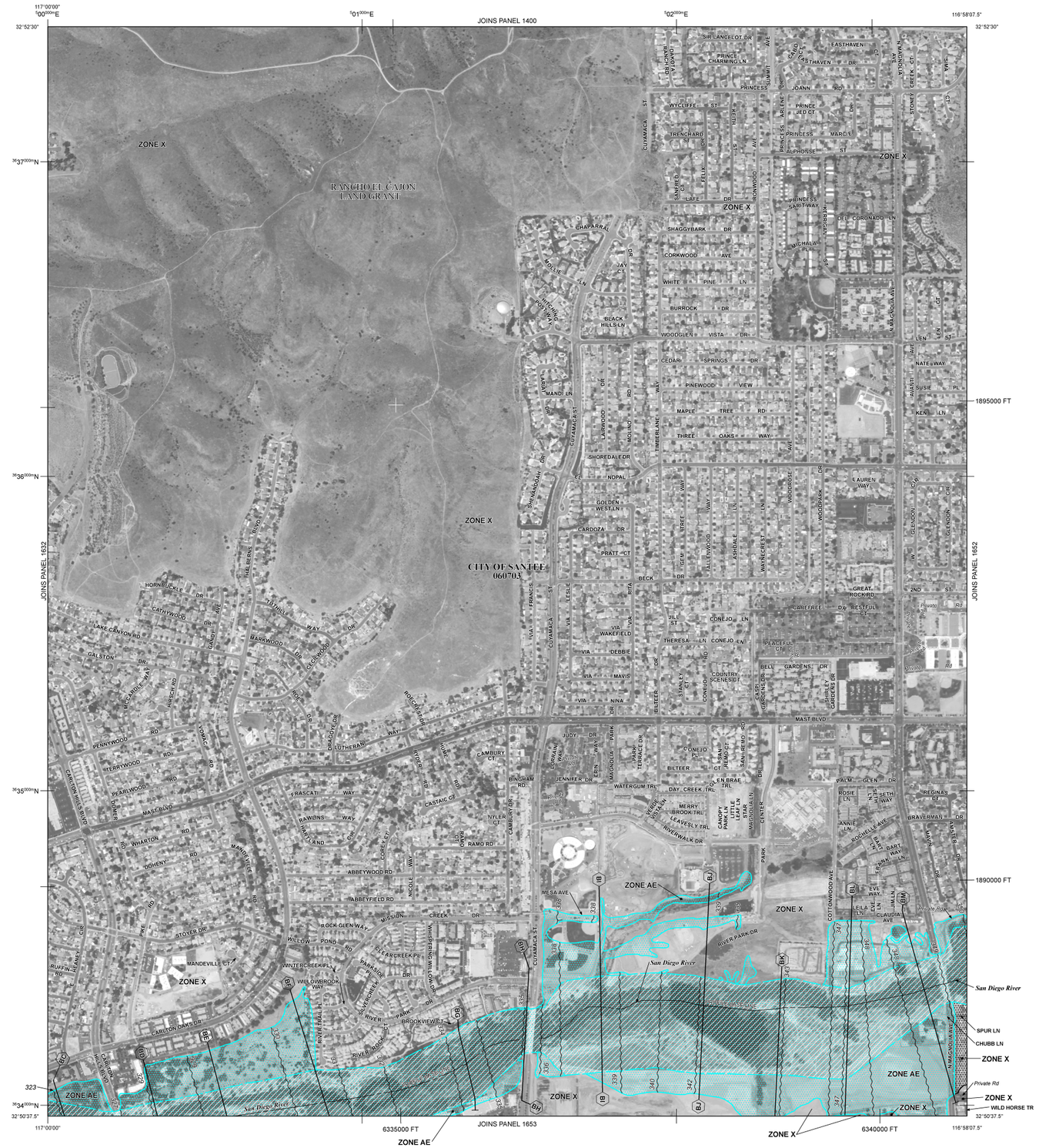
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-877-FEMA MAP (1-877-336-2627) for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip/.

The **"profile base lines"** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the "profile base line", in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Areas to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities
513 (EL 987) Base Flood Elevation line and value; elevation in feet*
Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

(A) (A) Cross section line
(23) (23) Transect line
97°07'30", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
4075000mE 1000-meter Universal Transverse Mercator grid ticks, zone 11
6000000 FT 5000-foot grid values: California State Plane coordinate system, Zone VI (FIPSZONE = 406), Lambert projection
DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 19, 1997

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
May 16, 2012 – to update corporate limits, to add roads and road names, to incorporate previously issued Letters of Map Revision, and to update map elevations to North American Vertical Datum of 1988.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 250 500 750 1,000 FEET
150 0 150 300 METERS

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1651G

FIRM

FLOOD INSURANCE RATE MAP

SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 1651 OF 2375

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SANTEE, CITY OF	060703	1651	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 06073C1651G

MAP REVISED MAY 16, 2012

Federal Emergency Management Agency

APPENDIX A

PSOMAS
401 B STREET, SUITE 1600
SAN DIEGO, CA 92101

SANTEE CC
PSOMAS#: 5HMC010100
CALCULATED BY: JM

Preciptation (in.)

	100-year Storm
6hr P	2.5
24hr P	5
Adjusted 6hr P	N/A
Between 45% to 65%?	50.00%

100 YEAR - EXISTING CONDITION

DRAINAGE AREA	DEVELOPMENT	A (ACRES)	% OF TOTAL ACREAGE	C	Tc***	*I50 (IN/HR)	Q** (CFS)	REMARKS
THE FOLLOWING HYDROLOGIC CALCULATIONS DONE PER METHODS DESCRIBED IN THE CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL								
Watershed 1								
1	71% IMPERVIOUS	3.78	73.11%	0.74	5.0	6.6	18.4	
Watershed 2								
2	16% IMPERVIOUS	1.39	26.89%	0.44	5.0	6.6	4.0	
	TOTAL	5.17					**22.5**	

* Intensities are based on the equation from the San Diego County - Hydrology Manual (2004) , Figure 3-1 where:

I(t) = 7.44 * P6 * D^-0.645

**Q based on the rational method equation from the San Diego County - Hydrology Manual (2004) and expressed as:

Q = C * I *A

**Time of Concentration (Tc) is based on the nomograph on San Diego County - Hydrology Manual (2004), Figure 3-4 .

APPENDIX B

PSOMAS
401 B STREET, SUITE 1600
SAN DIEGO, CA 92101

SANTEE CC
PSOMAS#: 5HMC010100
CALCULATED BY: JM

Preciptation (in.)

	100-year Storm
6hr P	2.5
24hr P	5
Adjusted 6hr P	N/A
Between 45% to 65%?	50.00%

100 YEAR - PROPOSED CONDITION

DRAINAGE AREA	DEVELOPMENT	A (ACRES)	% OF TOTAL ACREAGE	C	Tc***	*I50 (IN/HR)	Q** (CFS)	REMARKS
THE FOLLOWING HYDROLOGIC CALCULATIONS DONE PER METHODS DESCRIBED IN THE CITY OF SAN DIEGO DRAINAGE DESIGN MANUAL								
Watershed 1								
1A	79% IMPERVIOUS	2.00	38.68%	0.77	5.0	6.6	10.1	
1B	83% IMPERVIOUS	0.61	11.80%	0.80	5.0	6.6	3.2	
1C	70% IMPERVIOUS	0.17	3.29%	0.72	5.0	6.6	0.8	
1D	79% IMPERVIOUS	0.38	135.71%	0.77	5.0	6.6	1.9	
1E	90% IMPERVIOUS	0.46	64.79%	0.84	5.0	6.6	2.5	
1F	71% IMPERVIOUS	0.16	3.09%	0.73	5.0	6.6	0.8	
Watershed 2								
2A	72% IMPERVIOUS	0.40	7.74%	0.73	5.0	6.6	1.9	
2B	94% IMPERVIOUS	0.28	5.42%	0.86	5.0	6.6	1.6	
2C	71% IMPERVIOUS	0.71	13.73%	0.73	5.0	6.6	3.4	
	TOTAL	5.17					**26.3**	

* Intensities are based on the equation from the San Diego County - Hydrology Manual (2004) , Figure 3-1 where:

$$I(t) = 7.44 * P6 * D^{-0.645}$$

**Q based on the rational method equation from the San Diego County - Hydrology Manual (2004) and expressed as:

$$Q = C * I * A$$

***Time of Concentration (Tc) is based on the nomograph on San Diego County - Hydrology Manual (2004), Figure 3-4 .

APPENDIX C

LATERAL STATION	***SD LINE "A"***
FLOW REGIME	FULL
DESIGN FLOW "Q100" (cfs)	9.80 cfs
PIPE DIAMETER "d" (inches)	18"
PIPE MATERIAL	HDPE
MANNINGS "n" VALUE	0.012
PIPE SLOPE "S" (feet/feet)	0.0100
FRICTION SLOPE "S_f" (feet/feet)	0.0100
DEPTH OF FLOW "D" (feet)	1.50'
FLOW AREA "A" (square feet)	1.77 sf
WETTED PERIMETER "P"	4.71'
HYDRAULIC RADIUS "R" (A/P)	0.38'
FLOW TOP WIDTH, T (feet)	0.00'
FLOW VELOCITY "V" (feet/second)	6.44 fps
VELOCITY HEAD (V^2/2G) (feet)	0.64'
SPECIFIC ENERGY (D+ V^2/2G) (lb-ft/lb)	2.14'
FLOW CAPACITY DEPTH RATIO "D/d"	1.00
PIPE FLOW CAPACITY (cfs)	11.38 cfs

LATERAL STATION	***SD LATERAL "B-1"***	***SD LATERAL "B-2"***	***SD LATERAL "B-3"***
FLOW REGIME	NORMAL	NORMAL	NORMAL
DESIGN FLOW "Q100" (cfs)	2.00 cfs	3.40 cfs	3.70 cfs
PIPE DIAMETER "d" (inches)	10"	12"	12"
PIPE MATERIAL	PVC	PVC	PVC
MANNINGS "n" VALUE	0.009	0.009	0.009
PIPE SLOPE "S" (feet/feet)	0.0100	0.0100	0.0100
FRICTION SLOPE "S_f" (feet/feet)	0.0100	0.0100	0.0100
DEPTH OF FLOW "D" (feet)	0.83'	1.00'	1.00'
FLOW AREA "A" (square feet)	0.55 sf	0.79 sf	0.79 sf
WETTED PERIMETER "P"	2.58'	3.14'	3.14'
HYDRAULIC RADIUS "R" (A/P)	0.21'	0.25'	0.25'
FLOW TOP WIDTH, T (feet)	0.03'	0.00'	0.00'
FLOW VELOCITY "V" (feet/second)	5.85 fps	6.55 fps	6.55 fps
VELOCITY HEAD ($V^2/2G$) (feet)	0.53'	0.67'	0.67'
SPECIFIC ENERGY ($D+ V^2/2G$) (lb-ft/lb)	1.37'	1.67'	1.67'
FLOW CAPACITY DEPTH RATIO "D/d"	1.00	1.00	1.00
PIPE FLOW CAPACITY (cfs)	3.16 cfs	5.15 cfs	5.15 cfs

Attachment B

Storm Water Quality Management Plan (SWQMP), Psomas, February 2025

CITY OF SANTEE

PRIORITY DEVELOPMENT PROJECT (PDP)

STORM WATER QUALITY MANAGEMENT PLAN (SWQMP)

FOR

Santee Community Center

[INSERT PERMIT APPLICATION NUMBERS]

10129 Riverwalk Drive
Santee, CA 92071

ASSESSOR'S PARCEL NUMBER(S):
381-051-14-00
ENGINEER OF WORK:

_____

Sarah Curran C69620
[PROVIDE WET SIGNATURE AND STAMP ABOVE LINE]

PREPARED FOR:

City of Santee
10601 Magnolia Ave.
Santee, CA 92071
(619) 258-4100

PDP SWQMP PREPARED BY:

Psomas
401 B St., Suite 1600
San Diego, CA 92101
(619)961-2800

DATE OF SWQMP:
February 2025

PLANS PREPARED BY:
Psomas
401 B St., Suite 1600
San Diego, CA 92101
(619) 961-2800

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Acronym Sheet

PDP SWQMP Preparer's Certification Page

PDP SWQMP Project Owner's Certification Page

Submittal Record

Project Vicinity Map

FORM I-1 Applicability of Permanent, Post-Construction Storm Water BMP Requirements

FORM I-2 Project Type Determination Checklist (Standard Project or PDP)

FORM I-3B Site Information Checklist for PDPs

FORM I-4 Source Control BMP Checklist for All Development Projects

FORM I-5 Site Design BMP Checklist for All Development Projects

FORM I-6 Summary of PDP Structural BMPs

Attachment 1: Backup for PDP Pollutant Control BMPs

- Attachment 1a: DMA Exhibit
- Attachment 1b: Tabular Summary of DMAs and Design Capture Volume Calculations
- Attachment 1c: Harvest and Use Feasibility Screening (when applicable)
- Attachment 1d: Categorization of Infiltration Feasibility Condition (when applicable)
- Attachment 1e: Pollutant Control BMP Design Worksheets / Calculations

Attachment 2: Backup for PDP Hydromodification Control Measures

- Attachment 2a: Hydromodification Management Exhibit
- Attachment 2b: Management of Critical Coarse Sediment Yield Areas
- Attachment 2c: Geomorphic Assessment of Receiving Channels
- Attachment 2d: Flow Control Facility Design

Attachment 3: Structural BMP Maintenance Plan

- Attachment 3a: B Structural BMP Maintenance Thresholds and Actions
- Attachment 3b: Draft Maintenance Agreement (when applicable)

Attachment 4: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWQMP	Storm Water Quality Management Plan

SWQMP PREPARER'S
CERTIFICATION PAGE

Project Name: Santee Community Center
Permit Application Number: CIP 2018-31

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the City of Santee BMP Design Manual, which is a design manual for compliance with local City of San Diego and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the City of Santee has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWQMP by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

_____
Engineer of Work's Signature, PE Number & Expiration Date

Sarah Curran
_____
Print Name

Psomas
_____
Company

_____
Date

Engineer's Seal:

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SWQMP PROJECT OWNER'S
CERTIFICATION PAGE

Project Name: Santee Community Center
Permit Application Number: CIP 2018-31

PROJECT OWNER'S CERTIFICATION

This PDP SWQMP has been prepared for City of Santee by Psomas. The PDP SWQMP is intended to comply with the PDP requirements of the City of Santee BMP Design Manual, which is a design manual for compliance with local City of San Diego and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

_____
Project Owner's Signature

_____
Print Name

_____
Company

_____
Date

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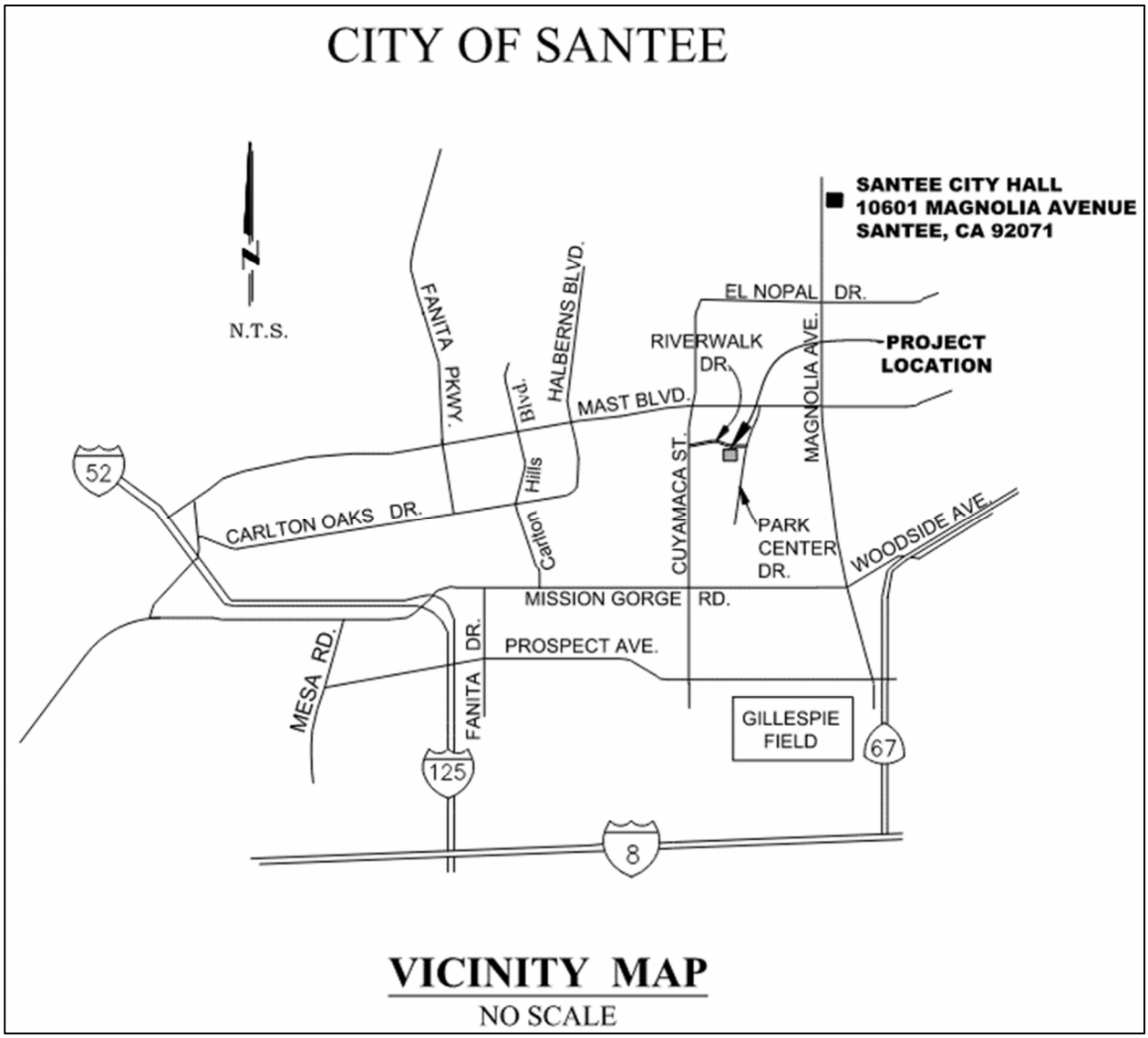
SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP SWQMP. Each time the PDP SWQMP is re-submitted, provide the date and status of the project. In column 4 summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Summary of Changes
1	May 26, 2023	☒ Preliminary Design / Planning/ CEQA ☐ Final Design	Initial Submittal
2	January 12, 2024	☐ Preliminary Design / Planning/ CEQA ☒ Final Design	2nd Submittal
3		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	
4		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	

PROJECT VICINITY MAP

Project Name: Santee Community Center
Permit Application Number: CIP 2018-31



Applicability of Permanent, Post-Construction Storm Water BMP Requirements **(Storm Water Intake Form for all Development Permit Applications)**	**Form I-1** Model BMP Design Manual [August 31, 2015]

Project Identification

Project Name: Santee Community Center	
Permit Application Number:	Date:
Project Address: 10129 Riverwalk Drive Santee, CA 92071	

Determination of Requirements

The purpose of this form is to identify permanent, post-construction requirements that apply to the project. This form serves as a short summary of applicable requirements, in some cases referencing separate forms that will serve as the backup for the determination of requirements.

Answer each step below, starting with Step 1 and progressing through each step until reaching "Stop". **Upon reaching a Stop, do not complete further Steps beyond the Stop.**

Refer to BMP Design Manual sections and/or separate forms referenced in each step below.

Step	Answer	Progression
Step 1: Is the project a "development project"? See Section 1.3 of the BMP Design Manual for guidance.	☒ Yes	Go to Step 2.
	☐ No	Stop. Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.
Discussion / justification if the project is not a "development project" (e.g., the project includes *only* interior remodels within an existing building):		
Step 2: Is the project a Standard Project, Priority Development Project (PDP), or exception to PDP definitions? To answer this item, see Section 1.4 of the BMP Design Manual *in its entirety* for guidance, AND complete Form I-2, Project Type Determination.	☐ Standard Project	Stop. Only Standard Project requirements apply, including Standard Project SWQMP.
	☒ PDP	Standard and PDP requirements apply, including PDP SWQMP. Go to Step 3.
	☐ Exception to PDP definitions	Stop. Standard Project requirements apply, and any additional requirements specific to the type of project. Provide discussion and list any additional requirements below. Prepare Standard Project SWQMP.

Form I-1 Page 2, Form Template Date: August 31, 2015		
[Step 2 Continued from Page 1] Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:		
Step 3 (PDPs only). Is the project subject to earlier PDP requirements due to a prior lawful approval? See Section 1.10 of the BMP Design Manual for guidance.	☐ Yes	Consult the [City Engineer] to determine requirements. Provide discussion and identify requirements below. Go to Step 4.
	☒ No	BMP Design Manual PDP requirements apply. Go to Step 4.
Discussion / justification of prior lawful approval, and identify requirements (*not required if prior lawful approval does not apply*):		
Step 4 (PDPs only). Do hydromodification control requirements apply? See Section 1.6 of the BMP Design Manual for guidance.	☒ Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). Go to Step 5.
	☐ No	Stop. PDP structural BMPs required for pollutant control (Chapter 5) only. Provide brief discussion of exemption to hydromodification control below.
Discussion / justification if hydromodification control requirements do <u>not</u> apply:		
Step 5 (PDPs subject to hydromodification control requirements only). Does protection of critical coarse sediment yield areas apply based on review of WMAA Potential Critical Coarse Sediment Yield Area Map? See Section 6.2 of the BMP Design Manual for guidance.	☐ Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	☒ No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. Stop.
Discussion / justification if protection of critical coarse sediment yield areas requirements do <u>not</u> apply: Critical coarse sediment not located near project site.		

Priority Determination Form	Form I-2 Model BMP Design Manual [August 31, 2015]
Project Information	
Project Name: Santee Community Center	
Permit Application Number:	Date:
Project Address: 10129 Riverwalk Drive Santee, CA 92071	

Project Type Determination: Standard Project or Priority Development Project (PDP)			
The project is (select one): New Development ☒ Redevelopment			
The total proposed newly created or replaced impervious area is: 111,283 ft^2 (2.56) acres			
Is the project in any of the following categories, (a) through (f)?			
Yes	No ☒	(a)	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ☒	No	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes	No ☒	(c)	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (Standard Industrial Classification (SIC) code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Form I-2 Page 2, Form Template Date: August 31, 2015			
Yes	No ☒	(d)	New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). *Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See BMP Design Manual Section 1.4.2 for additional guidance.*
Yes	No ☒	(e)	New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (ii) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.
Yes	No ☒	(f)	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. *Note: See BMP Design Manual Section 1.4.2 for additional guidance.*

Does the project meet the definition of one or more of the Priority Development Project categories (a) through (f) listed above?

No – the project is <u>not</u> a Priority Development Project (Standard Project).

☒ Yes – the project is a Priority Development Project (PDP).

The following is for redevelopment PDPs only:

The area of existing (pre-project) impervious area at the project site is: 235,224 acres ft^2 (A)
The total proposed newly created or replaced impervious area is 111,283 ft^2 (B)
Percent impervious surface created or replaced (B/A)*100: 47.3%
The percent impervious surface created or replaced is (select one based on the above calculation):

☒ less than or equal to fifty percent (50%) – only new impervious areas are considered PDP

OR

☐ greater than fifty percent (50%) – the entire project site is a PDP

Site Design Checklist For PDPs	Form I-3B (PDPs) Model BMP Design Manual [August 31, 2015]
Project Summary Information	
Project Name	Santee Community Center
Project Address	10129 Riverwalk Drive Santee, CA 92071
Assessor's Parcel Number(s) (APN(s))	381-051-14-00
Permit Application Number	CIP 2018-31
Project Hydrologic Unit	Select One: ☐ Santa Margarita 902 ☐ San Luis Rey 903 ☐ Carlsbad 904 ☐ San Dieguito 905 ☐ Penasquitos 906 ☒ San Diego 907 ☐ Pueblo San Diego 908 ☐ Sweetwater 909 ☐ Otay 910 ☐ Tijuana 911
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Diego River Basin, 434 mi^2 907.1
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	53.81 Acres (2,343,963 Square Feet)
Area to be Disturbed by the Project (Project Area)	3.31 Acres (144,344 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	2.56 Acres (111,283 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	0.76 Acres (33,061 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

Description of Existing Site Condition

Current Status of the Site (select all that apply):

☒ Existing development

☐ Previously graded but not built out

☐ Demolition completed without new construction

☐ Agricultural or other non-impervious use

☒ Vacant, undeveloped/natural

Description / Additional Information:
Existing parking lot used by the Cameron Family YMCA.
Existing vacant area North of the Cameron Family YMCA.

Existing Land Cover Includes (select all that apply):

☒ Vegetative Cover

☒ Non-Vegetated Pervious Areas

☒ Impervious Areas

Description / Additional Information:
Existing AC parking lot with landscaped buffer areas.
Proposed parking lot location has existing pervious areas.

Underlying Soil belongs to Hydrologic Soil Group (select all that apply):

☐ NRCS Type A

☐ NRCS Type B

☐ NRCS Type C

☒ NRCS Type D

Approximate Depth to Groundwater (GW):

☐ GW Depth < 5 feet

☐ 5 feet < GW Depth < 10 feet

☒ 10 feet < GW Depth < 20 feet

☐ GW Depth > 20 feet

Existing Natural Hydrologic Features (select all that apply):

☐ Watercourses

☐ Seeps

☐ Springs

☐ Wetlands

☒ None

Description / Additional Information:

Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

(1) whether existing drainage conveyance is natural or urban;

(2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site;

(3) Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and

(4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

The entire existing parking lot south of Riverwalk Drive conveys stormwater to the south of the lot. Runoff surface flow is then conveyed into an existing earthen swale then discharged into Woodglen Vista Creek. The creek eventually discharges into the San Diego River. A summary of the pre-project drainage areas and design flows can be found in the Project's hydrology report.

The vacant area north of the Cameron Family YMCA currently sheet flows south to catch basins located in an earthen swale. From there the drainage is conveyed via pipe to the west where the pipe daylights and outlets into an earthen open channel that flows southerly into Woodglen Vista Creek and eventually into the San Diego River. A summary of the pre-project drainage areas and design flows can be found in the Project's hydrology report.

Description of Proposed Site Development

Project Description / Proposed Land Use and/or Activities:

The community center will be constructed on City-owned property in the Santee Town Center Community Park adjacent to an existing City-owned YMCA facility located at 10129 Riverwalk Drive. The Project will include dedicated facilities for teens and seniors, lobby space, multi-purpose rooms, administrative offices and storage, occupying approximately 12,500 square feet. The Project's site improvements will include complimentary drought tolerant landscape architecture, storm water compliance, environmental documentation, addition of new parking lot area, realignment of adjacent parking facilities (but not replacement of displaced parking) and accessibility compatibility with adjacent features and the new building.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

The proposed site features one building with support areas and two covered outdoor event spaces and courtyards. The project will also redesign a portion of the existing parking lot. The proposed site will also include the development of a new parking lot to the North of the Cameron Family YMCA.

List/describe proposed pervious features of the project (e.g., landscape areas):

There are four landscaped islands located in the redesigned parking lot as well as planted common areas around the proposed building.

For the proposed new parking lot, there are eight landscaped islands.

Does the project include grading and changes to site topography?

☒ Yes

☐ No

Description / Additional Information:

Grading of the site involves remedial grading per the Project Geotechnical Report requirements and grading to achieve drainage and accessibility compliance requirements around the building and proposed new parking lot area.

Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

☒ Yes
☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

Drainage from parking lot areas tributary to our site will be rerouted around our site via a concrete V-gutter that directs the flows to the existing earthen swale and continue to match existing flow conditions. The site has proposed catch basins located in the outdoor event areas to collect surface flows away from the building entryways. There are three biofiltration basins that have a total provided area of 11,000 square feet in order to treat the site and provide hydromodification benefits. Drainage of the site conveys the water to the biofiltration basins and eventually will discharge into Woodglen Vista Creek via surface overflow. A summary of the post-project drainage areas and design flows can be found in the Project's hydrology report.

For the northern new parking lot, water will be conveyed to the west and to the south of the site into three new biofiltration basins then discharged into and earthen open channel to the west which then flows southerly into Woodglen Vista Creek. The creek eventually discharges into the San Diego River. A summary of the post-project drainage areas and design flows can be found in the Project's hydrology report.

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

☒ On-site storm drain inlets

☐ Interior floor drains and elevator shaft sump pumps

☐ Interior parking garages

☒ Need for future indoor & structural pest control

☒ Landscape/Outdoor Pesticide Use

☐ Pools, spas, ponds, decorative fountains, and other water features

☒ Food service

☒ Refuse areas

☐ Industrial processes

☐ Outdoor storage of equipment or materials

☐ Vehicle and Equipment Cleaning

☐ Vehicle/Equipment Repair and Maintenance

☐ Fuel Dispensing Areas

☐ Loading Docks

☒ Fire Sprinkler Test Water

☒ Miscellaneous Drain or Wash Water

☒ Plazas, sidewalks, and parking lots

Description / Additional Information:

There are three catch basins on the project site. The site will have a kitchen area for food service, trash enclosure, and features an outdoor plaza, seating, sidewalks, and parking lot.

Identification and Narrative of Receiving Water and Pollutants of Concern

Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable):

The site has two proposed catch basins located in the outdoor event areas. There are two biofiltration basins that have a required area of 2,000 square feet in order to treat the site. Drainage of the site conveys the water to the biofiltration basins and eventually will discharge into Woodglen Vista Creek. From the creek, the water will be discharged into the San Diego River.

List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs / WQIP Highest Priority Pollutant
San Diego River	Phosphorus	
	Total Dissolved Solids	
	Nitrogen	
	Indicator Bacteria	Highest Priority Pollutant
	Cadmium	
	Benthic Community Effects	
	Oxygen, Dissolved	
	Toxicity	
	Sulfates	

Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

Pollutant	Not Applicable to the Project Site	Expected from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment		X	
Nutrients	X		
Heavy Metals	X		
Organic Compounds		X	
Trash & Debris		X	

Oxygen Demanding Substances	X		
Oil & Grease		X	
Bacteria & Viruses	X		
Pesticides		X	

Form I-3B Page 8 of 10, Form Template Date: August 31, 2015
Hydromodification Management Requirements
Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)? ☒ Yes, hydromodification management flow control structural BMPs required. ☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean. ☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean. ☐ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides. Description / Additional Information (to be provided if a 'No' answer has been selected above):
Critical Coarse Sediment Yield Areas* ***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes

☒ No, No critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite

☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment

☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite

☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite

☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the SWQMP.

☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWQMP Exhibit.

Discussion / Additional Information:

The City of San Diego Regional Watershed Management Area analysis provided mapping of Critical Coarse Sediment Yield areas. The location of our project is not near a Coarse Sediment Yield area. Refer to Attachment 2b.

Flow Control for Post-Project Runoff*

***This Section only required if hydromodification management requirements apply**

List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.

Drainage of the site is conveyed via catch basins and daylighted roof drainage is piped to the biofiltration basins and will then discharge into Woodglen Vista Creek. From the creek, the water will flow to the San Diego River. Biofiltration basins are sized for hydromodification. Please refer to the HMP exhibit for the discharge area.

Has a geomorphic assessment been performed for the receiving channel(s)?

☒ No, the low flow threshold is 0.1Q2 (default low flow threshold)

☐ Yes, the result is the low flow threshold is 0.1Q2

☐ Yes, the result is the low flow threshold is 0.3Q2

☐ Yes, the result is the low flow threshold is 0.5Q2

If a geomorphic assessment has been performed, provide title, date, and preparer:

Discussion / Additional Information: (optional)

Form I-3B Page 10 of 10, Form Template Date: August 31, 2015
Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements. None.
Optional Additional Information or Continuation of Previous Sections As Needed
This space provided for additional information or continuation of information from previous sections as needed.

Source Control BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form I-4 Model BMP Design Manual [August 31, 2015]

Project Identification

Project Name: Santee Community Center

Permit Application Number: CIP 2018-31

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the Model BMP Design Manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the Model BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-4 not implemented:			

Form I-4 Page 2 of 2, Form Template Date: August 31, 2015			
Source Control Requirement	**Applied?**		
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-5 not implemented:			
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
☐ On-site storm drain inlets	☒ Yes	☐ No	☐ N/A
☐ Interior floor drains and elevator shaft sump pumps	☐ Yes	☐ No	☒ N/A
☐ Interior parking garages	☐ Yes	☐ No	☒ N/A
☐ Need for future indoor & structural pest control	☒ Yes	☐ No	☐ N/A
☐ Landscape/Outdoor Pesticide Use	☒ Yes	☐ No	☐ N/A
☐ Pools, spas, ponds, decorative fountains, and other water features	☐ Yes	☐ No	☒ N/A
☐ Food service	☒ Yes	☐ No	☐ N/A
☐ Refuse areas	☒ Yes	☐ No	☐ N/A
☐ Industrial processes	☐ Yes	☐ No	☒ N/A
☐ Outdoor storage of equipment or materials	☐ Yes	☐ No	☒ N/A
☐ Vehicle and Equipment Cleaning	☐ Yes	☐ No	☒ N/A
☐ Vehicle/Equipment Repair and Maintenance	☐ Yes	☐ No	☒ N/A
☐ Fuel Dispensing Areas	☐ Yes	☐ No	☒ N/A
☐ Loading Docks	☐ Yes	☐ No	☒ N/A
☐ Fire Sprinkler Test Water	☒ Yes	☐ No	☐ N/A
☐ Miscellaneous Drain or Wash Water	☒ Yes	☐ No	☐ N/A
☐ Plazas, sidewalks, and parking lots	☒ Yes	☐ No	☐ N/A

Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.

Additional BMPs Based on Potential Sources of Runoff Pollutants not applicable to our site.

Site Design BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form I-5 Model BMP Design Manual [August 31, 2015]

Project Identification

Project Name: Santee Community Center

Permit Application Number: CIP 2018-31

Site Design BMPs

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the Model BMP Design Manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the Model BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation	☐ Yes	☒ No	☐ N/A
Discussion / justification if SD-2 not implemented: Existing landscaped planters in the parking lot are being removed. Existing pervious area to the south of the project site is being modified to incorporate the Biofiltration BMPs			
SD-3 Minimize Impervious Area	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-4 not implemented:			
SD-5 Impervious Area Dispersion	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-5 not implemented:			

Form I-5 Page 2 of 2, Form Template Date: August 31, 2015			
Site Design Requirement	**Applied?**		
SD-6 Runoff Collection	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	☐ Yes	☐ No	☒ N/A
Discussion / justification if SD-8 not implemented: Harvest and Use BMP is not feasible for the project site.			

Summary of PDP Structural BMPs	Form I-6 (PDPs) Model BMP Design Manual [August 31, 2015]
Project Identification	
Project Name: Santee Community Center	
Permit Application Number: CIP 2018-31	
PDP Structural BMPs	
All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s). PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the BMP Design Manual). Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).	
Bio-1 Biofiltration BMPs were selected for this site due to the ample site area to accommodate these basins. Drainage flows are directed to the basins via surface flow and pipes from catch basins throughout the site. These basins are being utilized for flow and pollutant control. (Continue on page 2 as necessary.)	

Form I-6 Page 2 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. BF-1B
Construction Plan Sheet No. C1.9
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 3 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. BF-1C
Construction Plan Sheet No. C1.9
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 4 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-1D	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 4 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-1E	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 4 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-1F	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 5 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-2A	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 6 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-2B	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

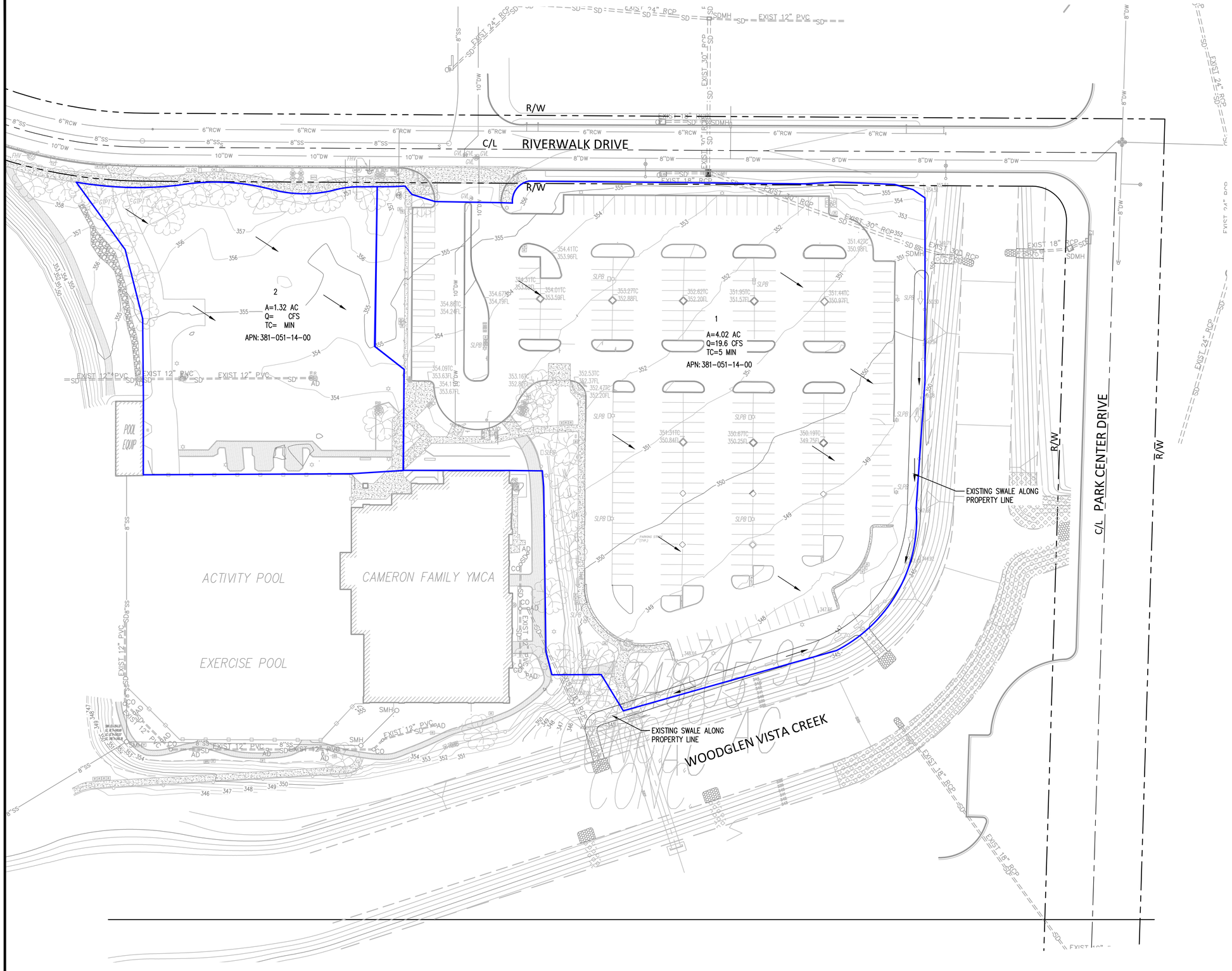
Form I-6 Page 7 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-2C	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
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Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	☒ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1a	☒ Included on DMA Exhibit in Attachment 1a ☐ Included as Attachment 1b, separate from DMA Exhibit
Attachment 1c	Form I-7, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form I-7.	☒ Included ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form I-8, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form I-8.	☒ Included ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	☒ Included



LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- SIDEWALK UNDERDRAIN
- CATCH BASIN
- CLEANOUT
- X% — SLOPE ARROW
- 500 — NEW CONTOUR
- x 505.50 — NEW SPOT ELEVATION
- 500 — EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 — EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 × — EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 — NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE — RIDGE LINE
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- PUBLIC UTILITIES EASEMENT LINE
- DRAINAGE FLOW ARROW
- DRAINAGE AREA BOUNDARY
- XX — SUBCATCHMENT IDENTIFICATION

A=AREA (ACRES)
Q=6-HOUR, 100-YEAR STORM EVENT (CFS)
TC=TIME OF CONCENTRATION (MIN)

NORTH 1" = 20'

20' 0' 20' 40' 60'

GRAPHIC SCALE
1 INCH = 20 FEET

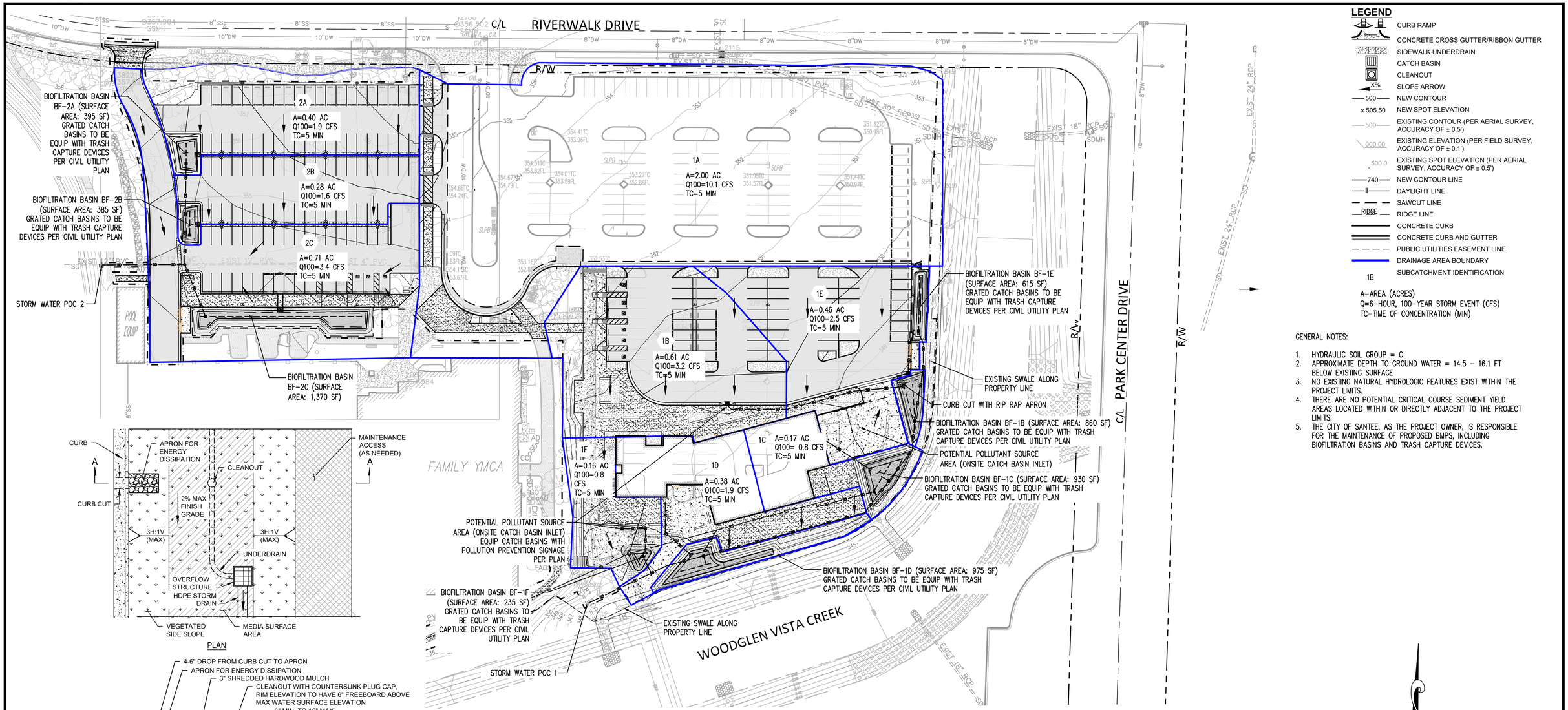
SANTEE COMMUNITY CENTER

PRE-DEVELOPMENT DRAINAGE CONDITION

FIGURE A1

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961-2800 (619) 961-2392 fax
www.psomas.com

Attachment 1a



BIOFILTRATION PROTECTION DURING CONSTRUCTION:

1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.
6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.

FOR REFERENCE ONLY
BIOFILTRATION BASIN DETAIL
N.T.S.

FOR REFERENCE ONLY
FLOGARD CATCH BASIN INSERT FILTER
NTS

GENERAL NOTES:

1. HYDRAULIC SOIL GROUP = C
2. APPROXIMATE DEPTH TO GROUND WATER = 14.5 – 16.1 FT BELOW EXISTING SURFACE
3. NO EXISTING NATURAL HYDROLOGIC FEATURES EXIST WITHIN THE PROJECT LIMITS.
4. THERE ARE NO POTENTIAL CRITICAL COURSE SEDIMENT YIELD AREAS LOCATED WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.
5. THE CITY OF SANTEE, AS THE PROJECT OWNER, IS RESPONSIBLE FOR THE MAINTENANCE OF PROPOSED BMPS, INCLUDING BIOFILTRATION BASINS AND TRASH CAPTURE DEVICES.

DMA DATA TABLE		
DMA TITLE	TRIBUTARY SIZE (AC)	DRAINS TO
1A	2.00	EXISTING POINT OF DISCHARGE (NO IMPROVEMENTS PROPOSED)
1B	0.61	BF-1B
1C	0.17	BF-1C
1D	0.38	BF-1D
1E	0.46	BF-1E
1F	0.16	BF-1F
2A	0.40	BF-2A
2B	0.28	BF-2B
2C	0.71	BF-2C

SANTEE COMMUNITY CENTER

POST-DEVELOPMENT DRAINAGE CONDITION

FIGURE A2

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961–2800 (619) 961–2392 fax
www.psomas.com

Attachment 1a

Attachment 1c

Worksheet 0-2. Harvest and Use Feasibility Screening

Harvest and Use Feasibility Screening	Worksheet B.3-1

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season? Waiting on flush volume from plumbing.

☒ Toilet and urinal flushing
☐ Landscape irrigation
☐ Other:_____

Due to the use of reclaimed water for the entirety of landscape irrigation, there is no irrigation demand for Harvest and Use (per City of Santee BMP Manual, Section B.3.2.2, bullet 1)

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

Daily Occupancy - 190
Total daily toilet/urinal use (based on office/retail space (7 per occupant)) - 1330 uses per day - 1995 uses in 36 hours
Average 0.7 gal/flush = 1397 gallons used in 36 hours

3. Calculate the DCV using worksheet B-2.1.

DCV = 4514 cu-ft = 33,767 gallons

3a. Is the 36-hour demand greater than or equal to the DCV?	3b. Is the 36-hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36-hour demand less than 0.25DCV?
Yes / No ⇨	Yes / No ⇨	Yes ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	Harvest and use is considered to be infeasible.

Worksheet 0-1: Categorization of Infiltration Feasibility Condition

Categorization of Infiltration Feasibility Condition			Worksheet C.4-1
Part 1 - Full Infiltration Feasibility Screening Criteria **Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	**Yes**	**No**
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			

Worksheet C.4-1 Page 2 of 4			
Criteria	Screening Question	**Yes**	**No**
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result*	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2		

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by City Engineer to substantiate findings.

Worksheet C.4-1 Page 3 of 4

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		☒

Provide basis:

Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		☒

Provide basis:

Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

Worksheet C.4-1 Page 4 of 4			
Criteria	Screening Question	**Yes**	**No**
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result*	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		No Infiltration

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Attachment 1e

Automated Worksheet B.1: Calculation of Design Capture Volume (V2.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
Standard Drainage Basin Inputs	1	Drainage Basin ID or Name	DMA 1B	DMA 1C	DMA 1D	DMA 2A	DMA 2B	DMA 2C					unitless
	2	85th Percentile 24-hr Storm Depth	0.50	0.50	0.50	0.50	0.50	0.50					inches
	3	Impervious Surfaces Not Directed to Dispersion Area (C=0.90)	33,565	4,810	22,685	13,250	9,276	24,188					sq-ft
	4	Semi-Pervious Surfaces Not Serving as Dispersion Area (C=0.30)											sq-ft
	5	Engineered Pervious Surfaces Not Serving as Dispersion Area (C=0.10)											sq-ft
	6	Natural Type A Soil Not Serving as Dispersion Area (C=0.10)											sq-ft
	7	Natural Type B Soil Not Serving as Dispersion Area (C=0.14)											sq-ft
	8	Natural Type C Soil Not Serving as Dispersion Area (C=0.23)											sq-ft
	9	Natural Type D Soil Not Serving as Dispersion Area (C=0.30)	8,385	2,640	10,790	4,185	2,930	7,639					sq-ft
Dispersion Area, Tree Well & Rain Barrel Inputs (Optional)	10	Does Tributary Incorporate Dispersion, Tree Wells, and/or Rain Barrels?	No	No	No	No	No	No	No	No	No	No	yes/no
	11	Impervious Surfaces **Directed to Dispersion Area** per SD-B (Ci=0.90)											sq-ft
	12	Semi-Pervious Surfaces **Serving as Dispersion Area** per SD-B (Ci=0.30)											sq-ft
	13	Engineered Pervious Surfaces **Serving as Dispersion Area** per SD-B (Ci=0.10)											sq-ft
	14	Natural Type A Soil **Serving as Dispersion Area** per SD-B (Ci=0.10)											sq-ft
	15	Natural Type B Soil **Serving as Dispersion Area** per SD-B (Ci=0.14)											sq-ft
	16	Natural Type C Soil **Serving as Dispersion Area** per SD-B (Ci=0.23)											sq-ft
	17	Natural Type D Soil **Serving as Dispersion Area** per SD-B (Ci=0.30)											sq-ft
	18	Number of Tree Wells Proposed per SD-A											#
	19	Average Mature Tree Canopy Diameter											ft
	20	Number of Rain Barrels Proposed per SD-E											#
	21	Average Rain Barrel Size											gal
Initial Runoff Factor Calculation	22	Total Tributary Area	41,950	7,450	33,475	17,435	12,206	31,827	0	0	0	0	sq-ft
	23	Initial Runoff Factor for Standard Drainage Areas	0.78	0.69	0.71	0.76	0.76	0.76	0.00	0.00	0.00	0.00	unitless
	24	Initial Runoff Factor for Dispersed & Dispersion Areas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	unitless
	25	Initial Weighted Runoff Factor	0.78	0.69	0.71	0.76	0.76	0.76	0.00	0.00	0.00	0.00	unitless
	26	Initial Design Capture Volume	1,363	214	990	552	387	1,008	0	0	0	0	cubic-feet
Dispersion Area Adjustments	27	Total Impervious Area Dispersed to Pervious Surface	0	0	0	0	0	0	0	0	0	0	sq-ft
	28	Total Pervious Dispersion Area	0	0	0	0	0	0	0	0	0	0	sq-ft
	29	Ratio of Dispersed Impervious Area to Pervious Dispersion Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ratio
	30	Adjustment Factor for Dispersed & Dispersion Areas	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	ratio
	31	Runoff Factor After Dispersion Techniques	0.78	0.69	0.71	0.76	0.76	0.76	n/a	n/a	n/a	n/a	unitless
	32	Design Capture Volume After Dispersion Techniques	1,363	214	990	552	387	1,008	0	0	0	0	cubic-feet
Tree & Barrel Adjustments	33	Total Tree Well Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
	34	Total Rain Barrel Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
Results	35	Final Adjusted Runoff Factor	0.78	0.69	0.71	0.76	0.76	0.76	0.00	0.00	0.00	0.00	unitless
	36	Final Effective Tributary Area	32,721	5,141	23,767	13,251	9,277	24,189	0	0	0	0	sq-ft
	37	Initial Design Capture Volume Retained by Site Design Elements	0	0	0	0	0	0	0	0	0	0	cubic-feet
	38	Final Design Capture Volume Tributary to BMP	1,363	214	990	552	387	1,008	0	0	0	0	cubic-feet

No Warning Messages

Attachment 1e

Automated Worksheet B.2: Retention Requirements (V2.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
Basic Analysis	1	Drainage Basin ID or Name	DMA 1B	DMA 1C	DMA 1D	DMA 2A	DMA 2B	DMA 2C	-	-	-	-	unitless
	2	85th Percentile Rainfall Depth	0.50	0.50	0.50	0.50	0.50	0.50	-	-	-	-	inches
	3	Predominant NRCS Soil Type Within BMP Location	D	D	D	D	D	D					unitless
	4	Is proposed BMP location Restricted or Unrestricted for Infiltration Activities?	Restricted	Restricted	Restricted	Restricted	Restricted	Restricted					unitless
	5	Nature of Restriction	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater					unitless
	6	Do Minimum Retention Requirements Apply to this Project?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	yes/no
	7	Are Habitable Structures Greater than 9 Stories Proposed?	No	No	No	No	No	No					yes/no
Advanced Analysis	8	Has Geotechnical Engineer Performed an Infiltration Analysis?	Yes	Yes	Yes	Yes	Yes	Yes					yes/no
	9	Design Infiltration Rate Recommended by Geotechnical Engineer	0.001	0.001	0.001	0.001	0.001	0.001					in/hr
Result	10	Design Infiltration Rate Used To Determine Retention Requirements	0.000	0.000	0.000	0.000	0.000	0.000	-	-	-	-	in/hr
	11	Percent of Average Annual Runoff that Must be Retained within DMA	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	-	-	-	-	percentage
	12	Fraction of DCV Requiring Retention	0.02	0.02	0.02	0.02	0.02	0.02	-	-	-	-	ratio
	13	Required Retention Volume	27	4	20	11	8	20	-	-	-	-	cubic-feet

No Warning Messages

Attachment 1e

Automated Worksheet B.3: BMP Performance (V2.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
BMP Inputs	1	Drainage Basin ID or Name	DMA 1B	DMA 1C	DMA 1D	DMA 2A	DMA 2B	DMA 2C	-	-	-	-	sq-ft
	2	Design Infiltration Rate Recommended	0.000	0.000	0.000	0.000	0.000	0.000	-	-	-	-	in/hr
	3	Design Capture Volume Tributary to BMP	1,363	214	990	552	387	1,008	-	-	-	-	cubic-feet
	4	Is BMP Vegetated or Unvegetated?	Vegetated	Vegetated	Vegetated	Vegetated	Vegetated	Vegetated					unitless
	5	Is BMP Impermeably Lined or Unlined?	Lined	Lined	Lined	Lined	Lined	Lined					unitless
	6	Does BMP Have an Underdrain?	Underdrain	Underdrain	Underdrain	Underdrain	Underdrain	Underdrain					unitless
	7	Does BMP Utilize Standard or Specialized Media?	Standard	Standard	Standard	Standard	Standard	Standard					unitless
	8	Provided Surface Area	860	930	2,795	685	460	3,150					sq-ft
	9	Provided Surface Ponding Depth	12	12	12	6	6	6					inches
	10	Provided Soil Media Thickness	27	27	27	27	27	27					inches
	11	Provided Gravel Thickness (Total Thickness)	27	27	27	27	27	27					inches
	12	Underdrain Offset	3	3	3	3	3	3					inches
	13	Diameter of Underdrain or Hydromod Orifice (Select Smallest)	0.90	0.90	0.90	0.90	0.90	0.90					inches
	14	Specialized Soil Media Filtration Rate											in/hr
	15	Specialized Soil Media Pore Space for Retention											unitless
	16	Specialized Soil Media Pore Space for Biofiltration											unitless
	17	Specialized Gravel Media Pore Space											unitless
Retention Calculations	18	Volume Infiltrated Over 6 Hour Storm	0	0	0	0	0	0	0	0	0	0	cubic-feet
	19	Ponding Pore Space Available for Retention	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	unitless
	20	Soil Media Pore Space Available for Retention	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	unitless
	21	Gravel Pore Space Available for Retention (Above Underdrain)	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40	0.40	0.40	unitless
	22	Gravel Pore Space Available for Retention (Below Underdrain)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	unitless
	23	Effective Retention Depth	2.55	2.55	2.55	2.55	2.55	2.55	0.00	0.00	0.00	0.00	inches
	24	Fraction of DCV Retained (Independent of Drawdown Time)	0.13	0.92	0.60	0.26	0.25	0.66	0.00	0.00	0.00	0.00	ratio
	25	Calculated Retention Storage Drawdown Time	120	120	120	120	120	120	0	0	0	0	hours
	26	Efficacy of Retention Processes	0.15	0.71	0.53	0.27	0.26	0.57	0.00	0.00	0.00	0.00	ratio
	27	Volume Retained by BMP (Considering Drawdown Time)	206	152	529	150	102	574	0	0	0	0	cubic-feet
	28	Design Capture Volume Remaining for Biofiltration	1,157	62	461	402	285	434	0	0	0	0	cubic-feet
Biofiltration Calculations	29	Max Hydromod Flow Rate through Underdrain	0.0486	0.0486	0.0486	0.0462	0.0462	0.0462	0.0000	0.0000	0.0000	0.0000	cfs
	30	Max Soil Filtration Rate Allowed by Underdrain Orifice	2.44	2.26	0.75	2.91	4.34	0.63	0.00	0.00	0.00	0.00	in/hr
	31	Soil Media Filtration Rate per Specifications	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	in/hr
	32	Soil Media Filtration Rate to be used for Sizing	2.44	2.26	0.75	2.91	4.34	0.63	0.00	0.00	0.00	0.00	in/hr
	33	Depth Biofiltered Over 6 Hour Storm	14.64	13.54	4.50	17.47	26.02	3.80	0.00	0.00	0.00	0.00	inches
	34	Ponding Pore Space Available for Biofiltration	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	unitless
	35	Soil Media Pore Space Available for Biofiltration	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	unitless
	36	Gravel Pore Space Available for Biofiltration (Above Underdrain)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	unitless
	37	Effective Depth of Biofiltration Storage	27.00	27.00	27.00	21.00	21.00	21.00	0.00	0.00	0.00	0.00	inches
	38	Drawdown Time for Surface Ponding	5	5	16	2	1	9	0	0	0	0	hours
	39	Drawdown Time for Effective Biofiltration Depth	11	12	36	7	5	33	0	0	0	0	hours
	40	Total Depth Biofiltered	41.64	40.54	31.50	38.47	47.02	24.80	0.00	0.00	0.00	0.00	inches
	41	Option 1 - Biofilter 1.50 DCV: Target Volume	1,736	93	692	602	427	651	0	0	0	0	cubic-feet
	42	Option 1 - Provided Biofiltration Volume	1,736	93	692	602	427	651	0	0	0	0	cubic-feet
	43	Option 2 - Store 0.75 DCV: Target Volume	868	46	346	301	214	325	0	0	0	0	cubic-feet
	44	Option 2 - Provided Storage Volume	868	46	346	301	214	325	0	0	0	0	cubic-feet
	45	Portion of Biofiltration Performance Standard Satisfied	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	ratio
Result	46	Do Site Design Elements and BMPs Satisfy Annual Retention Requirements?	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	yes/no
	47	Overall Portion of Performance Standard Satisfied (BMP Efficacy Factor)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	ratio
	48	**Deficit of Effectively Treated Stormwater**	**0**	**0**	**0**	**0**	**0**	**0**	**n/a**	**n/a**	**n/a**	**n/a**	cubic-feet

Attention!

- BMPs sized at <3% of the effective tributary areas must be accompanied by Reduced Size BMP Maintenance calculations (see last tab)

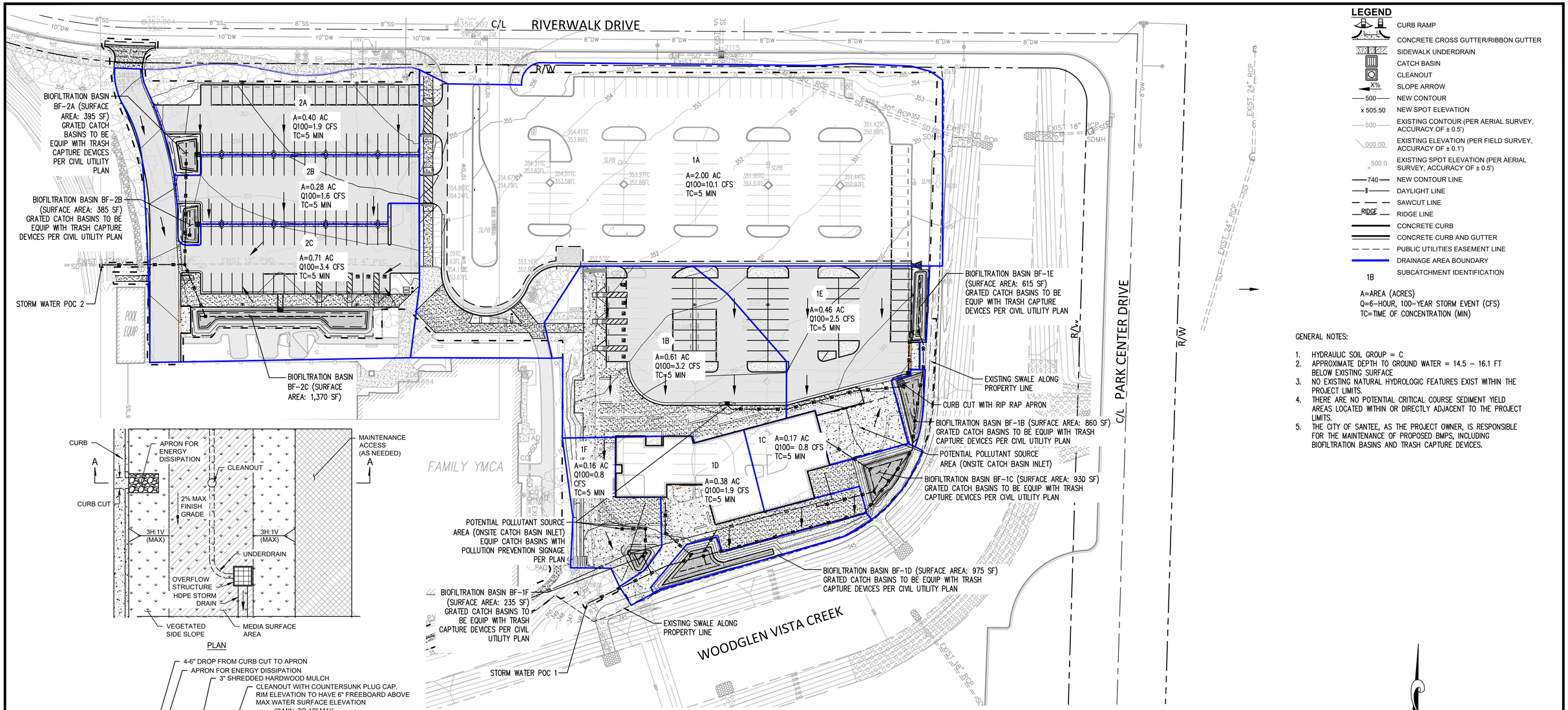
ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

☐ Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	**Contents**	**Checklist**
Attachment 2a	Hydromodification Management Exhibit (Required)	☒ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☒ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☒ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	☒ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☒ Not required because BMPs will drain in less than 96 hours



LEGEND

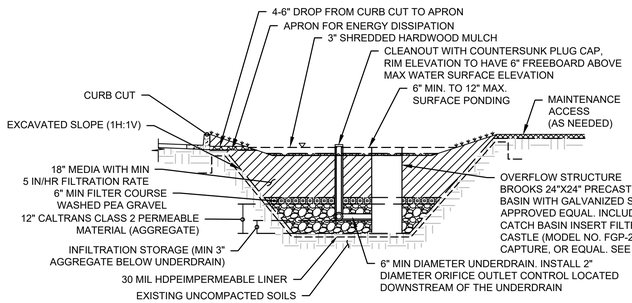
- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- SIDEWALK UNDERDRAIN
- CATCH BASIN
- CLEANOUT
- X% SLOPE ARROW
- 500 NEW CONTOUR
- x 505.50 NEW SPOT ELEVATION
- 500 EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE RIDGE LINE
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- PUBLIC UTILITIES EASEMENT LINE
- DRAINAGE AREA BOUNDARY
- 1B SUBCATCHMENT IDENTIFICATION

A=AREA (ACRES)
Q=6-HOUR, 100-YEAR STORM EVENT (CFS)
TC=TIME OF CONCENTRATION (MIN)

GENERAL NOTES:

1. HYDRAULIC SOIL GROUP = C
2. APPROXIMATE DEPTH TO GROUND WATER = 14.5 – 16.1 FT BELOW EXISTING SURFACE
3. NO EXISTING NATURAL HYDROLOGIC FEATURES EXIST WITHIN THE PROJECT LIMITS.
4. THERE ARE NO POTENTIAL CRITICAL COURSE SEDIMENT YIELD AREAS LOCATED WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.
5. THE CITY OF SANTEE, AS THE PROJECT OWNER, IS RESPONSIBLE FOR THE MAINTENANCE OF PROPOSED BMPS, INCLUDING BIOFILTRATION BASINS AND TRASH CAPTURE DEVICES.

PLAN

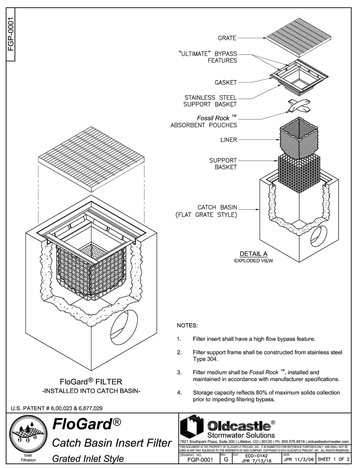


SECTION A-A

BIOFILTRATION PROTECTION DURING CONSTRUCTION:

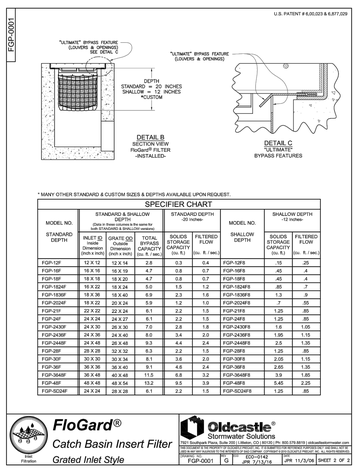
1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.
6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.

FOR REFERENCE ONLY
BIOFILTRATION BASIN DETAIL
N.T.S.



NOTES:

1. Filter insert shall have a high flow bypass feature.
2. Filter support frame shall be constructed from stainless steel Type 304.
3. Filter medium shall be *Fossil Rock* ™, installed and maintained in accordance with manufacturer specifications.
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.



* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART

MODEL NO.	STANDARD & SHALLOW DEPTH (Units in these columns is the same for both STANDARD & SHALLOW versions)			STANDARD DEPTH -20 inches-		MODEL NO.	SHALLOW DEPTH -12 inches-		
STANDARD DEPTH	INLET ID Inside Dimension (Inch x Inch)	GRATE OD Outside Dimension (Inch x Inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)	SHALLOW DEPTH	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-15F	15 X 15	15 X 15	4.7	0.8	0.7	FGP-15F8	.45	.4
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1824F	18 X 18	18 X 24	5.0	1.0	1.2	FGP-1824F8	.65	.7
FGP-1836F	18 X 36	18 X 40	8.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	19 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-22F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-22F8	1.25	.85
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	8.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-30F	30 X 30	30 X 30	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-5024F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-5024F8	1.25	.85

FOR REFERENCE ONLY
FLOGARD CATCH BASIN INSERT FILTER
NTS

DMA DATA TABLE		
DMA TITLE	TRIBUTARY SIZE (AC)	DRAINS TO
1A	2.00	EXISTING POINT OF DISCHARGE (NO IMPROVEMENTS PROPOSED)
1B	0.61	BF-1B
1C	0.17	BF-1C
1D	0.38	BF-1D
1E	0.46	BF-1E
1F	0.16	BF-1F
2A	0.40	BF-2A
2B	0.28	BF-2B
2C	0.71	BF-2C



SANTEE COMMUNITY CENTER

POST-DEVELOPMENT DRAINAGE CONDITION

FIGURE A2

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961–2800 (619) 961–2392 fax
www.psomas.com

Attachment 2a

REACH ID	NAME
1	Santa Margarita River
2	San Luis Rey River
3	Buena Vista Creek
4	Agua Hedionda Creek
5	San Marcos Creek
6	Encinitas Creek
7	Cottonwood Creek (Carlsbad WMA)
8	Escondido Creek
9	San Dieguito Creek - Reach 1
10	San Dieguito Creek - Reach 2
11	Lusardi Creek
12	Los Penasquitos / Poway Creek
13	Rattlesnake Creek
14	Carroll Canyon Creek
15	Rose Creek
16	San Diego River
17	Sycamore Creek
18	Woodglen Vista Creek
19	San Vicente Creek
20	Forester Creek
21	Chollas Creek
22	Sweetwater River - Reach 1
23	Sweetwater River - Reach 2
24	Otay River
25	Jamul / Dulzura Creek
26	Tijuana River
27	Cottonwood Creek (Tijuana WMA)

Legend

- Regional WMAA Streams
- Watershed Boundaries
- Municipal Boundaries
- Rivers & Streams
- Potential Critical Coarse Sediment Yield Areas

Aerial Imagery Source: DigitalGlobe, 06/2012

Miles 0 5 10 15 NORTH

Potential Critical Coarse Sediment Yield Areas

Regional San Diego County Watersheds

Exhibit Date: Sept. 8, 2014

Attachment 2b

Geosyntec consultants

RICK ENGINEERING COMPANY

Attachment 2d

SDHM 3.1

PROJECT REPORT

General Model Information

Project Name: 2025_SCC
Site Name: SCC
Site Address:
City:
Report Date: 2/24/2025
Gage: SANTEE
Data Start: 10/01/1973
Data End: 09/30/2004
Timestep: Hourly
Precip Scale: 1.000
Version Date: 2021/06/28

POC Thresholds

Low Flow Threshold for POC1:	10 Percent of the 2 Year
High Flow Threshold for POC1:	10 Year
Low Flow Threshold for POC2:	10 Percent of the 2 Year
High Flow Threshold for POC2:	10 Year

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Landuse Basin Data

Predeveloped Land Use

Pre Basin 1

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
C,NatVeg,Flat	1.79
Pervious Total	1.79
Impervious Land Use	acre
Impervious Total	0
Basin Total	1.79

Element Flows To:

Surface	Interflow	Groundwater

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Pre Basin 2

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
C,NatVeg,Flat	1.39
Pervious Total	1.39
Impervious Land Use	acre
Impervious Total	0
Basin Total	1.39

Element Flows To:

Surface	Interflow	Groundwater

DRAFT

Mitigated Land Use

Prop Basin 2

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,NatVeg,Flat	0.34
Pervious Total	0.34

Impervious Land Use	acre
IMPERVIOUS-FLAT	1.05
Impervious Total	1.05
Basin Total	1.39

Element Flows To:

Surface	Interflow	Groundwater
Surface rtial Ret 2	Surface rtial Ret 2	

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Prop Basin 1

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,NatVeg,Flat	0.33
Pervious Total	0.33

Impervious Land Use	acre
IMPERVIOUS-FLAT	1.46
Impervious Total	1.46
Basin Total	1.79

Element Flows To:

Surface	Interflow	Groundwater
Surface rtial Ret 1	Surface rtial Ret 1	

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Routing Elements
Predeveloped Routing

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Mitigated Routing

Bio Partial Ret 2

Bottom Length:	161.93 ft.
Bottom Width:	161.93 ft.
Material thickness of first layer:	0.25
Material type for first layer:	Mulch
Material thickness of second layer:	1.5
Material type for second layer:	ESM
Material thickness of third layer:	1.5
Material type for third layer:	GRAVEL
Underdrain used	
Underdrain Diameter (feet):	0.5
Orifice Diameter (in.):	0.749612500000001
Offset (in.):	3
Flow Through Underdrain (ac-ft.):	21.954
Total Outflow (ac-ft.):	24.896
Percent Through Underdrain:	88.18
Discharge Structure	
Riser Height:	0.5 ft.
Riser Diameter:	12 in.
Element Flows To:	
Outlet 1	Outlet 2

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Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.6019	0.0000	0.0000	0.0000
0.0467	0.6019	0.0084	0.0000	0.0000
0.0934	0.6019	0.0169	0.0000	0.0000
0.1401	0.6019	0.0253	0.0000	0.0000
0.1868	0.6019	0.0337	0.0000	0.0000
0.2335	0.6019	0.0422	0.0000	0.0000
0.2802	0.6019	0.0506	0.0000	0.0000
0.3269	0.6019	0.0590	0.0000	0.0000
0.3736	0.6019	0.0675	0.0000	0.0000
0.4203	0.6019	0.0759	0.0000	0.0000
0.4670	0.6019	0.0843	0.0000	0.0000
0.5137	0.6019	0.0928	0.0000	0.0000
0.5604	0.6019	0.1012	0.0000	0.0000
0.6071	0.6019	0.1096	0.0000	0.0000
0.6538	0.6019	0.1181	0.0000	0.0000
0.7005	0.6019	0.1265	0.0000	0.0000
0.7473	0.6019	0.1349	0.0000	0.0000
0.7940	0.6019	0.1434	0.0000	0.0000
0.8407	0.6019	0.1518	0.0000	0.0000
0.8874	0.6019	0.1602	0.0000	0.0000
0.9341	0.6019	0.1687	0.0000	0.0000
0.9808	0.6019	0.1771	0.0000	0.0000
1.0275	0.6019	0.1855	0.0000	0.0000
1.0742	0.6019	0.1940	0.0000	0.0000
1.1209	0.6019	0.2024	0.0000	0.0000
1.1676	0.6019	0.2108	0.0000	0.0000
1.2143	0.6019	0.2193	0.0000	0.0000
1.2610	0.6019	0.2277	0.0000	0.0000
1.3077	0.6019	0.2361	0.0000	0.0000

1.3544	0.6019	0.2446	0.0000	0.0000
1.4011	0.6019	0.2530	0.0000	0.0000
1.4478	0.6019	0.2614	0.0000	0.0000
1.4945	0.6019	0.2699	0.0000	0.0000
1.5412	0.6019	0.2783	0.0000	0.0000
1.5879	0.6019	0.2868	0.0000	0.0000
1.6346	0.6019	0.2952	0.0000	0.0000
1.6813	0.6019	0.3036	0.0000	0.0000
1.7280	0.6019	0.3121	0.0000	0.0000
1.7747	0.6019	0.3237	0.0000	0.0000
1.8214	0.6019	0.3354	0.0000	0.0000
1.8681	0.6019	0.3471	0.0000	0.0000
1.9148	0.6019	0.3587	0.0000	0.0000
1.9615	0.6019	0.3704	0.0000	0.0000
2.0082	0.6019	0.3821	0.0000	0.0000
2.0549	0.6019	0.3937	0.0000	0.0000
2.1016	0.6019	0.4054	0.0000	0.0000
2.1484	0.6019	0.4171	0.0000	0.0000
2.1951	0.6019	0.4287	0.0000	0.0000
2.2418	0.6019	0.4404	0.0000	0.0000
2.2885	0.6019	0.4521	0.0000	0.0000
2.3352	0.6019	0.4637	0.0000	0.0000
2.3819	0.6019	0.4754	0.0000	0.0000
2.4286	0.6019	0.4871	0.0000	0.0000
2.4753	0.6019	0.4987	0.0000	0.0000
2.5220	0.6019	0.5104	0.0000	0.0000
2.5687	0.6019	0.5221	0.0000	0.0000
2.6154	0.6019	0.5337	0.0000	0.0000
2.6621	0.6019	0.5454	0.0000	0.0000
2.7088	0.6019	0.5571	0.0000	0.0000
2.7555	0.6019	0.5687	0.0000	0.0000
2.8022	0.6019	0.5804	0.0000	0.0000
2.8489	0.6019	0.5921	0.0000	0.0000
2.8956	0.6019	0.6037	0.0000	0.0000
2.9423	0.6019	0.6154	0.0000	0.0000
2.9890	0.6019	0.6271	0.0000	0.0000
3.0357	0.6019	0.6387	0.0000	0.0000
3.0824	0.6019	0.6504	0.0000	0.0000
3.1291	0.6019	0.6621	0.0000	0.0000
3.1758	0.6019	0.6737	0.0000	0.0000
3.2225	0.6019	0.6854	0.0000	0.0000
3.2500	0.6019	0.6923	0.0000	0.0000

Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	To Amended(cfs)	Infilt(cfs)
3.2500	0.6019	0.6923	0.0000	0.0264	0.0000
3.2967	0.6019	0.7204	0.0000	0.0264	0.0000
3.3434	0.6019	0.7485	0.0000	0.0264	0.0000
3.3901	0.6019	0.7766	0.0000	0.0264	0.0000
3.4368	0.6019	0.8047	0.0000	0.0264	0.0000
3.4835	0.6019	0.8328	0.0000	0.0264	0.0000
3.5302	0.6019	0.8609	0.0000	0.0264	0.0000
3.5769	0.6019	0.8890	0.0000	0.0264	0.0000
3.6236	0.6019	0.9172	0.0000	0.0264	0.0000
3.6703	0.6019	0.9453	0.0000	0.0264	0.0000
3.7170	0.6019	0.9734	0.0000	0.0264	0.0000
3.7637	0.6019	1.0015	0.0000	0.0264	0.0000
3.8104	0.6019	1.0296	0.0000	0.0264	0.0000

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3.8571	0.6019	1.0577	0.0000	0.0264	0.0000
3.9038	0.6019	1.0858	0.0000	0.0264	0.0000
3.9505	0.6019	1.1139	0.0000	0.0264	0.0000
3.9973	0.6019	1.1421	0.0000	0.0264	0.0000
4.0440	0.6019	1.1702	0.0000	0.0264	0.0000
4.0907	0.6019	1.1983	0.0000	0.0264	0.0000
4.1374	0.6019	1.2264	0.0000	0.0264	0.0000
4.1841	0.6019	1.2545	0.0000	0.0264	0.0000
4.2308	0.6019	1.2826	0.0000	0.0264	0.0000
4.2500	0.6019	1.2942	0.0000	0.0264	0.0000

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Surface rtial Ret 2

Element Flows To:

Outlet 1	Outlet 2
	Bio Partial Ret 2

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Bio Partial Ret 1

Bottom Length:	197.29 ft.
Bottom Width:	197.29 ft.
Material thickness of first layer:	0.25
Material type for first layer:	Mulch
Material thickness of second layer:	1.5
Material type for second layer:	ESM
Material thickness of third layer:	1.5
Material type for third layer:	GRAVEL
Underdrain used	
Underdrain Diameter (feet):	0.5
Orifice Diameter (in.):	0.830401500000001
Offset (in.):	3
Flow Through Underdrain (ac-ft.):	27.587
Total Outflow (ac-ft.):	31.943
Percent Through Underdrain:	86.36
Discharge Structure	
Riser Height:	0.5 ft.
Riser Diameter:	12 in.
Element Flows To:	
Outlet 1	Outlet 2

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Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.8936	0.0000	0.0000	0.0000
0.0522	0.8936	0.0140	0.0000	0.0000
0.1044	0.8936	0.0280	0.0000	0.0000
0.1566	0.8936	0.0420	0.0000	0.0000
0.2088	0.8936	0.0560	0.0000	0.0000
0.2610	0.8936	0.0700	0.0000	0.0000
0.3132	0.8936	0.0840	0.0000	0.0000
0.3654	0.8936	0.0979	0.0000	0.0000
0.4176	0.8936	0.1119	0.0000	0.0000
0.4698	0.8936	0.1259	0.0000	0.0000
0.5220	0.8936	0.1399	0.0000	0.0000
0.5742	0.8936	0.1539	0.0000	0.0000
0.6264	0.8936	0.1679	0.0000	0.0000
0.6786	0.8936	0.1819	0.0000	0.0000
0.7308	0.8936	0.1959	0.0000	0.0000
0.7830	0.8936	0.2099	0.0000	0.0000
0.8352	0.8936	0.2239	0.0000	0.0000
0.8874	0.8936	0.2379	0.0000	0.0000
0.9396	0.8936	0.2519	0.0000	0.0000
0.9918	0.8936	0.2659	0.0000	0.0000
1.0440	0.8936	0.2799	0.0000	0.0000
1.0962	0.8936	0.2938	0.0000	0.0000
1.1484	0.8936	0.3078	0.0000	0.0000
1.2005	0.8936	0.3218	0.0000	0.0000
1.2527	0.8936	0.3358	0.0000	0.0000
1.3049	0.8936	0.3498	0.0000	0.0000
1.3571	0.8936	0.3638	0.0000	0.0000
1.4093	0.8936	0.3778	0.0000	0.0000
1.4615	0.8936	0.3918	0.0000	0.0000
1.5137	0.8936	0.4058	0.0000	0.0000
1.5659	0.8936	0.4198	0.0000	0.0000

1.6181	0.8936	0.4338	0.0000	0.0000
1.6703	0.8936	0.4478	0.0000	0.0000
1.7225	0.8936	0.4618	0.0000	0.0000
1.7747	0.8936	0.4811	0.0000	0.0000
1.8269	0.8936	0.5005	0.0000	0.0000
1.8791	0.8936	0.5198	0.0000	0.0000
1.9313	0.8936	0.5392	0.0000	0.0000
1.9835	0.8936	0.5585	0.0000	0.0000
2.0357	0.8936	0.5779	0.0000	0.0000
2.0879	0.8936	0.5973	0.0000	0.0000
2.1401	0.8936	0.6166	0.0000	0.0000
2.1923	0.8936	0.6360	0.0000	0.0000
2.2445	0.8936	0.6553	0.0000	0.0000
2.2967	0.8936	0.6747	0.0000	0.0000
2.3489	0.8936	0.6940	0.0000	0.0000
2.4011	0.8936	0.7134	0.0000	0.0000
2.4533	0.8936	0.7327	0.0000	0.0000
2.5055	0.8936	0.7521	0.0000	0.0000
2.5577	0.8936	0.7715	0.0000	0.0000
2.6099	0.8936	0.7908	0.0000	0.0000
2.6621	0.8936	0.8102	0.0000	0.0000
2.7143	0.8936	0.8295	0.0000	0.0000
2.7665	0.8936	0.8489	0.0000	0.0000
2.8187	0.8936	0.8682	0.0000	0.0000
2.8709	0.8936	0.8876	0.0000	0.0000
2.9231	0.8936	0.9070	0.0000	0.0000
2.9753	0.8936	0.9263	0.0000	0.0000
3.0275	0.8936	0.9457	0.0000	0.0000
3.0797	0.8936	0.9650	0.0000	0.0000
3.1319	0.8936	0.9844	0.0000	0.0000
3.1841	0.8936	1.0037	0.0000	0.0000
3.2363	0.8936	1.0231	0.0000	0.0000
3.2500	0.8936	1.0282	0.0000	0.0000

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Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	To Amended(cfs)	Infilt(cfs)
3.2500	0.8936	1.0282	0.0000	0.0324	0.0000
3.3022	0.8936	1.0748	0.0000	0.0324	0.0000
3.3544	0.8936	1.1215	0.0000	0.0324	0.0000
3.4066	0.8936	1.1681	0.0000	0.0324	0.0000
3.4588	0.8936	1.2148	0.0000	0.0324	0.0000
3.5110	0.8936	1.2614	0.0000	0.0324	0.0000
3.5632	0.8936	1.3080	0.0000	0.0324	0.0000
3.6154	0.8936	1.3547	0.0000	0.0324	0.0000
3.6676	0.8936	1.4013	0.0000	0.0324	0.0000
3.7198	0.8936	1.4480	0.0000	0.0324	0.0000
3.7720	0.8936	1.4946	0.0000	0.0324	0.0000
3.8242	0.8936	1.5413	0.0000	0.0324	0.0000
3.8764	0.8936	1.5879	0.0000	0.0324	0.0000
3.9286	0.8936	1.6345	0.0000	0.0324	0.0000
3.9808	0.8936	1.6812	0.0000	0.0324	0.0000
4.0330	0.8936	1.7278	0.0000	0.0324	0.0000
4.0852	0.8936	1.7745	0.0000	0.0324	0.0000
4.1374	0.8936	1.8211	0.0000	0.0324	0.0000
4.1896	0.8936	1.8677	0.0000	0.0324	0.0000
4.2418	0.8936	1.9144	0.0000	0.0324	0.0000
4.2940	0.8936	1.9610	0.0000	0.0324	0.0000
4.3462	0.8936	2.0077	0.0000	0.0324	0.0000

4.3984	0.8936	2.0543	0.0000	0.0324	0.0000
4.4505	0.8936	2.1010	0.0000	0.0324	0.0000
4.5027	0.8936	2.1476	0.0000	0.0324	0.0000
4.5549	0.8936	2.1942	0.0000	0.0324	0.0000
4.6071	0.8936	2.2409	0.0000	0.0324	0.0000
4.6593	0.8936	2.2875	0.0015	0.0324	0.0000
4.7115	0.8936	2.3342	0.0022	0.0324	0.0000
4.7500	0.8936	2.3685	0.0032	0.0324	0.0000

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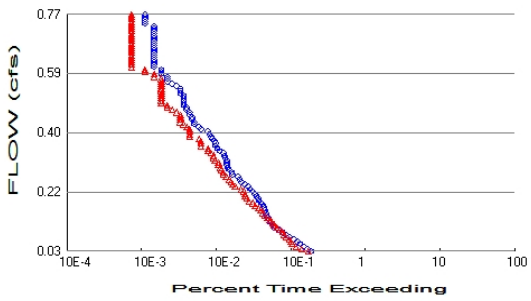
Surface rtial Ret 1

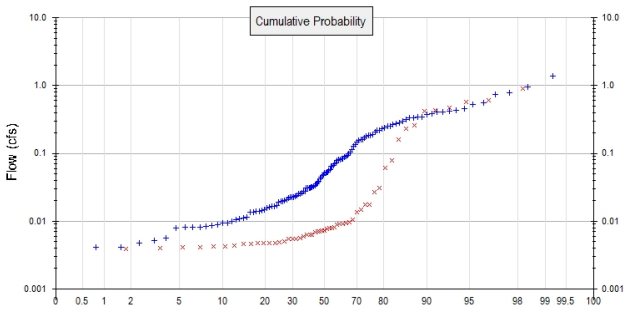
Element Flows To:

Outlet 1	Outlet 2
	Bio Partial Ret 1

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Analysis Results
POC 1





\+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #1
Total Pervious Area: 1.79
Total Impervious Area: 0

Mitigated Landuse Totals for POC #1
Total Pervious Area: 0.33
Total Impervious Area: 1.46

Flow Frequency Method: Cunnane

Flow Frequency Return Periods for Predeveloped. POC #1

Return Period	**Flow(cfs)**
2 year	0.338562
5 year	0.491893
10 year	0.769406
25 year	1.17907

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	**Flow(cfs)**
2 year	0.014617
5 year	0.350192
10 year	0.548751
25 year	0.771831

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Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.0339	510	469	91	Pass
0.0413	451	380	84	Pass
0.0487	411	321	78	Pass
0.0561	361	285	78	Pass
0.0636	330	271	82	Pass
0.0710	303	260	85	Pass
0.0784	259	235	90	Pass
0.0859	235	222	94	Pass
0.0933	209	212	101	Pass
0.1007	184	194	105	Pass
0.1082	160	176	110	Pass
0.1156	153	164	107	Pass
0.1230	145	154	106	Pass
0.1304	140	143	102	Pass
0.1379	136	133	97	Pass
0.1453	129	121	93	Pass
0.1527	127	116	91	Pass
0.1602	123	108	87	Pass
0.1676	120	100	83	Pass
0.1750	116	90	77	Pass
0.1825	110	85	77	Pass
0.1899	103	75	72	Pass
0.1973	99	70	70	Pass
0.2047	94	67	71	Pass
0.2122	90	66	73	Pass
0.2196	83	64	77	Pass
0.2270	78	59	75	Pass
0.2345	72	49	68	Pass
0.2419	65	45	69	Pass
0.2493	59	43	72	Pass
0.2568	56	41	73	Pass
0.2642	53	37	69	Pass
0.2716	45	34	75	Pass
0.2790	44	34	77	Pass
0.2865	40	32	80	Pass
0.2939	39	31	79	Pass
0.3013	38	29	76	Pass
0.3088	38	29	76	Pass
0.3162	38	26	68	Pass
0.3236	36	25	69	Pass
0.3310	35	25	71	Pass
0.3385	34	23	67	Pass
0.3459	30	21	70	Pass
0.3533	28	21	75	Pass
0.3608	27	17	62	Pass
0.3682	27	17	62	Pass
0.3756	26	17	65	Pass
0.3831	24	16	66	Pass
0.3905	23	12	52	Pass
0.3979	22	12	54	Pass
0.4053	21	12	57	Pass
0.4128	17	12	70	Pass
0.4202	16	11	68	Pass

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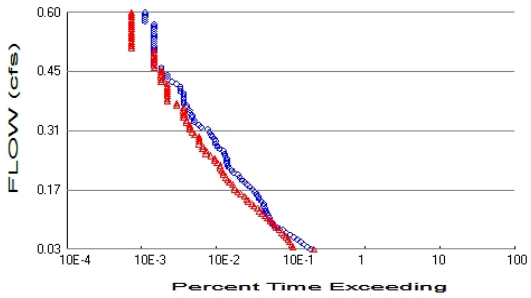
0.4276	14	10	71	Pass
0.4351	14	9	64	Pass
0.4425	13	9	69	Pass
0.4499	13	9	69	Pass
0.4574	12	9	75	Pass
0.4648	12	8	66	Pass
0.4722	11	7	63	Pass
0.4796	11	6	54	Pass
0.4871	10	6	60	Pass
0.4945	10	5	50	Pass
0.5019	10	5	50	Pass
0.5094	10	5	50	Pass
0.5168	10	5	50	Pass
0.5242	9	5	55	Pass
0.5317	9	5	55	Pass
0.5391	9	5	55	Pass
0.5465	8	5	62	Pass
0.5539	7	5	71	Pass
0.5614	6	5	83	Pass
0.5688	6	5	83	Pass
0.5762	6	4	66	Pass
0.5837	5	4	80	Pass
0.5911	5	3	60	Pass
0.5985	5	3	60	Pass
0.6060	4	2	50	Pass
0.6134	4	2	50	Pass
0.6208	4	2	50	Pass
0.6282	4	2	50	Pass
0.6357	4	2	50	Pass
0.6431	4	2	50	Pass
0.6505	4	2	50	Pass
0.6580	4	2	50	Pass
0.6654	4	2	50	Pass
0.6728	4	2	50	Pass
0.6802	4	2	50	Pass
0.6877	4	2	50	Pass
0.6951	4	2	50	Pass
0.7025	4	2	50	Pass
0.7100	4	2	50	Pass
0.7174	4	2	50	Pass
0.7248	4	2	50	Pass
0.7323	4	2	50	Pass
0.7397	3	2	66	Pass
0.7471	3	2	66	Pass
0.7545	3	2	66	Pass
0.7620	3	2	66	Pass
0.7694	3	2	66	Pass

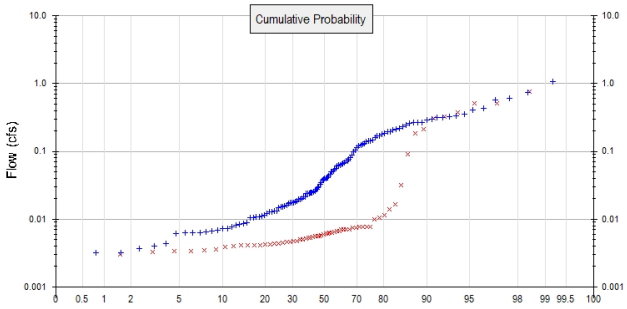
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Water Quality

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POC 2





\+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #2
Total Pervious Area: 1.39
Total Impervious Area: 0

Mitigated Landuse Totals for POC #2
Total Pervious Area: 0.34
Total Impervious Area: 1.05

Flow Frequency Method: Cunnane

Flow Frequency Return Periods for Predeveloped. POC #2

Return Period	**Flow(cfs)**
2 year	0.262905
5 year	0.381973
10 year	0.597472
25 year	0.915591

Flow Frequency Return Periods for Mitigated. POC #2

Return Period	**Flow(cfs)**
2 year	0.007763
5 year	0.266186
10 year	0.474116
25 year	0.646797

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Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.0263	508	553	108	Pass
0.0321	449	292	65	Pass
0.0378	413	277	67	Pass
0.0436	367	264	71	Pass
0.0494	330	250	75	Pass
0.0551	303	235	77	Pass
0.0609	267	224	83	Pass
0.0667	235	205	87	Pass
0.0724	210	190	90	Pass
0.0782	182	172	94	Pass
0.0840	161	168	104	Pass
0.0898	154	154	100	Pass
0.0955	145	144	99	Pass
0.1013	140	131	93	Pass
0.1071	135	123	91	Pass
0.1128	131	111	84	Pass
0.1186	127	105	82	Pass
0.1244	123	98	79	Pass
0.1301	119	87	73	Pass
0.1359	118	82	69	Pass
0.1417	110	73	66	Pass
0.1475	103	70	67	Pass
0.1532	99	65	65	Pass
0.1590	94	58	61	Pass
0.1648	90	53	58	Pass
0.1705	83	49	59	Pass
0.1763	78	48	61	Pass
0.1821	71	45	63	Pass
0.1878	65	41	63	Pass
0.1936	60	39	65	Pass
0.1994	56	37	66	Pass
0.2051	53	34	64	Pass
0.2109	46	34	73	Pass
0.2167	44	32	72	Pass
0.2225	40	31	77	Pass
0.2282	39	31	79	Pass
0.2340	38	28	73	Pass
0.2398	38	26	68	Pass
0.2455	38	26	68	Pass
0.2513	36	23	63	Pass
0.2571	35	20	57	Pass
0.2628	34	20	58	Pass
0.2686	30	18	60	Pass
0.2744	28	18	64	Pass
0.2801	27	16	59	Pass
0.2859	27	16	59	Pass
0.2917	26	16	61	Pass
0.2975	24	16	66	Pass
0.3032	23	14	60	Pass
0.3090	22	13	59	Pass
0.3148	21	12	57	Pass
0.3205	17	12	70	Pass
0.3263	16	12	75	Pass

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0.3321	14	11	78	Pass
0.3378	14	11	78	Pass
0.3436	13	10	76	Pass
0.3494	13	10	76	Pass
0.3552	12	10	83	Pass
0.3609	12	10	83	Pass
0.3667	11	10	90	Pass
0.3725	11	8	72	Pass
0.3782	10	8	80	Pass
0.3840	10	6	60	Pass
0.3898	10	6	60	Pass
0.3955	10	6	60	Pass
0.4013	10	6	60	Pass
0.4071	9	6	66	Pass
0.4128	9	6	66	Pass
0.4186	9	6	66	Pass
0.4244	8	6	75	Pass
0.4302	7	5	71	Pass
0.4359	6	5	83	Pass
0.4417	6	5	83	Pass
0.4475	6	5	83	Pass
0.4532	5	5	100	Pass
0.4590	5	5	100	Pass
0.4648	5	4	80	Pass
0.4705	4	4	100	Pass
0.4763	4	4	100	Pass
0.4821	4	4	100	Pass
0.4879	4	4	100	Pass
0.4936	4	4	100	Pass
0.4994	4	4	100	Pass
0.5052	4	4	100	Pass
0.5109	4	2	50	Pass
0.5167	4	2	50	Pass
0.5225	4	2	50	Pass
0.5282	4	2	50	Pass
0.5340	4	2	50	Pass
0.5398	4	2	50	Pass
0.5455	4	2	50	Pass
0.5513	4	2	50	Pass
0.5571	4	2	50	Pass
0.5629	4	2	50	Pass
0.5686	4	2	50	Pass
0.5744	3	2	66	Pass
0.5802	3	2	66	Pass
0.5859	3	2	66	Pass
0.5917	3	2	66	Pass
0.5975	3	2	66	Pass

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Water Quality

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Model Default Modifications

Total of 0 changes have been made.

PERLND Changes

No PERLND changes have been made.

IMPLND Changes

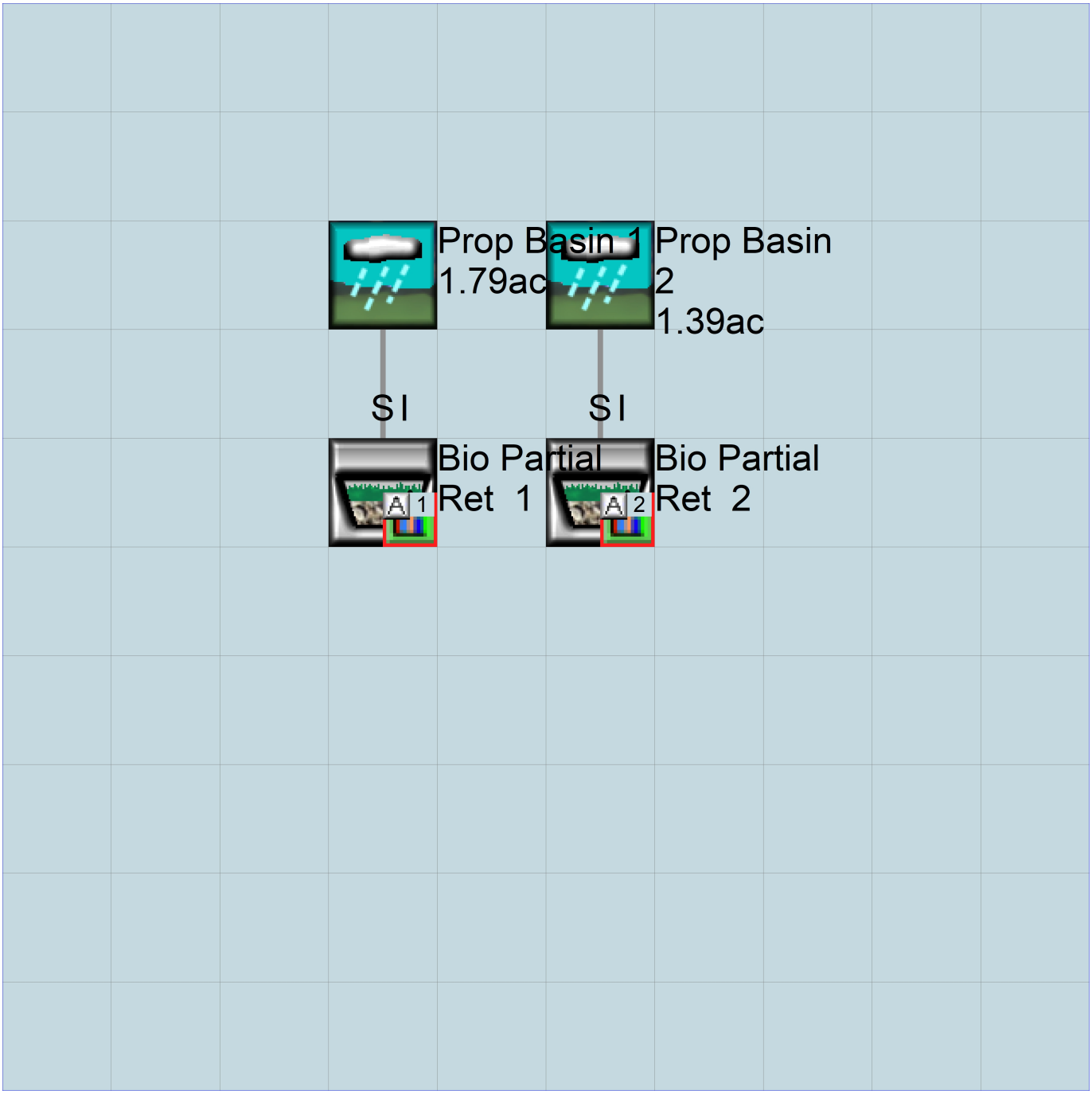
No IMPLND changes have been made.

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Appendix
Predeveloped Schematic



Mitigated Schematic



Predeveloped UCI File

```
RUN

GLOBAL
  WWHM4 model simulation
  START       1973 10 01        END    2004 09 30
  RUN INTERP OUTPUT LEVEL    3    0
  RESUME     0 RUN     1                    UNIT SYSTEM     1
END GLOBAL

FILES
<File>  <Un#>   <-----------File Name------------------------------>***
<-ID->                                                              ***
WDM         26   2025_SCC.wdm
MESSU       25   Pre2025_SCC.MES
            27   Pre2025_SCC.L61
            28   Pre2025_SCC.L62
            30   POC2025_SCC1.dat
            31   POC2025_SCC2.dat
END FILES

OPN SEQUENCE
    INGRP               INDELT 00:60
      PERLND      19
      COPY       501
      COPY       502
      DISPLY       1
      DISPLY       2
    END INGRP
END OPN SEQUENCE
DISPLY
  DISPLY-INFO1
    # -  #<----------Title---------->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
    1        Pre Basin 1                MAX                    1    2   30    9
    2        Pre Basin  2               MAX                    1    2   31    9
  END DISPLY-INFO1
END DISPLY
COPY
  TIMESERIES
    # -  #  NPT  NMN ***
    1         1    1
  501         1    1
  502         1    1
  END TIMESERIES
END COPY
GENER
  OPCODE
    #    # OPCD ***
  END OPCODE
  PARM
    #    #         K ***
  END PARM
END GENER
PERLND
  GEN-INFO
    <PLS ><-------Name------->NBLKS   Unit-systems   Printer ***
    # -  #                          User  t-series Engl Metr ***
                                        in  out           ***
   19      C,NatVeg,Flat          1    1    1    1   27    0
  END GEN-INFO
  *** Section PWATER***

  ACTIVITY
    <PLS > ************ Active Sections ******************************
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
   19         0    0    1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
```

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```
    <PLS > ***************** Print-flags ***************************** PIVL  PYR
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC  *********
   19         0    0    4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  PWAT-PARM1
    <PLS >  PWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP UZFG  VCS  VUZ  VNN VIFW VIRC  VLE INFC  HWT ***
   19         0    1    1    1    0    0    0    0    1    1    0
  END PWAT-PARM1

  PWAT-PARM2
    <PLS >      PWATER input info: Part 2         ***
    # -  # ***FOREST      LZSN    INFILT      LSUR     SLSUR     KVARY     AGWRC
   19              0       3.8     0.035       100      0.05       2.5     0.915
  END PWAT-PARM2

  PWAT-PARM3
    <PLS >      PWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN    INFEXP    INFILD    DEEPFR    BASETP    AGWETP
   19              0         0         2         2         0      0.05      0.05
  END PWAT-PARM3
  PWAT-PARM4
    <PLS >     PWATER input info: Part 4                              ***
    # -  #     CEPSC      UZSN      NSUR     INTFW       IRC     LZETP ***
   19             0       0.6      0.04         1       0.3         0
  END PWAT-PARM4
  MON-LZETPARM
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.4  0.4  0.4  0.4  0.6  0.6  0.6  0.6  0.6  0.4  0.4  0.4
  END MON-LZETPARM
  MON-INTERCEP
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.1  0.1  0.1  0.1 0.06 0.06 0.06 0.06 0.06  0.1  0.1  0.1
  END MON-INTERCEP

  PWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
               ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
    # -  # ***  CEPS      SURS       UZS      IFWS       LZS      AGWS      GWVS
   19             0         0      0.01         0       0.4      0.01         0
  END PWAT-STATE1

END PERLND

IMPLND
  GEN-INFO
    <PLS ><-------Name------->   Unit-systems   Printer ***
    # -  #                    User  t-series Engl Metr ***
                                    in  out           ***
  END GEN-INFO
  *** Section IWATER***

  ACTIVITY
    <PLS > ************* Active Sections ****************************
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL   ***
  END ACTIVITY

  PRINT-INFO
    <ILS > ******** Print-flags ******** PIVL  PYR
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL    *********
  END PRINT-INFO

  IWAT-PARM1
    <PLS >  IWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP  VRS  VNN RTLI     ***
  END IWAT-PARM1
```

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```
  IWAT-PARM2
    <PLS >      IWATER input info: Part 2         ***
    # -  # ***  LSUR     SLSUR      NSUR     RETSC
  END IWAT-PARM2

  IWAT-PARM3
    <PLS >      IWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN
  END IWAT-PARM3

  IWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
    # -  # ***  RETS      SURS
  END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->                 <--Area-->     <-Target->   MBLK    ***
<Name>   #                 <-factor->     <Name>   #   Tbl#    ***
Pre Basin 1***
PERLND  19                       1.79     COPY   501     12
PERLND  19                       1.79     COPY   501     13
Pre Basin  2***
PERLND  19                       1.39     COPY   502     12
PERLND  19                       1.39     COPY   502     13

******Routing******
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
COPY   501 OUTPUT MEAN   1 1   12.1        DISPLY   1     INPUT  TIMSER 1
COPY   502 OUTPUT MEAN   1 1   12.1        DISPLY   2     INPUT  TIMSER 1



<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
END NETWORK

RCHRES
  GEN-INFO
    RCHRES       Name        Nexits   Unit Systems   Printer                ***
    # -  #<------------------><---> User T-series  Engl Metr LKFG           ***
                                      in  out                               ***
  END GEN-INFO
  *** Section RCHRES***

  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags ****************** PIVL  PYR
    # -  # HYDR ADCA CONS HEAT  SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR  *********
  END PRINT-INFO

  HYDR-PARM1
    RCHRES  Flags for each HYDR Section                                 ***
    # -  #  VC A1 A2 A3  ODFVFG for each *** ODGTFG for each     FUNCT  for each
            FG FG FG FG  possible  exit  *** possible  exit      possible  exit
             *  *  *  *    *  *  *  *  *       *  *  *  *  *         ***
  END HYDR-PARM1

  HYDR-PARM2
    # -  #    FTABNO       LEN     DELTH     STCOR        KS      DB50       ***
  <------><--------><--------><--------><--------><--------><-------->      ***
```

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```
  END HYDR-PARM2
  HYDR-INIT
    RCHRES  Initial conditions for each HYDR section                        ***
    # -  # ***   VOL     Initial  value  of COLIND     Initial  value  of OUTDGT
          *** ac-ft     for each possible exit        for each possible exit
  <------><-------->     <---><---><---><---><---> *** <---><---><---><---><--->
  END HYDR-INIT
END RCHRES

SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES
END FTABLES

EXT SOURCES
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   # <Name> # tem strg<-factor->strg <Name>   #   #        <Name> # #  ***
WDM      2 PREC     ENGL    1              PERLND   1 999 EXTNL  PREC
WDM      2 PREC     ENGL    1              IMPLND   1 999 EXTNL  PREC
WDM      1 EVAP     ENGL    1              PERLND   1 999 EXTNL  PETINP
WDM      1 EVAP     ENGL    1              IMPLND   1 999 EXTNL  PETINP

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>   #        <Name> # #<-factor->strg <Name>   # <Name>    tem strg strg***
COPY   501 OUTPUT MEAN   1 1     12.1      WDM    501 FLOW     ENGL      REPL
COPY   502 OUTPUT MEAN   1 1     12.1      WDM    502 FLOW     ENGL      REPL
END EXT TARGETS

MASS-LINK
<Volume>   <-Grp> <-Member-><--Mult-->     <Target>       <-Grp> <-Member->***
<Name>            <Name> # #<-factor->     <Name>                <Name> # #***
  MASS-LINK       12
PERLND     PWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   12

  MASS-LINK       13
PERLND     PWATER IFWO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   13


END MASS-LINK

END RUN
```

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Mitigated UCI File

```
RUN

GLOBAL
  WWHM4 model simulation
  START       1973 10 01        END    2004 09 30
  RUN INTERP OUTPUT LEVEL    3    0
  RESUME     0 RUN     1                    UNIT SYSTEM     1
END GLOBAL

FILES
<File>  <Un#>   <-----------File Name------------------------------>***
<-ID->                                                              ***
WDM         26   2025_SCC.wdm
MESSU       25   Mit2025_SCC.MES
            27   Mit2025_SCC.L61
            28   Mit2025_SCC.L62
            31   POC2025_SCC2.dat
            30   POC2025_SCC1.dat
END FILES

OPN SEQUENCE
    INGRP               INDELT 00:60
      PERLND      19
      IMPLND       1
      RCHRES       1
      RCHRES       2
      RCHRES       3
      RCHRES       4
      COPY         2
      COPY       502
      COPY         1
      COPY       501
      DISPLY       2
      DISPLY       1
    END INGRP
END OPN SEQUENCE
DISPLY
  DISPLY-INFO1
    # -  #<----------Title---------->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
    2        Surface rtial Ret  2        MAX                   1    2   31    9
    1        Surface rtial Ret  1        MAX                   1    2   30    9
  END DISPLY-INFO1
END DISPLY
COPY
  TIMESERIES
    # -  #  NPT  NMN ***
    1         1    1
    2         1    1
  502         1    1
  501         1    1
  END TIMESERIES
END COPY
GENER
  OPCODE
    #    # OPCD ***
  END OPCODE
  PARM
    #    #         K ***
  END PARM
END GENER
PERLND
  GEN-INFO
    <PLS ><-------Name------->NBLKS   Unit-systems   Printer ***
    # -  #                          User  t-series Engl Metr ***
                                          in  out           ***
   19      C,NatVeg,Flat          1    1    1    1   27    0
  END GEN-INFO
  *** Section PWATER***
```

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```
  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
   19         0    0    1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags **************************** PIVL  PYR
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC  *********
   19         0    0    4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  PWAT-PARM1
    <PLS >  PWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP UZFG  VCS  VUZ  VNN VIFW VIRC  VLE INFC  HWT ***
   19         0    1    1    1    0    0    0    0    1    1    0
  END PWAT-PARM1

  PWAT-PARM2
    <PLS >      PWATER input info: Part 2          ***
    # -  # ***FOREST      LZSN    INFILT      LSUR     SLSUR     KVARY     AGWRC
   19              0       3.8     0.035       100      0.05       2.5     0.915
  END PWAT-PARM2

  PWAT-PARM3
    <PLS >      PWATER input info: Part 3          ***
    # -  # ***PETMAX    PETMIN    INFEXP    INFILD    DEEPFR    BASETP    AGWETP
   19              0         0         2         2         0      0.05      0.05
  END PWAT-PARM3
  PWAT-PARM4
    <PLS >     PWATER input info: Part 4                              ***
    # -  #     CEPSC      UZSN      NSUR     INTFW       IRC     LZETP ***
   19              0       0.6      0.04         1       0.3         0
  END PWAT-PARM4
  MON-LZETPARM
    <PLS >      PWATER input info: Part 3          ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.4  0.4  0.4  0.4  0.6  0.6  0.6  0.6  0.6  0.4  0.4  0.4
  END MON-LZETPARM
  MON-INTERCEP
    <PLS >      PWATER input info: Part 3          ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.1  0.1  0.1  0.1 0.06 0.06 0.06 0.06 0.06  0.1  0.1  0.1
  END MON-INTERCEP

  PWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
             ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
    # -  # ***  CEPS      SURS       UZS      IFWS       LZS      AGWS      GWVS
   19              0         0      0.01         0       0.4      0.01         0
  END PWAT-STATE1

END PERLND

IMPLND
  GEN-INFO
    <PLS ><-------Name------->   Unit-systems   Printer ***
    # -  #                     User  t-series Engl Metr ***
                                  in  out           ***
    1      IMPERVIOUS-FLAT        1    1    1   27    0
  END GEN-INFO
  *** Section IWATER***

  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL   ***
    1         0    0    1    0    0    0
  END ACTIVITY
```

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```
  PRINT-INFO
    <ILS > ******** Print-flags ******** PIVL  PYR
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL    *********
    1         0    0    4    0    0    0    1    9
  END PRINT-INFO

  IWAT-PARM1
    <PLS >  IWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP  VRS  VNN RTLI     ***
    1         0    0    0    0    1
  END IWAT-PARM1

  IWAT-PARM2
    <PLS >      IWATER input info: Part 2         ***
    # -  # ***  LSUR     SLSUR      NSUR     RETSC
    1          100      0.05     0.011       0.1
  END IWAT-PARM2

  IWAT-PARM3
    <PLS >      IWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN
    1              0         0
  END IWAT-PARM3

  IWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
    # -  # ***  RETS      SURS
    1              0         0
  END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->                  <--Area-->     <-Target->   MBLK   ***
<Name>   #                  <-factor->     <Name>   #   Tbl#   ***
Prop Basin  2***
PERLND  19                        0.34     RCHRES   1      2
PERLND  19                        0.34     RCHRES   1      3
IMPLND   1                        1.05     RCHRES   1      5
Prop Basin 1***
PERLND  19                        0.33     RCHRES   3      2
PERLND  19                        0.33     RCHRES   3      3
IMPLND   1                        1.46     RCHRES   3      5

******Routing******
PERLND  19                        0.34     COPY     2     12
IMPLND   1                        1.05     COPY     2     15
PERLND  19                        0.34     COPY     2     13
RCHRES   1                           1     RCHRES   2      8
PERLND  19                        0.33     COPY     1     12
IMPLND   1                        1.46     COPY     1     15
PERLND  19                        0.33     COPY     1     13
RCHRES   3                           1     RCHRES   4      8
RCHRES   2                           1     COPY   502     16
RCHRES   1                           1     COPY   502     17
RCHRES   4                           1     COPY   501     16
RCHRES   3                           1     COPY   501     17
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
COPY   502 OUTPUT MEAN   1 1   12.1        DISPLY   2     INPUT  TIMSER 1
COPY   501 OUTPUT MEAN   1 1   12.1        DISPLY   1     INPUT  TIMSER 1



<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
END NETWORK
```

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```
RCHRES
  GEN-INFO
    RCHRES       Name        Nexits   Unit Systems   Printer                ***
    # -  #<-----------------><---> User T-series  Engl Metr LKFG            ***
                                       in  out                              ***
    1     Surface rtial Re-029    2    1    1    1   28    0    1
    2     Bio Partial Ret -028    1    1    1    1   28    0    1
    3     Surface rtial Re-040    2    1    1    1   28    0    1
    4     Bio Partial Ret -039    1    1    1    1   28    0    1
  END GEN-INFO
  *** Section RCHRES***

  ACTIVITY
    <PLS > ************ Active Sections ******************************
    # -  # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1         1    0    0    0    0    0    0    0    0    0
    2         1    0    0    0    0    0    0    0    0    0
    3         1    0    0    0    0    0    0    0    0    0
    4         1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags ******************* PIVL  PYR
    # -  # HYDR ADCA CONS HEAT  SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR  *********
    1         4    0    0    0    0    0    0    0    0    0    1    9
    2         4    0    0    0    0    0    0    0    0    0    1    9
    3         4    0    0    0    0    0    0    0    0    0    1    9
    4         4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  HYDR-PARM1
    RCHRES  Flags for each HYDR Section                                  ***
    # -  #  VC A1 A2 A3  ODFVFG for each *** ODGTFG for each     FUNCT  for each
          FG FG FG FG  possible  exit  *** possible  exit      possible  exit
           *  *  *  *   *  *  *  *  *       *  *  *  *  *         ***
    1      0  1  0  0    4  5  0  0  0       0  0  0  0  0        2  2  2  2  2
    2      0  1  0  0    4  0  0  0  0       0  0  0  0  0        2  2  2  2  2
    3      0  1  0  0    4  5  0  0  0       0  0  0  0  0        2  2  2  2  2
    4      0  1  0  0    4  0  0  0  0       0  0  0  0  0        2  2  2  2  2
  END HYDR-PARM1

  HYDR-PARM2
    # -  #    FTABNO       LEN      DELTH     STCOR        KS      DB50       ***
  <------><--------><--------><--------><--------><--------><--------><--------> ***
    1              1      0.01       0.0       0.0       0.0       0.0
    2              2      0.03       0.0       0.0       0.0       0.0
    3              3      0.01       0.0       0.0       0.0       0.0
    4              4      0.04       0.0       0.0       0.0       0.0
  END HYDR-PARM2
  HYDR-INIT
    RCHRES  Initial conditions for each HYDR section                     ***
    # -  # ***   VOL     Initial  value  of COLIND     Initial  value  of OUTDGT
         *** ac-ft     for each possible exit        for each possible exit
  <------><-------->     <---><---><---><---><---> *** <---><---><---><---><--->
    1            0         4.0  5.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
    2            0         4.0  0.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
    3            0         4.0  5.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
    4            0         4.0  0.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
  END HYDR-INIT
END RCHRES

SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES
  FTABLE      2
   71    4
     Depth      Area    Volume  Outflow1 Velocity  Travel Time***
      (ft)   (acres) (acre-ft)   (cfs)   (ft/sec)    (Minutes)***
  0.000000  0.601944  0.000000  0.000000
```

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0.046703	0.601944	0.008434	0.000000
0.093407	0.601944	0.016868	0.000000
0.140110	0.601944	0.025301	0.000000
0.186813	0.601944	0.033735	0.000000
0.233516	0.601944	0.042169	0.000000
0.280220	0.601944	0.050603	0.000000
0.326923	0.601944	0.059037	0.000000
0.373626	0.601944	0.067471	0.000000
0.420330	0.601944	0.075904	0.000000
0.467033	0.601944	0.084338	0.000000
0.513736	0.601944	0.092772	0.000000
0.560440	0.601944	0.101206	0.000000
0.607143	0.601944	0.109640	0.000000
0.653846	0.601944	0.118074	0.000000
0.700549	0.601944	0.126507	0.000000
0.747253	0.601944	0.134941	0.000000
0.793956	0.601944	0.143375	0.000000
0.840659	0.601944	0.151809	0.000000
0.887363	0.601944	0.160243	0.000000
0.934066	0.601944	0.168677	0.000000
0.980769	0.601944	0.177110	0.000000
1.027473	0.601944	0.185544	0.000000
1.074176	0.601944	0.193978	0.000000
1.120879	0.601944	0.202412	0.000000
1.167582	0.601944	0.210846	0.000000
1.214286	0.601944	0.219280	0.000937
1.260989	0.601944	0.227713	0.001406
1.307692	0.601944	0.236147	0.002206
1.354396	0.601944	0.244581	0.002606
1.401099	0.601944	0.253015	0.003210
1.447802	0.601944	0.261449	0.003512
1.494505	0.601944	0.269883	0.003995
1.541209	0.601944	0.278316	0.004237
1.587912	0.601944	0.286750	0.004646
1.634615	0.601944	0.295184	0.004851
1.681319	0.601944	0.303618	0.005212
1.728022	0.601944	0.312052	0.005393
1.774725	0.601944	0.323718	0.005719
1.821429	0.601944	0.335385	0.005883
1.868132	0.601944	0.347052	0.006184
1.914835	0.601944	0.358719	0.006334
1.961538	0.601944	0.370386	0.006615
2.008242	0.601944	0.382052	0.006755
2.054945	0.601944	0.393719	0.007019
2.101648	0.601944	0.405386	0.007151
2.148352	0.601944	0.417053	0.007401
2.195055	0.601944	0.428720	0.007525
2.241758	0.601944	0.440386	0.007763
2.288462	0.601944	0.452053	0.007763
2.335165	0.601944	0.463720	0.008060
2.381868	0.601944	0.475387	0.008524
2.428571	0.601944	0.487054	0.009051
2.475275	0.601944	0.498720	0.009593
2.521978	0.601944	0.510387	0.010128
2.568681	0.601944	0.522054	0.010646
2.615385	0.601944	0.533721	0.011145
2.662088	0.601944	0.545388	0.011625
2.708791	0.601944	0.557054	0.012088
2.755495	0.601944	0.568721	0.012534
2.802198	0.601944	0.580388	0.012965
2.848901	0.601944	0.592055	0.013382
2.895604	0.601944	0.603722	0.013786
2.942308	0.601944	0.615388	0.014180
2.989011	0.601944	0.627055	0.014562
3.035714	0.601944	0.638722	0.014936
3.082418	0.601944	0.650389	0.015301
3.129121	0.601944	0.662056	0.015658
3.175824	0.601944	0.673722	0.016009
3.222527	0.601944	0.685389	0.016358
3.250000	0.601944	0.694435	0.026411

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```
END FTABLE  2
FTABLE      1
 23    5
   Depth      Area    Volume  Outflow1  Outflow2  Velocity  Travel Time***
    (ft)   (acres) (acre-ft)   (cfs)      (cfs)   (ft/sec)    (Minutes)***
0.000000  0.601944  0.000000  0.000000  0.000000
0.046703  0.601944  0.028113  0.000000  0.026411
0.093407  0.601944  0.056226  0.000000  0.026411
0.140110  0.601944  0.084338  0.000000  0.026411
0.186813  0.601944  0.112451  0.000000  0.026411
0.233516  0.601944  0.140564  0.000000  0.026411
0.280220  0.601944  0.168677  0.000000  0.026411
0.326923  0.601944  0.196789  0.000000  0.026411
0.373626  0.601944  0.224902  0.000000  0.026411
0.420330  0.601944  0.253015  0.000000  0.026411
0.467033  0.601944  0.281128  0.000000  0.026411
0.513736  0.601944  0.309240  0.017087  0.026411
0.560440  0.601944  0.337353  0.157374  0.026411
0.607143  0.601944  0.365466  0.369426  0.026411
0.653846  0.601944  0.393579  0.627270  0.026411
0.700549  0.601944  0.421691  0.911089  0.026411
0.747253  0.601944  0.449804  1.200769  0.026411
0.793956  0.601944  0.477917  1.476083  0.026411
0.840659  0.601944  0.506030  1.718754  0.026411
0.887363  0.601944  0.534143  1.915531  0.026411
0.934066  0.601944  0.562255  2.061968  0.026411
0.980769  0.601944  0.590368  2.166777  0.026411
1.000000  0.601944  0.601944  2.287491  0.026411
END FTABLE  1
FTABLE      4
 64    4
   Depth      Area    Volume  Outflow1 Velocity  Travel Time***
    (ft)   (acres) (acre-ft)   (cfs)   (ft/sec)    (Minutes)***
0.000000  0.893566  0.000000  0.000000
0.052198  0.893566  0.013993  0.000000
0.104396  0.893566  0.027985  0.000000
0.156593  0.893566  0.041978  0.000000
0.208791  0.893566  0.055971  0.000000
0.260989  0.893566  0.069963  0.000000
0.313187  0.893566  0.083956  0.000000
0.365385  0.893566  0.097949  0.000000
0.417582  0.893566  0.111941  0.000000
0.469780  0.893566  0.125934  0.000000
0.521978  0.893566  0.139927  0.000000
0.574176  0.893566  0.153919  0.000000
0.626374  0.893566  0.167912  0.000000
0.678571  0.893566  0.181905  0.000000
0.730769  0.893566  0.195897  0.000000
0.782967  0.893566  0.209890  0.000000
0.835165  0.893566  0.223882  0.000000
0.887363  0.893566  0.237875  0.000000
0.939560  0.893566  0.251868  0.000000
0.991758  0.893566  0.265860  0.000000
1.043956  0.893566  0.279853  0.000000
1.096154  0.893566  0.293846  0.000000
1.148352  0.893566  0.307838  0.000000
1.200549  0.893566  0.321831  0.000000
1.252747  0.893566  0.335824  0.000000
1.304945  0.893566  0.349816  0.000000
1.357143  0.893566  0.363809  0.000000
1.409341  0.893566  0.377802  0.001476
1.461538  0.893566  0.391794  0.002214
1.513736  0.893566  0.405787  0.003228
1.565934  0.893566  0.419780  0.003735
1.618132  0.893566  0.433772  0.004479
1.670330  0.893566  0.447765  0.004851
1.722527  0.893566  0.461758  0.005448
1.774725  0.893566  0.481114  0.005746
1.826923  0.893566  0.500471  0.006257
1.879121  0.893566  0.519827  0.006512
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  1.931319  0.893566  0.539184  0.006966
  1.983516  0.893566  0.558540  0.007193
  2.035714  0.893566  0.577897  0.007606
  2.087912  0.893566  0.597253  0.007812
  2.140110  0.893566  0.616610  0.008194
  2.192308  0.893566  0.635966  0.008385
  2.244505  0.893566  0.655323  0.008593
  2.296703  0.893566  0.674679  0.009080
  2.348901  0.893566  0.694036  0.009784
  2.401099  0.893566  0.713392  0.010559
  2.453297  0.893566  0.732749  0.011340
  2.505495  0.893566  0.752105  0.012100
  2.557692  0.893566  0.771462  0.012829
  2.609890  0.893566  0.790818  0.013525
  2.662088  0.893566  0.810175  0.014190
  2.714286  0.893566  0.829531  0.014827
  2.766484  0.893566  0.848888  0.015438
  2.818681  0.893566  0.868244  0.016027
  2.870879  0.893566  0.887601  0.016594
  2.923077  0.893566  0.906957  0.017143
  2.975275  0.893566  0.926314  0.017675
  3.027473  0.893566  0.945670  0.018192
  3.079670  0.893566  0.965027  0.018695
  3.131868  0.893566  0.984383  0.019187
  3.184066  0.893566  1.003740  0.019669
  3.236264  0.893566  1.023096  0.020150
  3.250000  0.893566  1.030869  0.032411
  END FTABLE  4
  FTABLE      3
   30    5
     Depth      Area    Volume  Outflow1  Outflow2  Velocity  Travel Time***
      (ft)   (acres) (acre-ft)    (cfs)     (cfs)   (ft/sec)    (Minutes)***
  0.000000  0.893566  0.000000  0.000000  0.000000
  0.052198  0.893566  0.046642  0.000000  0.032411
  0.104396  0.893566  0.093284  0.000000  0.032411
  0.156593  0.893566  0.139927  0.000000  0.032411
  0.208791  0.893566  0.186569  0.000000  0.032411
  0.260989  0.893566  0.233211  0.000000  0.032411
  0.313187  0.893566  0.279853  0.000000  0.032411
  0.365385  0.893566  0.326495  0.000000  0.032411
  0.417582  0.893566  0.373137  0.000000  0.032411
  0.469780  0.893566  0.419780  0.000000  0.032411
  0.521978  0.893566  0.466422  0.034569  0.032411
  0.574176  0.893566  0.513064  0.213745  0.032411
  0.626374  0.893566  0.559706  0.471194  0.032411
  0.678571  0.893566  0.606348  0.775552  0.032411
  0.730769  0.893566  0.652991  1.099144  0.032411
  0.782967  0.893566  0.699633  1.413620  0.032411
  0.835165  0.893566  0.746275  1.692395  0.032411
  0.887363  0.893566  0.792917  1.915531  0.032411
  0.939560  0.893566  0.839559  2.076126  0.032411
  0.991758  0.893566  0.886202  2.187838  0.032411
  1.043956  0.893566  0.932844  2.322958  0.032411
  1.096154  0.893566  0.979486  2.431861  0.032411
  1.148352  0.893566  1.026128  2.536091  0.032411
  1.200549  0.893566  1.072770  2.636204  0.032411
  1.252747  0.893566  1.119412  2.732651  0.032411
  1.304945  0.893566  1.166055  2.825808  0.032411
  1.357143  0.893566  1.212697  2.915991  0.032411
  1.409341  0.893566  1.259339  3.003467  0.032411
  1.461538  0.893566  1.305981  3.088466  0.032411
  1.500000  0.893566  1.340349  3.171188  0.032411
  END FTABLE  3
END FTABLES

EXT SOURCES
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   # <Name> # tem strg<-factor->strg <Name>   #   #        <Name> # #  ***
WDM      2 PREC     ENGL    1              PERLND   1 999 EXTNL  PREC
WDM      2 PREC     ENGL    1              IMPLND   1 999 EXTNL  PREC
```

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```
WDM      1 EVAP     ENGL    1              PERLND   1 999 EXTNL  PETINP
WDM      1 EVAP     ENGL    1              IMPLND   1 999 EXTNL  PETINP
WDM      2 PREC     ENGL    1              RCHRES   1     EXTNL  PREC
WDM      2 PREC     ENGL    1              RCHRES   3     EXTNL  PREC
WDM      1 EVAP     ENGL    0.5            RCHRES   1     EXTNL  POTEV
WDM      1 EVAP     ENGL    0.7            RCHRES   2     EXTNL  POTEV
WDM      1 EVAP     ENGL    0.5            RCHRES   3     EXTNL  POTEV
WDM      1 EVAP     ENGL    0.7            RCHRES   4     EXTNL  POTEV

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>   #        <Name> # #<-factor->strg <Name>   # <Name>    tem strg strg***
RCHRES   2 HYDR   RO     1 1        1      WDM   1004 FLOW     ENGL       REPL
RCHRES   2 HYDR   STAGE  1 1        1      WDM   1005 STAG     ENGL       REPL
RCHRES   1 HYDR   STAGE  1 1        1      WDM   1006 STAG     ENGL       REPL
RCHRES   1 HYDR   O      1 1        1      WDM   1007 FLOW     ENGL       REPL
COPY     2 OUTPUT MEAN   1 1     12.1      WDM    702 FLOW     ENGL       REPL
COPY   502 OUTPUT MEAN   1 1     12.1      WDM    802 FLOW     ENGL       REPL
RCHRES   4 HYDR   RO     1 1        1      WDM   1008 FLOW     ENGL       REPL
RCHRES   4 HYDR   STAGE  1 1        1      WDM   1009 STAG     ENGL       REPL
RCHRES   3 HYDR   STAGE  1 1        1      WDM   1010 STAG     ENGL       REPL
RCHRES   3 HYDR   O      1 1        1      WDM   1011 FLOW     ENGL       REPL
COPY     1 OUTPUT MEAN   1 1     12.1      WDM    701 FLOW     ENGL       REPL
COPY   501 OUTPUT MEAN   1 1     12.1      WDM    801 FLOW     ENGL       REPL
END EXT TARGETS

MASS-LINK
<Volume>   <-Grp> <-Member-><--Mult-->     <Target>       <-Grp> <-Member->***
<Name>             <Name> # #<-factor->     <Name>                <Name> # #***
  MASS-LINK        2
PERLND     PWATER SURO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    2

  MASS-LINK        3
PERLND     PWATER IFWO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    3

  MASS-LINK        5
IMPLND     IWATER SURO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    5

  MASS-LINK        8
RCHRES     OFLOW  OVOL   2                 RCHRES         INFLOW IVOL
  END MASS-LINK    8

  MASS-LINK       12
PERLND     PWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   12

  MASS-LINK       13
PERLND     PWATER IFWO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   13

  MASS-LINK       15
IMPLND     IWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   15

  MASS-LINK       16
RCHRES     ROFLOW                          COPY           INPUT  MEAN
  END MASS-LINK   16

  MASS-LINK       17
RCHRES     OFLOW  OVOL   1                 COPY           INPUT  MEAN
  END MASS-LINK   17


END MASS-LINK
```

DRAFT

```
END RUN
```

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DRAFT

```
ERROR/WARNING ID:   238   1

The continuity error reported below is greater than 1 part in 1000 and is
therefore considered high.

Did you specify any "special actions"?  If so, they could account for it.

Relevant data are:
DATE/TIME: 1976/ 7/31 24: 0

RCHRES :    1

RELERR       STORS        STOR       MATIN      MATDIF
-1.0000      0.00000  0.0000E+00     0.00000  8.9960E-12

Where:

RELERR is the relative error (ERROR/REFVAL).
ERROR  is (STOR-STORS) - MATDIF.
REFVAL is the reference value (STORS+MATIN).
STOR   is the storage of material in the processing unit (land-segment or
reach/reservior) at the end of the present interval.
STORS  is the storage of material in the pu at the start of the present
printout reporting period.
MATIN  is the total inflow of material to the pu during the present printout
reporting period.
MATDIF is the net inflow (inflow-outflow) of material to the pu during the
present printout reporting period.
```

```
ERROR/WARNING ID:   238   1

The continuity error reported below is greater than 1 part in 1000 and is
therefore considered high.

Did you specify any "special actions"?  If so, they could account for it.

Relevant data are:
DATE/TIME: 1976/ 7/31 24: 0

RCHRES :    3

RELERR       STORS        STOR       MATIN      MATDIF
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Where:

RELERR is the relative error (ERROR/REFVAL).
ERROR  is (STOR-STORS) - MATDIF.
REFVAL is the reference value (STORS+MATIN).
STOR   is the storage of material in the processing unit (land-segment or
reach/reservior) at the end of the present interval.
STORS  is the storage of material in the pu at the start of the present
printout reporting period.
MATIN  is the total inflow of material to the pu during the present printout
reporting period.
MATDIF is the net inflow (inflow-outflow) of material to the pu during the
present printout reporting period.
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DRAFT

Disclaimer

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Clear Creek Solutions, Inc.
6200 Capitol Blvd. Ste F
Olympia, WA. 98501
Toll Free 1(866)943-0304
Local (360)943-0304

www.clearcreeksolutions.com

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ATTACHMENT 3
Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	☒ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☒ Included ☐ Not Applicable

E.12 BF-1 Biofiltration



Location: 43rd Street and Logan Avenue, San Diego, California

MS4 Permit Category
Biofiltration

Manual Category
Biofiltration

Applicable Performance Standard
Pollutant Control
Flow Control

Primary Benefits
Treatment
Volume Reduction (Incidental)
Peak Flow Attenuation (Optional)

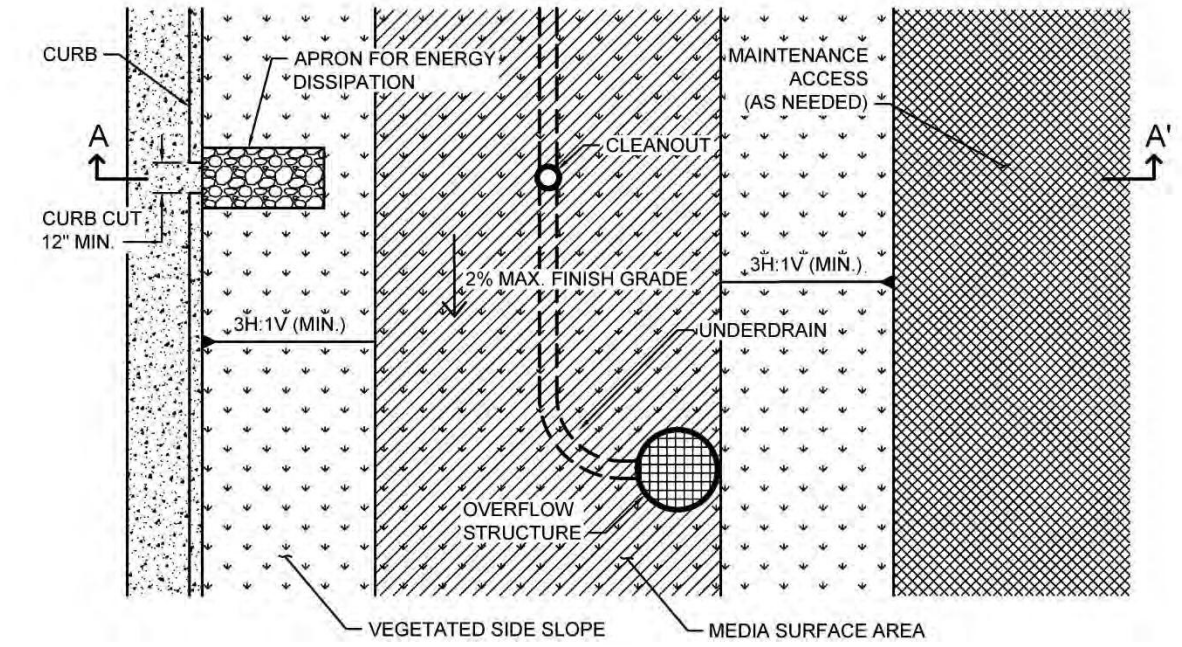
Description

Biofiltration (Bioretention with underdrain) facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Bioretention with underdrain facilities are commonly incorporated into the site within parking lot landscaping, along roadsides, and in open spaces. Because these types of facilities have limited or no infiltration, they are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Treatment is achieved through filtration, sedimentation, sorption, biochemical processes and plant uptake.

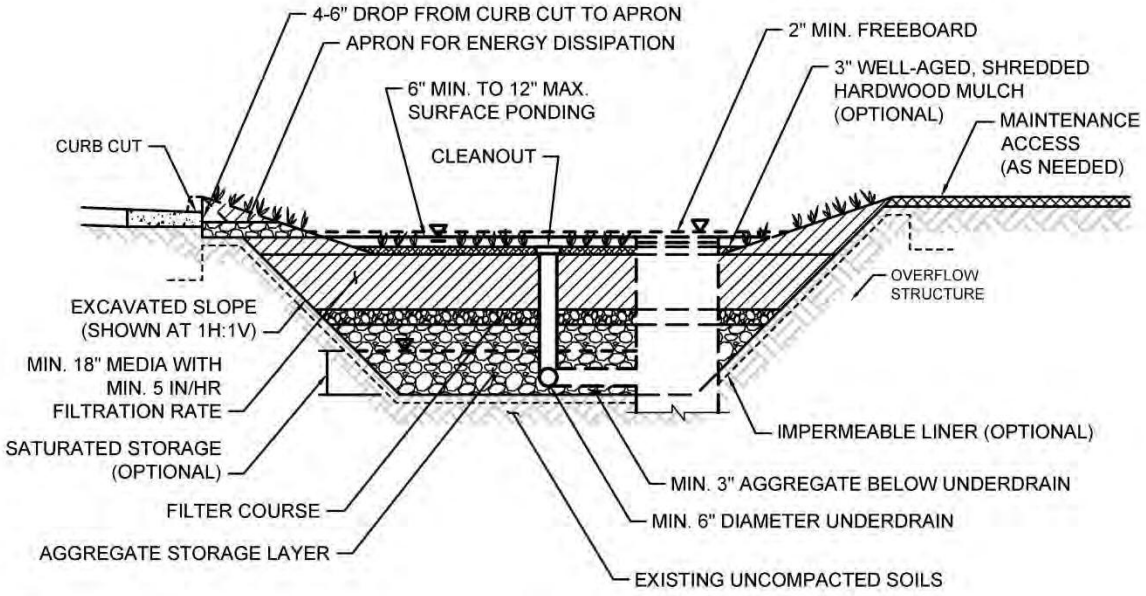
Typical bioretention with underdrain components include:

- Inflow distribution mechanisms (e.g, perimeter flow spreader or filter strips)
- Energy dissipation mechanism for concentrated inflows (e.g., splash blocks or riprap)
- Shallow surface ponding for captured flows
- Side slope and basin bottom vegetation selected based on expected climate and ponding depth
- Non-floating mulch layer (Optional)
- Media layer (planting mix or engineered media) capable of supporting vegetation growth
- Filter course layer consisting of aggregate to prevent the migration of fines into uncompacted native soils or the aggregate storage layer
- Aggregate storage layer with underdrain(s)

- Impermeable liner or uncompacted native soils at the bottom of the facility
- Overflow structure



PLAN
NOT TO SCALE



SECTION A-A'
NOT TO SCALE

Typical plan and Section view of a Biofiltration BMP

Design Adaptations for Project Goals

Biofiltration Treatment BMP for storm water pollutant control. The system is lined or un-lined to provide incidental infiltration, and an underdrain is provided at the bottom to carry away filtered runoff. This configuration is considered to provide biofiltration treatment via flow through the media layer. Storage provided above the underdrain within surface ponding, media, and aggregate storage is considered included in the biofiltration treatment volume. Saturated storage within the aggregate storage layer can be added to this design by raising the underdrain above the bottom of the aggregate storage layer or via an internal weir structure designed to maintain a specific water level elevation.

Integrated storm water flow control and pollutant control configuration. The system can be designed to provide flow rate and duration control by primarily providing increased surface ponding and/or having a deeper aggregate storage layer above the underdrain. This will allow for significant detention storage, which can be controlled via inclusion of an outlet structure at the downstream end of the underdrain.

Design Criteria and Considerations

Bioretention with underdrain must meet the following design criteria. Deviations from the below criteria may be approved at the discretion of the City Engineer if it is determined to be appropriate:

	Siting and Design	*Intent/Rationale*
☐	Placement observes geotechnical recommendations regarding potential hazards (e.g., slope stability, landslides, liquefaction zones) and setbacks (e.g., slopes, foundations, utilities).	Must not negatively impact existing site geotechnical concerns.
☐	An impermeable liner or other hydraulic restriction layer is included if site constraints indicate that infiltration or lateral flows should not be allowed.	Lining prevents storm water from impacting groundwater and/or sensitive environmental or geotechnical features. Incidental infiltration, when allowable, can aid in pollutant removal and groundwater recharge.

Siting and Design		*Intent/Rationale*
☐	Contributing tributary area shall be ≤ 5 acres (≤ 1 acre preferred).	Bigger BMPs may require additional design features for proper performance. Contributing tributary area greater than 5 acres may be allowed at the discretion of the City Engineer if the following conditions are met: 1) incorporate design features (e.g. flow spreaders) to minimizing short circuiting of flows in the BMP and 2) incorporate additional design features requested by the City Engineer for proper performance of the regional BMP.
☐	Finish grade of the facility is ≤ 2%.	Flatter surfaces reduce erosion and channelization within the facility.
Surface Ponding		
☐	Surface ponding is limited to a 24-hour drawdown time.	Surface ponding limited to 24 hour for plant health.
☐	Surface ponding depth is ≥ 6 and ≤ 12 inches.	Surface ponding capacity lowers subsurface storage requirements. Deep surface ponding raises safety concerns. Surface ponding depth greater than 12 inches (for additional pollutant control or surface outlet structures or flow-control orifices) may be allowed at the discretion of the City Engineer if the following conditions are met: 1) surface ponding depth drawdown time is less than 24 hours; and 2) safety issues and fencing requirements are considered (typically ponding greater than 18" will require a fence and/or flatter side slopes) and 3) potential for elevated clogging risk is considered.
☐	A minimum of 2 inches of freeboard is provided.	Freeboard provides room for head over overflow structures and minimizes risk of uncontrolled surface discharge.

Siting and Design	*Intent/Rationale*
☐ Side slopes are stabilized with vegetation and are = 3H:1V or shallower.	Gentler side slopes are safer, less prone to erosion, able to establish vegetation more quickly and easier to maintain.
Vegetation	
☐ Plantings are suitable for the climate and expected ponding depth. A plant list to aid in selection can be found in Appendix E.20.	Plants suited to the climate and ponding depth are more likely to survive.
☐ An irrigation system with a connection to water supply should be provided as needed.	Seasonal irrigation might be needed to keep plants healthy.
Mulch (Mandatory)	
☐ A minimum of 3 inches of well-aged, shredded hardwood mulch that has been stockpiled or stored for at least 12 months is provided.	Mulch will suppress weeds and maintain moisture for plant growth. Aging mulch kills pathogens and weed seeds and allows the beneficial microbes to multiply.
Media Layer	
☐ Media maintains a minimum filtration rate of 5 in/hr over lifetime of facility. An initial filtration rate of 8 to 12 in/hr is recommended to allow for clogging over time; the initial filtration rate should not exceed 12 inches per hour.	A filtration rate of at least 5 inches per hour allows soil to drain between events. The initial rate should be higher than long term target rate to account for clogging over time. However an excessively high initial rate can have a negative impact on treatment performance, therefore an upper limit is needed.

Siting and Design		*Intent/Rationale*
☐	Media is a minimum 18 inches deep, meeting either of these two media specifications: City of San Diego Low Impact Development Design Manual (page B-18) (July 2011, unless superseded by more recent edition) **or** County of San Diego Low Impact Development Handbook: Appendix G -Bioretention Soil Specification (June 2014, unless superseded by more recent edition). Alternatively, for proprietary designs and custom media mixes not meeting the media specifications contained in the City or County LID Manual, the media meets the pollutant treatment performance criteria in Section F.1.	A deep media layer provides additional filtration and supports plants with deeper roots. Standard specifications shall be followed. For non-standard or proprietary designs, compliance with F.1 ensures that adequate treatment performance will be provided.
☐	Media surface area is 3% of contributing area times adjusted runoff factor or greater.	Greater surface area to tributary area ratios: a) maximizes volume retention as required by the MS4 Permit and b) decrease loading rates per square foot and therefore increase longevity. Adjusted runoff factor is to account for site design BMPs implemented upstream of the BMP (such as rain barrels, impervious area dispersion, etc.). Refer to Appendix B.2 guidance. Use Worksheet B.5-1 Line 26 to estimate the minimum surface area required per this criteria.
☐	Where receiving waters are impaired or have a TMDL for nutrients, the system is designed with nutrient sensitive media design (see fact sheet BF-2).	Potential for pollutant export is partly a function of media composition; media design must minimize potential for export of nutrients, particularly where receiving waters are impaired for nutrients.
Filter Course Layer		
☐	A filter course is used to prevent migration of fines through layers of the facility. Filter fabric is not used.	Migration of media can cause clogging of the aggregate storage layer void spaces or subgrade. Filter fabric is more likely to clog.

Siting and Design		*Intent/Rationale*
☐	Filter course is washed and free of fines.	Washing aggregate will help eliminate fines that could clog the facility and impede infiltration.
☐	Filter course calculations assessing suitability for particle migration prevention have been completed.	Gradation relationship between layers can evaluate factors (e.g., bridging, permeability, and uniformity) to determine if particle sizing is appropriate or if an intermediate layer is needed.
Aggregate Storage Layer		
☐	Class 2 Permeable per Caltrans specification 68-1.025 is recommended for the storage layer. Washed, open-graded crushed rock may be used, however a 4-6 inch washed pea gravel filter course layer at the top of the crushed rock is required.	Washing aggregate will help eliminate fines that could clog the aggregate storage layer void spaces or subgrade.
☐	The depth of aggregate provided (12-inch typical) and storage layer configuration is adequate for providing conveyance for underdrain flows to the outlet structure.	Proper storage layer configuration and underdrain placement will minimize facility drawdown time.
Inflow, Underdrain, and Outflow Structures		
☐	Inflow, underdrains and outflow structures are accessible for inspection and maintenance.	Maintenance will prevent clogging and ensure proper operation of the flow control structures.
☐	Inflow velocities are limited to 3 ft/s or less or use energy dissipation methods. (e.g., riprap, level spreader) for concentrated inflows.	High inflow velocities can cause erosion, scour and/or channeling.
☐	Curb cut inlets are at least 12 inches wide, have a 4-6 inch reveal (drop) and an apron and energy dissipation as needed.	Inlets must not restrict flow and apron prevents blockage from vegetation as it grows in. Energy dissipation prevents erosion.
☐	Underdrain outlet elevation should be a minimum of 3 inches above the bottom elevation of the aggregate storage layer.	A minimal separation from subgrade or the liner lessens the risk of fines entering the underdrain and can improve hydraulic performance by allowing perforations to remain unblocked.
☐	Minimum underdrain diameter is 6 inches.	Smaller diameter underdrains are prone to clogging.

Siting and Design		*Intent/Rationale*
☐	Underdrains are made of slotted, PVC pipe conforming to ASTM D 3034 or equivalent or corrugated, HDPE pipe conforming to AASHTO 252M or equivalent.	Slotted underdrains provide greater intake capacity, clog resistant drainage, and reduced entrance velocity into the pipe, thereby reducing the chances of solids migration.
☐	An underdrain cleanout with a minimum 6-inch diameter and lockable cap is placed every 250 to 300 feet as required based on underdrain length.	Properly spaced cleanouts will facilitate underdrain maintenance.
☐	Overflow is safely conveyed to a downstream storm drain system or discharge point Size overflow structure to pass 100-year peak flow for on-line infiltration basins and water quality peak flow for off-line basins.	Planning for overflow lessens the risk of property damage due to flooding.

Conceptual Design and Sizing Approach for Storm Water Pollutant Control Only

To design bioretention with underdrain for storm water pollutant control only (no flow control required), the following steps should be taken:

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.
2. Calculate the DCV per Appendix B based on expected site design runoff for tributary areas.
3. Use the sizing worksheet presented in Appendix B.5 to size biofiltration BMPs.

Conceptual Design and Sizing Approach when Storm Water Flow Control is Applicable

Control of flow rates and/or durations will typically require significant surface ponding and/or aggregate storage volumes, and therefore the following steps should be taken prior to determination of storm water pollutant control design. Pre-development and allowable post-project flow rates and durations should be determined as discussed in Chapter 6 of the manual.

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.

2. Iteratively determine the facility footprint area, surface ponding and/or aggregate storage layer depth required to provide detention storage to reduce flow rates and durations to allowable limits. Flow rates and durations can be controlled from detention storage by altering outlet structure orifice size(s) and/or water control levels. Multi-level orifices can be used within an outlet structure to control the full range of flows.
3. If bioretention with underdrain cannot fully provide the flow rate and duration control required by this manual, an upstream or downstream structure with significant storage volume such as an underground vault can be used to provide remaining controls.
4. After bioretention with underdrain has been designed to meet flow control requirements, calculations must be completed to verify if storm water pollutant control requirements to treat the DCV have been met.

E.13 Nutrient Sensitive Media Design

Some studies of bioretention with underdrains have observed export of nutrients, particularly inorganic nitrogen (nitrate and nitrite) and dissolved phosphorus. This has been observed to be a short-lived phenomenon in some studies or a long term issue in some studies. The composition of the soil media, including the chemistry of individual elements is believed to be an important factor in the potential for nutrient export. Organic amendments, often compost, have been identified as the most likely source of nutrient export. The quality and stability of organic amendments can vary widely.

The biofiltration media specifications contained in the County of San Diego Low Impact Development Handbook: Appendix G -Bioretention Soil Specification (June 2014, unless superseded by more recent edition) and the City of San Diego Low Impact Development Design Manual (page B-18) (July 2011, unless superseded by more recent edition) were developed with consideration of the potential for nutrient export. These specifications include criteria for individual component characteristics and quality in order to control the overall quality of the blended mixes. As of the publication of this manual, the June 2014 County of San Diego specifications provide more detail regarding mix design and quality control.

The City and County specifications noted above were developed for general purposes to meet permeability and treatment goals. In cases where the BMP discharges to receiving waters with nutrient impairments or nutrient TMDLs, the biofiltration media should be designed with the specific goal of minimizing the potential for export of nutrients from the media. Therefore, in addition to adhering to the City or County media specifications, the following guidelines should be followed:

1. Select plant palette to minimize plant nutrient needs

A landscape architect or agronomist should be consulted to select a plant palette that minimizes nutrient needs. Utilizing plants with low nutrient needs results in less need to enrich the biofiltration soil mix. If nutrient quantity is then tailored to plants with lower nutrient needs, these plants will generally have less competition from weeds, which typically need higher nutrient content. The following practices are recommended to minimize nutrient needs of the plant palette:

- **Utilize native, drought-tolerant plants and grasses where possible.** Native plants generally have a broader tolerance for nutrient content, and can be longer lived in leaner/lower nutrient soils.

- **Start plants from smaller starts or seed.** Younger plants are generally more tolerant of lower nutrient levels and tend to help develop soil structure as they grow. Given the lower cost of smaller plants, the project should be able to accept a plant mortality rate that is somewhat higher than starting from larger plants and providing high organic content.

2. Minimize excess nutrients in media mix

Once the low-nutrient plant palette is established (item 1), the landscape architect and/or agronomist should be consulted to assist in the design of a biofiltration media to balance the interests of plant establishment, water retention capacity (irrigation demand), and the potential for nutrient export. The following guidelines should be followed:

- **The mix should not exceed the nutrient needs of plants.** In conventional landscape design, the nutrient needs of plants are often exceeded intentionally in order to provide a factor of safety for plant survival. This practice must be avoided in biofiltration media as excess nutrients will increase the chance of export. The mix designer should keep in mind that nutrients can be added later (through mulching, tilling of amendments into the surface), but it is not possible to remove nutrients, once added.

- **The actual nutrient content and organic content of the selected organic amendment source should be determined when specifying mix proportions.** Nutrient content (i.e., C:N ratio; plant extractable nutrients) and organic content (i.e, % organic material) are relatively inexpensive to measure via standard agronomic methods and can provide important information about mix design. If mix design relies on approximate assumption about nutrient/organic content and this is not confirmed with testing (or the results of prior representative testing), it is possible that the mix could contain much more nutrient than intended.

- **Nutrients are better retained in soils with higher cation exchange capacity.** Cation exchange capacity can be increased through selection of organic material with naturally high cation exchange capacity, such as peat or coconut coir pith, and/or selection of inorganic material with high cation exchange capacity such as some sands or engineered minerals (e.g., low P-index sands, zeolites, rhyolites, etc). Including higher cation exchange capacity materials would tend to reduce the net export of nutrients. Natural silty materials also provide cation exchange capacity; however potential impacts to permeability need to be considered.

- **Focus on soil structure as well as nutrient content.** Soil structure is loosely defined as the ability of the soil to conduct and store water and nutrients as well as the degree of aeration of the soil. Soil structure can be more important than nutrient content in plant survival and biologic health of the system. If a good soil structure can be created with very low amounts of organic amendment, plants survivability should still be provided. While soil structure generally develops with time, biofiltration media can be designed to promote earlier development of soil structure. Soil structure is enhanced by the use of amendments with high humus content (as found in well-aged organic material). In addition, soil structure can be enhanced through the use of organic material with a distribution of particle sizes (i.e., a more heterogeneous mix).

- **Consider alternatives to compost.** Compost, by nature, is a material that is continually evolving and decaying. It can be challenging to determine whether tests previously done on a given compost stock are still representative. It can also be challenging to determine how the properties of the compost will change once placed in the media bed. More stable materials such as aged coco coir pith, peat, biochar, shredded bark, and/or other amendments should be considered.

With these considerations, it is anticipated that less than 10 percent organic amendment by volume could be used, while still balancing plant survivability and water retention. If compost is used, designers should strongly consider utilizing less than 10 percent by volume.

3. Design with partial retention and/or internal water storage

An internal water storage zone, as described in Fact Sheet PR-1 is believed to improve retention of nutrients. For lined systems, an internal water storage zone worked by providing a zone that fluctuates between aerobic and anaerobic conditions, resulting in nitrification/denitrification. In soils that will allow infiltration, a partial retention design (PR-1) allows significant volume reduction and can also promote nitrification/denitrification.

Acknowledgment: This fact sheet has been adapted from the Orange County Technical Guidance Document (May 2011). It was originally developed based on input from: Deborah Deets, City of Los Angeles Bureau of Sanitation, Drew Ready, Center for Watershed Health, Rick Fisher, ASLA, City of Los Angeles Bureau of Engineering, Dr. Garn Wallace, Wallace Laboratories, Glen Dake, GDML, and Jason Schmidt, Tree People. The guidance provided herein does not reflect the individual opinions of any individual listed above and should not be cited or otherwise attributed to those listed.

E.14 BF-3 Proprietary Biofiltration Systems

The purpose of this fact sheet is to help explain the potential role of proprietary BMPs in meeting biofiltration requirements, when full retention of the DCV is not feasible. The fact sheet does not describe design criteria like the other fact sheets in this appendix because this information varies by BMP product model.

Criteria for Use of a Proprietary BMP as a Biofiltration BMP

A proprietary BMP may be acceptable as a "biofiltration BMP" under the following conditions:

(1) The BMP meets the minimum design criteria listed in Appendix F, including the pollutant treatment performance standard in Appendix F.1;

(2) The BMP is designed and maintained in a manner consistent with its performance certifications (See explanation in Appendix F.2); and

(3) The BMP is acceptable at the discretion of the City Engineer. The City Engineer has no obligation to accept any proprietary biofiltration BMP.

Guidance for Sizing a Proprietary BMP as a Biofiltration BMP

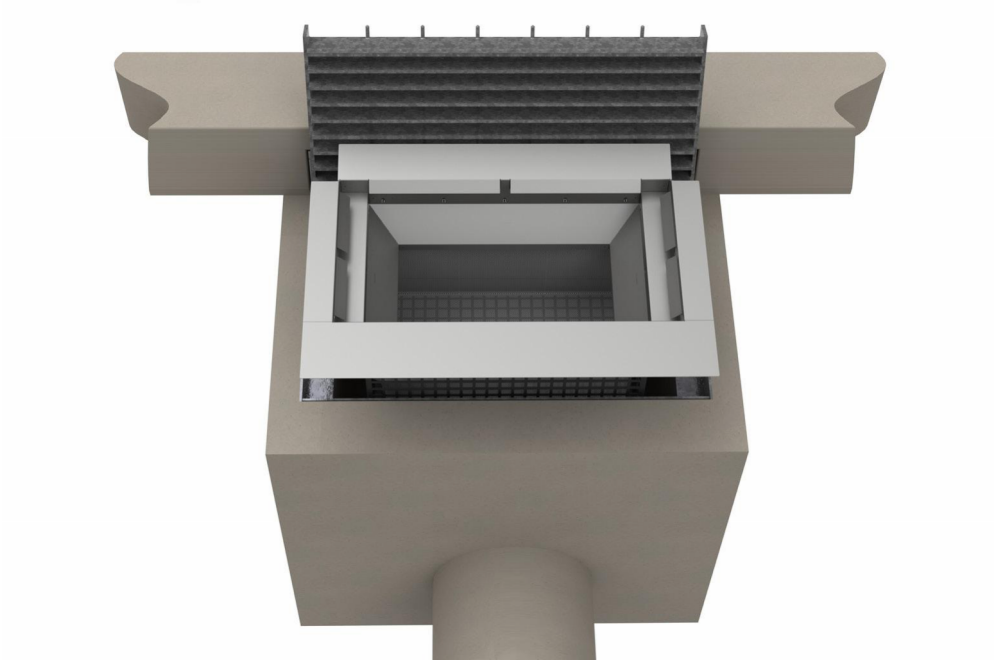
Proprietary biofiltration BMPs must meet the same sizing guidance as non-proprietary BMPs. Sizing is typically based on capturing and treating 1.50 times the DCV not reliably retained. Guidance for sizing biofiltration BMPs to comply with requirements of this manual is provided in Appendix F.2.

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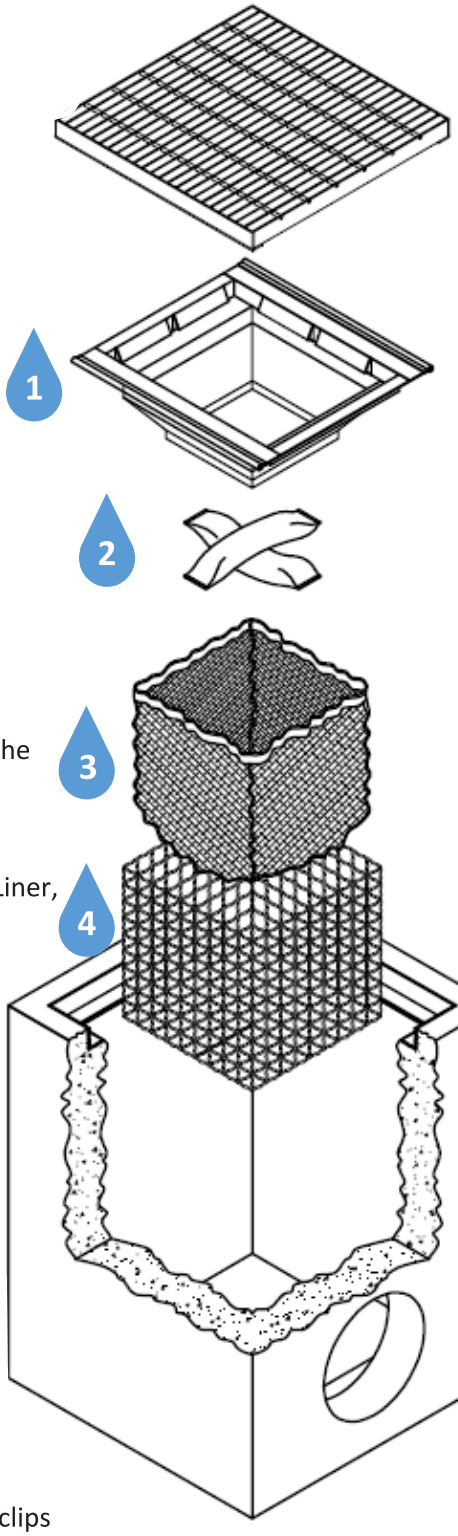
Replacement & Repair

Instruction Manual



Stormwater

FloGard Plus Replacement and Repair



Parts of the FloGard Plus Inlet Filter-

1. FloGard Stainless Steel Support Frame
2. Fossil Rock Absorbent Pouches
3. Liner
4. GeoGrid Support Basket & Cable

* Grate and Basin NOT INCLUDED

Disassembly:

1. Clear FloGard of any existing debris by hand or vacuum.
2. Unclip and remove the Fossil Rock pouches from the inside Liner.
3. Lift the FloGard from the catch basin.
4. Using a slotted screw driver, carefully pry open the metal tabs holding the GeoGrid and Cable in place. Separate the GeoGrid and Liner from the FloGard frame.
5. Unclip the Liner from the inside of the GeoGrid. If you are reusing the Liner, rinse thoroughly with water and inspect for tears. (If torn, mend with stainless steel wire or replace the Liner).
6. Rinse and inspect the GeoGrid Basket and the reinforcing cable. (If torn, mend with stainless steel wire or replace the GeoGrid).
7. Rinse and inspect the Stainless Steel FloGard frame.

Reassembly:

1. Fully expand the GeoGrid Basket and orient to the FloGard frame. Hook cable and GeoGrid to the FloGard frame metal tabs and close the tabs using slotted screwdriver. Move around the FloGard until all tabs are closed and GeoGrid is secured to the Frame.
2. Expand and orient the Liner, locating the clips at each corner and side. Push the Liner through the center of the FloGard frame and secure the clips to the GeoGrid Basket close to the top support cable. Push the Liner to expand inside of the basket.
3. Clip new Fossil Rock Rubberizer pouches to the inside of the Liner.
4. Lower FloGard back into the basin, replace grate.

FLOGARD +PLUS®

OUR MARKETS



BUILDING STRUCTURES



COMMUNICATIONS



WATER



ENERGY



TRANSPORTATION

Attachment 3b

RECORDING REQUESTED BY:

City of Santee, CA

AFTER RECORDING MAIL TO:

City Clerk
City of Santee
10601 Magnolia Avenue
Santee, CA 92071-1266

ABOVE SPACE FOR RECORDER'S USE

AGREEMENT TO PERFORM STORM WATER FACILITIES MAINTENANCE

NO RECORDATION FEE REQUIRED; THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTIONS 27383

DOCUMENTARY TRANSFER TAX DUE $ 0

Assessor's Parcel No._____ Project No._____

This AGREEMENT for the maintenance and repair of certain Storm Water Management Facilities is entered into between _____ (hereinafter referred to as "Owner") and the City of Santee (hereinafter referred to as "City") for the benefit of the City, the successors in interest to the City, and the public generally.

RECITALS

A. Owner is the owner of certain real property located in the City of Santee, California, more particularly described in Exhibit "A" hereto (hereinafter referred to as the "Property"), and has proposed that the Property be developed as _____(insert brief description of type of project, e.g., "a 100 unit residential subdivision")_____ in accordance with applications for Tentative Map No. ___

_____, Development Review No. _____, Conditional Use Permit No. _____, Grading Permit No. _____ which are on file with the City. This Agreement is required as a condition of approval for such development as set forth in Resolution Nos. _____ _____.

B. In accordance with the City of Santee's Storm Water Management and Discharge Control Ordinance, (Santee Municipal Code, Chapter 9.06), the City of Santee Subdivision Ordinance, the City of Santee Zoning Ordinance, the City of Santee Grading Ordinance and/or other ordinances or regulations of the City which regulate land development and urban runoff, Owner has prepared and submitted to the City, a site specific Storm Water Quality Management Plan (hereinafter the SWQMP), prepared by _____ and dated _____ as it currently exists or may hereafter be amended and which is on file with the City's Department of Development Services. The SWQMP proposes that storm water runoff from the Property be treated by the use of various storm water management facilities which are identified in the SWQMP as "Best Management Practices" or "BMP's":

The precise location and extent of the BMP's are described and shown in the SWQMP. The SWQMP specifies the frequency, manner, and standards by which the BMP's must be repaired and maintained in order to retain their effectiveness, as set forth in the Operation and Maintenance Section included in the SWMP.

C. The information contained in the SWQMP and the Owner's representation that the BMP's will be maintained pursuant to the SWQMP have been relied upon by City in approving Owner's development applications. It is the purpose of this Agreement to assure that the BMP's are maintained in perpetuity, by creating obligations which are enforceable against the Owner and the Owner's successors in interest in the Property. It is intended that these obligations be enforceable notwithstanding other provisions related to BMP maintenance which are provided by law.

AGREEMENT

NOW, THEREFORE, for consideration of City's approval of the above development applications and the mutual covenants set forth herein, IT IS HEREBY AGREED AS FOLLOWS:

1. **Maintenance of Storm Water Management Facilities.** Owner agrees, for itself and its successors in interest, to all or any portion of the Property, to comply in all respects with the requirements of the Storm Water Management and Discharge Control Ordinance and the SWQMP with regard to the maintenance

of all BMP's as designated in the SWQMP, and in particular agrees to perform, at its sole cost, expense and liability, the following "Maintenance Activities": all inspections, cleaning, repairs, servicing, maintenance and other actions specified in the SWQMP, with respect to all of the BMP's listed at Recital "B" above, at the times and in the manner specified in the SWQMP as it currently exists or may be amended or modified as provided herein. Owner shall initiate, perform and complete all Maintenance Activities at the required time, without request or demand from City or any other agency. Owner further agrees that "Maintenance Activities" shall include replacement or modification of the BMP's in the event that the BMP fails to provide the necessary water quality treatment, it is found that the BMP was not installed correctly, or in the event that the BMP is not functioning as intended. Replacement shall be with an identical type, size and model of BMP, except that:

(a) The City Engineer may authorize substitution of an alternative BMP if he or she determines that it will function as good or better than the failed BMP. The City requires that proposed modifications be submitted for review and approval prior to making any changes in the field, and that the Storm Water Quality Management Plan be revised or amended and resubmitted for approval; and

(b) Pursuant to Section 9.06.200 of the Storm Water Management and Discharge Control Ordinance, any discharge that would result in or contribute to a violation of the City's NPDES Permit and any amendment, revision or re-issuance thereof, either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the owner(s) causing or responsible for the discharge. Owner agrees that if the BMP, in the judgment of the Director of Development Services, is inappropriate or inadequate to the circumstances and has or may result in a violation of water quality standards, the BMP must be modified or replaced with an upgraded BMP to prevent any actual or potential violation.

2. **Annual Inspection and Certification by Owner**

Owner agrees to provide documentation of BMP maintenance as required for the City to ensure that all storm water BMPs are properly maintained and are functioning as intended, in compliance with the site specific Storm Water Quality Management Plan. Owner shall provide annual certification that BMPs have been properly maintained for the time period of S*eptember 1 to August 31, each year. This documentation is due to the City* prior to September 15th of each year. Structural BMPs for which annual certification is required includes, but is not limited to: drainage inserts; detention basins; hydrodynamic separators; swales; filters;

bioretention facilities; and Low Impact Development Integrated Management Practices (LID IMPs).

3. **Notices.** Owner further agrees that it shall, prior to transferring ownership of any land on which any of the above BMP's are located, and also prior to transferring ownership of any such BMP, provide clear written notice of the above maintenance obligations associated with that BMP to the transferee. The Storm Water Quality Management Plan and all associated records must also be provided to all subsequent owners upon transfer of property title.

4. **City's Right to Perform Maintenance.** It is agreed that City shall have the right, but not the obligation, to elect to perform any or all of the Maintenance Activities if, in the City's sole judgment, Owner has failed to perform the same. It is recognized and understood that the City makes no representation that it intends to or will perform any of the Maintenance Activities, and any election by the City to perform any of the Maintenance Activities, shall in no way relieve Owner of its continuing maintenance obligations under this agreement. If the City elects to perform any of the Maintenance Activities, it is understood that the City shall be deemed to be acting as the agent of the Owner and said work shall be without warranty or representation by City as to safety or effectiveness, shall be deemed to be accepted by Owner "as is", and shall be covered by Owner's indemnity provisions below.

If the City performs any of the Maintenance Activities, after City has served written notice to the Owner to perform the same, and the Owner has failed to do so within a reasonable time stated in the City's written notice, then Owner shall pay all of the City's costs incurred in performing the Maintenance Activities within sixty days of receipt of an invoice for those costs.

5. **Right of Entry and Inspection by City.** Owner hereby grants to City a perpetual right of entry over, under and across Owner's Property, for purposes of accessing the BMP's and performing inspection of the BMP's or any of the Maintenance Activities related to maintenance of the BMP's. City shall have the right, at any time and without prior notice to Owner, to enter upon any part of said area as may be necessary or convenient for such purposes. Owner shall at all times maintain the Property so as to make the City's access clear and unobstructed. City is required to perform periodic inspection of Structural BMPs. Owner agrees to pay reasonable fees levied by the City on Owners of BMPs for the costs of managing the BMP inspection and maintenance tracking program.

6. **Administration of Agreement for City.** City hereby designates its Department of Development Services with responsibility and authority to administer this Agreement on behalf of City. Any notice or communication related to the

implementation of this Agreement desired or required to be delivered to City shall be addressed to:

Director of Development Services
City of Santee
10601 Magnolia Avenue
Santee, CA 92071

The City Engineer is also granted authority to enter into appropriate amendments to this Agreement on behalf of City, provided that the amendment is consistent with the purposes of this Agreement as set forth above.

7. **Defense and Indemnity.** City shall not be liable for, and Owner and its successors in interest shall defend and indemnify City and the employees and agents of City, against any and all claims, demands, liability, judgments, awards, fines, mechanic's liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as "CLAIMS"), related to this Agreement and arising either directly or indirectly from any act, error, omission or negligence of Owner, Owner's successors, or their contractors, licensees, agents, servants or employees, including, without limitation, claims caused by the concurrent negligent act, error or omission, whether active or passive of City. Owner shall have no obligation, however, to defend or indemnify City from a claim if it is determined by a court of competent jurisdiction that such claim was caused by the sole negligence or willful misconduct of City. Nothing in this Agreement, in the City's approval of the subdivision or other applications or plans and specifications, or inspection of the work, is intended to acknowledge responsibility for any such matter, and City shall have absolutely no responsibility or liability therefore unless otherwise provided by applicable law.

8. **Common Interest Developments.** If the Property is developed as a "Common Interest Development" as defined in Civil Code section 4100 which will include membership in or ownership of an "Association" as defined in Civil Code section 4080, then the following provisions of this Paragraph 7 shall apply during such time as the Property is encumbered by a "Declaration" as defined in Civil Code section 4135, and the Common Area, as "Common Area" is defined in Civil Code section 4095, of the Property is managed and controlled by the Association:

(a) The Association, through its Board of Directors, shall assume full responsibility to perform the MAINTENANCE ACTIVITIES pursuant to this Agreement, and shall undertake all actions and efforts necessary to accomplish the MAINTENANCE ACTIVITIES, including but not limited to, levying regular or special assessments against each member of the

Association sufficient to provide funding for the MAINTENANCE ACTIVITIES, conducting a vote of the membership related to such assessments if required by law. In the event insufficient votes have been obtained to authorize an assessment, the Association shall seek authority from a court of competent jurisdiction for a reduced percentage of affirmative votes necessary to authorize the assessment, re-conducting the vote of the membership in order to obtain the votes necessary to authorize an assessment, and the Association shall take all action authorized by the Declaration or California law to collect delinquent assessments, including but not limited to, the recording and foreclosure of assessment liens.

(b) No provision of the Declaration, nor any other governing document of the Association or grant of authority to its members, shall grant or recognize a right of any member or other person to alter, improve, maintain or repair any of the Property in any manner which would impair the functioning of the BMP's to manage drainage or storm water runoff as described in the SWQMP. In the event of any conflict between the terms of this Agreement and the Declaration or other Association governing documents, the provisions of this Agreement shall prevail.

9. **Agreement Binds Successors and Runs With the Property.** It is understood and agreed that the terms, covenants and conditions herein contained shall constitute covenants running with the land and shall be binding upon the heirs, executors, administrators, successors and assigns of Owner and City, shall be deemed to be for the benefit of all persons owning any interest in the Property (including the interest of City or its successors in the easement granted herein). It is the intent of the parties hereto that this Agreement shall be recorded and shall be binding upon all persons purchasing or otherwise acquiring all or any lot, unit or other portion of the Property, who shall be deemed to have consented to and become bound by all the provisions hereof.

10. **Owner's Continuing Responsibilities Where Work Commenced or Permit Obtained.** Notwithstanding any other provision of this Agreement, no transfer or conveyance of the Property or any portion thereof shall in any way relieve Owner of or otherwise affect Owner's responsibilities for installation or maintenance of BMP's which may have arisen under the ordinances or regulations of City referred to in Recital B above, or other federal, state or local laws, on account of Owner having obtained a permit which creates such obligations or having commenced grading, construction or other land disturbance work.

11. **Amendment and Release.** The terms of this Agreement may be modified only by a written amendment approved and signed by the Director of Development Services and by the Owner or Owner's successor(s) in interest. This

Agreement may be terminated and Owner and the Property released from the covenants set forth herein, by a Release which City may execute if it determines that another mechanism will assure the ongoing maintenance of the BMP's or that it is no longer necessary to assure such maintenance.

12. **Agreement is Intended to Supplement Not Supercede.** This Agreement is intended to supplement and not supercede the requirements of the Chapter 9.06 of the Santee Municipal Code – Storm Water Management and Discharge Control. The requirements listed herein are in addition to the requirements set forth in the Code including Civil Actions and Enforcement Powers established under the Code.

13. **Governing Law and Severability.** This Agreement shall be governed by the laws of the State of California. Venue in any action related to this Agreement shall be in the Superior Court of the State of California, County of San Diego, East County Division. In the event that any of the provisions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity, and enforceability of the remaining provisions shall not be affected thereby.

IN WITNESS WHEREOF, the parties have executed this Agreement on the _____ day of _____, 201__.

CITY OF SANTEE:

By: _____
Melanie Kush
Director of Development Services

OWNERS: _____

By:_____ By:_____
(sign here) (sign here)

_____ _____
(print name here) (print name here)

_____ _____
(title of signatory) (title of signatory)

(All OWNERS must sign)

(Proper notary acknowledgment of execution by OWNER must be attached.)

(President or vice-president **and** secretary or assistant secretary must sign for corporations. If only one officer signs, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering that officer to bind the corporation.)

CITY OF SANTEE
CERTIFICATE OF ACCEPTANCE
FOR
AGREEMENT TO PERFORM STORM WATER FACILITIES MAINTENANCE

This AGREEMENT by and between the City of Santee, a municipal corporation, and _____ is accepted for recording by the undersigned officers on behalf of the City of Santee pursuant to authority granted by Resolution No. 148-89 of the Santee City Council adopted on August 9, 1989.

Date:_____ By:_____
Melanie Kush
Director of Development Services

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }
County of San Diego }

On _____
(date), before me, Patsy Bell, Santee City Clerk (name and title of the officer), personally appeared _____

(Name(s) of Signer(s)), who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

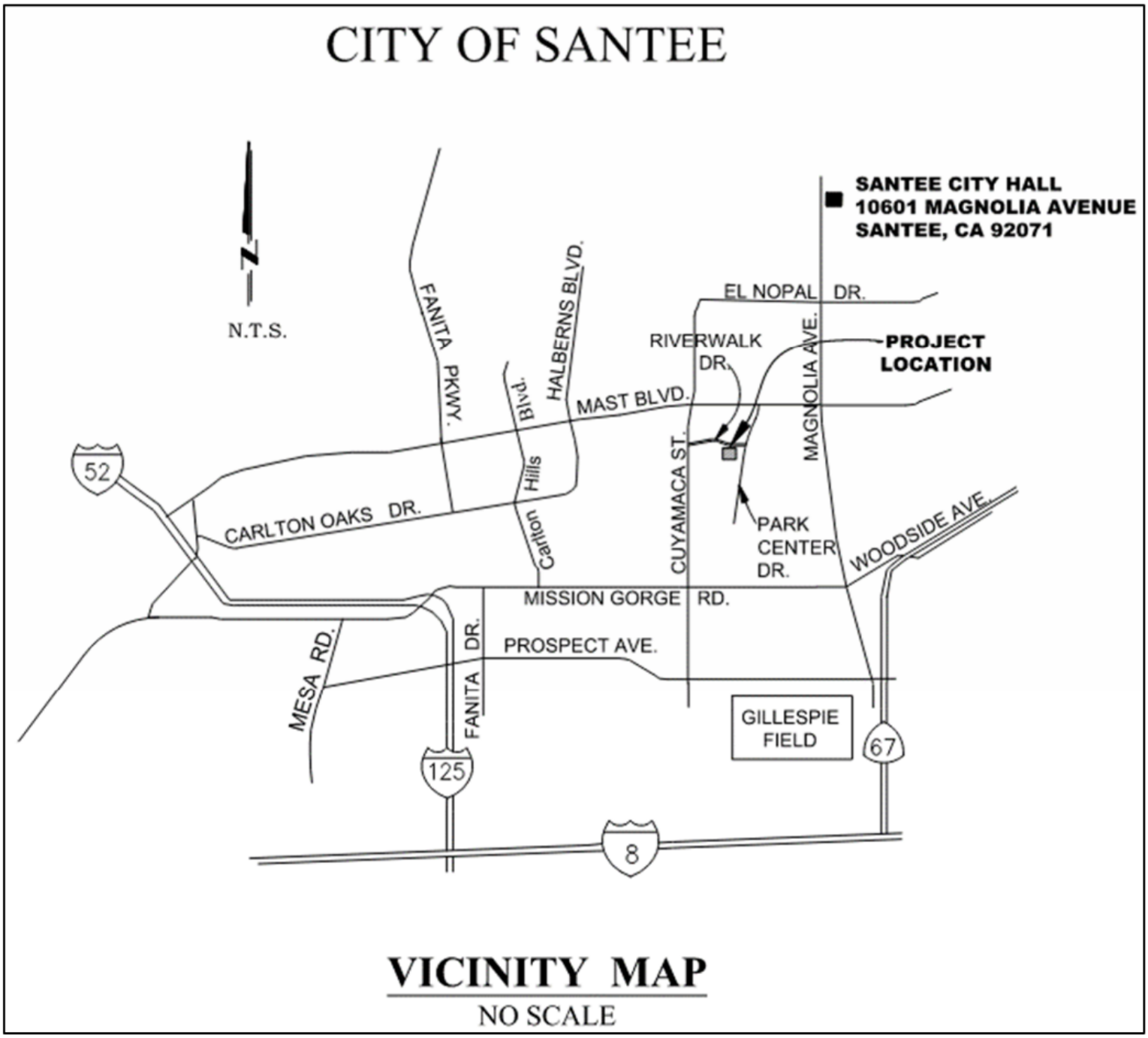
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ [Seal]

Patsy Bell, City Clerk

EXHIBIT 'A'


CITY OF SANTEE
N
N.T.S.
SANTEE CITY HALL
10601 MAGNOLIA AVENUE
SANTEE, CA 92071
PROJECT LOCATION
EL NOPAL DR.
RIVERWALK DR.
MAGNOLIA AVE.
FANITA PKWY.
HALBERNS BLVD.
Blvd.
MAST BLVD.
52
CARLTON OAKS DR.
Hills
Carlton
CUYAMACA ST.
PARK CENTER DR.
WOODSIDE AVE.
MISSION GORGE RD.
MESA RD.
DR.
PROSPECT AVE.
FANITA
GILLESPIE FIELD
125
67
8
VICINITY MAP
NO SCALE

ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs

This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

☒ Structural BMP(s) with ID numbers matching Form I-6 Summary of PDP Structural BMPs

☒ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit

☒ Details and specifications for construction of structural BMP(s)

☒ Signage indicating the location and boundary of structural BMP(s) as required by the [City Engineer]

☒ How to access the structural BMP(s) to inspect and perform maintenance

☒ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)

☒ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable

☒ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)

☒ Recommended equipment to perform maintenance

☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

☒ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)

☒ All BMPs must be fully dimensioned on the plans

☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.

I

SANTEE COMMUNITY CENTER (CIP 2018-31)

CITY OF SANTEE

GENERAL NOTES

1. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF DEVELOPMENT SERVICES PRIOR TO THE START OF ANY CONSTRUCTION WITHIN THE LIMITS OF THE PUBLIC RIGHT-OF-WAY INCLUDING BUT NOT LIMITED TO UTILITY CONNECTIONS OR GRADING.
2. ACCEPTANCE OF THESE IMPROVEMENTS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
3. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, TESTED AND CONNECTED PRIOR TO CONSTRUCTION OF BERMS, CURBS, CROSS-GUTTERS, SIDEWALKS, RETAINING WALLS OR FINAL PAVING.
4. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORD DATA AND FIELD SURVEYS. TO THE BEST OF OUR KNOWLEDGE, EXISTING FACILITIES ARE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITIES SHOWN HEREON AND TO MAKE A REASONABLE AND DILIGENT SEARCH TO DETERMINE ANY OTHER WHICH ARE NOT OF RECORD OR NOT SHOWN ON THESE PLANS AND TO PROTECT THE SAME. ANY FACILITIES SO LOCATED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND INCLUDED ON THE AS-BUILT DRAWINGS FOR THIS PROJECT.
5. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING EXPLORATORY EXCAVATIONS AND LOCATING EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO ALLOW FOR REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF CHANGES IN LINE OR GRADE DUE TO THE ACTUAL LOCATION OF THE EXISTING FACILITIES.
6. THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS AND ELECTRIC COMPANY PRIOR TO STARTING WORK NEAR S.D.G & E. FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.

   NOTICE: FOR LOCATION OF ELECTRICAL CABLES AND GAS PIPING AND APPURTENANCES CONTACT THE SAN DIEGO GAS AND ELECTRIC COMPANY. TELEPHONE: 811.
7. THE CONTRACTOR SHALL NOTIFY THE SBC PACIFIC BELL TELEPHONE COMPANY PRIOR TO STARTING WORK NEAR PACIFIC BELL FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.

   NOTICE: FOR LOCATION OF CABLES AND APPURTENANCES CONTACT AT&T.
8. THE CONTRACTOR SHALL NOTIFY PADRE DAM MUNICIPAL WATER DISTRICT 48 HRS. PRIOR TO STARTING WORK NEAR PADRE DAM FACILITIES AND SHALL COORDINATE HIS WORK WITH DISTRICT REPRESENTATIVES.

   NOTICE: FOR LOCATION OF WATER AND SEWER FACILITIES AND APPURTENANCES CONTACT PADRE DAM. TELEPHONE: 811.
9. THE CONTRACTOR SHALL NOTIFY COX CABLE TV PRIOR TO STARTING WORK NEAR COX CABLE FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.

   NOTICE: FOR LOCATION OF CABLES AND APPURTENANCES CONTACT COX CABLE. TELEPHONE: 811.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS, AND COORDINATE RELOCATION'S, IF NEEDED.
11. POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "AS-BUILT" IMPROVEMENT DRAWINGS. ALL SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT-OF-WAY, OR WITHIN EASEMENTS DEDICATED TO THE CITY OF SANTEE.
12. CITY OF SANTEE - INSPECTION REQUIREMENTS:
    A. CONTRACTOR SHALL INFORM THE CITY PROJECT ENGINEER 48 HRS. IN ADVANCE OF COMMENCING WORK. PHONE (619) 258-4100 EXT 168.
    B. THE CONTRACTOR SHALL GIVE A MINIMUM OF 24 HRS. NOTICE ON REQUESTS FOR INSPECTION. CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS THROUGH SANTEEPORTAL.ORG.
    C. ANY WORK PERFORMED WITHOUT THE BENEFIT OF INSPECTION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL RELOCATE STREET SIGNS WHEN CONDITIONS SO DICTATE. CONTRACTOR SHALL PROTECT AND ASSUME RESPONSIBILITY FOR ALL OTHER TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL REPLACE TRAFFIC STRIPING, STREET MARKINGS, AND CURB MARKINGS REMOVED OR DAMAGED BY HIS WORK.
14. SIDEWALK JOINT LOCATIONS SHALL BE INSTALLED IN ACCORDANCE WITH REGIONAL STANDARD DRAWING NO. G-9. CURB OR CURB AND GUTTER JOINT LOCATIONS SHALL INCLUDE EXPANSION JOINTS AT CURB RETURNS, ADJACENT TO WALLS AND STRUCTURES AND AT 45 FOOT INTERVALS. WEAKENED PLANE JOINTS SHALL BE PLACED EVERY 15' AND GROOVED JOINTS PLACED EVERY 5'. ALL CONCRETE JOINTS SHALL CONFORM TO REGIONAL STANDARD DRAWING NO. G-10. SIDEWALKS SHALL BE REMOVED TO THE NEAREST JOINT. REFER TO PROJECT SPECIFICATIONS SECTION 32 13 13 FOR FURTHER INFORMATION.
15. SIDEWALKS AND BIKEPATHS ARE DESIGNED TO HAVE CLEAR UNOBSTRUCTED ACCESS. THESE FACILITIES SHALL BE KEPT CLEAR OF STREET LIGHTS, FIRE HYDRANTS, METER BOXES, TRANSFORMERS, ELECTRICAL PULL BOXES, BLOWOFFS, AIR VENTS OR OTHER SIMILAR OBSTRUCTIONS AT ALL TIMES AND SHALL MAINTAIN 4' MINIMUM CLEARANCE.
16. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ADEQUACY OF DESIGN AND CONSTRUCTION IN ACCORDANCE WITH THE SPECIFIED GENERAL STANDARDS OF CONSTRUCTION LISTED HEREON, AND TO PROTECT THE WORK AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. FAILED OR DAMAGED WORK SUCH AS CRACKED SIDEWALKS, CURB AND GUTTER, CROSS GUTTERS, DRIVEWAY APRONS AND SO FORTH, SHALL BE REPLACED TO THE NEAREST JOINT OR SCORE LINE IN EACH DIRECTION PRIOR TO PLACEMENT OF THE FINAL PAVEMENT COURSE.
17. THE CONTRACTOR SHALL ENFORCE SAFETY MEASURES AND REGULATIONS INCLUDING THE DESIGN, CONSTRUCTION AND MAINTENANCE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, DISPOSAL, AND COORDINATION OF ALL PRIVATE FACILITIES, FENCES, WALLS, DEBRIS, LANDSCAPING AND IRRIGATION WITHIN THE RIGHT OF WAY WHICH REQUIRES REMOVAL FOR CONSTRUCTION PURPOSES. EACH INDIVIDUAL OWNER EFFECTED SHALL BE NOTIFIED 5 DAYS IN ADVANCE PRIOR TO DEMOLITION OR REMOVAL OF PRIVATE PROPERTY WITHIN THE RIGHT OF WAY.
19. NO WORK OUTSIDE THE RIGHT OF WAY SHALL BE CONDUCTED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE CITY.
20. SOME UTILITIES MAY BE RELOCATED BY THE UTILITY COMPANIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THAT ALL UTILITIES ARE RELOCATED PRIOR TO START OF WORK BY CONTACTING THE CITY.
21. CONTRACTOR SHALL BE PROPERLY LICENSED BY THE TIME THE CONTRACT IS AWARDED, PURSUANT TO THE PROVISIONS OF PUBLIC CONTRACT CODE 20103.5.

DIGALERT

811

Call 2 Full Working Days In Advance

STORMWATER POLLUTION PREVENTION NOTES:

1. APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED AT ALL TIMES.
2. THE TOPS OF ALL SLOPES SHALL HAVE A DIKE OR TRENCH TO PREVENT WATER FROM FLOWING OVER THE CRESTS OF SLOPES.
3. CLEAN GRAVEL ONLY WILL BE USED IN GRAVEL BAGS.
4. CATCH BASINS, DESILTING BASINS, GRAVEL BAGS, CHECK DAMS AND STORM DRAIN SYSTEMS SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER. THESE FACILITIES SHALL BE CLEANED ON A REGULAR BASIS, AND KEPT FREE OF SOIL ACCUMULATION.
5. GRAVEL BAG CHECK DAMS SHALL BE PLACED IN UNPAVED AREAS WITH GRADIENTS IN EXCESS OF 2%, IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE DEPARTMENT OF DEVELOPMENT SERVICES, AND AT OR NEAR EVERY POINT WHERE CONCENTRATED FLOWS LEAVE THE DEVELOPMENT.
6. GRAVEL BAGS SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL DRAINAGE INLETS TO MINIMIZE SILT BUILDUP IN THE INLETS AND PIPES.
7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY ERODED SLOPES.
8. ROADWAYS AND ENTRANCES TO AND FROM THE SITE SHALL BE SWEPT ON A REGULAR BASIS TO KEEP THEM FREE OF SOIL ACCUMULATION.
9. CONTRACTOR SHALL HAVE WATER TRUCKS AND EQUIPMENT ON-SITE TO MINIMIZE AIRBORNE DUST CREATED FROM GRADING AND HAULING OPERATIONS OR EXCESSIVE WIND CONDITIONS. WATERING SHALL BE PERFORMED ON A CONTINUOUS BASIS ANY TIME THESE CONDITIONS ARE PRESENT AND AT ALL OTHER TIMES AS DIRECTED BY THE CITY ENGINEER. ADDITIONAL DUST CONTROL MEASURES SHALL BE IMPLEMENTED AS NEEDED.
10. STOCKPILES SHALL BE COVERED AT THE END OF EACH WORKING DAY AND PRIOR TO PREDICTED RAIN EVENTS. ASPHALT SHALL BE STORED ON A LAYER OF PLASTIC SHEETING, OR EQUIVALENT.
11. ALL PORTABLE TOILETS SHALL HAVE A SECONDARY CONTAINMENT AND NOT BE LOCATED NEAR A STORM DRAIN (I.E. CATCH BASIN OR STREET).
12. INACTIVE SLOPES SHALL BE PROTECTED AND STABILIZED WITHIN 10 CALENDAR DAYS OF LAST BEING WORKED, OR ON THE DIRECTION OF THE CITY. ACTIVE SLOPES SHALL BE STABILIZED DURING RAIN.
13. EROSION CONTROL ON SLOPES SHALL BE MITIGATED BY INSTALLING LANDSCAPING AS PER APPROVED LANDSCAPE PLANS AS REQUIRED BY THE DEVELOPMENT REVIEW CONDITIONS..
14. VEHICLE MAINTENANCE, REPAIR AND STORAGE BMPS WILL BE IMPLEMENTED INCLUDING: USE OF DRIP PANS OR EQUIVALENT UNDER VEHICLE STORED OVERNIGHT; DAILY INSPECTION FOR LEAKS AND SPILLS; PROMPT REMOVAL OF SPILLS; AVAILABILITY OF OIL-ABSORBENT SPILL REMOVAL MATERIALS ON SITE.
15. HEAVY EQUIPMENT WILL NOT BE STORED ON THE PUBLIC RIGHT-OF-WAY.
16. TRASH SHALL BE PLACED IN DUMPSTERS. OFFCUTS FROM FRAMING WILL BE STORED APPROPRIATLY AND NOT ALLOWED TO ACCUMULATE IN STOCKPILES AROUND THE SITE.
17. TRASH DUMPSTERS WILL HAVE LIDS. THE LIDS WILL REMAIN CLOSED AND THE DUMPSTERS WILL NOT BE OVERFILLED. ADDITIONAL TRASH PICK UPS SHALL BE MADE AS NECESSARY.
18. LIQUID MATERIALS WILL BE STORED IN CLOSED CONTAINERS IN SECONDARY CONTAINMENT AND UNDER COVER. SOLID MATERIALS WILL BE STORED ON PALLETS AND BE COVERED DURING RAIN.
19. A MATERIALS WASHOUT WILL BE AVAILABLE ONSITE WHENEVER LIQUID MATERIALS ARE USED. THE WASHOUT WILL FULLY CONTAIN THOSE MATERIALS AND THE SURROUNDING AREA SHALL BE KEPT FREE OF SPILLS.
20. DISCHARGE OF POTABLE WATER (SUCH AS FROM POWERWASHING OR FILLING WATER TRUCKS) WILL BE PREVENTED.
21. 125 PERCENT OF THE MATERIALS REQUIRED TO MAINTAIN STORM WATER BMPS SHALL BE PRESENT ON THE SITE AT ALL TIMES.
22. STORMWATER CONTROL MEASURES SHOWN HEREON ARE BEST MANAGEMENT PRACTICES FOR THIS SITE BASED ON THE ANTICIPATED PROGRESS OF THE WORK. ADDITIONAL MEASURES MAY BE REQUIRED AT ANY TIME AT THE DISCRETION OF THE CITY ENGINEER AS THE WORK PROGRESSES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE PROTECTION IS IN PLACE AT ALL TIMES TO PREVENT ANY DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENT, FROM THE EXPOSED SITE AREAS. BMPS WILL BE MAINTAINED UNTIL REMOVAL.
23. SILT FENCING SHALL BE INSTALLED AROUND THE PERIMETER OF ALL GRADING WORK AND THE PERIMETER OF THE IMPROVEMENT AREA.

ENGINEER OF WORK'S DESIGN CERTIFICATION

I, SARAH CURRAN, HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I, UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SANTEE IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS THE ENGINEER OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

I FURTHER UNDERSTAND THAT UPON APPROVAL OF THESE PLANS BY THE CITY ENGINEER, THE PLANS BECOME THE PROPERTY OF THE CITY OF SANTEE IN ACCORDANCE WITH THE CITY PUBLIC WORKS STANDARDS. AS SUCH, I HEREBY RELINQUISH RIGHT OF OWNERSHIP TO THE CITY TO USE THESE PLANS AS THEY MAY DEEM NECESSARY

SIGNED: _____ DATE: 04/04/2025

R.C.E. # C69620, MY REGISTRATION EXPIRES ON 06/30/26.

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

NONRESIDENTIAL FLOOD STATEMENT

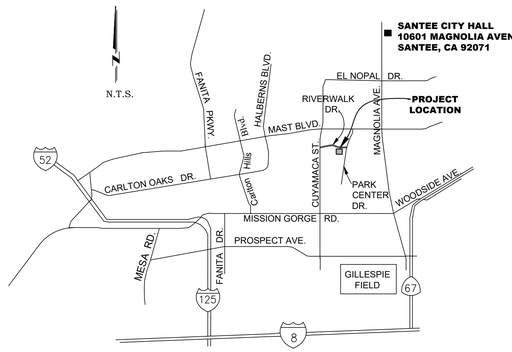
I, SARAH CURRAN, A REGISTERED CIVIL ENGINEER HEREBY CERTIFY THAT:

1. THE PAD ELEVATIONS SHOWN ON THIS AS-BUILT GRADING PLAN HAVE BEEN VERIFIED BY ME AND THAT SAID ELEVATIONS ARE AT A MINIMUM OF ONE FOOT ABOVE THE BASE FLOOD ELEVATION AS ESTABLISHED BY THE BASE FLOOD DISCHARGE RATES SET FORTH IN THE FLOOD DAMAGE PREVENTION ORDINANCE - CHAPTER 11.36 OF THE SANTEE MUNICIPAL CODE, OR
2. THE STRUCTURES ON THIS PROPERTY HAVE BEEN FLOOD PROOFED TO OR ABOVE THE BASE FLOOD ELEVATION AS ESTABLISHED BY THE BASE FLOOD DISCHARGE RATES SET FORTH IN THE FLOOD DAMAGE PREVENTION ORDINANCE - CHAPTER 15.52 OF THE SANTEE MUNICIPAL CODE.

SIGNED: _____ DATE: 04/04/2025

R.C.E. # C69620, MY REGISTRATION EXPIRES ON 06/30/26.

CITY RESUBMITTAL
03/05/2025



VICINITY MAP

NO SCALE

STANDARD SPECIFICATIONS:

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREENBOOK") 2021 EDITION.
2. CITY OF SANTEE DEVELOPMENT SERVICES STANDARDS, LATEST EDITION.
3. CALIFORNIA DEPARTMENT OF TRANSPORTATION, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" 2014 REVISION 6 EDITION.
4. STANDARD SPECIFICATIONS OF THE PADRE DAM MUNICIPAL WATER DISTRICT, WATER AGENCY STANDARDS, W.A.S.

STANDARD DRAWINGS:

1. CITY OF SANTEE STANDARD DRAWINGS.
2. SAN DIEGO REGIONAL STANDARD DRAWINGS (R.S.D.) AS RECOMMENDED BY THE REGIONAL STANDARDS COMMITTEE, MAINTAINED AND PUBLISHED BY THE SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS, 2018 EDITION.
3. STANDARD DRAWINGS OF THE PADRE DAM MUNICIPAL WATER DISTRICT, WATER AGENCY STANDARDS, W.A.S.
4. STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION 2021 EDITION.

LEGAL DESCRIPTION:

SITE ADDRESS: 10129 RIVERWALK DRIVE
SANTEE, CA 92071

APN: 381-051-14-00

ALL THOSE PORTIONS OF BLOCKS 2 AND 3 OF THE SUBDIVISION OF LOTS "H" AND "O", PER MAP NO. 817, RECORDED APRIL 2, 1896.

SHEET INDEX:

SHEET NO.	DESCRIPTION
C1.0	TITLE SHEET AND GENERAL NOTES
C1.1	EXISTING CONDITIONS PLAN
C1.2	DEMOLITION PLAN
C1.3	GRADING AND PAVING PLAN
C1.4	PARKING LOT GRADING AND PAVING PLAN
C1.5	HORIZONTAL CONTROL PLAN
C1.6	PARKING LOT HORIZONTAL CONTROL PLAN
C1.7	HORIZONTAL CONTROL PLAN TABLES
C1.8	TRAFFIC SIGNAGE AND STRIPING PLAN
C1.9	CIVIL UTILITY PLAN
C1.10	CIVIL DETAILS
C1.11	CIVIL DETAILS
C1.12	EROSION CONTROL PLAN

BENCHMARK:

THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10, WITH PUNCH ONLY. LOCATED ON A 5.00' OFFSET SOUTH ALONG THE CENTERLINE OF COTTONWOOD AVENUE FROM THE CENTERLINE INTERSECTION OF PALM GLEN DRIVE AND COTTONWOOD AVENUE AS DERIVED FROM MAP NO. 7349.

ELEVATION: 355.96 FEET FROM SAID RECORD OF SURVEY 20986. FOR THE PURPOSE OF THIS SURVEY IT IS 356.05 FEET.

DATUM: NAVD88

ABBREVIATIONS:

AC	ASPHALT CONCRETE
C&G	CURB AND GUTTER
CB	CATCH BASIN
CBM	CONSTRUCTION BENCH MARK
EX	EXISTING
FG	FINISH GRADE
FL	FLOW LINE
LT	LEFT
MH	MANHOLE
OHE	OVER HEAD ELECTRIC
PCC	PORTLAND CEMENT CONCRETE
PP	POWER POLE
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RT	RIGHT
ROW	RIGHT OF WAY
RW	RECYCLED WATER
SDRSD	SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS
SDMH	STORM DRAIN MANHOLE
SL	STREET LIGHT
TC	TOP OF CURB
TF	TOP OF FOOTING
X-ING	CROSSING

LEGEND

ITEM (RSD)	SYMBOL
RIGHT-OF-WAY	ROW
EXIST TELEPHONE	T
EXIST CABLE TV	CATV
EXIST ELECTRIC	E
EXIST SANITARY SEWER	MH SS
EXIST WATER	W
EXIST GAS	G
EXIST RECYCLED WATER	RW
EXIST CHAIN LINK FENCE	X X X
EXIST SIDEWALK	#4 @ 4'-0"
EXIST CATCH BASIN	CB
EXIST POWER POLE	PP
EXIST CURB AND GUTTER	
EXIST STORM DRAIN	SD SD
EXIST SEWER SERVICE	S
EXIST WATER SERVICE	W
EXIST BLOWOFF	B
EXIST RECYCLED WATER SERVICE	
CURB AND GUTTER (G-2)	
LODGE POLE FENCE (2 RAIL)	
CHAIN LINK FENCE (M-6)	X X X
REMOVABLE BOLLARD	
DG SURFACE	
6" CONCRETE MOW CURB	
CONSTRUCTION NOTE	1

* ALL DIMENSIONS IN FEET UNLESS OTHERWISE SHOWN

SEWER & WATER AGENCY

APPROVED BY: PADRE DAM Municipal Water District

DIRECTOR OF ENGINEERING & PLANNING — DATE

RCE NO. — EXP

PDMWD PROJECT/FILE NAME — PDMWD JOB NO. — SERVICE AREA

VALID FOR ONE YEAR FROM THE DATE OF SIGNATURE.
SIGNATURE OF THESE PLANS IS NOT A COMMITMENT TO SERVE. ACTUAL FIELD CONDITIONS MAY REQUIRE CHANGES TO THE WATER, SEWER, AND/OR RECYCLED WATER PLANS. THE DEVELOPER AND/OR ITS ENGINEER OF WORK SHALL BE RESPONSIBLE FOR MAKING ANY NECESSARY CHANGES AT NO ADDITIONAL COST TO THE DISTRICT.

CITY OF SANTEE

FIRE DEPARTMENT
DEPUTY FIRE CHIEF — DATE

COMMUNITY SERVICES DEPARTMENT
PUBLIC SERVICES MANAGER — DATE

ENGINEERING DIVISION
CITY ENGINEER — DATE
RCE NO: 60112 EXPIRES: 06/30/2026

PLANNING DIVISION
PROJECT PLANNER — DATE

TRAFFIC SECTION
PRINCIPAL TRAFFIC ENGINEER — DATE

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
TITLE SHEET AND GENERAL NOTES

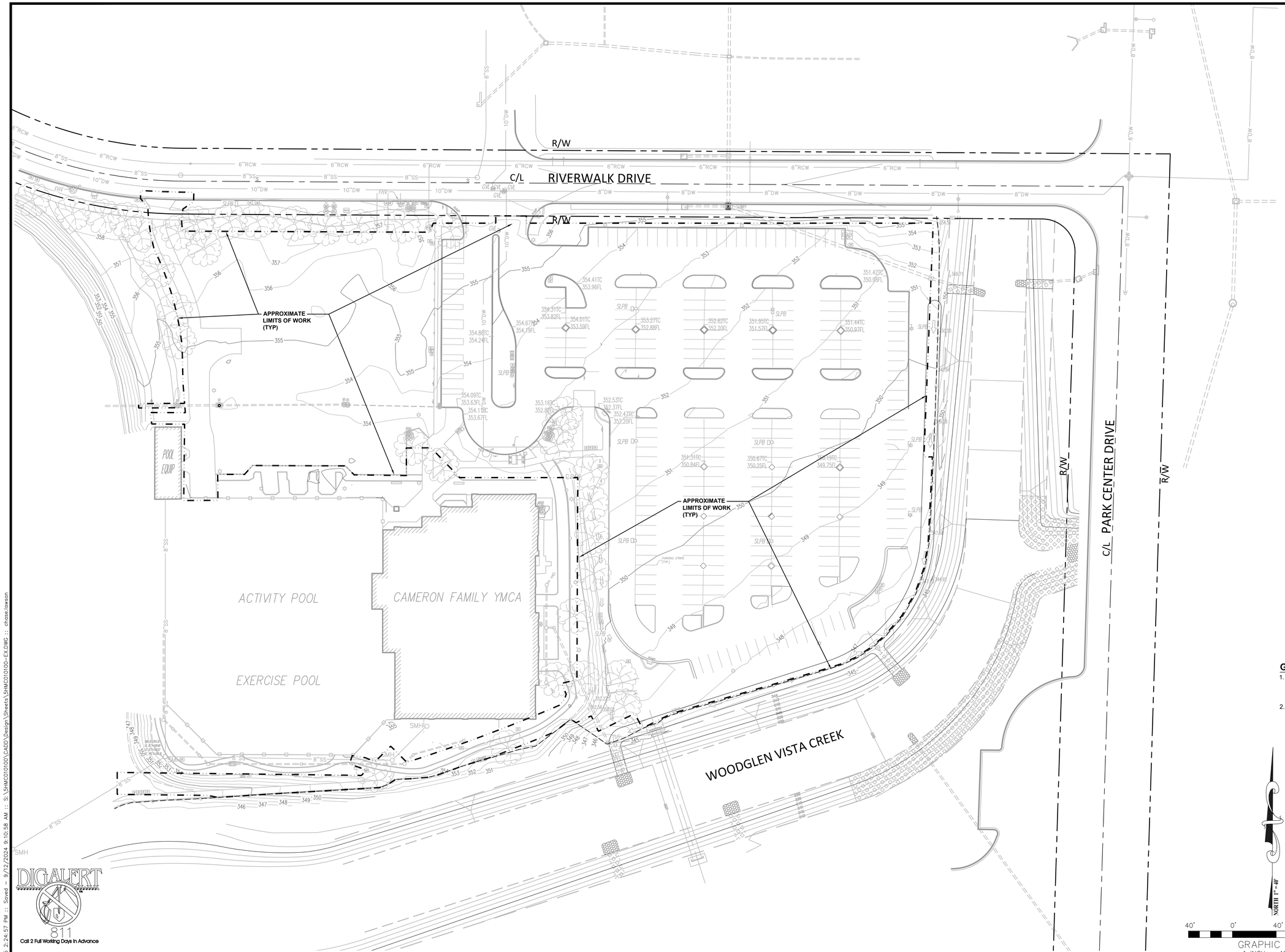
CITY W.O. NO.: CIP 2018-31

DRAWING NO.: C1.0

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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LEGEND AND ABBREVIATIONS

AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
BFP	BACKFLOW PREVENTION ASSEMBLY
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CMU	CONCRETE MASONRY UNIT
C/O	SANITARY SEWER CLEANOUT
CONC	CONCRETE/CONCRETE SPOT EL.
CP	CONCRETE PEDESTAL
CPAD	CONCRETE PAD
CR	COMMUNICATION RISER
DI	DROP INLET
DIA	DIAMETER
DECID	DECIDUOUS
ECCB	ELECTRIC CABINET
EC	EDGE OF CONCRETE
EL	ELEVATION
ELEC	ELECTRIC
EUC	EUCALYPTUS
EVC	ELECTRIC VEHICLE CHARGING STATION
EVT	ELECTRIC VAULT
EP	EDGE OF PAVEMENT
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FHV	FIRE HYDRANT VALVE
FL	FLOWLINE
GB	GRADE BREAK
GRD	GROUND
GR	GROUNDING ROD
HCR	HANDICAP RAMP
HDCP	HANDICAP
IR	IRRIGATION CONTROL VALVE
OHG	OVERHANG
LS	LANDSCAPE
RD	3" PVC ROOF DRAIN
(N)	NORTH
(S)	SOUTH
SW	SIDEWALK
TC	TOP OF CURB
TOP	TOP OF SLOPE
TRW	TREE WELL
TW	TOP OF WALL
UD	SIDEWALK UNDERDRAIN
VG	VALLEY GUTTER
BL	BOLLARD
FH	FIRE HYDRANT
GVL	GAS VALVE
ICV	IRRIGATION CONTROL VALVE
LP	LIGHT ON POLE/LANDSCAPE LIGHT
PED	PEDESTAL
SN	ROAD/TRAFFIC SIGN
WTVL	WATER VALVE
CB	CATCH BASIN
SDMH/CO	STORM DRAIN MANHOLE & CLEANOUT
SMH	SEWER MANHOLE
CI	CURB INLET
	RIP RAP
	DG WALK
	CONCRETE
	RIVER BED
	GRAVEL PARKING LOT
	WALL
	TOP OF SLOPE
	TOE OF SLOPE
	TOP FACE OF CURB OR EDGE OF PAVEMENT
	FLOWLINE OF SWALE
X	CHAINLINK FENCE
O	WOOD FENCE
	WROUGHT IRON FENCE
COM	UNDERGROUND COMMUNICATION
E	UNDERGROUND ELECTRIC
G	UNDERGROUND GAS
DW	UNDERGROUND DOMESTIC WATER
RCW	UNDERGROUND RECLAIM WATER
SS	UNDERGROUND SANITARY SEWER
SD	UNDERGROUND STORM DRAIN
355	EXISTING CONTOUR LINE
	TREE

GENERAL NOTES

1. BASE CONDITIONS SHOWN HEREON AS EXISTING CONDITIONS ARE BASED ON A SURVEY DATED MARCH 23, 2022, PREPARED BY PSOMAS, AND PUBLICLY AVAILABLE RECORD AS-BUILT DRAWINGS.
2. SEE THE GEOTECHNICAL INVESTIGATION REPORT, SANTEE COMMUNITY CENTER, DATED MARCH 18, 2022, PREPARED BY GROUP DELTA CONSULTANTS, INC.. CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW AND COMPLY WITH RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT.

NORTH 1" = 40'

40' 0' 40' 80' 120'

GRAPHIC SCALE
1 INCH = 40 FEET

DIGALERT 811
Call 2 Full Working Days In Advance

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____
PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:

SANTEE COMMUNITY CENTER
EXISTING CONDITIONS PLAN

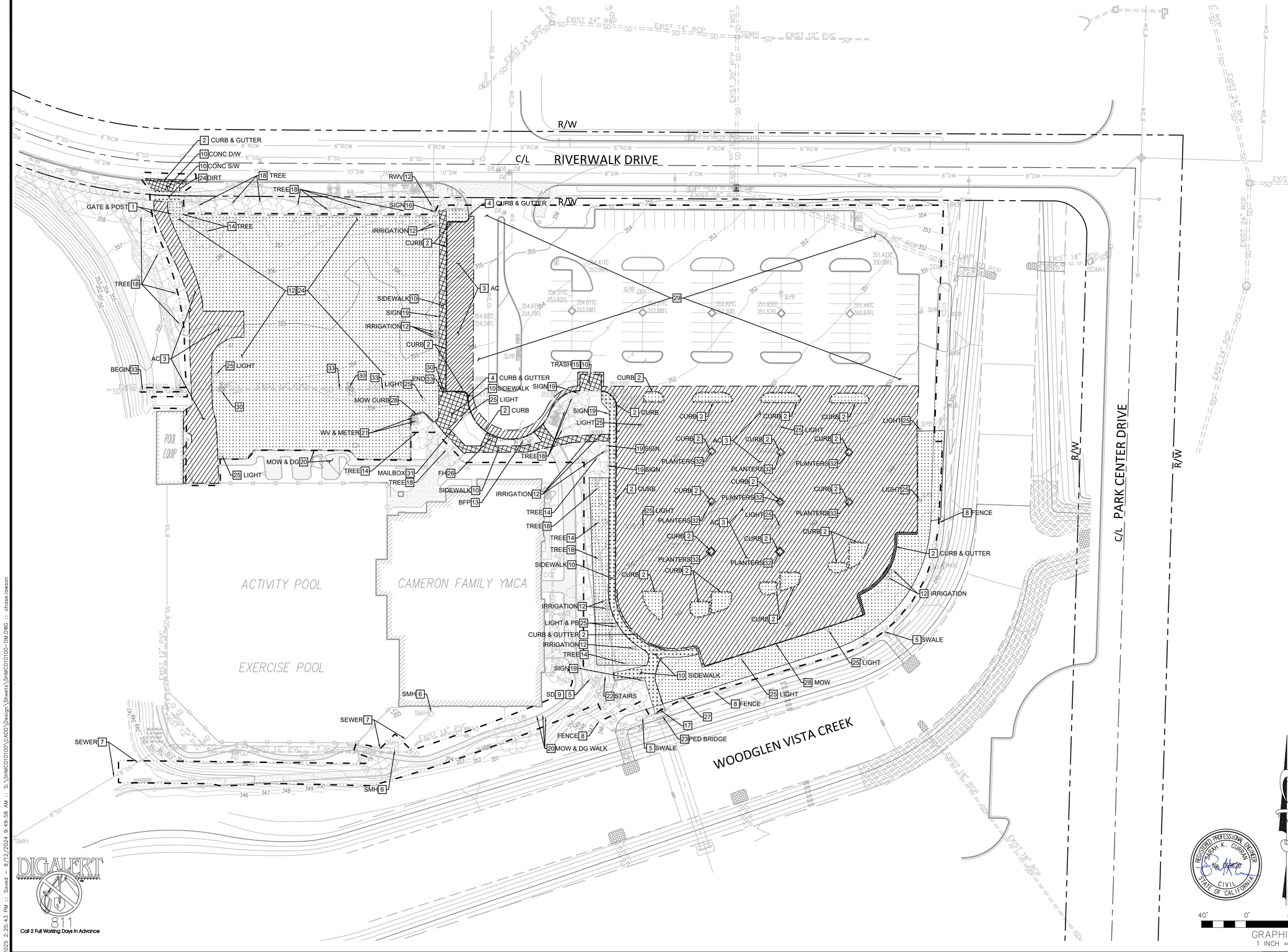
CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.1

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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LEGEND

- REMOVE EXIST ASPHALT PAVEMENT AND AGGREGATE BASE
- REMOVE EXIST CONCRETE PAVEMENT AND PERIMETER CURB/GUTTER/SIDEWALK (WHERE OCCURS)
- REMOVE EXIST LANDSCAPING AND IRRIGATION
- REMOVE EXIST CONCRETE MOW CURB

- SAWCUT LINE
- REMOVE EXIST FENCE/GATE
- EXISTING NATURAL SWALE
- APPROXIMATE LIMITS OF WORK

DEMOLITION NOTES

1. REMOVE AND DISPOSE GATE AND GATE POSTS.
2. REMOVE AND DISPOSE CONCRETE CURB OR CURB & GUTTER.
3. REMOVE AND DISPOSE AC PAVEMENT AND BASE, FULL DEPTH, WHEEL STOPS, AND ADA PARKING SIGNAGE.
4. PROTECT CURB & GUTTER IN PLACE.
5. PROTECT DRAINAGE STRUCTURE IN PLACE.
6. PROTECT SEWER MANHOLE IN PLACE.
7. PROTECT SEWER LINE IN PLACE.
8. PROTECT FENCE IN PLACE.
9. PROTECT STORM DRAIN PIPE IN PLACE.
10. REMOVE CONCRETE PAVEMENT & SIDEWALK.
11. NOT USED.
12. REFER TO LANDSCAPE SHEETS L2.10 AND L2.11 FOR IRRIGATION DEMOLITION AND DISPOSE.
13. PROTECT IN PLACE BACK FLOW PREVENTER AND FIRE PIPE CONNECTION.
14. REMOVE AND DISPOSE TREE AND TRUNKS.
15. REMOVE AND DISPOSE OF TRASH ENCLOSURE AND FOOTINGS.
16. PROTECT SIGN.
17. PROTECT REMOVABLE BOLLARD IN PLACE.
18. PROTECT TREE.
19. REMOVE & DISPOSE SIGN.
20. PROTECT MOW CURB AND DG WALK.
21. EXISTING YMCA WATER METERS (2) TO BE REMOVED BY PADRE DAM MUNICIPAL WATER DISTRICT AFTER RELOCATION INSTALL (SEE UTILITIES PLAN). BACKFLOW PREVENTERS (2) TO BE REMOVED BY CONTRACTOR AFTER RELOCATION INSTALL (SEE UTILITIES PLAN).
22. REMOVE AND DISPOSE WOOD STAIRS.
23. PROTECT IN PLACE PEDESTRIAN BRIDGE.
24. REMOVE GRASS FIELD AND AGGREGATE BASE.
25. REMOVE LIGHT STANDARD POLE FOOTING AND PULL BOX.
26. PROTECT FIRE HYDRANT IN PLACE.
27. PROTECT UNDERGROUND ELECTRICAL PULL BOX.
28. REMOVE AND DISPOSE MOW CURB.
29. PROTECT EXIST CURBS, STRIPES, ASPHALT CONCRETE, PLANTERS, IRRIGATION, LANDSCAPING, ELECTRICAL AND LIGHTING IN PLACE.
30. REMOVE AND DISPOSE EXISTING CATCH BASIN.
31. PROTECT IN PLACE EXISTING MAIL BOX.
32. REMOVE AND DISPOSE EXISTING TREES AND ROOT BARRIERS IN ISLAND PLANTERS.
33. REMOVE AND DISPOSE PVC STORM DRAIN.

GENERAL DEMOLITION NOTES

1. PRIOR TO ANY DEMOLITION OR EXCAVATION FOR THIS CONTRACT CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY NOT REFLECT ALL EXISTING UTILITIES.
2. LOCATION OF ALL EXISTING UTILITIES SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF WORK. ACCURATE VERIFICATION AS TO SIZE, LOCATION AND DEPTH OF EXISTING UNDERGROUND SERVICES SHALL BE THE CONTRACTORS RESPONSIBILITY.
3. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
4. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY AGENCIES PRIOR TO STARTING HIS WORK WITH UTILITY REPRESENTATIVES. FOR LOCATION OF UNDERGROUND UTILITIES AND APPURTENANCES, CONTACT "UNDERGROUND SERVICE ALERT": AT 811
5. EXIST ABANDONED UNDERGROUND UTILITIES TO BE REMOVED AND DISPOSED.
6. WITHIN DEMOLITION AREA, REMOVE ALL TREES, ROOTS,SHRUBS, STRUCTURES, FENCING, STRUCTURAL FOUNDATIONS, PAVED PATHS AND STAIRS, CONCRETE PAVEMENT, ASPHALT PAVEMENT, CURBS, GUTTERS, GROUND COVER, AND ANY EXISTING IMPROVEMENTS NOT SPECIFICALLY NOTED TO REMAIN. REMOVE ALL MISCELLANEOUS TRASH FROM SITE.
7. UNLESS OTHERWISE NOTED, ALL EXISTING UNDERGROUND UTILITIES AND ASSOCIATED STRUCTURES SHALL BE PROTECTED IN PLACE.
8. REFERENCE MECHANICAL, ELECTRICAL AND TELECOMMUNICATION PLANS FOR DEMOLITION AND INSTALLATION OF M, E, & T UTILITIES AND STRUCTURES.
9. REFERENCE LANDSCAPE PLANS FOR TREE PROTECTION AND REMOVALS.
10. REFERENCE LANDSCAPE PLANS FOR DEMOLITION AND INSTALLATION OF IRRIGATION LINES.
11. SHOULD ANY EXISTING UTILITY NOT SHOWN HEREON BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER PRIOR TO DEMOLITION OF SUCH UTILITY.
12. CONTRACTOR SHALL USE A 3RD PARTY UNDERGROUND LOCATION SERVICE TO DETERMINE THE LOCATION OF ALL ELECTRICAL, WATER, SEWER, AND IRRIGATION LINES.

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

NORTH 1" = 40'

40' 0' 40' 80' 120'

GRAPHIC SCALE
1 INCH = 40 FEET

DIGALERT 811 Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
DEMOLITION PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.2**
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted: 3/4/2025 2:25:43 PM :: Saved: 9/12/2024 9:49:58 AM :: S:\SHM\C01010\CADD\Design\Sheets\SHMC01010D-DM.DWG :: chase.lawson

SEE TRAFFIC SIGNAGE AND STRIPING PLANS FOR IMPROVEMENTS WITHIN ADJACENT PARKING LOT

MATCHLINE SEE SHEET C1.4

CAMERON FAMILY YMCA

COMMUNITY CENTER
FF 350.50
PAD 350.08

PROPOSED LIGHT POLE (TYP)

SPILLWAY CONNECTION TO EXISTING SITE DISCHARGE POINT (346.0) FG

WOODGLEN VISTA CREEK

LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- CATCH BASIN
- CLEANOUT
- X% SLOPE ARROW
- 500 NEW CONTOUR
- x 505.50 NEW SPOT ELEVATION
- 500 EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE RIDGE LINE
- GB GRADE BREAK
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- LIMITS OF WORK
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

GRADING NOTES

1. CONSTRUCT CONCRETE CURB PER SDRSD G-01 6" CURB FACE UNLESS NOTED OTHERWISE.
2. CONSTRUCT CONCRETE CURB AND GUTTER PER SDRSD G-02 6" CURB FACE,TYPE H.
3. CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27.
4. CONSTRUCT CROSS GUTTER PER SDRSD G-12 WIDTH PER PLANS.
5. CONSTRUCT CONCRETE SIDEWALK PER DETAIL 4 SHEET C1.10.
6. CONSTRUCT CONCRETE VEHICULAR PAVEMENT PER DETAIL 3 SHEET C1.10.
7. CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 2 SHEET C1.10.
8. CONSTRUCT FENCE PER LANDSCAPE PLAN.
9. CONSTRUCT CURB CUT WITH RIP RAP APRON PER DETAIL 2 SHEET C1.11.
10. NOT USED
11. CONSTRUCT CURBSIDE GRATED CATCH BASIN PER SPPWC STD 303-4 (SINGLE GRATE, V=2.77, t=8") WITH CASE F LOCAL DEPRESSION AT CATCH BASIN PER SPPWC STD 313-4.
12. CONSTRUCT TRASH ENCLOSURE PER ARCHITECT PLAN.
13. CONSTRUCT SEAT WALL PER LANDSCAPE PLAN.
14. CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 SHEET C1.11.
15. EXISTING PEDESTRIAN BRIDGE TO REMAIN.
16. CONSTRUCT CONCRETE DRIVEWAY (ALLEY TYPE) PER SDRSD G-14E.
17. CONSTRUCT 8" CURB WITH SIDEWALK UNDERDRAIN PER SDRSD D-27.
18. CONSTRUCT 12" CURB CUT PER DETAIL 2 ON SHEET 1 SHEET C1.11.
19. CONSTRUCT TYPE A 6" ROLLED CURB ALONG CONCRETE PAVEMENT ACCESS PER SDRSD G-4A WITH 5'-LONG CURB TRANSITION ON EACH END PER SDRSD G-04B.
20. INSTALL DEMOUNTABLE POST PER SDRSD M-16.
21. CONSTRUCT TYPE D-3 CURB RAMP PER SRDSD G-31.
22. CONSTRUCT TYPE D-2 CURB PAMP PER SDRSD G-31.
23. CONSTRUCT COBBLE ENERGY DISSIPATION PER DETAIL 4 ON SHEET C1.11.
24. CONSTRUCT SIDEWALK UNDERDRAIN PER DETAIL 5 ON SHEET C1.11.
25. ELECTRICAL EQUIPMENT, SEE MEP PLANS FOR EQUIPMENT AND PAD CONSTRUCTION DETAILS.

SPECIAL GEOTECHNICAL NOTES

1. GROUND IMPROVEMENT SPECIALTY CONTRACTOR SHALL SUBMIT PLANS AND DESIGN CALCULATIONS PRIOR TO CONSTRUCTION FOR APPROVAL. THE PLANS SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER OR RECORD FOR CONCURRENCE THAT THEY MEET THE DESIGN INTENT NOTED IN THE PROJECT GEOTECHNICAL REPORT. THE GROUND IMPROVEMENT DESIGN PACKAGE SHALL INCLUDE QUALITY CONTROL PROCEDURES TO CONFIRM THE DESIGN BEARING CAPACITY AND LIQUEFACTION POTENTIAL MEET THE DESIGN INTENT. THE QUALITY CONTROL PROCEDURES SHALL INCLUDE AN INDICATOR MODULUS TEST (MT) PROGRAM AND A GROUND IMPROVEMENT TEST SECTION TO INDICATE PRE- AND POST- IMPROVEMENT BORINGS AND/OR CPTS ALONG WITH LIQUEFACTION ANALYSIS TO INDICATE THAT THE POST-GROUND IMPROVEMENT MEETS THE DESIGN INTENT.
2. ALL GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT, PROJECT NUMBER IR786, BY GROUP DELTA, DATED JUNE 15, 2022.

GENERAL GRADING NOTES

1. CONTRACTOR SHALL PROTECT IN PLACE OR ADJUST WHERE NECESSARY ALL EXISTING UTILITY LINES, WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, THAT LAY WITHIN THE LIMITS OF THE NEW CONSTRUCTION, AND ARE NOT SPECIFICALLY MARKED TO BE REMOVED OR ABANDONED.
2. FINAL MANHOLE, VALVE BOXES AND VAULTS RIM ELEVATIONS SHALL BE ADJUSTED TO MEET FINAL GRADES.
3. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES THAT ARE IN CONFLICT WITH THE PROJECT PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER OF RECORD OF ANY FOUND CONFLICTS. CONTRACTOR SHALL USE A 3RD PARTY UNDERGROUND UTILITY SERVICE TO DETERMINE THE LOCATION OF ALL ELECTRICAL, WATER, SEWER, AND IRRIGATION LINES.
4. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. JOIN ELEVATIONS SHOW APPROXIMATE. NEW CONCRETE JOINS SHALL MATCH EXISTING ELEVATIONS.
6. BUILDING PAD PREPARATION REFERENCE SHEET S0.01 FOR SOIL (GROUND) IMPROVEMENTS AND SHEET S3.02 FOR ADDITIONAL REQUIRED EXCAVATION AND CERTIFIED FILL BENEATH BUILDING.

NORTH 1"= 20'

GRAPHIC SCALE
20' 0' 20' 40' 60'
1 INCH = 20 FEET

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

DIGALERT 811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

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VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
GRADING AND PAVING PLAN

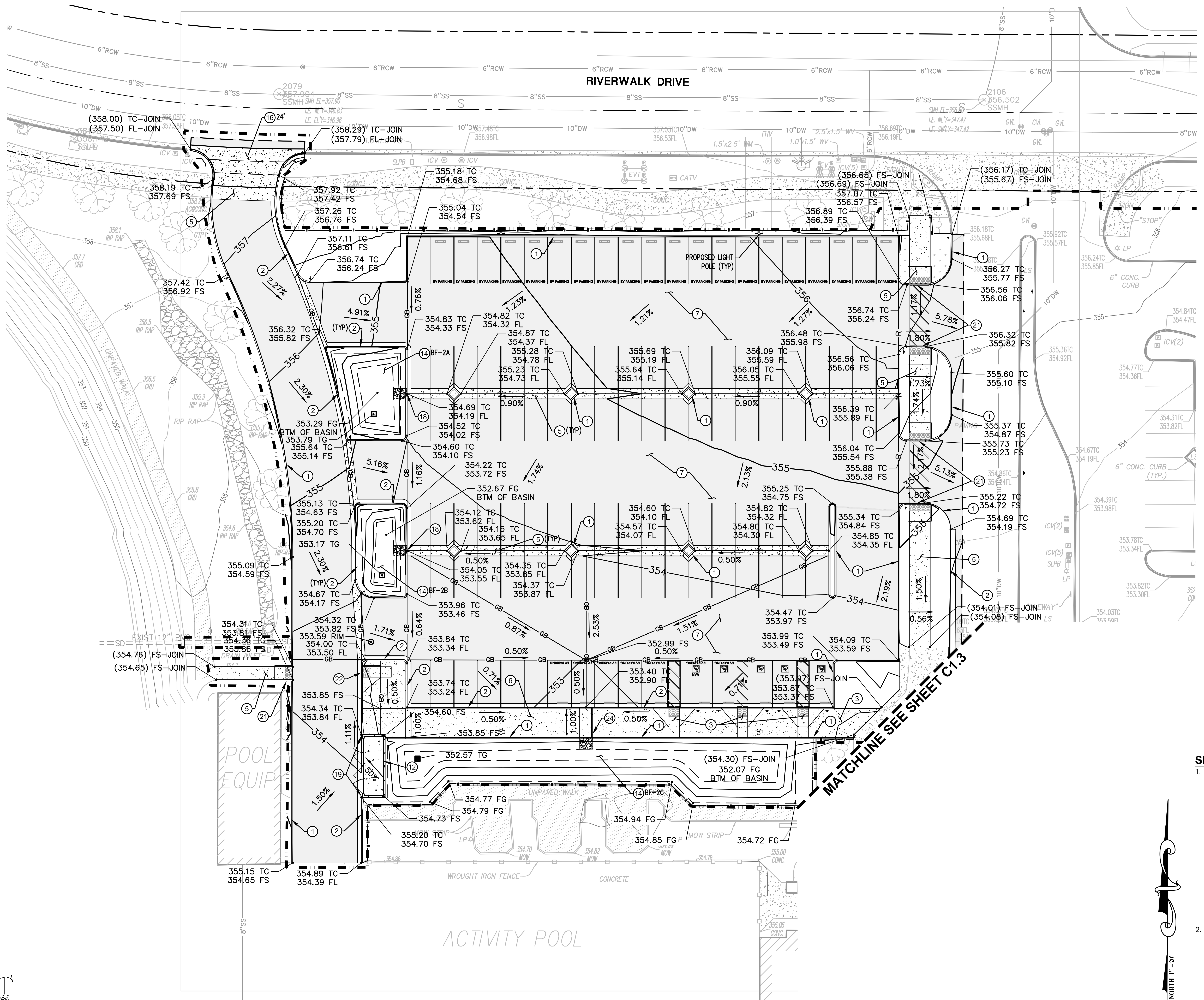
CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.3

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted – 3/4/2025 2:27:00 PM :: Saved – 2/24/2025 4:54:02 PM :: S:\SHMC01010\CADD\Design\Sheets\SHMC01010D-GP.DWG :: chase.lawson



LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- CATCH BASIN
- CLEANOUT
- X% SLOPE ARROW
- —500— NEW CONTOUR
- x 505.50 NEW SPOT ELEVATION
- —500— EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- ×500.0 EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- —740— NEW CONTOUR LINE
- —‖— DAYLIGHT LINE
- — — — SAWCUT LINE
- RIDGE RIDGE LINE
- —GB— GRADE BREAK
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- LIMITS OF WORK
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

GRADING NOTES

① CONSTRUCT CONCRETE CURB PER SDRSD G-01 6" CURB FACE UNLESS NOTED OTHERWISE.

② CONSTRUCT CONCRETE CURB AND GUTTER PER SDRSD G-02 6" CURB FACE,TYPE H

③ CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27.

④ CONSTRUCT CROSS GUTTER PER SDRSD G-12 WIDTH PER PLANS.

⑤ CONSTRUCT CONCRETE SIDEWALK PER DETAIL 4 SHEET C1.10.

⑥ CONSTRUCT CONCRETE VEHICULAR PAVEMENT PER DETAIL 3 SHEET C1.10.

⑦ CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 2 SHEET C1.10.

⑧ CONSTRUCT FENCE PER LANDSCAPE PLAN.

⑨ CONSTRUCT CURB CUT WITH RIP RAP APRON PER DETAIL 2 SHEET C1.11.

⑩ NOT USED

⑪ CONSTRUCT CURBSIDE GRATED CATCH BASIN PER SPPWC STD 303-4 (SINGLE GRATE, V=2.77', t=6") WITH CASE F LOCAL DEPRESSION AT CATCH BASIN PER SPPWC STD 313-4.

⑫ CONSTRUCT TRASH ENCLOSURE PER ARCHITECT PLAN.

⑬ CONSTRUCT SEAT WALL PER LANDSCAPE PLAN.

⑭ CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 SHEET C1.11.

⑮ EXISTING PEDESTRIAN BRIDGE TO REMAIN.

⑯ CONSTRUCT CONCRETE DRIVEWAY (ALLEY TYPE) PER SDRSD G-14E.

⑰ CONSTRUCT 8" CURB WITH SIDEWALK UNDERDRAIN PER SDRSD D-27.

⑱ CONSTRUCT 12" CURB CUT PER DETAIL 2 ON SHEET 1 SHEET C1.11.

⑲ CONSTRUCT TYPE A 6" ROLLED CURB ALONG CONCRETE PAVEMENT ACCESS PER SDRSD G-4A WITH 5'-LONG CURB TRANSITION ON EACH END PER SDRSD G-04B.

⑳ INSTALL DEMOUNTABLE POST PER SDRSD M-16.

㉑ CONSTRUCT TYPE D-3 CURB RAMP PER SRDSD G-31.

㉒ CONSTRUCT TYPE D-2 CURB PAMP PER SDRSD G-31.

㉓ CONSTRUCT COBBLE ENERGY DISSIPATION PER DETAIL 4 ON SHEET C1.11.

㉔ CONSTRUCT SIDEWALK UNDERDRAIN PER DETAIL 5 ON SHEET C1.11.

㉕ ELECTRICAL EQUIPMENT. SEE MEP PLANS FOR EQUIPMENT AND PAD CONSTRUCTION DETAILS.

SPECIAL GEOTECHNICAL NOTES

1. GROUND IMPROVEMENT SPECIALTY CONTRACTOR SHALL SUBMIT PLANS AND DESIGN CALCULATIONS PRIOR TO CONSTRUCTION FOR APPROVAL. THE PLANS SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER OR RECORD FOR CONCURRENCE THAT THEY MEET THE DESIGN INTENT NOTED IN THE PROJECT GEOTECHNICAL REPORT. THE GROUND IMPROVEMENT DESIGN PACKAGE SHALL INCLUDE QUALITY CONTROL PROCEDURES TO CONFIRM THE DESIGN BEARING CAPACITY AND LIQUEFACTION POTENTIAL MEET THE DESIGN INTENT. THE QUALITY CONTROL PROCEDURES SHALL INCLUDE AN INDICATOR MODULUS TEST (MT) PROGRAM AND A GROUND IMPROVEMENT TEST SECTION TO INDICATE PRE- AND POST- IMPROVEMENT BORINGS AND/OR CPTS ALONG WITH LIQUEFACTION ANALYSIS TO INDICATE THAT THE POST-GROUND IMPROVEMENT MEETS THE DESIGN INTENT.
2. ALL GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT, PROJECT NUMBER IR786, BY GROUP DELTA, DATED JUNE 15, 2022.

GENERAL GRADING NOTES

1. CONTRACTOR SHALL PROTECT IN PLACE OR ADJUST WHERE NECESSARY ALL EXISTING UTILITY LINES, WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, THAT LAY WITHIN THE LIMITS OF THE NEW CONSTRUCTION, AND ARE NOT SPECIFICALLY MARKED TO BE REMOVED OR ABANDONED.
2. FINAL MANHOLE, VALVE BOXES AND VAULTS RIM ELEVATIONS SHALL BE ADJUSTED TO MEET FINAL GRADES.
3. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES THAT ARE IN CONFLICT WITH THE PROJECT PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER OF RECORD OF ANY FOUND CONFLICTS. CONTRACTOR SHALL USE A 3RD PARTY UNDERGROUND UTILITY SERVICE TO DETERMINE THE LOCATION OF ALL ELECTRICAL, WATER, SEWER, AND IRRIGATION LINES.
4. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. JOIN ELEVATIONS SHOW APPROXIMATE. NEW CONCRETE JOINS SHALL MATCH EXISTING ELEVATIONS.
6. BUILDING PAD PREPARATION REFERENCE SHEET S0.01 FOR SOIL (GROUND) IMPROVEMENTS AND SHEET S3.02 FOR ADDITIONAL REQUIRED EXCAVATION AND CERTIFIED FILL BENEATH BUILDING.

NORTH 1" = 20'

20' 0' 20' 40' 60'
GRAPHIC SCALE
1 INCH = 20 FEET

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

DIGALERT
811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED
BY PROJECT ENGINEER

CITY OF SANTEE
DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR:

SANTEE COMMUNITY CENTER
PARKING LOT GRADING AND PAVING PLAN

CITY W.O. NO. CIP 2018-31
DRAWING NO. C1.4
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted – 3/4/2025 2:28:14 PM :: Saved – 2/24/2025 5:00:20 PM :: S:\5HMC010100\CADD\Design\Sheets\5HMC010100-GP PARKING LOT.DWG :: chase.lawson

LEGEND

- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- SAWCUT LINE
- PROPERTY LINE
- LIMITS OF WORK
- LANDSCAPE PER LANDSCAPE PLANS
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

MATCHLINE SEE SHEET C1.6

CAMERON FAMILY YMCA

COMMUNITY CENTER

WOODGLEN VISTA CREEK

GRAPHIC SCALE
1 INCH = 20 FEET

NORTH 1" = 20'

811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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DATUM: NAVD88

SCALE	
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VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
HORIZONTAL CONTROL PLAN

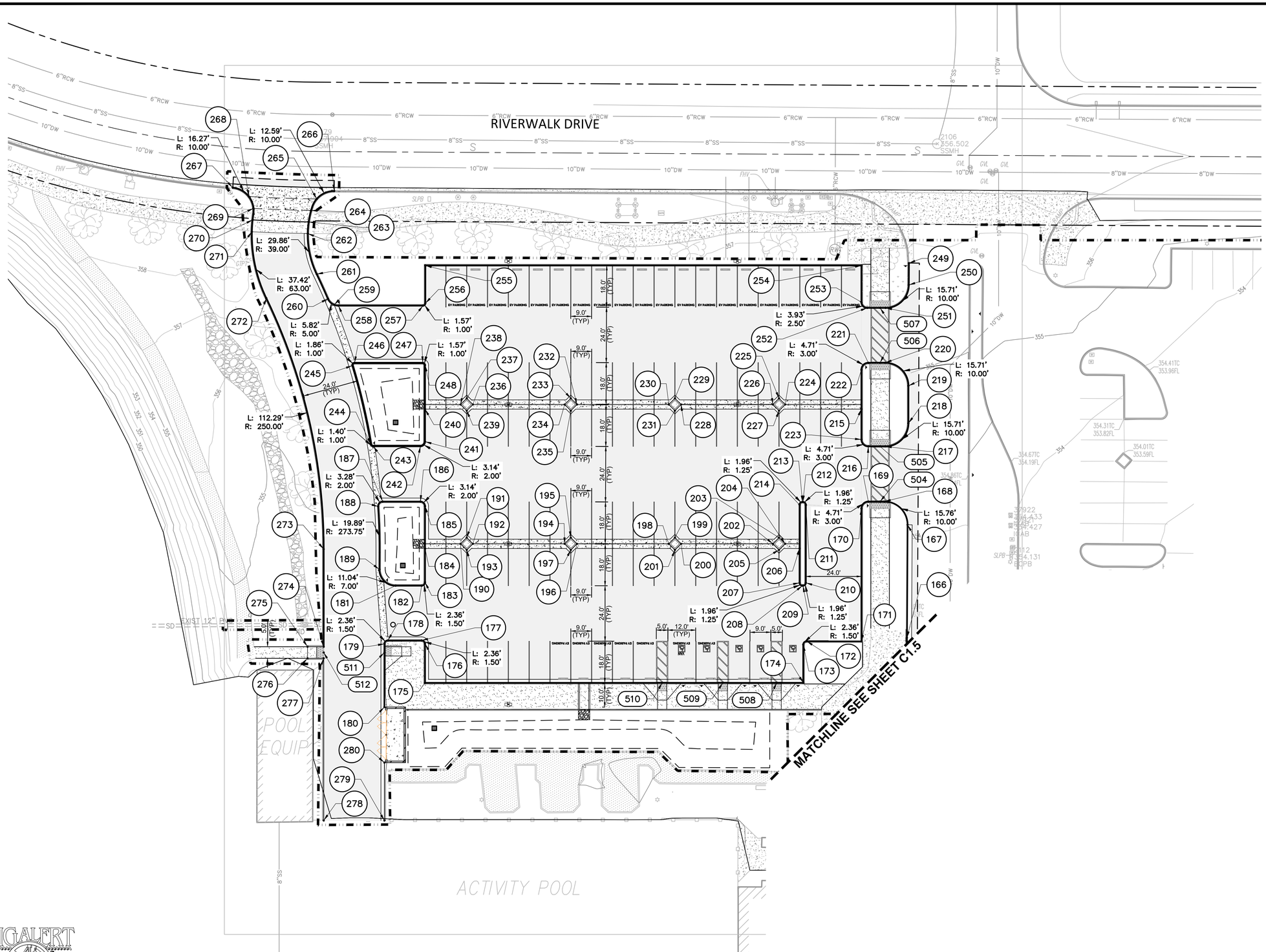
CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.5

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted: 3/4/2025 2:29:27 PM :: Saved: 2/14/2025 3:35:44 PM :: S:\SHMC010100\CADD\Design\Sheets\SHMC010100-HC.DWG :: chase.lawson



LEGEND

- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- SAWCUT LINE
- PROPERTY LINE
- LIMITS OF WORK
- LANDSCAPE PER LANDSCAPE PLANS
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

NORTH 1" = 20'

20' 0' 20' 40' 60'

GRAPHIC SCALE
1 INCH = 20 FEET

DIGALERT 811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
PARKING LOT HORIZONTAL CONTROL PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.6**

SHEET X OF X

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
CIVIL
STATE OF CALIFORNIA

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted: 3/4/2025 2:30:32 PM :: Saved: 1/18/2024 1:52:13 PM :: S:\SHM\C01010\CADD\Design\Sheets\SHMC01010-HC PARKING LOT.DWG :: chase.lawson

SHEET C1.5 POINT TABLES

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
100	1890106.64	6338566.13
101	1890115.91	6338563.64
102	1890119.79	6338556.91
103	1890104.27	6338499.03
104	1890104.27	6338396.38
105	1890139.27	6338361.38
106	1890142.10	6338361.38
107	1890142.11	6338343.40
108	1890214.23	6338343.38
109	1890214.23	6338360.05
110	1890215.42	6338361.30
111	1890222.58	6338358.11
112	1890224.57	6338352.54
113	1890224.71	6338302.82
114	1890206.06	6338275.08
115	1890113.68	6338592.74
116	1890123.67	6338590.06
117	1890128.53	6338592.74
118	1890131.03	6338600.78
119	1890131.04	6338606.08

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
120	1890134.86	6338606.11
121	1890158.86	6338606.26
122	1890223.00	6338607.02
123	1890160.23	6338562.08
124	1890157.84	6338562.08
125	1890148.18	6338554.67
126	1890142.20	6338532.38
127	1890147.03	6338526.08
128	1890151.23	6338526.08
129	1890151.23	6338542.08
130	1890160.23	6338544.08
131	1890142.11	6338501.08
132	1890137.83	6338501.08
133	1890132.83	6338496.09
134	1890132.78	6338469.98
135	1890137.78	6338464.97
136	1890142.11	6338464.97
137	1890142.10	6338439.97
138	1890137.72	6338439.97
139	1890132.72	6338434.98

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
140	1890132.70	6338419.03
141	1890140.84	6338400.52
142	1890142.10	6338401.08
143	1890215.03	6338562.01
144	1890214.23	6338561.62
145	1890214.23	6338526.08
146	1890219.88	6338526.08
147	1890224.88	6338531.08
148	1890224.88	6338542.14
149	1890214.23	6338501.08
150	1890219.79	6338501.08
151	1890224.79	6338496.08
152	1890224.79	6338469.97
153	1890219.79	6338464.97
154	1890214.23	6338464.97
155	1890214.23	6338439.97
156	1890219.70	6338439.97
157	1890224.70	6338434.97
158	1890224.70	6338419.88
159	1890216.27	6338401.17

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
160	1890215.07	6338400.10
161	1890214.23	6338400.48
162	1890194.25	6338268.38
163	1890187.39	6338260.36
164	1890182.95	6338227.77
165	1890208.94	6338201.95
281	1890145.34	6338544.08

CENTER OF CURB RAMP COORDINATES		
POINT #	NORTHING	EASTING
500	1890153.35	6338343.40
501	1890176.60	6338343.40
502	1890199.73	6338343.39
503	1890224.54	6338334.13

BLDG/WALL COORDINATES		
POINT #	NORTHING	EASTING
400	1890128.11	6338354.89
401	1890121.11	6338354.89
402	1890115.77	6338354.89
403	1890105.77	6338354.89
404	1890092.52	6338337.40
405	1890092.52	6338349.40
406	1890092.52	6338356.15
407	1890092.52	6338372.15
408	1890092.52	6338379.06
409	1890092.52	6338391.06
410	1890087.48	6338415.14
411	1890092.25	6338432.93
412	1890086.35	6338441.41
413	1890088.92	6338451.02
414	1890089.44	6338452.95
415	1890092.54	6338464.54
416	1890093.06	6338466.47
417	1890094.10	6338470.34
418	1890094.61	6338472.27
419	1890095.94	6338477.21

BLDG/WALL COORDINATES		
POINT #	NORTHING	EASTING
427	1890099.52	6338523.80
435	1890024.66	6338351.48
440	1890009.98	6338337.56
441	1890003.98	6338337.56
442	1890001.73	6338339.81
443	1890001.73	6338353.81
444	1890001.73	6338359.81
445	1890001.73	6338374.03
446	1890001.73	6338380.03
447	1890001.73	6338392.15
448	1890003.98	6338394.40
449	1890009.98	6338394.40
450	1890030.64	6338424.69
451	1890020.98	6338427.28
452	1890011.58	6338429.80
453	1890001.93	6338432.38
454	1890000.88	6338429.56
455	1889998.16	6338419.39
456	1889987.58	6338422.23
457	1889992.26	6338439.70

BLDG/WALL COORDINATES		
POINT #	NORTHING	EASTING
458	1889977.15	6338443.75
459	1890052.40	6338536.43
460	1890070.73	6338604.91
463	1890095.50	6338524.88
464	1889973.43	6338326.48
465	1889965.43	6338326.48
466	1889965.43	6338314.40
467	1890006.93	6338314.40
468	1890019.43	6338317.40
469	1890045.43	6338320.40
470	1890045.43	6338322.90
471	1890097.27	6338322.90
472	1890097.27	6338315.41
473	1890126.18	6338315.41
474	1890126.18	6338322.90
475	1890167.03	6338322.90
476	1890175.03	6338322.90
477	1890224.02	6338322.90

SHEET C1.6 POINT TABLES

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
166	1890220.21	6338200.78
167	1890269.07	6338201.04
168	1890279.12	6338191.04
169	1890279.12	6338184.10
170	1890276.12	6338181.10
171	1890218.71	6338181.10
172	1890218.71	6338157.45
173	1890217.21	6338155.95
174	1890200.72	6338155.95
175	1890200.71	6337992.49
176	1890217.57	6337992.49
177	1890219.07	6337990.99
178	1890219.07	6337976.41
179	1890217.57	6337974.91
180	1890190.22	6337974.91
181	1890242.71	6337979.74
182	1890242.71	6337990.99
183	1890244.21	6337992.49
184	1890258.84	6337992.49
185	1890277.12	6337992.49
186	1890279.12	6337990.49
187	1890279.12	6337974.17

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
188	1890276.99	6337972.18
189	1890249.75	6337972.74
190	1890260.84	6338007.84
191	1890263.48	6338010.49
192	1890260.84	6338013.13
193	1890258.19	6338010.49
194	1890260.84	6338052.84
195	1890263.48	6338055.49
196	1890260.84	6338058.13
197	1890258.19	6338055.49
198	1890260.84	6338097.84
199	1890263.48	6338100.49
200	1890260.84	6338103.13
201	1890258.19	6338100.49
202	1890260.84	6338142.84
203	1890263.48	6338145.49
204	1890260.84	6338148.13
205	1890258.19	6338145.49
206	1890258.84	6338154.36
207	1890243.96	6338154.36
208	1890242.71	6338155.61
209	1890242.71	6338155.84

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
210	1890243.96	6338157.09
211	1890277.71	6338157.09
212	1890278.96	6338155.84
213	1890278.96	6338155.61
214	1890277.71	6338154.36
215	1890319.09	6338181.10
216	1890302.96	6338184.10
217	1890302.96	6338191.44
218	1890312.96	6338201.44
219	1890329.15	6338201.44
220	1890339.15	6338191.44
221	1890339.15	6338184.10
222	1890336.15	6338181.10
223	1890305.96	6338181.10
224	1890321.09	6338148.13
225	1890323.73	6338145.49
226	1890321.09	6338142.84
227	1890318.44	6338145.49
228	1890321.09	6338103.13
229	1890323.73	6338100.49
230	1890321.09	6338097.84
231	1890318.44	6338100.49

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
232	1890321.09	6338058.13
233	1890323.73	6338055.49
234	1890321.09	6338052.84
235	1890318.44	6338055.49
236	1890321.09	6338013.13
237	1890323.73	6338010.49
238	1890321.09	6338007.84
239	1890318.44	6338010.49
240	1890319.09	6337992.49
241	1890305.02	6337992.49
242	1890303.02	6337990.49
243	1890303.02	6337969.99
244	1890303.86	6337969.01
245	1890337.86	6337961.05
246	1890339.15	6337962.00
247	1890339.15	6337991.49
248	1890338.15	6337992.49
249	1890382.27	6338201.65
250	1890372.81	6338201.60
251	1890362.86	6338191.55
252	1890362.87	6338183.60
253	1890365.37	6338181.10

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
254	1890381.21	6338181.10
255	1890381.21	6337992.61
256	1890364.84	6337992.61
257	1890363.84	6337991.61
258	1890363.84	6337955.04
259	1890364.19	6337953.21
260	1890366.86	6337950.45
261	1890377.49	6337945.61
262	1890395.04	6337941.74
263	1890400.05	6337942.15
264	1890405.04	6337943.21
265	1890410.02	6337945.64
266	1890413.45	6337953.22
267	1890414.93	6337909.28
268	1890411.05	6337916.34
269	1890405.92	6337918.35
270	1890400.93	6337917.97
271	1890395.82	6337917.65
272	1890367.08	6337923.88
273	1890258.53	6337948.68
274	1890216.32	6337948.68
275	1890216.32	6337941.68

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
276	1890211.33	6337941.68
277	1890211.33	6337948.68
278	1890141.15	6337948.68
279	1890141.13	6337974.91
280	1890166.22	6337974.91

CENTER OF CURB RAMP COORDINATES		
POINT #	NORTHING	EASTING
504	1890279.12	6338189.19
505	1890302.96	6338189.19
506	1890339.15	6338189.19
507	1890362.87	6338189.19
508	1890200.72	6338144.45
509	1890200.72	6338121.20
510	1890200.71	6338094.95
511	1890213.83	6337974.91
512	1890213.82	6337948.68

DIGALERT
811
Call 2 Full Working Days In Advance

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED
BY PROJECT ENGINEER

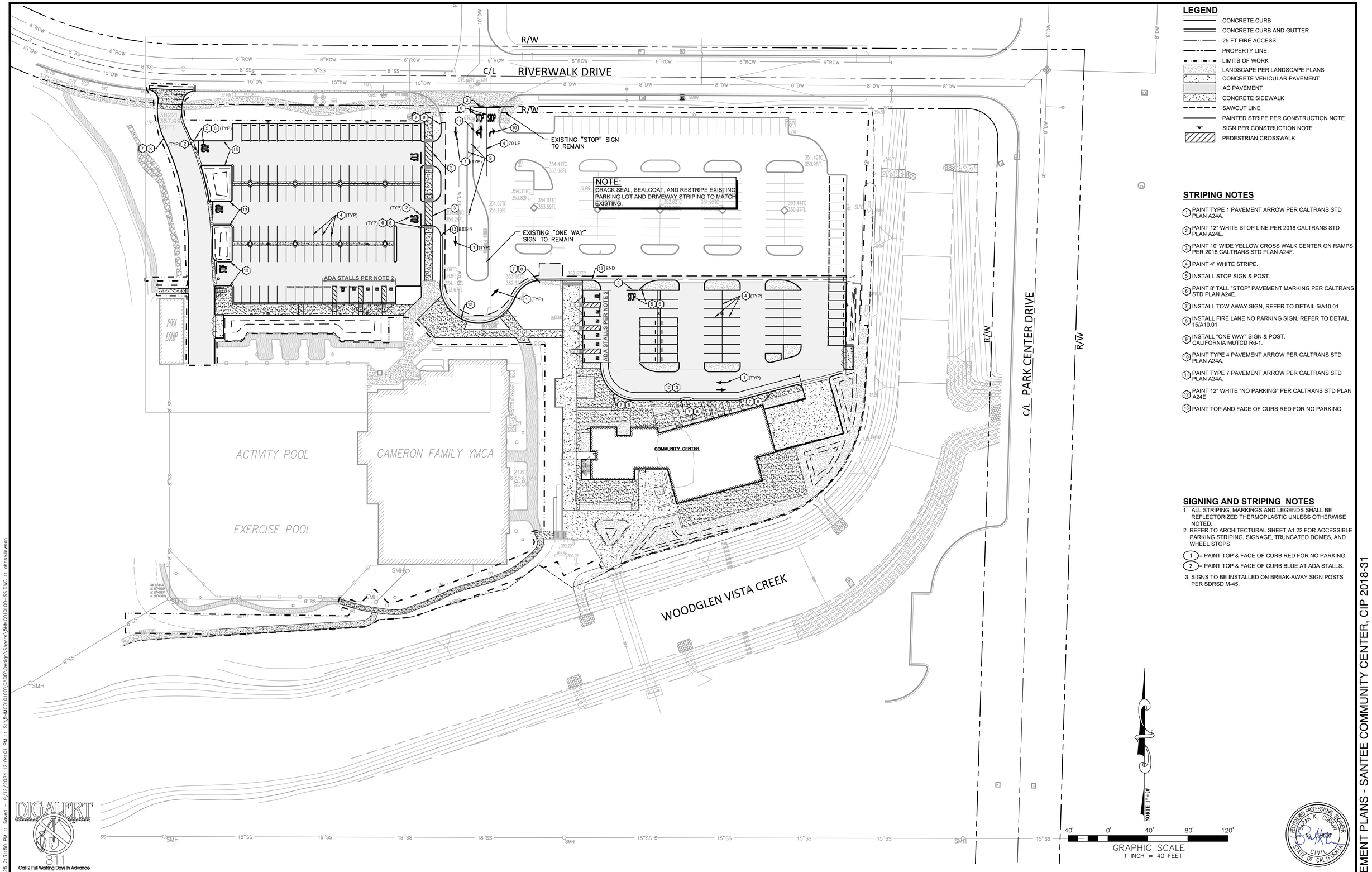
CITY OF SANTEE | DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
HORIZONTAL CONTROL PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.7**
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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LEGEND

- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- 25 FT FIRE ACCESS
- PROPERTY LINE
- LIMITS OF WORK
- LANDSCAPE PER LANDSCAPE PLANS
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK
- SAWCUT LINE
- PAINTED STRIPE PER CONSTRUCTION NOTE
- SIGN PER CONSTRUCTION NOTE
- PEDESTRIAN CROSSWALK

STRIPING NOTES

1. PAINT TYPE 1 PAVEMENT ARROW PER CALTRANS STD PLAN A24A.
2. PAINT 12" WHITE STOP LINE PER 2018 CALTRANS STD PLAN A24E.
3. PAINT 10' WIDE YELLOW CROSS WALK CENTER ON RAMPS PER 2018 CALTRANS STD PLAN A24F.
4. PAINT 4" WHITE STRIPE.
5. INSTALL STOP SIGN & POST.
6. PAINT 8' TALL "STOP" PAVEMENT MARKING PER CALTRANS STD PLAN A24E.
7. INSTALL TOW AWAY SIGN, REFER TO DETAIL 5/A10.01
8. INSTALL FIRE LANE NO PARKING SIGN, REFER TO DETAIL 15/A10.01
9. INSTALL "ONE WAY" SIGN & POST. CALIFORNIA MUTCD R6-1.
10. PAINT TYPE 4 PAVEMENT ARROW PER CALTRANS STD PLAN A24A.
11. PAINT TYPE 7 PAVEMENT ARROW PER CALTRANS STD PLAN A24A.
12. PAINT 12" WHITE "NO PARKING" PER CALTRANS STD PLAN A24E
13. PAINT TOP AND FACE OF CURB RED FOR NO PARKING.

SIGNING AND STRIPING NOTES

1. ALL STRIPING, MARKINGS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC UNLESS OTHERWISE NOTED.
2. REFER TO ARCHITECTURAL SHEET A1.22 FOR ACCESSIBLE PARKING STRIPING, SIGNAGE, TRUNCATED DOMES, AND WHEEL STOPS

(1) = PAINT TOP & FACE OF CURB RED FOR NO PARKING.
(2) = PAINT TOP & FACE OF CURB BLUE AT ADA STALLS.

3. SIGNS TO BE INSTALLED ON BREAK-AWAY SIGN POSTS PER SDRSD M-45.

DIGALERT 811 Call 2 Full Working Days In Advance

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN CIVIL STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
TRAFFIC SIGNAGE AND STRIPING PLAN

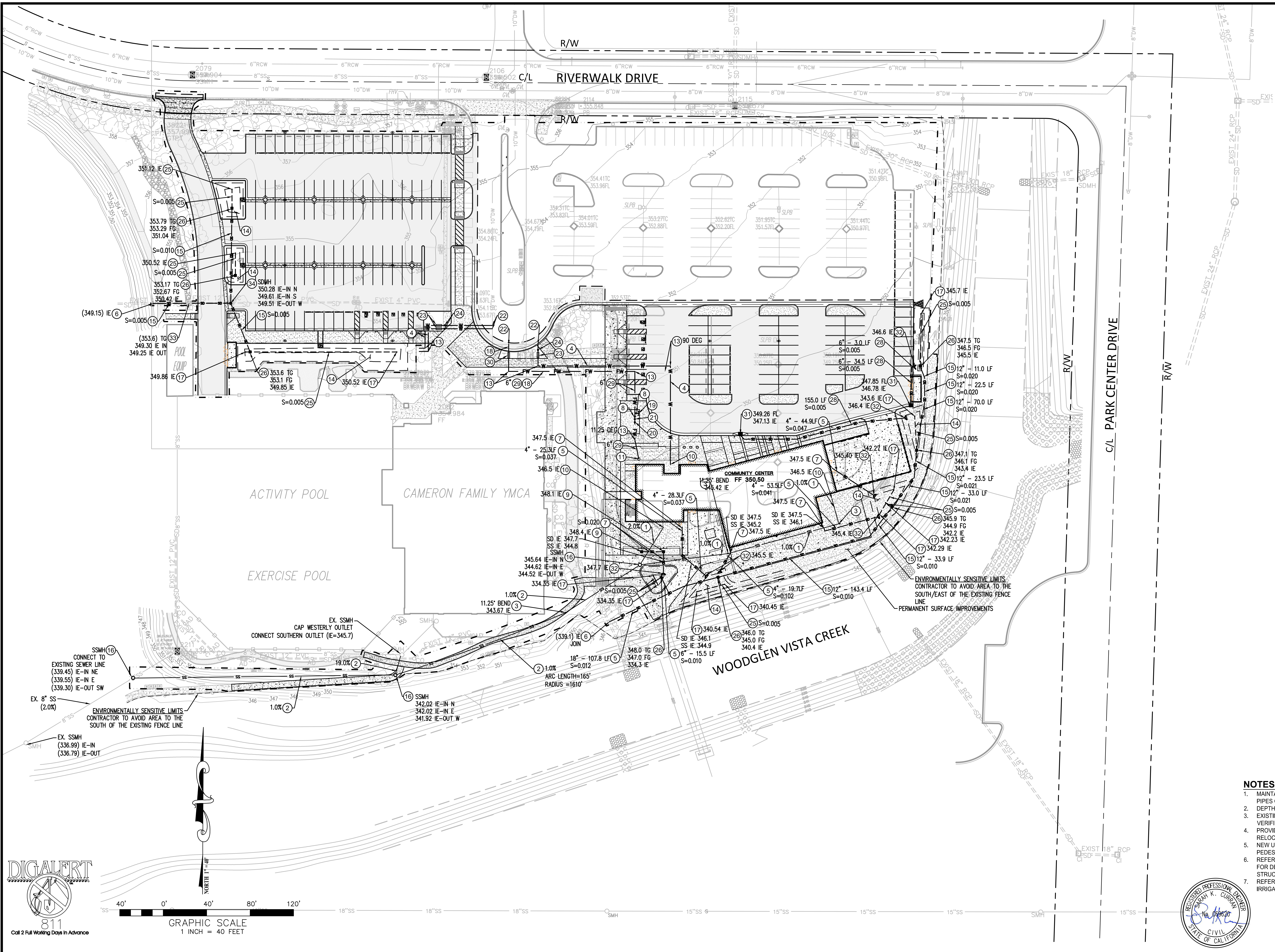
CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.8**

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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LEGEND

▨	SIDEWALK UNDERDRAIN
— FW — FW —	FIRE WATER SERVICE & BACKFLOW
— W —	DOMESTIC WATER SERVICE, BACKFLOW, & METER
— SS —	SEWER LINE
— SS —○	SEWER MANHOLE
— SD — SD — SD —	STORM DRAIN
- - - - -	UNDERDRAIN PIPE
■	CATCH BASIN
⋈	FIRE HYDRANT
— X —	CHAIN LINK FENCE/GATE
— · — · —	LIMITS OF WORK
— — —	PROPERTY LINE

CONSTRUCTION NOTES

1. CONSTRUCT 4" PVC (SDR 35) SEWER LINE, SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER WAS SP-02.
2. CONSTRUCT 6" PVC (SDR 35) SEWER LINE, SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER WAS SP-02.
3. CONSTRUCT SANITARY SEWER CLEANOUT PER WAS SC-01, TYPE A WITH SCREW CAP
4. CONSTRUCT 2.5" COPPER WATER LINE, PIPE BEDDING AND TRENCH PER WAS WP-02
5. CONSTRUCT HDPE STORM DRAIN LINE, SIZE, LENGTH, AND SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER DETAIL SDRSD D-60
6. CONNECT TO EXISTING UTILITY. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, SIZE AND CONDITION PRIOR TO CONSTRUCTION
7. CONSTRUCT 4" PVC STORM DRAIN LINE, LENGTH AND SLOPE PER PLAN. STUB OUT FOR CONNECTION TO BULD DRAIN PER DETAIL SEE STRUCTURAL/PLUMBING PLANS. PIPE BEDDING AND TRENCH PER DETAIL SDRSD D-60.
8. CONSTRUCT GATE VALVE PER WAS WV-02
9. CONSTRUCT 24"X24" CATCH BASIN, PER DETAIL 5 SHEET C1.10. INCLUDE FLOGARD CATCH BASIN INSERT FILTER BY OLD CASTLE (MODEL NO. FGP-24F8) FOR TRASH CAPTURE OR EQUAL. SEE DETAIL 6, SHEET C1.11. INCLUDE STORM DRAIN SIGNAGE PER CASQA SD-13. SEE EXAMPLE DETAIL 7, SHEET C1.11
10. REFER TO PLUMBING SITE PLAN FOR CONNECTION, LOCATION AND ELEVATION
11. REFER TO FIRE PLANS FOR CONNECTION, LOCATION AND ELEVATION
12. INSTALL AND FURNISH (AS NOTED)
13. CONSTRUCT THRUST BLOCK, CLASS 350 RATED WORKING PRESSURE, PER AWWA C110 WITH RESTRAINED JOINTS (U.N.O). SIZE PER ADJOINING PIPE, ANGLE PER PLAN. SEE DETAIL 3, SHEET C1.11
14. CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 SHEET C1.11
15. CONSTRUCT 12" PVC STORM DRAIN. PIPE BEDDING AND TRENCH PER DETAIL SDRSD D-60.
16. CONSTRUCT SANITARY SEWER MANHOLE PER WAS SM-01
17. CONSTRUCT STORM DRAIN CLEANOUT PER WAS SC-01, TYPE A WITH SCREW CAP
18. CONSTRUCT 6" FIRE WATER SERVICE PER WAS WF-05
19. CONSTRUCT NEW FIRE HYDRANT PER WAS WF-02
20. INSTALL FIRE DEPARTMENT CONNECTION SEE DETAIL 7 ON SHEET C1.10
21. CONSTRUCT POST INDICATOR VALVE SEE DETAIL 7 ON SHEET C1.10
22. CONNECTION TO PADRE DAM MAIN TO BE PERFORMED BY THE DISTRICT AT THE OWNERS EXPENSE.
23. CONSTRUCT 2-INCH DOMESTIC WATER BACKFLOW PREVENTOR ASSEMBLY PER WAS WR-01, WITH STAINLESS STEEL PROTECTION CAGE AND FOUNDATION
24. PDMWD TO INSTALL INSTALL 2" DOMESTIC WATER SERVICE PER WAS WS-02
25. CONSTRUCT UNDERDRAIN AS REQUIRED BY BIO RETENTION BASIN DETAIL 1 SHEET C1.11
26. CONSTRUCT BROOKS 24"X24" CATCH BASIN WITH GALVANIZED STEEL GRATE, OR APPROVED EQUAL. INSTALL $\frac{3}{4}$" ORIFICE AT AN ELEVATION 3" ABOVE THE BASIN FINISH FLOOR. INCLUDE FLOGARD CATCH BASIN INSERT FILTER BY OLD CASTLE (MODEL NO. FGP-24F8) FOR TRASH CAPTURE OR EQUAL. SEE DETAIL 6, SHEET C1.11
27. CONSTRUCT 6" PVC STORM DRAIN LINE
28. CONSTRUCT 8" PVC STORM DRAIN LINE
29. CONSTRUCT C900 PVC FIRE WATER LINE. PIPE BEDDING AND TRENCH PER WAS WP-02
30. CONSTRUCT 6-INCH REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY PER WAS WR-02, PRIMED AND PAINTED RED WITH $\frac{5}{16}$" STAINLESS STEEL CHAIN FOR LOCKING HANDLES
31. CONSTRUCT CURBSIDE GRATING CATCH BASIN, SEE GRADING PLAN. INCLUDE FLOGARD CATCH BASIN INSERT FILTER BY OLD CASTLE (MODEL NO. FGP-24F8) FOR TRASH CAPTURE OR EQUAL. SEE DETAIL 6, SHEET C1.11. INCLUDE STORM DRAIN SIGNAGE PER CASQA SD-13. SEE EXAMPLE DETAIL 7, SHEET C1.11
32. HEADWALL PER DETAIL 6 SHEET C1.10.
33. DEEPEN STRUCTURE TO CONFORM INVERT PER PLAN
34. CONSTRUCT STORM DRAIN MANHOLE PER SPPWC STD PLAN 321-2. SEE DETAIL 8, SHEET C1.10

NOTES

1. MAINTAIN 10' CLEARANCE BETWEEN DOMESTIC AND SANITARY SEWER PIPES OUTSIDE DIAMETERS.
2. DEPTH OF COVER BASED ON FINISHED SURFACE.
3. EXISTING UTILITY LOCATIONS, SIZES, AND DEPTHS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
4. PROVIDE PEDESTRIAN AND TRAFFIC RATED RIMS AND COVERS FOR RELOCATED OR ADJUSTED UTILITY STRUCTURES
5. NEW UTILITY STRUCTURES AND MANHOLES SHALL HOUSE TRAFFIC AND PEDESTRIAN RATED COVERS.
6. REFERENCE MECHANICAL, ELECTRICAL AND TELECOMMUNICATION PLANS FOR DEMOLITION AND INSTALLATION OF M, E, & T UTILITIES AND STRUCTURE.
7. REFERENCE LANDSCAPE PLANS FOR DEMOLITION AND INSTALLATION OF IRRIGATION LINES.

CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES AS DESCRIBED IN GENERAL NOTE 4 ON SHEET C1.0. CONTRACTOR TO USE 3RD PARTY PRIVATE UNDERGROUND UTILITY LOCATION SERVICE.

SARAH K. CURRAN
No. C69620

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED ______
BY ______
PROJECT ENGINEER

CITY OF SANTEE
DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR:

SANTEE COMMUNITY CENTER
CIVIL UTILITY PLAN

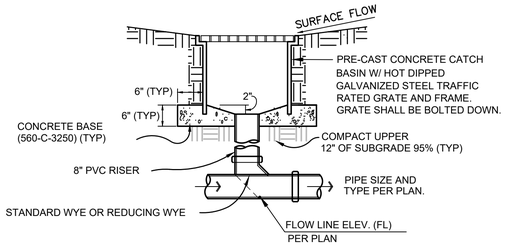
CITY W.O. NO.
CIP 2018-31

DRAWING NO.
C1.9

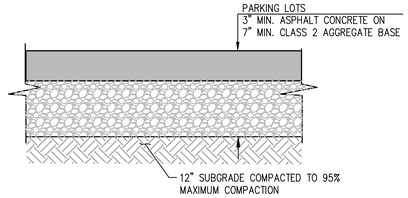
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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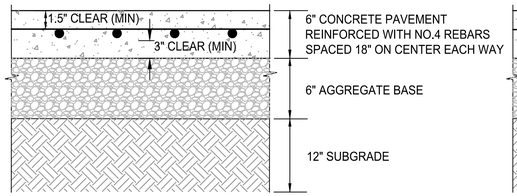
CATCH BASIN DETAIL 5 C1.10
N.T.S.



NOTE:

1. AC STRUCTURAL SECTIONS ARE FOR ESTIMATING PURPOSES ONLY AND SHALL BE BASED ON SUBGRADE TESTS BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF BASE MATERIAL.
2. OVER EXCAVATE AND RECOMPACT 1-FT BELOW PAVEMENT SECTION PER GEOTECHNICAL REPORT.

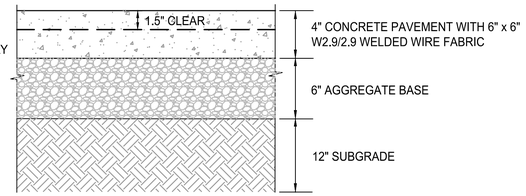
ASPHALT PAVEMENT DETAIL 2 C1.10
N.T.S.



NOTE:

1. OVER EXCAVATE AND RECOMPACT 1-FT BELOW PAVEMENT SECTION PER GEOTECHNICAL REPORT.

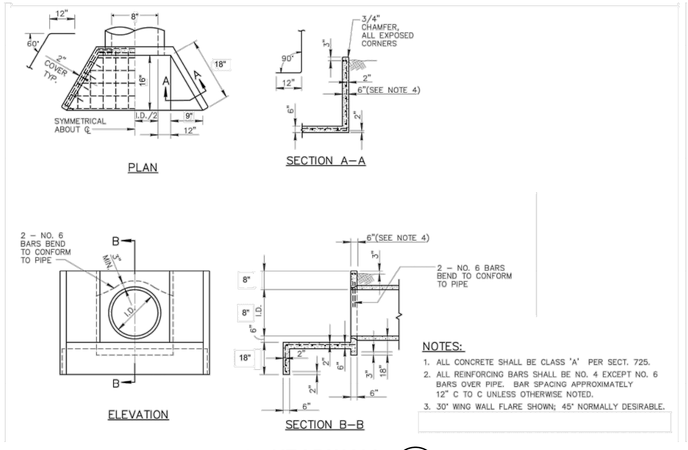
CONCRETE VEHICULAR PAVEMENT DETAIL 3 C1.10
N.T.S.



NOTE:

1. OVER EXCAVATE AND RECOMPACT 1-FT BELOW PAVEMENT SECTION PER GEOTECHNICAL REPORT.

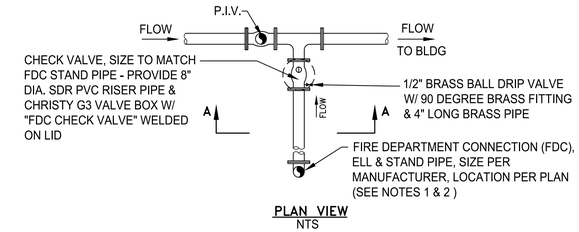
CONCRETE WALK DETAIL 4 C1.10
N.T.S.



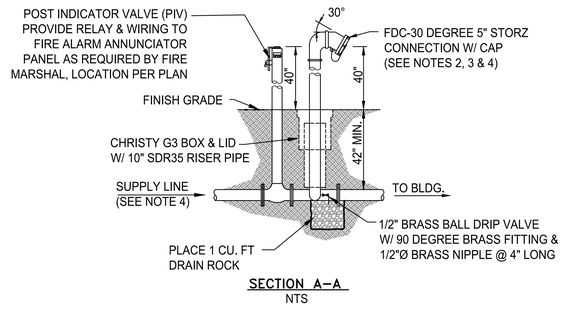
NOTES:

1. ALL CONCRETE SHALL BE CLASS 'A' PER SECT. 725.
2. ALL REINFORCING BARS SHALL BE NO. 4 EXCEPT NO. 6 BARS OVER PIPE. BAR SPACING APPROXIMATELY 12" C TO C UNLESS OTHERWISE NOTED.
3. 30° WING WALL FLARE SHOWN; 45° NORMALLY DESIRABLE.

8" HEADWALL 6 C1.10
N.T.S.



PLAN VIEW
NTS



SECTION A–A
NTS

NOTES:

1. FIRE MARSHAL SHALL SPECIFY LOCATION OF FIRE DEPARTMENT CONNECTION (FDC). CLEARANCE AROUND FDC SHALL BE 3 FEET RIGHT, LEFT, REAR, AND 20 FEET IN FRONT.
2. A METAL SIGN WITH RAISED LETTERS AT LEAST 1 INCH IN SIZE SHALL BE MOUNTED ON ALL FIRE DEPARTMENT CONNECTIONS SERVICING AUTO SPRINKLERS, STANDPIPES OR FIRE PUMPS. SUCH SIGNS SHALL READ "AUTO SPRINKLER", "STANDPIPE", OR "TEST CONNECTION" AS APPLICABLE. WHERE THE FDC DOES NOT SERVE THE ENTIRE BUILDING A SIGN SHALL BE PROVIDED INDICATING THE PORTIONS OF THE BUILDING TO BE SERVED.
3. FIRE PROTECTION FACILITIES ARE OWNED AND MAINTAINED BY THE CUSTOMER.
4. ASSEMBLIES AND PIPING ON FIRE LINES SHALL BE FM/UL AND CONFORM TO THE APPLICABLE NFPA. THRUST BLOCKING AND/OR MECHANICAL RESTRAINTS SHALL BE PROVIDED AS NECESSARY.
5. STANDPIPE MATERIALS AND DEVICES MUST BE OF SUFFICIENT STRENGTH TO WITHSTAND A MINIMUM OF 200 PSI.
6. ALL FERROUS MATERIAL PRODUCTS THAT WILL INTERACT WITH THE SOIL WHEN INSTALLED SHALL BE PROPERLY COATED FOR CORROSION PROTECTION PER GEOTECH REPORT.

FIRE DEPARTMENT CONNECTION AND POST INDICATOR VALVE DETAIL 7 C1.10
N.T.S.

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED
BY PROJECT ENGINEER

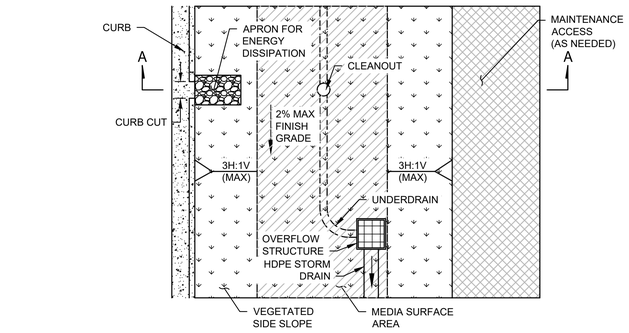
CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
CIVIL DETAILS

CITY W.O. NO. CIP 2018-31

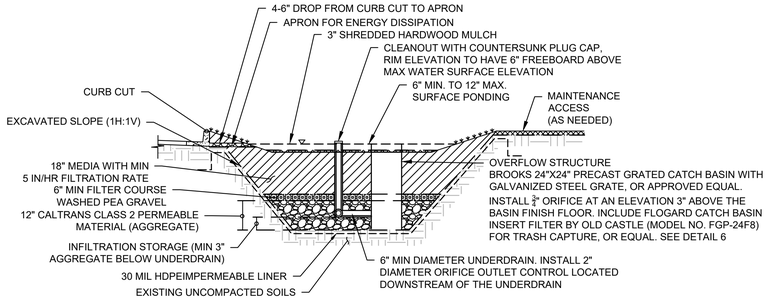
DRAWING NO. **C1.10**
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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PLAN

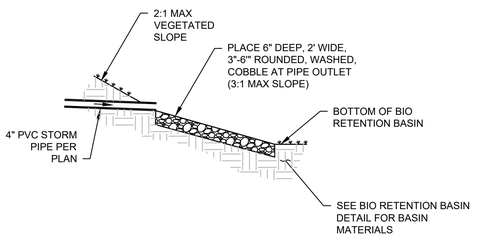


SECTION A-A

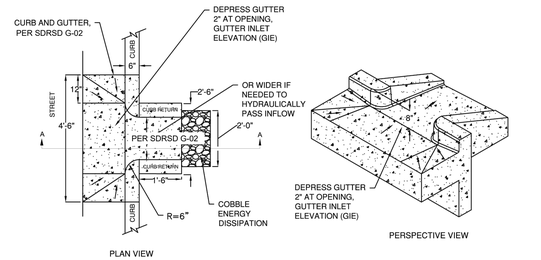
BIOFILTRATION PROTECTION DURING CONSTRUCTION:

1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.
6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.

BIOFILTRATION BASIN DETAIL 1 C1.11
N.T.S.

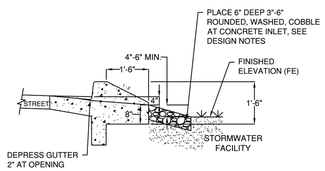


COBBLE ENERGY DISSIPATION AT STORM PIPE OUTLETS 4 C1.11
N.T.S.



PLAN VIEW

PERSPECTIVE VIEW



SECTION A-A

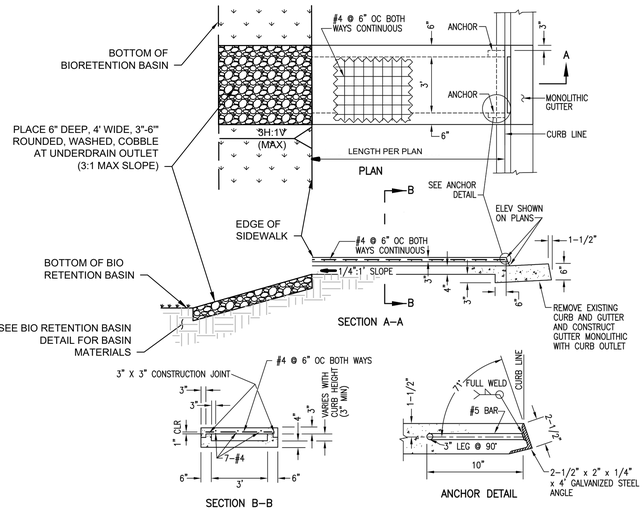
BIORETENTION DESIGN NOTES

1. FOR USE WITH STORMWATER FACILITIES WITH SIDE SLOPES.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, OE, GIE, IE). REFER TO GRADING SHEETS FOR SPOT ELEVATIONS.
3. CURB AND WALL DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY CITY ENGINEER.
4. WHERE INLET FLOW VELOCITY IS HIGH, EXTEND COBBLE INTO FACILITY, BUT AVOID EXCESSIVE USE.

CONSTRUCTION NOTES

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.

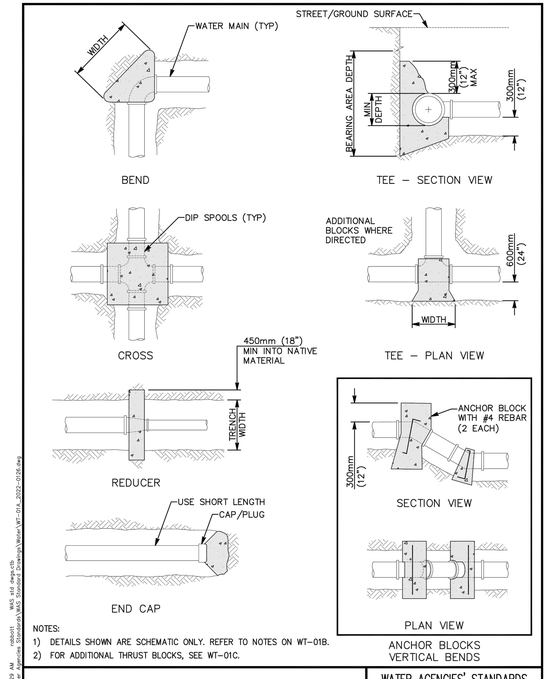
CURB CUT INLET DETAIL 2 C1.11
N.T.S.



NOTES:

1. CONCRETE SHALL BE 500-C-3250.
2. SLOPE OF DRAINAGE CHANNEL TO BE SLOPED TOWARDS BIORETENTION BASIN. SLOPES OF FINISHED SIDEWALK PER PLAN.
3. SIDEWALK FINISH TO MATCH ADJACENT SIDEWALK.
4. PROVIDE 1/2" TOOLED GROOVE IN TOP SLABE IN LINE WITH BACK OF ADJACENT CURB.
5. THIS DETAIL IS A MODIFICATION OF SDRSD D-25A.

SIDEWALK UNDERDRAIN 5 C1.11
NTS



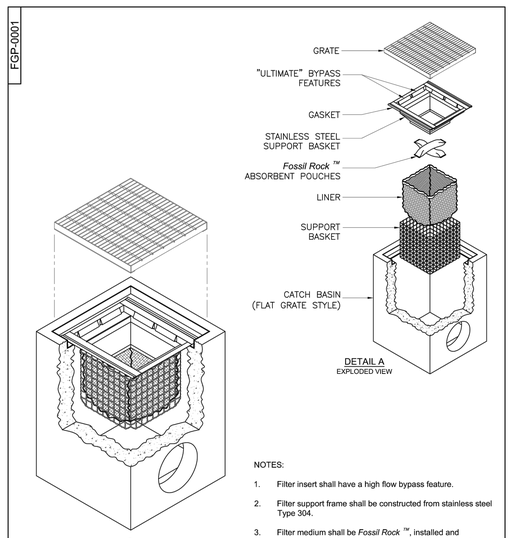
NOTES:

1) DETAILS SHOWN ARE SCHEMATIC ONLY. REFER TO NOTES ON WT-01B.
2) FOR ADDITIONAL THRUST BLOCKS, SEE WT-01C.

CONCRETE THRUST AND ANCHOR BLOCK INSTALLATIONS

WATER AGENCIES' STANDARDS	
COMMITTEE APPROVAL:	01/26/2022
DRAWING NUMBER:	WT-01A

THRUST BLOCK DETAIL 3 C1.11
NTS



U.S. PATENT # 6,00,023 & 6,877,029

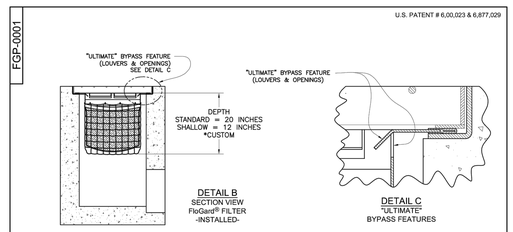
NOTES:

1. Filter insert shall have a high flow bypass feature.
2. Filter support frame shall be constructed from stainless steel Type 304.
3. Filter medium shall be *Fossil Rock ™*, installed and maintained in accordance with manufacturer specifications.
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

FloGard® Catch Basin Insert Filter
Grated Inlet Style

Oldcastle® Stormwater Solutions
7901 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

DRAWING NO.	ECO-0142		
FGP-0001	G	JPR 7/13/16	JPR 11/3/06	SHEET 1 OF 2



* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART

MODEL NO. STANDARD DEPTH	STANDARD & SHALLOW DEPTH (Data in those columns is the same for both STANDARD & SHALLOW versions) INLET ID Inside Dimension (inch x inch)	GRATE OD Outside Dimension (inch x inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	STANDARD DEPTH -20 inches- SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)	MODEL NO. SHALLOW DEPTH	SHALLOW DEPTH -12 inches- SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-16F	16 X 16	16 X 19	4.7	0.8	0.7	FGP-16F8	.45	.4
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1824F	16 X 22	18 X 24	5.0	1.5	1.2	FGP-1824F8	.85	.7
FGP-1836F	18 X 36	18 X 40	6.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-21F8	1.25	.85
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	6.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-SD24F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-SD24F8	1.25	.85

FloGard® Catch Basin Insert Filter
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FLOGARD CATCH BASIN INSERT FILTER 6 C1.11
NTS

NO DUMPING GOES TO OCEAN — think BLUE — NO TIRAR BASURA LLEGA AL MAR

EXAMPLE STORM DRAIN SIGNAGE PER CASQA SD-13 7 C1.11
NTS

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20886, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

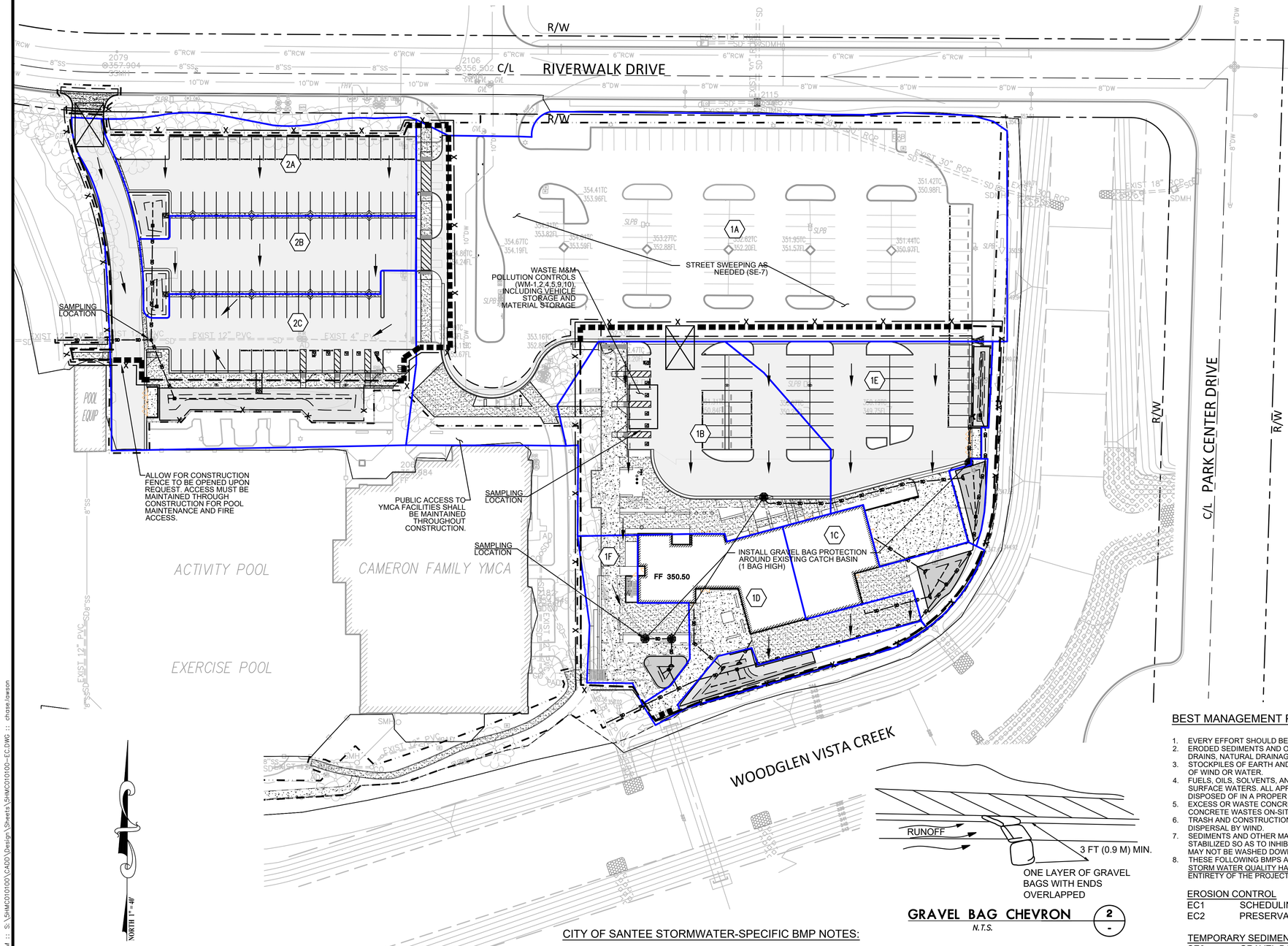
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
CIVIL DETAILS

CITY W.O. NO.: CIP 2018-31

DRAWING NO.: **C1.11** SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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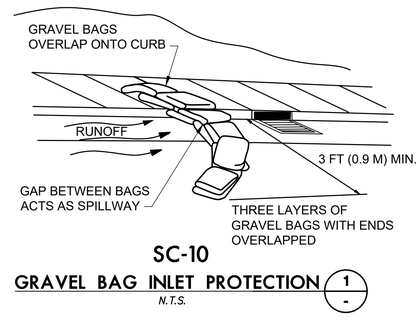


LEGEND

- INSTALL CONTINUOUS SILT FENCE PER CALTRANS CONSTRUCTION SITE BMP MANUAL (2017) SC-1
- INSTALL CONTINUOUS GRAVEL BAG CHECK DAM ON TOP OF EXISTING PAVEMENT (NO GAPS) (SE-6)
- INSTALL GRAVEL BAG INLET PROTECTION AT ALL INLETS EXPOSED TO CONSTRUCTION RUNOFF PER DETAIL THIS SHEET. (SE-10)
- LIMITS OF WORK
- INSTALL TEMPORARY CONSTRUCTION FENCING. MAINTAIN 4' MINIMUM WALKWAY CLEARANCE WHERE FENCE IS INSTALLED ON SIDEWALK. AREAS OF SOIL DISTURBANCE TO BE LIMITED TO WITHIN THE PROPOSED FENCE LINE.
- 351 — PROPOSED CONTOUR
- XX.X — PROPOSED SPOT ELEVATION
- 351 — EXISTING CONTOUR
- XX.XXX — EXISTING SPOT ELEVATION
- EXISTING TREE
- FLOW ARROW
- CONSTRUCTION ENTRANCE PER CALTRANS C9ONSTRUCTION SITE BMP MANUAL (2017) (TC-1)
- 1A — PROPOSED DRAINAGE MANAGEMENT AREA (DMA). SEE PROPOSED DMA EXHIBIT FOR MORE DETAIL.

GENERAL NOTES

1. REFER TO THE LATEST EDITION OF THE CALIFORNIA STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK FOR THE BMP OUTLINED ON THIS PLAN.
2. INSTALL INLET PROTECTION ON ALL EXISTING INLETS PRIOR TO DEMOLITION.
3. SAMPLING LOCATIONS SHOWN MAY BE MODIFIED IN THE FIELD DURING STORM EVENTS AT THE DISCRETION OF THE QSP.
4. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.



SC-10

GRAVEL BAG INLET PROTECTION 1/-
N.T.S.

GRAVEL BAG CHEVRON 2/-
N.T.S.

BEST MANAGEMENT PRACTICES:

1. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.
2. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
3. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
8. THESE FOLLOWING BMPS AS OUTLINED IN, BUT NOT LIMITED TO, THE LATEST EDITION OF THE CASQA CONSTRUCTION BMP ONLINE HANDBOOK OR CALTRANS STORM WATER QUALITY HANDBOOKS (CONSTRUCTION SITE BMP MANUAL) MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT AND APPLY TO THE ENTIRETY OF THE PROJECT SITE.

EROSION CONTROL

EC1	SCHEDULING
EC2	PRESERVATION OF EXISTING VEGETATION

TEMPORARY SEDIMENT CONTROL

SE6	GRAVEL BAG BERM
SE7	STREET SWEEPING
SE8	SANDBAG BARRIER
SE10	TEMPORARY DRAINAGE INLET PROTECTION

WIND EROSION CONTROL

WE1	WIND EROSION CONTROL

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL

WM1	MATERIAL DELIVERY AND STORAGE
WM2	MATERIAL USE
WM3	STOCKPILE MANAGEMENT
WM4	SPILL PREVENTION AND CONTROL
WM5	SOLID WASTE MANAGEMENT
WM9	SANITARY/SEPTIC WASTE MANAGEMENT
WM10	LIQUID WASTE MANAGEMENT

EQUIPMENT TRACKING CONTROL

TC1	TEMPORARY CONSTRUCTION ENTRANCE/EXIT

NON-STORMWATER MANAGEMENT

NS1	WATER CONSERVATION PRACTICES
NS3	PAVING AND GRINDING OPERATIONS
NS6	ILLICIT CONNECTION/DISCHARGE
NS7	POTABLE WATER/IRRIGATION
NS8	VEHICLE AND EQUIPMENT CLEANING
NS9	VEHICLE AND EQUIPMENT FUELING
NS10	VEHICLE AND EQUIPMENT MAINTENANCE
NS15	DEMOLITION ADJACENT TO WATER

CITY OF SANTEE STORMWATER-SPECIFIC BMP NOTES:

THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE CITY OF SANTEE AND STATE OF CALIFORNIA WATER QUALITY CONTROL BOARD, SAN DIEGO REGION

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMPs) DURING ALL PHASES OF CONSTRUCTION.
2. SUFFICIENT BMPs MUST BE INSTALLED TO PREVENT SILT, MUD, OR OTHER CONSTRUCTION DEBRIS FROM BEING TRACKED INTO THE ADJACENT STREET(S) OR STORM WATER CONVEYANCE SYSTEMS DUE TO CONSTRUCTION VEHICLES OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY SUCH DEBRIS THAT MAY BE IN THE STREET OR CONVEYANCE SYSTEM AT THE ENDS OF EACH WORK DAY OR AFTER A STORM EVENT THAT CAUSED A BREECH IN THE INSTALLED CONSTRUCTION BMPs.
3. STORM WATER POLLUTION PREVENTION DEVICES AND OR PRACTICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS. IF AT ANY TIME, BMPs ARE FOUND TO BE INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE INEFFECTIVE, THEY SHALL BE MODIFIED AND REPLACED IMMEDIATELY.
4. TRASH AND CONSTRUCTION SOLID WASTES SHALL BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OR RAINWATER AND DISPERSAL BY WIND. THE STORAGE OF ALL CONSTRUCTION MATERIALS AND CONSTRUCTION WASTES MUST BE PROTECTED AGAINST THE POTENTIAL RELEASE OF POLLUTANTS INTO THE ENVIRONMENT.
5. A CONCRETE WASHOUT SHALL BE PROVIDED ON ALL PROJECTS WHICH PROPOSE THE CONSTRUCTION OF ANY CONCRETE IMPROVEMENTS THAT ARE TO BE POURED IN PLACE ON THE SITE.
6. ALL BMPs SHALL BE MAINTAINED IN WORKING ORDER AT ALL TIMES. ALL SLOPES THAT ARE CREATED OR DISTURBED BY CONSTRUCTION ACTIVITY MUST BE PROTECTED AGAINST EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.
7. IF TRENCHING/DIGGING ACTIVITIES ARE NOT COMPLETED WITHIN ONE DAY, PROPER BMPs WILL BE IMPLEMENTED.
8. IF DEBRIS OR MATERIALS WILL BE STORED FOR LONGER THAN ONE DAY, PROPER BMPs WILL BE IMPLEMENTED.

DIGALERT 811 Call 2 Full Working Days In Advance

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN CIVIL STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
EROSION CONTROL PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.12

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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Appendix G
Transportation Analysis

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

TRANSPORTATION ANALYSIS

SANTEE COMMUNITY CENTER

Santee, California
February 23, 2024

LLG Ref. 3-22-3519

Prepared by:
Renald Espiritu
Transportation Engineer III

Under the Supervision of:
John Boarman, P.E.
Principal

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TRANSPORTATION ANALYSIS

SANTEE COMMUNITY CENTER

Santee, California
February 23, 2024

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Transportation Analysis to assess the potential impacts to the street system as a result of the proposed Santee Community Center project (hereafter referred to as the "Project"). The Project proposes the construction of the 12,500 gross square foot Santee Community Center building on a 3.57-acre site located at 10129 Riverwalk Drive in the City of Santee adjacent to the existing Cameron Family YMCA located at 10123 Riverwalk Drive.

The transportation analysis presented in this report includes the following:

- Project Description
- Existing Conditions
- Analysis Approach and Methodology
- Substantial Effect Criteria
- Analysis of Existing Conditions
- Trip Generation, Distribution, and Assignment
- Cumulative Projects Discussion
- Analysis of Near-Term Scenarios
- Vehicle Miles Traveled (VMT) Assessment
- Site Access Discussion
- Conclusions

2.0 PROJECT DESCRIPTION

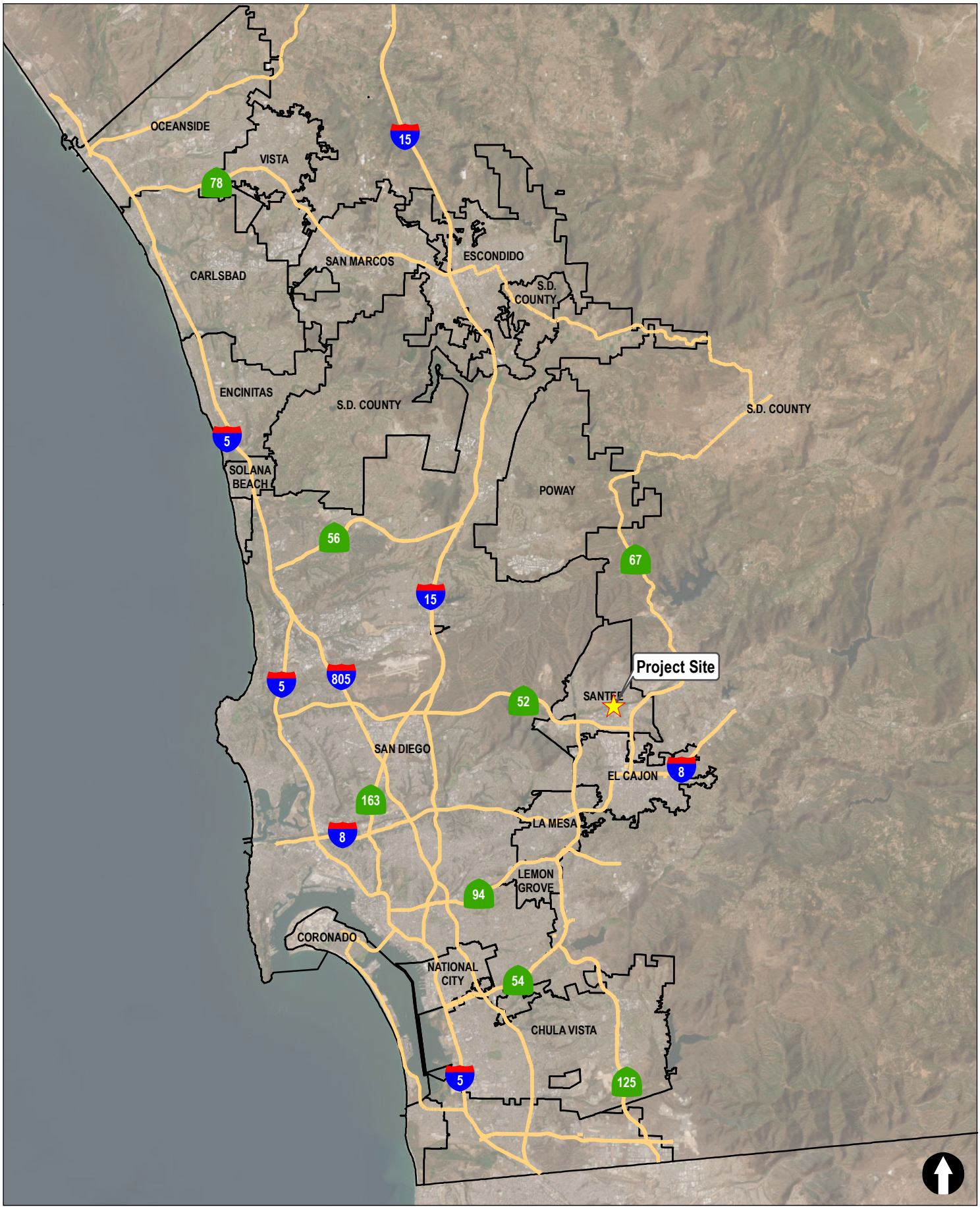
The Project is proposed on an approximately 3.57-acre site located at 10129 Riverwalk Drive in the City of Santee. The proposed Project would involve the construction of the Santee Community Center building, which is two stories and includes event space, office space, and support spaces and would total 12,500 gross square feet. The Project site is currently developed as a parking lot with several landscape features located through, and located in a developed urban area of the City. The Project site is bound by the Cameron Family YMCA and Sportsplex USA to the west, and Riverwalk Drive and residential uses to the north.

The community center building would include an eastern and western wing, which are joined by the lobby and entrance area. There are two entrances to the proposed community center, the south entrance and the north entrance, both of which lead to the lobby area. Entry plazas are located outside of both entrances, which would include benches and landscaped areas. The lobby would include a reception area, access to both wings of the building, a staircase, and an elevator. The eastern wing would be one story tall and would include event space, storage, a kitchen, utilities, and an outdoor covered dining area (located south of the event space). The service yard and biofiltration basin would be located immediately east of the eastern wing. The first floor of the western wing would include office space, restrooms, storage, janitors' closet. The second floor would include event space, an event deck, concession space, restrooms, and storage. Amphitheater seating and bike storage would be located west of the western wing.

Vehicular access to the Project site would be provided via the existing south leg of the Riverwalk Drive / Canopy Park Lane intersection.

The Project site is zoned as Town Center (TC) and has a General Plan land use designation of Town Center (TC).

Figure 2–1 shows the Project vicinity. ***Figure 2–2*** shows a more detailed Project area map. ***Figure 2–3*** shows the Project site plan.



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Figure 2-1

Vicinity Map

City of Santee Community Center

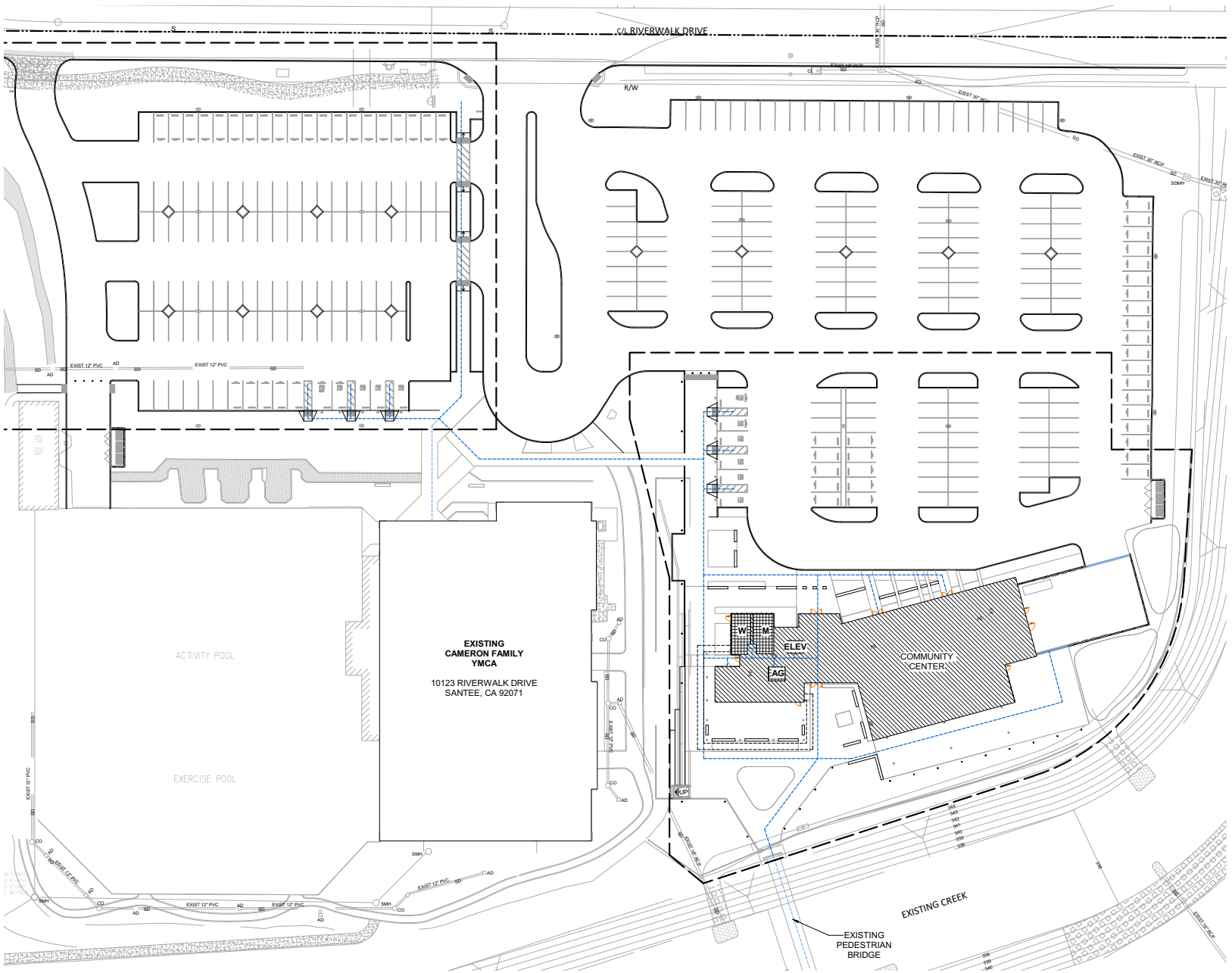


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Figure 2-2

Project Area Map

CITY OF SANTEE COMMUNITY CENTER



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Figure 2-3

Site Plan

3.0 EXISTING CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the project area. ***Figure 3–1*** shows an existing conditions diagram, including signalized intersections and lane configurations.

3.1 Existing Street Network

The following is a description of the existing street network in the study area.

Mast Boulevard is an east-west roadway that is classified as a 4-lane Major Arterial in the *City of Santee Mobility Element*. Mast Boulevard is currently constructed as a 4-lane divided roadway with a landscaped median within the Project study area. The posted speed limit ranges between 35 mph and 40 mph. Sidewalks and Class II bike lanes are provided on both sides of the roadway. On-street parking is permitted intermittently.

Riverwalk Drive is an east-west roadway that is classified as a 2-lane Collector Residential in the *City of Santee Mobility Element*. Riverwalk Drive is currently constructed as a 2-lane undivided roadway within the Project study area. The posted speed limit is 25 mph. Sidewalks and Class III bike routes are provided on both sides of the roadway. On-street parking is permitted.

Cuyamaca Street is a north-south roadway that is classified as a 4-lane Major Arterial in the *City of Santee Mobility Element*. Cuyamaca Street is currently constructed as a 4-lane divided roadway with a landscaped median within the Project study area. The posted speed limit is 35 mph. Sidewalks and Class II bike lanes are provided on both sides of the roadway. On-street parking is prohibited.

Park Center Drive is a north-south roadway that is classified as a 2-lane Parkway in the *City of Santee Mobility Element*. Park Center Drive is currently constructed as a 2-lane undivided roadway with intermittent left-turn pockets within the Project study area. The posted speed limit is 30 mph. Sidewalks are provided on both sides of the roadway north of Riverwalk Drive and on the west side of the roadway south of Riverwalk Drive. On-street parking is prohibited.

Magnolia Avenue is a north-south roadway that is classified as a 4-lane Major Arterial in the *City of Santee Mobility Element*. Mast Boulevard is currently constructed as a 4-lane divided roadway with a landscaped median within the Project study area. The posted speed limit is 40 mph north of Mast Boulevard and 45 mph south of Mast Boulevard. Sidewalks and Class II bike lanes are provided on both sides of the roadway. On-street parking is permitted intermittently on the east side of the roadway.

3.2 Existing Traffic Volumes

Peak hour intersection turning movement volume counts were conducted at the study area intersections on Wednesday, January 10, 2024, when area schools were in session.

Figure 3–2 shows the Existing Traffic Volumes. ***Appendix A*** contains the existing count sheets.

3.3 Existing Bicycle Network

The City of Santee provides Class II bike lanes on Mast Boulevard, Cuyamaca Street and Magnolia Avenue, and Class III bike routes on Riverwalk Drive. Per the *City of Santee Mobility Element*, Class III bike routes are planned along Park Center Drive between Mast Boulevard and Riverwalk Drive.

3.4 Existing Pedestrian Network

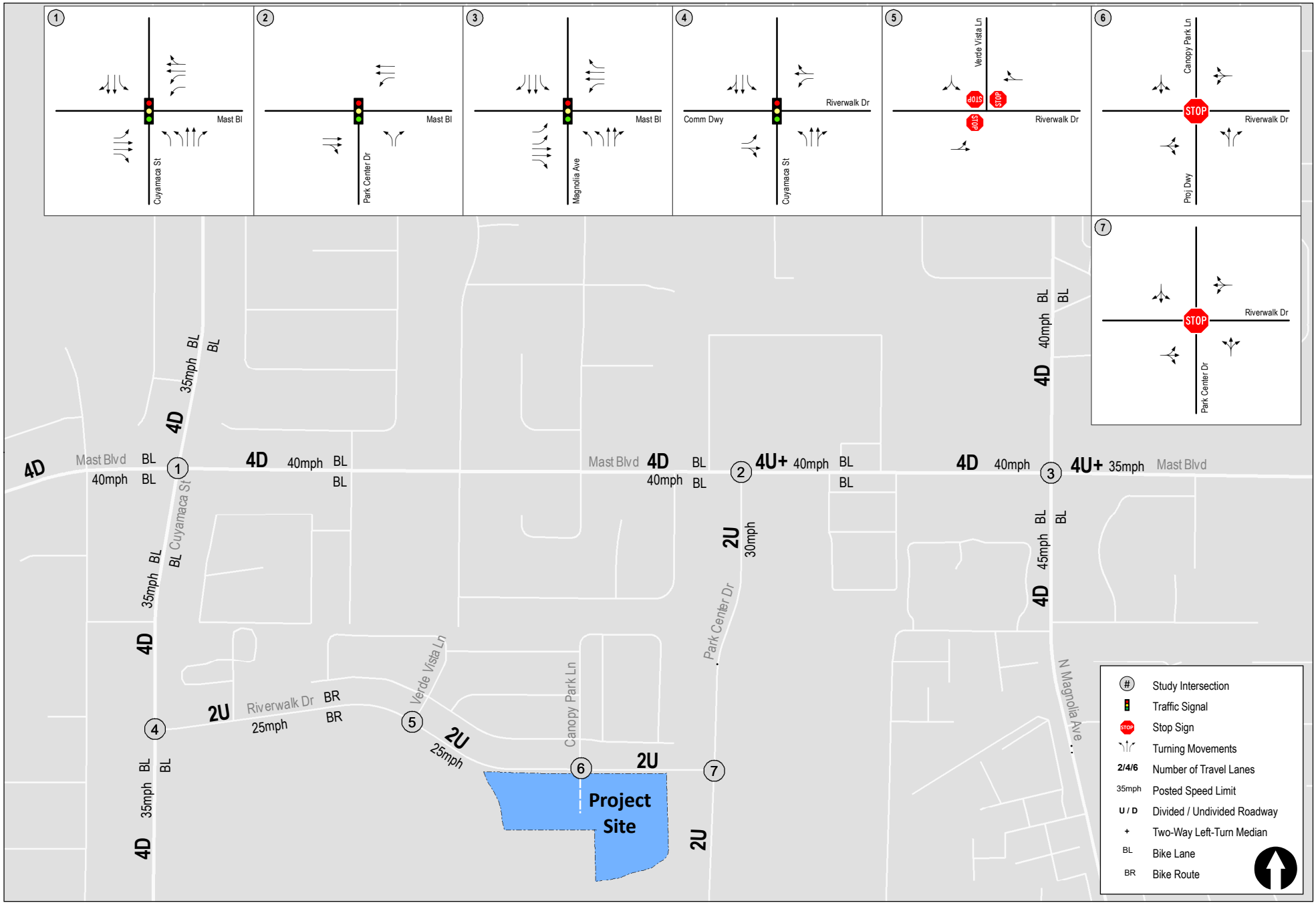
Sidewalks are provided on both sides of the roadways within the study area with the exception of Park Center Drive south of Riverwalk Drive. In addition, a sidewalk connection is provided between the Project site and the Santee Transit Center and nearby bus stops. Per the *City of Santee Mobility Element*, there are no plans to add or alter sidewalks within the Project vicinity.

3.5 Existing Transit Network

Transit service is provided to the area via Metropolitan Transit Services (MTS). The nearest bus stop is located just 230 feet south of the Riverwalk Drive / Cuyamaca Street intersection, which is a walking distance of 0.5 miles from the Project site. The Santee Transit Center, which serves the Green Line Trolley, is located in the Santee Trolley Square shopping mall, which is a walking distance of 1.2 miles from the Project site. A description of the nearest transit service is shown below:

> **Bus Route 832** provides bus service to the area via Cuyamaca Street, Mission Gorge Road and Magnolia Avenue. During weekdays, headways are 1 hour for the duration of the day. During weekends, headways are 1 hour for the duration of the day.
>
> The **Green Line Trolley** runs between the Santee Transit Center and the 12th and Imperial Avenue Transit Center in Downtown San Diego. There are twenty-seven (27) stops along this route with 15-minute headways on the weekdays and 30-minute headways on the weekends. During weekends, headways are 15 - 30 minutes during the peak periods.

Appendix B contains the bus route schedule and map.



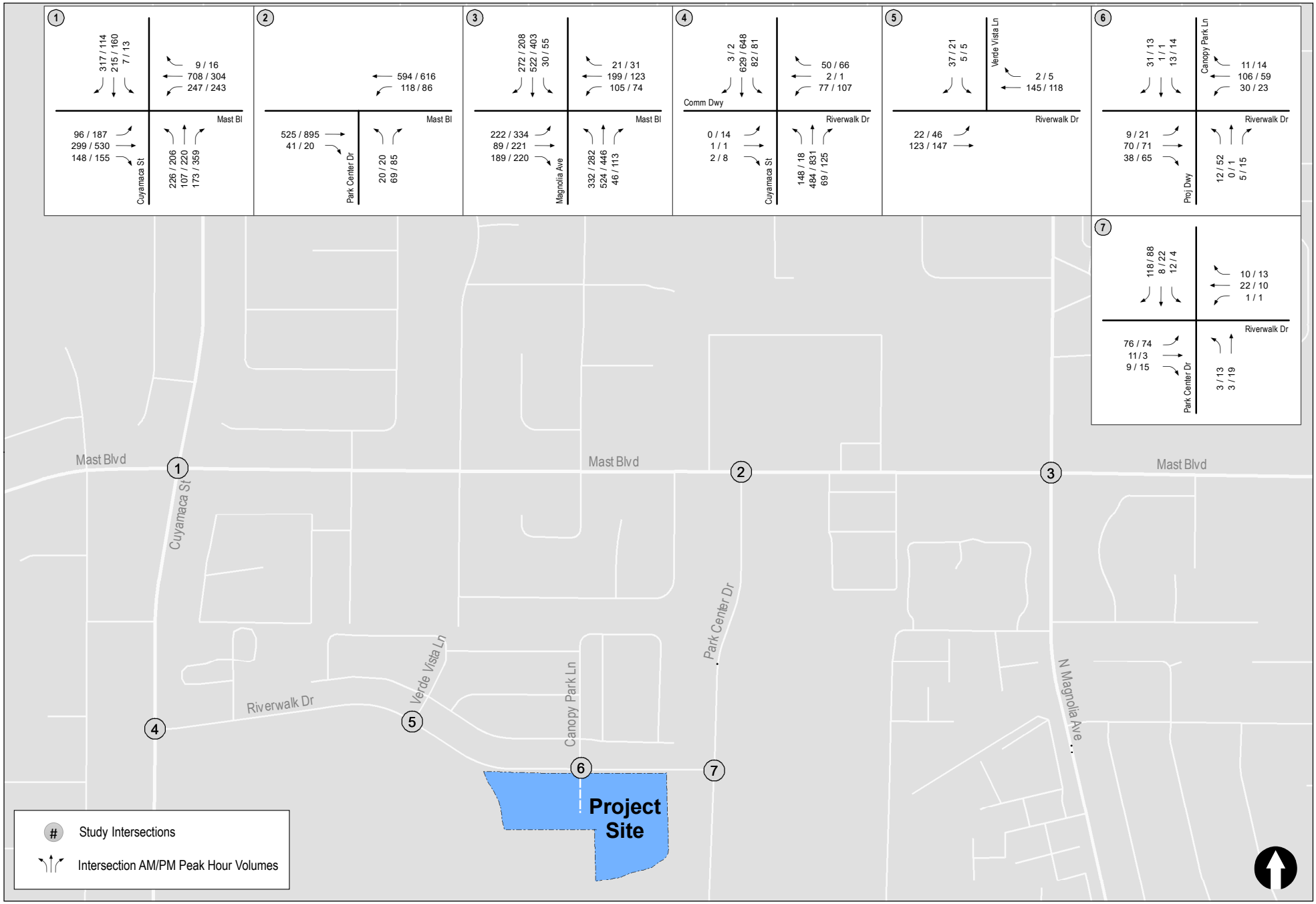
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Figure 3-1

Existing Conditions Diagram

CITY OF SANTEE COMMUNITY CENTER



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Figure 3-2

Existing Traffic Volumes

CITY OF SANTEE COMMUNITY CENTER

4.0 PROJECT STUDY AREA, ANALYSIS APPROACH AND METHODOLOGY

4.1 Project Study Area and Study Scenarios

Based on the expected distribution of traffic and the main access point to the site being Riverwalk Drive and Park Center Drive, the Project study area includes the following intersections:

INTERSECTIONS

1. Mast Boulevard / Cuyamaca Street
2. Mast Boulevard / Park Center Drive
3. Mast Boulevard / Magnolia Avenue
4. Riverwalk Drive / Cuyamaca Street
5. Riverwalk Drive / Verde Vista Lane
6. Riverwalk Drive / Canopy Park Lane
7. Riverwalk Drive / Park Center Drive

The following study scenarios are included in this report:

- Existing
- Existing + Project
- Existing + Cumulative projects
- Existing + Cumulative projects + Project

4.2 Analysis Approach

4.3 Methodology

Level of Service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS designation is reported differently for signalized and unsignalized intersections.

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the Highway Capacity Manual (HCM) 6th Edition, with the assistance of the Synchro (version 11) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS.

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS was determined based upon the procedures found in Chapters 20 and 21 of the HCM 6th Edition, with the assistance of the Synchro (version 11) computer software.

5.0 SUBSTANTIAL EFFECT CRITERIA

A project is considered to have a substantial effect if the new project traffic has decreased the operations of surrounding intersections by a defined threshold. The defined thresholds shown in ***Table 5–1*** below for an intersection is based on published SANTEC guidelines with the exception that LOS D is considered acceptable per the City of Santee General Plan. If the project exceeds the thresholds in *Table 5–1*, then the project may be considered to have a substantial effect. A feasible improvement will need to be identified to return the effect to within the thresholds (pre-project + allowable increase).

If project traffic causes the location to degrade from an acceptable LOS D or better to LOS E or LOS F, or exceeds the allowable thresholds as shown in *Table 5–1* below for currently LOS E or F operating locations, a substantial effect occurs. Under Near-Term conditions, substantial effects are considered to be direct.

TABLE 5–1
LEVEL OF SERVICE THRESHOLDS FOR INTERSECTIONS

Level of Service with Project[a]	Allowable Increase Due to Project Impacts[b]
	Delay (sec.)
E & F	2

Footnotes:

a. All level of service measurements are based upon HCM procedures for peak-hour conditions. The acceptable LOS for intersections is generally "D" or better.

b. If a proposed project's traffic causes the values shown in the table to be exceeded, the effects are deemed to be substantial. These effects may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible improvements (within the Transportation Analysis report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note a above), the project applicant shall be responsible for mitigating substantial effects.

General Notes:

1. Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters.
2. LOS = Level of Service

6.0 ANALYSIS OF EXISTING CONDITIONS

Table 6–1 summarizes the intersection operations under Existing conditions. As shown in *Table 6–1*, all the study area intersections are calculated to operate at LOS D or better during both the AM and PM peak hours.

Appendix C contains the Existing intersection analysis worksheets.

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[a]	LOS[b]
1. Mast Boulevard / Cuyamaca Street	Signal	AM	40.3	D
		PM	34.2	C
2. Mast Boulevard / Park Center Drive	Signal	AM	10.7	B
		PM	9.8	A
3. Mast Boulevard / Magnolia Avenue	Signal	AM	42.5	D
		PM	34.8	C
4. Riverwalk Drive / Cuyamaca Street	Signal	AM	21.9	C
		PM	22.0	C
5. Riverwalk Drive / Verde Vista Lane	AWSC[c]	AM	9.3	A
		PM	8.5	A
6. Riverwalk Drive / Canopy Park Lane	AWSC[c]	AM	9.1	A
		PM	8.4	A
7. Riverwalk Drive / Park Center Drive	AWSC[c]	AM	9.2	A
		PM	8.0	A

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. AWSC – All-Way Stop-Controlled intersection.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

The following is a discussion of the Project trip generation calculations and the Project traffic distribution and assignment through the local network.

7.1 Trip Generation

Trip generation rates for recreational community center land use (land use code 495) were taken from the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*, to determine the traffic generated by the proposed Project.

Events that could occur include gathering for private and governmental including business meetings, trainings, birthday parties, family celebrations, weddings, community events, conferences, Town Hall Meetings, City Council Meetings, Governmental Meetings, car shows, festivals, emergency operations, comedy shows, movies, and other events. Events would range in size from small events for 50 persons to 450 persons with all building space utilized. Events utilizing outdoor space could increase capacity by 250 if events such as car shows utilize outdoor parking lot space. The anticipated time of operation for events would be Sunday through Thursday from 7 AM to 10 PM, and Fridays and Saturdays from 7 AM to 11 PM.

Classes that could occur include senior, youth and general classes such as arts, floral, babysitter training, CPR training, fitness training, safety training, dog training, martial arts, dance, musical classes, historical classes, gardening classes, cooking, language classes, cultural classes, outdoor recreation classes, and additional classes needed for the community. Average class size would be 30-60 persons per class but could be as large as the occupancy load of the building if a large class was required. The anticipated time of operation for classes would be Monday - Saturday from 7 AM to 10 PM.

In order to account for the above-mentioned events that at times attract a large number of guests within a short time frame, trip rates obtained from the ITE Trip General Manual were quadrupled to capture all event guests. This adjustment was based on how the *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (dated April 2002)* handles the peak characteristics of a Church land use (see ***Appendix D***). ITE rates show 28.82 daily trips/ KSF, 1.91 AM peak hour trips/ KSF and 2.50 PM peak hour trips/ KSF for recreational community center.

Table 7–1 shows the Project trip generation. As shown in *Table 7–1*, the Project is calculated to generate 1,441 ADT, with 96 trips during the AM peak hour (63 inbound and 33 outbound), and 125 trips during the PM peak hour (59 inbound and 66 outbound).

TABLE 7–1
PROJECT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	Rate[a]	In:Out Split [a]	Volume			Rate[a]	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Community Center Building	12,500 SF	115.28 / KSF[b]	1,441	7.64/ KSF[b]	66:34	63	33	96	10.00/ KSF[b]	47:53	59	66	125

Footnotes:

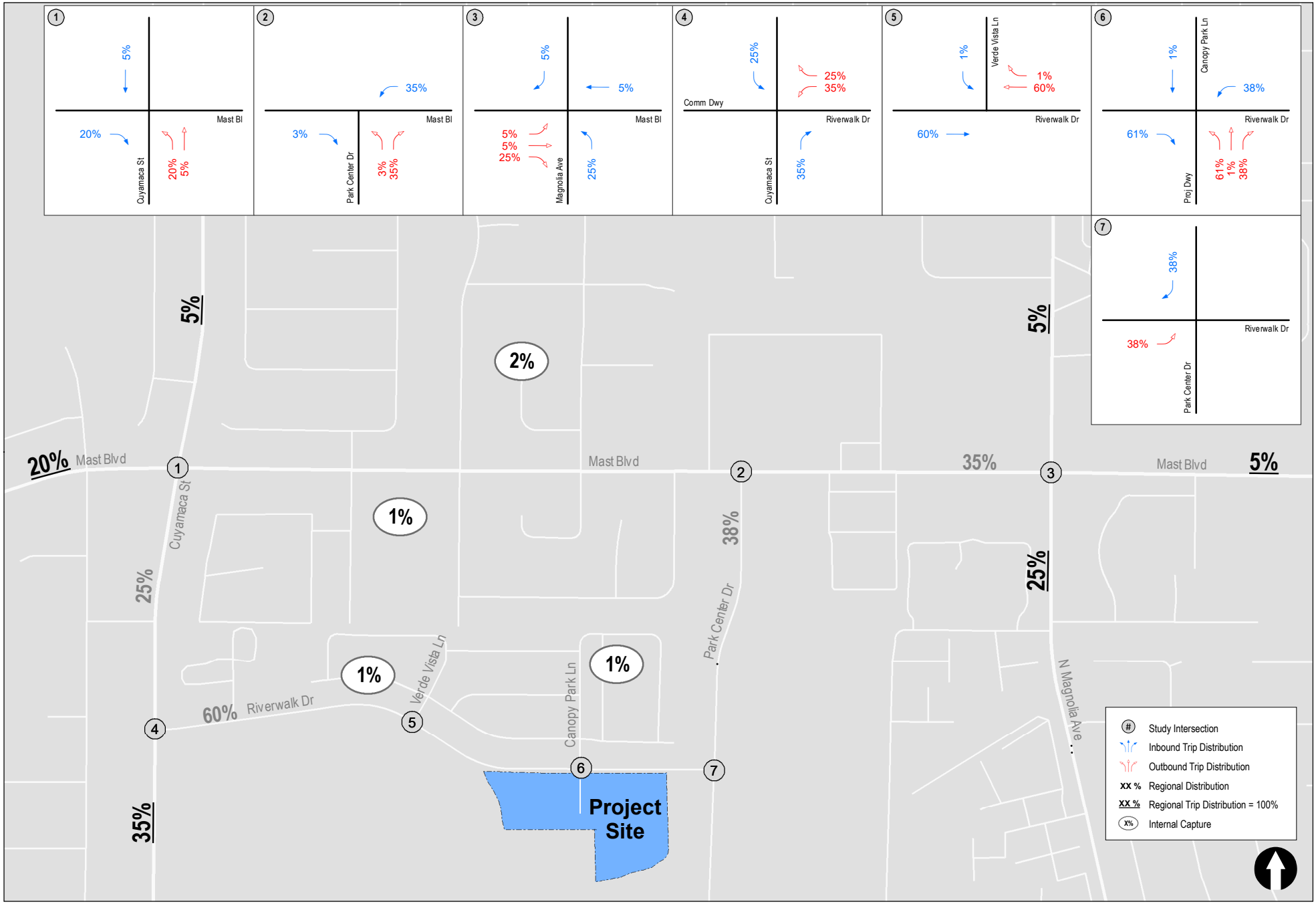
a. Rates are based on *ITE Trip Generation Manual, 11th Edition*.

b. Rates are based on recreational community center trip rate (land use code 495). To be conservative, trip rates were quadrupled to capture all event guests arriving within a short time frame. This adjustment was obtained from *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (dated April 2002)*, for a Church land use which functions similarly to worst-case events to be hosted by the community center. ITE rates show 28.82 daily trips/ KSF, 1.91 AM peak hour trips/ KSF and 2.50 PM peak hour trips/ KSF for recreational community center.

7.2 Trip Distribution and Assignment

The Project traffic was distributed based on the site location, access to SR-52, SR-67 and SR-125, existing traffic patterns in the area and anticipated traffic routes to and from the site, and the location of City-wide residential areas. Relative to the Project site location in central Santee, the Project's distributions assumes 10% of trips oriented to/from the northern portion of Santee; 60% of trips oriented to/from the southern portion of Santee, vehicles using SR-67 and exiting via Woodside Avenue, and vehicles using SR-52 and exiting via Cuyamaca Street; 20% of trips oriented to/from the western portion of Santee and vehicles using SR-52 and exiting via Mast Boulevard; 5% oriented to/from the eastern portion of Santee; and the remaining 1 – 2% to/from nearby residentials within close proximity of the Project site.

Figure 7–1 shows the Project traffic distribution. ***Figure 7–2*** shows the Project traffic volumes. ***Figure 7–3*** shows the Existing + Project traffic volumes.



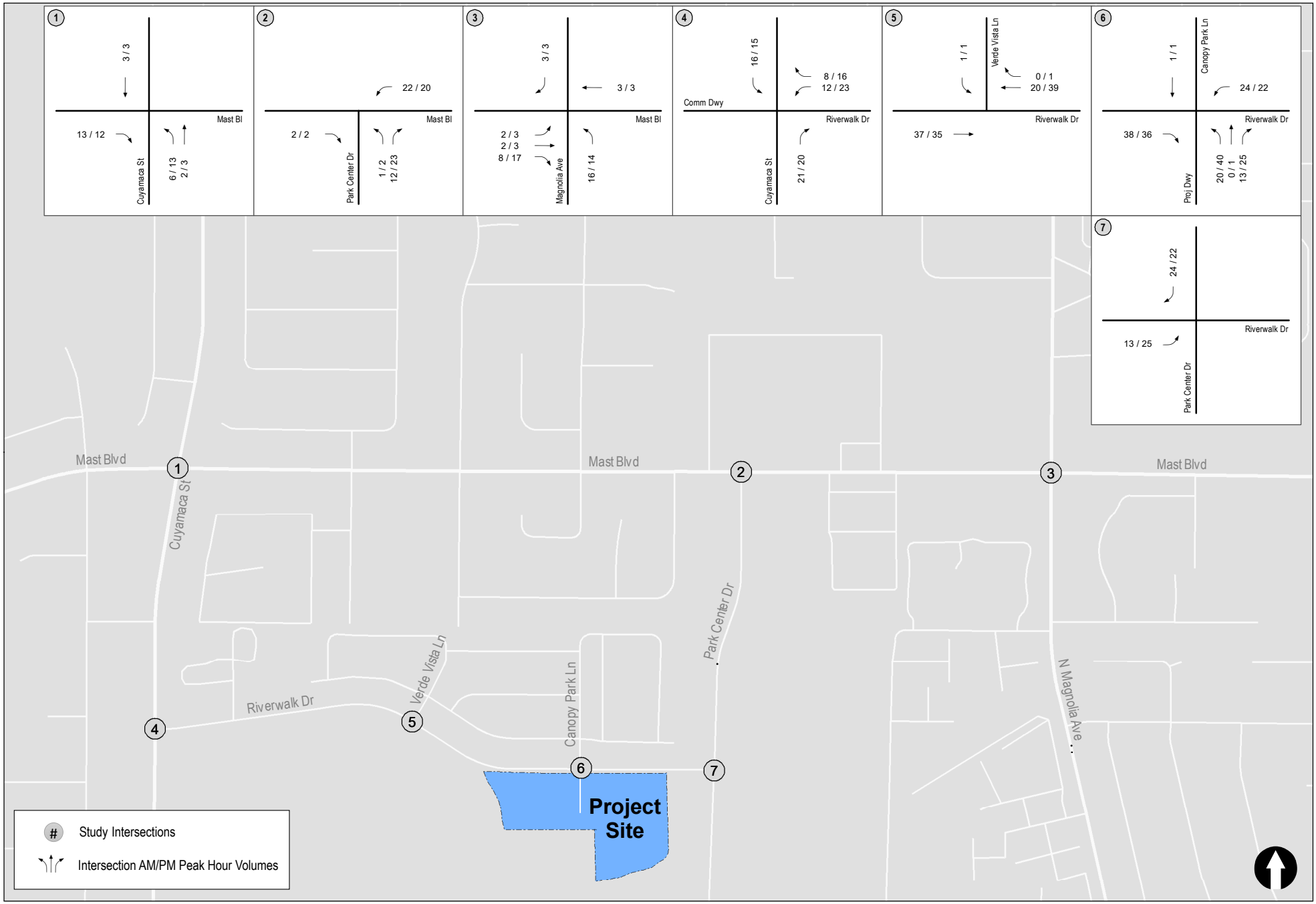
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Figure 7-1

Project Traffic Distribution

City of Santee Community Center

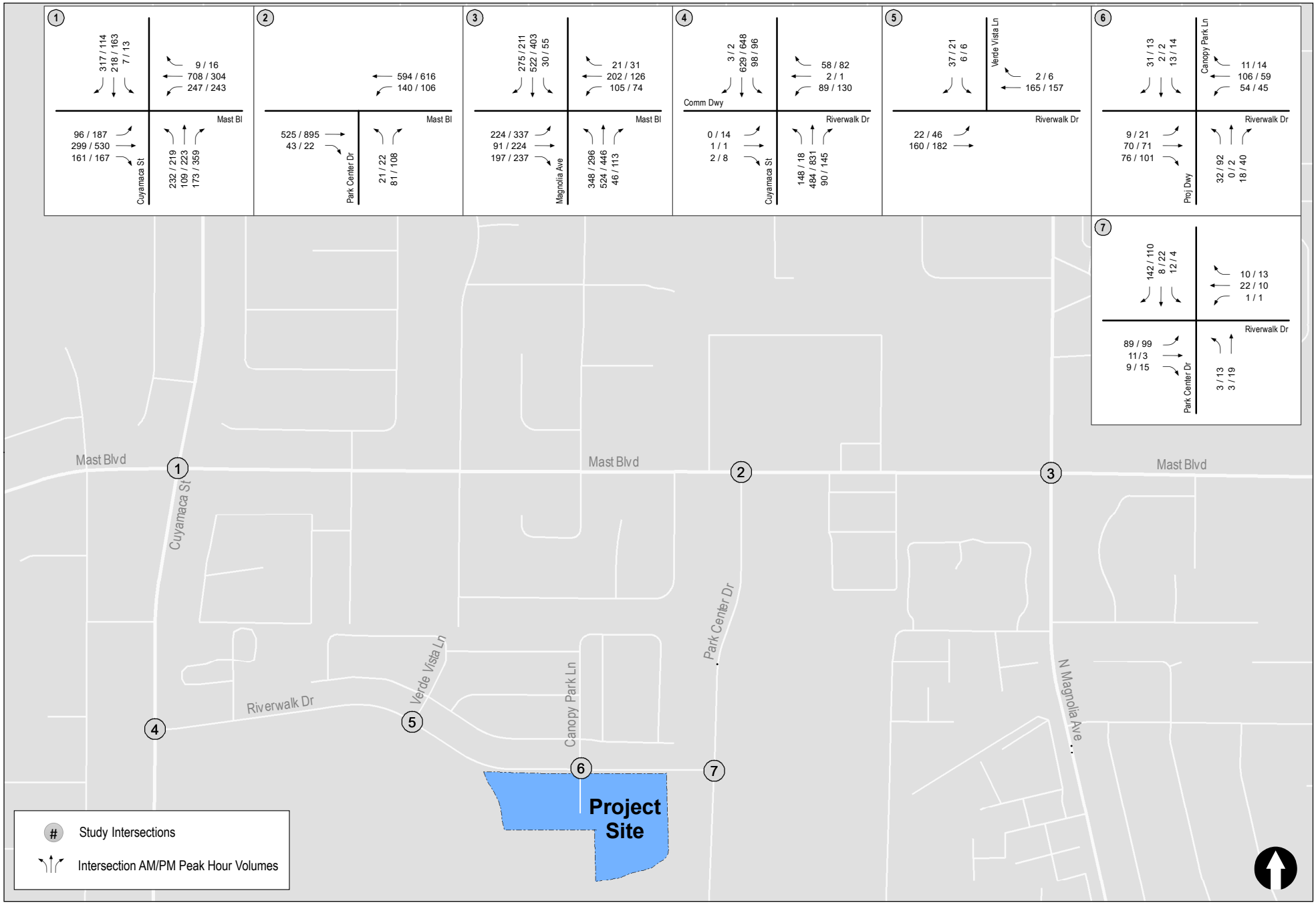


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Figure 7-2

Project Traffic Volumes

CITY OF SANTEE COMMUNITY CENTER



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Figure 7-3

Existing + Project Traffic Volumes

CITY OF SANTEE COMMUNITY CENTER

8.0 CUMULATIVE PROJECTS

Cumulative projects are other projects in the Project study area that could be constructed and occupied between the date of existing data collection (January 2024) and the expected opening year of the Project, thus adding traffic to the local circulation system. LLG researched projects within the City of Santee, City of San Diego, City of El Cajon and County of San Diego to identify cumulative projects in the Project study area that could be constructed and generating traffic in the Project vicinity. The Cumulative development projects identified in the Project vicinity in the near-term condition are listed in ***Table 8–1***.

For the purposes of this study, 500 units of the Fanita project were accounted for in the Cumulative projects traffic volumes due to the uncertainty of development of the Fanita Project at the time this study was prepared.

Figure 8–1 shows the Cumulative projects traffic volumes. ***Figure 8–2*** shows the Existing + Cumulative projects traffic volumes. ***Figure 8–3*** shows the Existing + Cumulative projects + Project traffic volumes.

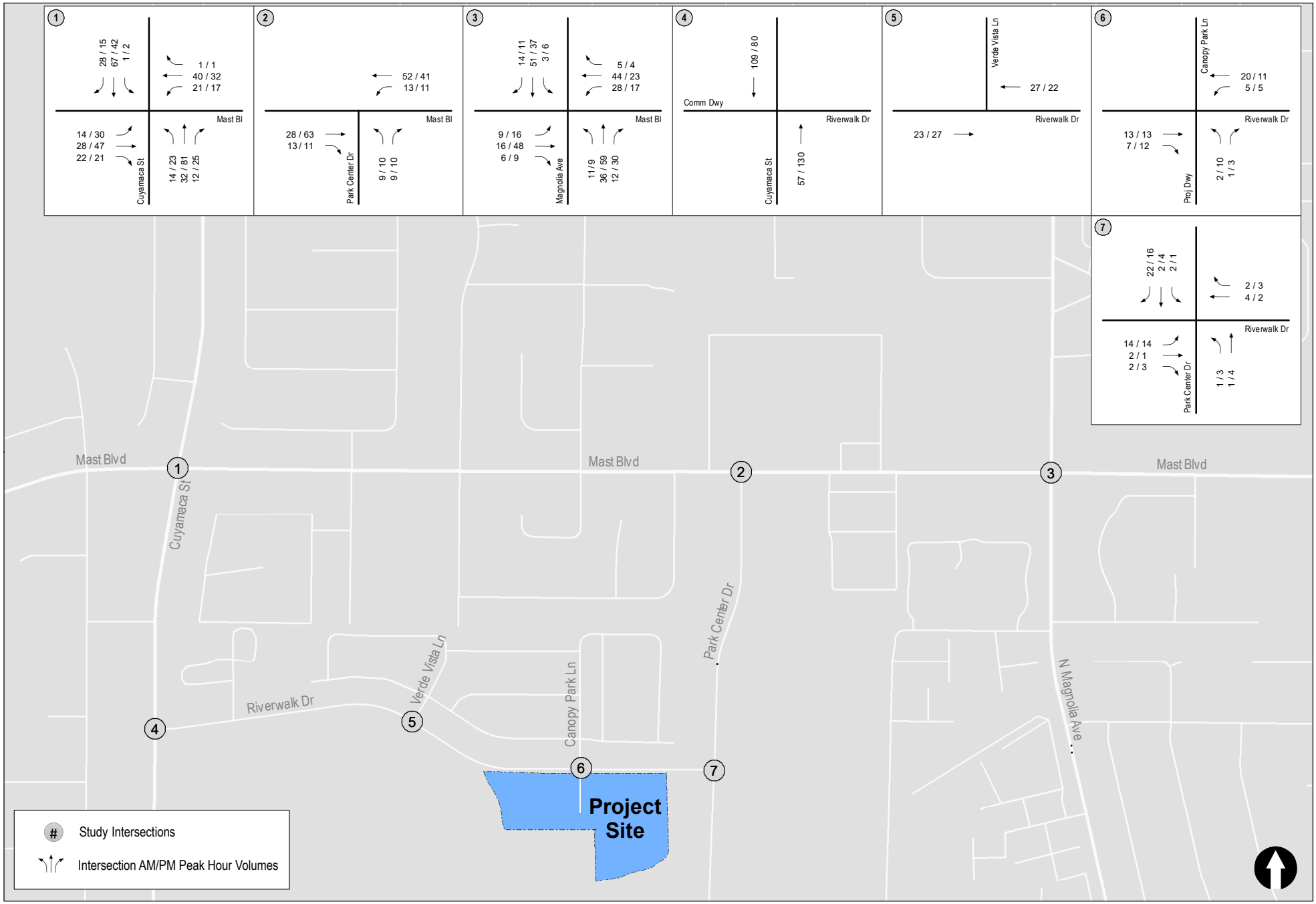
TABLE 8–1
CUMULATIVE PROJECTS SUMMARY

Name/Applicant	Description	ADT [a]	AM		PM		Status
			In	Out	In	Out	
1. Santee View Estates	27- Single Family DU	270	7	15	19	8	Approved – Not Built
2. Karl Strauss	Brewery, warehouse, tasting room, & restaurant	1,509	80	21	74	93	Approved – Not Built
3. Prospect Estates II	53 Single Family DU	530	13	29	37	16	Approved – Not Built
4. Tyler Street Subdivision	14 Single Family DU	140	3	8	10	4	Pending Entitlement
5. Talwar	8 condominiums	64	1	4	4	2	Approved – Not Built
6. Lantern Crest Ridge Ph II	46-bed memory care facility	115	3	2	5	4	Pending Entitlement
7. Graves/Prospect Commercial	Convenience store, coffee shop	1,200	48	48	48	48	Pending Entitlement
8. Parkside (formerly Hillside Meadows)	63 Single Family DU & 62 condominiums	1,126	23	67	79	34	Pending Entitlement
9. Carlton Oaks Country Club	Single family, assisted living, hotel, and restaurant expansion	2,380	56	117	155	74	Pending Entitlement
10. Woodspring Suites	120-room hotel	840	27	40	46	30	Approved – Not Built
11. Apts. Inc	11 condominiums	88	1	6	6	3	Pending Entitlement
12. Studio Movie Grill	Entertainment, restaurant	3,700	13	0	179	117	Pending Entitlement
13. County Property 2	365 condominiums	2,920	47	187	204	88	Pending Entitlement
14. County Property 1	130 condominiums	1,040	17	66	73	31	Pending Entitlement
15. KDS & Assoc.	Warehouse	37	4	1	2	4	Pending Entitlement
16. Cameron Bros	Commercial	12,883	309	206	644	644	Pending Entitlement
17. Rockvill Residential	59 Single Family DU	590	14	33	41	18	Pending Entitlement
18. All Right Storage	87 KSF Storage	175	6	5	8	8	Pending Entitlement
19. Gondala Skate	28 KSF Industrial	229	23	2	5	22	Approved – Not Built
20. Lunar Lane	7 KSF Industrial	59	5	1	1	6	Pending Entitlement
21. Kalasho Gas Station	Gas Station	900	32	31	36	36	Pending Entitlement
22. Prospect Avenue Subdivision	14 Single Family DU	140	3	8	10	4	Pending Entitlement
23. Fanita Project [b]	500 Units	5,000	120	280	350	150	Approved – Not Built

Footnotes:

a. Average daily traffic.

b. See text for explanation.

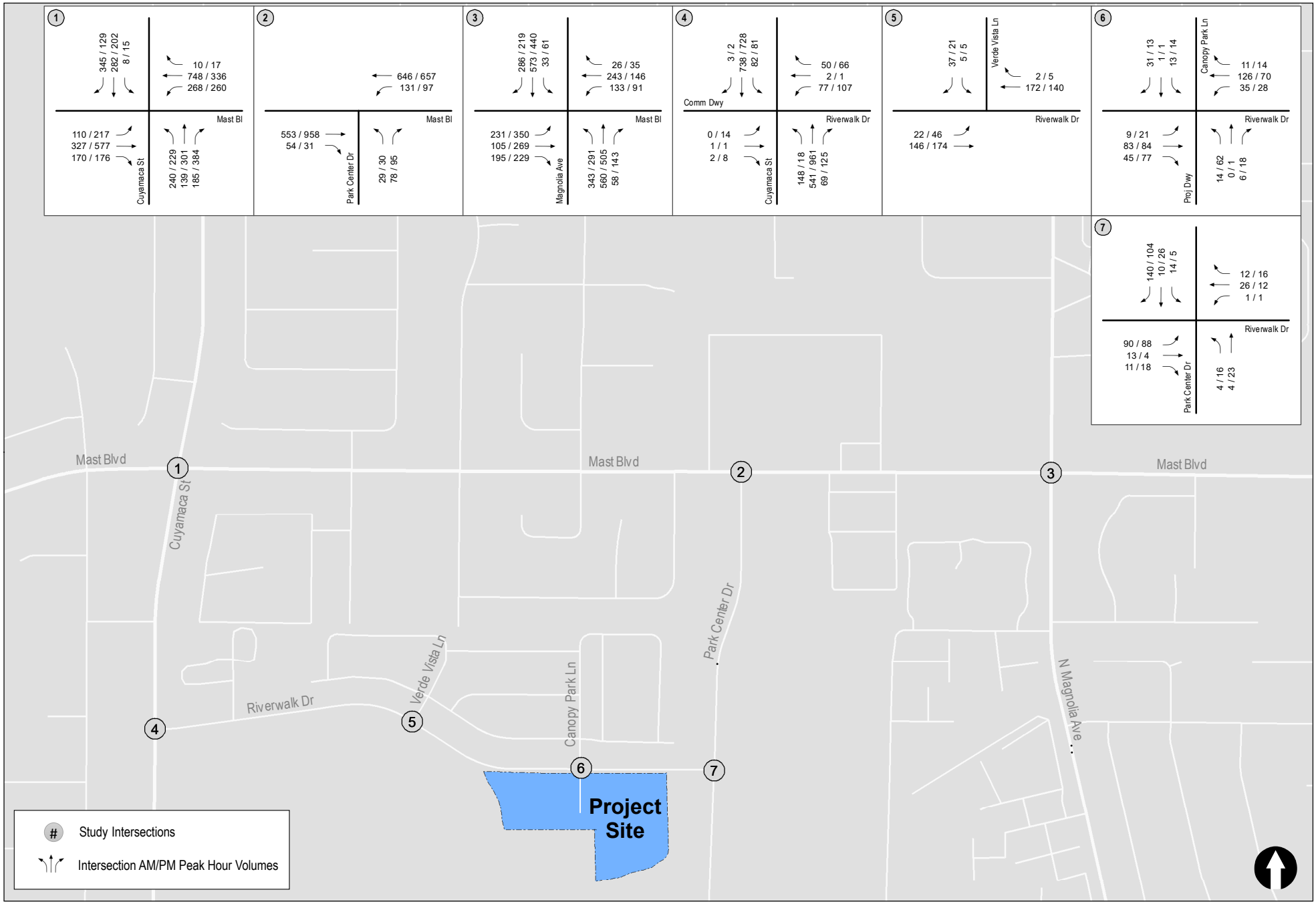


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Figure 8-1

Cumulative Projects Traffic Volumes

CITY OF SANTEE COMMUNITY CENTER



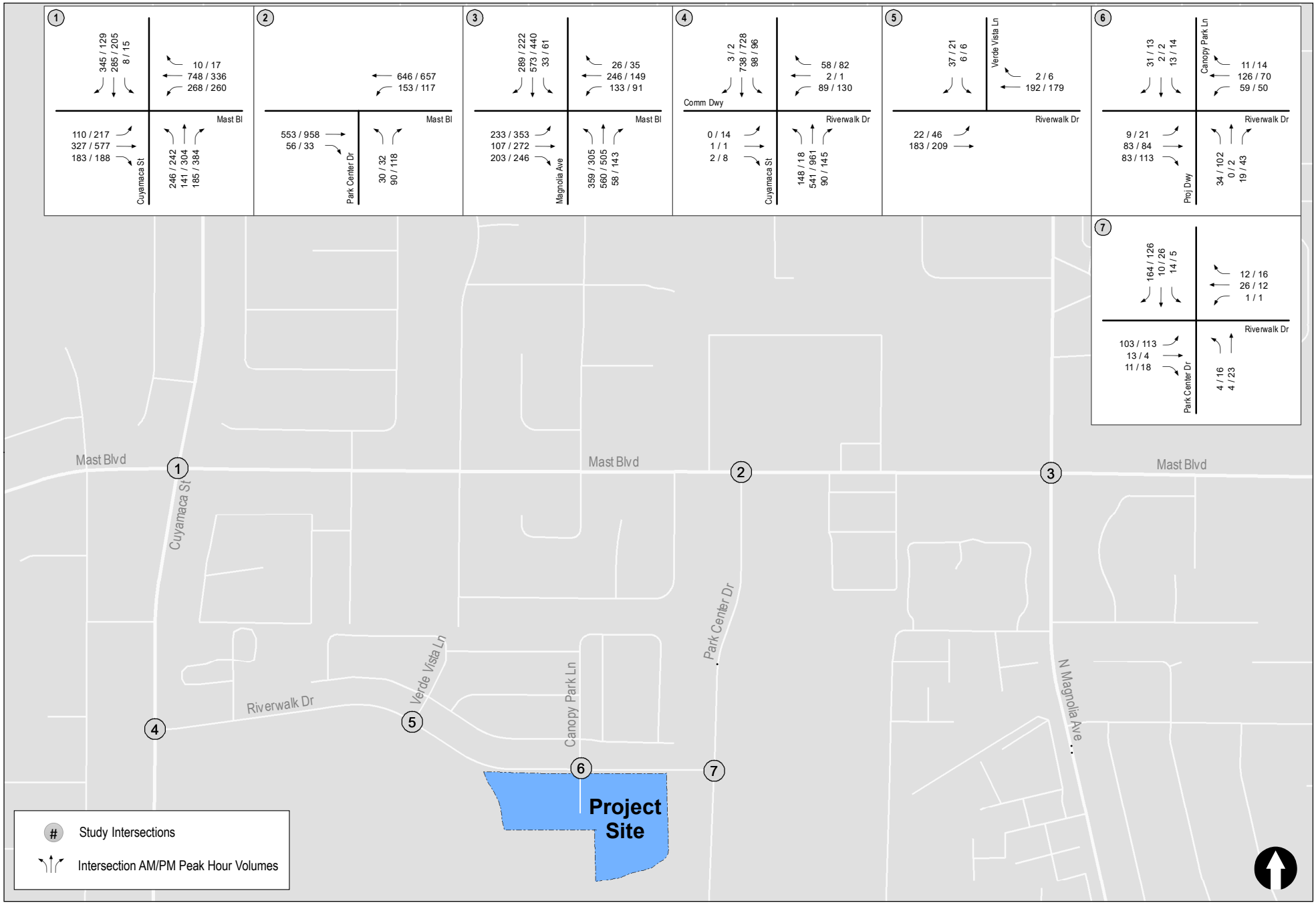
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Figure 8-2

Existing + Cumulative Projects Traffic Volumes

CITY OF SANTEE COMMUNITY CENTER



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Figure 8-3

Existing + Cumulative Projects + Project Traffic Volumes

City of Santee Community Center

9.0 ANALYSIS OF NEAR-TERM SCENARIOS

The following sections present the analysis of study area intersections under Existing + Project, Existing + Cumulative projects and Existing + Cumulative projects + Project conditions.

9.1 Exiting + Project Conditions

Table 9–1 summarizes the intersection operations under Existing + Projects conditions. As shown in *Table 9–1*, with the addition of Project traffic, all the study area intersections are calculated to operate at LOS D or better during both the AM and PM peak hours.

Appendix E contains the Existing + Projects intersection analysis worksheets.

9.2 Exiting + Cumulative Projects Conditions

Table 9–1 summarizes the intersection operations under Existing + Cumulative projects conditions. As shown in *Table 9–1*, all the study area intersections are calculated to operate at LOS D or better during both the AM and PM peak hours.

Appendix F contains the Existing + Cumulative projects intersection analysis worksheets.

9.3 Exiting + Cumulative Projects + Project Conditions

Table 9–1 summarizes the intersection operations under Existing + Cumulative projects + Project conditions. As shown in *Table 9–1*, with the addition of project traffic, all the study area intersections are calculated to operate at LOS D or better during both the AM and PM peak hours.

Appendix G contains the Existing + Cumulative projects + Project intersection analysis worksheets.

TABLE 9–1
NEAR-TERM INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ[c]	Substantial Effect?	Existing + Cumulative		Existing + Cumulative + Project		Δ[c]	Substantial Effect?
			Delay[a]	LOS[b]	Delay[a]	LOS[b]			Delay[a]	LOS[b]	Delay[a]	LOS[b]		
1. Mast Boulevard / Cuyamaca Street	Signal	AM	40.3	D	40.4	D	0.1	No	43.1	D	43.2	D	0.1	No
		PM	34.2	C	34.5	C	0.3	No	35.8	D	36.1	D	0.3	No
2. Mast Boulevard / Park Center Drive	Signal	AM	10.7	B	11.7	B	1.0	No	11.5	B	12.8	B	1.3	No
		PM	9.8	A	10.6	B	0.8	No	10.3	B	11.3	B	1.0	No
3. Mast Boulevard / Magnolia Avenue	Signal	AM	42.5	D	43.1	D	0.6	No	44.1	D	44.7	D	0.6	No
		PM	34.8	C	35.5	D	0.7	No	35.9	D	36.6	D	0.7	No
4. Riverwalk Drive / Cuyamaca Street	Signal	AM	21.9	C	22.5	C	0.6	No	23.3	C	23.9	C	0.6	No
		PM	22.0	C	24.3	C	2.3	No	24.0	C	27.1	C	3.1	No
5. Riverwalk Drive / Verde Vista Lane	AWSC[d]	AM	9.3	A	10.2	B	0.9	No	9.9	A	11.0	B	1.1	No
		PM	8.5	A	9.0	A	0.5	No	8.9	A	9.4	A	0.5	No
6. Riverwalk Drive / Canopy Park Lane	AWSC[d]	AM	9.1	A	10.0	A	0.9	No	9.6	A	10.8	B	1.2	No
		PM	8.4	A	9.3	A	0.9	No	8.8	A	9.7	A	0.9	No
7. Riverwalk Drive / Park Center Drive	AWSC[d]	AM	9.2	A	9.8	A	0.6	No	10.0	A	10.8	B	0.8	No
		PM	8.0	A	8.3	A	0.3	No	8.3	A	8.7	A	0.4	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay due to project.
d. AWSC – All-Way Stop-Controlled intersection.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

10.0 VEHICLE MILES TRAVELED (VMT) ASSESSMENT

10.1 Background

In December 2018, the Natural Resources Agency adopted amendments to the CEQA Guidelines, including the incorporation of SB 743 modifications. The Office of Planning and Research (OPR) also published an update to its Technical Advisory on Evaluating Transportation Impacts in CEQA to assist professional planners, land use officials, and CEQA practitioners. The Technical Advisory provides recommendations on how to evaluate transportation impacts under SB743 that agencies and other entities may use at their discretion. The Technical Advisory recommends the use of VMT as the preferred CEQA transportation metric. To comply with the new legislation, the City has identified VMT analysis methodology, established VMT thresholds for CEQA transportation impacts, and identified possible mitigation strategies. SB743 includes the following two legislative intent statements:

1. Ensure that the environmental impacts of traffic, such as noise, air pollution, and safety concerns, continue to be properly addressed and mitigated through the California Environmental Quality Act.

2. More appropriately, balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. VMT does not directly measure traffic operations but instead is a measure of network use or efficiency, especially if expressed as a function of population or employment (e.g., VMT/capita). VMT tends to increase as land use density decreases and travel becomes more reliant on the use of the automobile due to the long distances between origins and destinations. VMT can also serve as a proxy for impacts related to energy use, air pollution emissions, GHG emissions, safety, and roadway maintenance. The relationship between VMT and energy or emissions is based on fuel consumption. The traditional use of VMT in environmental impact analysis is to estimate mobile air pollution emissions, GHGs, and energy consumption, and the type of VMT metric reported for these additional impact areas typically differs from the metrics used for the transportation analysis.

10.2 Screening Criteria for CEQA VMT Analysis

The requirements to prepare a detailed transportation VMT analysis apply to all discretionary land development projects that are not exempt from CEQA, except those that meet at least one of the transportation screening criteria described below. A project that meets at least one of the screening criteria below would be presumed to have a less than significant VMT impact due to some aspect of the project. If evidence suggests that the project might have a significant impact despite meeting the below screening criteria, City staff reserves the discretion to request VMT analysis.

Based on the *City of Santee VMT Analysis Guidelines, April 2022*, the requirement to prepare a detailed transportation VMT analysis applies to all discretionary land development projects that are not exempt from CEQA, except for those that meet at least one of the provided screening criteria. A project that meets at least one of the screening criteria listed below would be considered to have a less-than-significant CEQA transportation impact due to some aspect of the project.

1. Projects Located in a Transit-Accessible Area: Projects located within a half-mile radius of an existing major transit stop or an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.

2. Small Projects: Projects generating 500 or fewer net new daily vehicle trips may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Trips are based on the number of vehicle trips calculated using *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* or ITE trip generation rates with any alternative modes/location-based adjustments applied.

3. Projects in a VMT Efficient Area: A VMT-efficient area is any area within the City with an average VMT/capita or VMT/employee below the thresholds as compared to the baseline City/Regional VMT for the TAZ that the project is located within.

4. Locally Serving Retail Projects: Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. Local serving retail projects less than 50,000 square feet that are expected to draw approximately 75% of customers from the local area (roughly 3-miles) are presumed to have a less than significant impact absent substantial evidence to the contrary. Retail projects that are between 50,000 square feet and 125,000 square feet with similar customer attraction (approximately 75% from local area) may also be presumed locally-serving; however, the city may require the applicant to provide a market analysis as evidence that the project is locally serving. Retail projects that are more than 125,000 square feet are required to conduct a VMT analysis unless the applicant provides market surveys to demonstrate that at least 75% of customers are attracted from the local population.

5. Locally Serving Public Facilities: Public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.

6. Redevelopment Projects with Lower Total VMT: A redevelopment project may be presumed to have a less-than-significant impact absent substantial evidence to the contrary if the proposed project's total project VMT is less than the existing land use's total VMT and the CEQA action includes closing the existing land use.

7. Infill Affordable Housing: Based on the ITE 11th Edition of the Trip Generation Manual, the affordable housing trip generation rate is approximately 30% lower than the multi-family (low-rise) rate. Adding affordable housing to infill locations generally improves jobs-housing

balance, in turn, shortening commutes and reducing VMT. This suggests that it is possible to presume a blended affordable and market-rate residential project as having less than significant VMT impact.

10.2.1 *Locally-Serving Public Facilities*

As discussed in *Sections 2.0* and *7.0*, the function and aspects of the proposed Santee Community Center falls under the category of "locally serving public facilities." Therefore, according to the City's screening criteria #5 summarized in *Section 10.2*, the Project would be considered to have a less-than-significant CEQA transportation impact and would be screened out of further analysis.

11.0 SITE ACCESS

As mentioned in *Section 2.0*, vehicular access to the Project site will be provided via an existing full-access driveway, which is also the south leg of the Riverwalk Drive / Canopy Park Lane intersection. The Project site is currently fronting a 2-lane undivided roadway. As shown in *Table 9–1*, the analyzed Project driveway is calculated to operate at LOS B or better during the AM and PM peak hours. Therefore, no improvements are necessary.

12.0 CONCLUSIONS

The Project is proposed on an approximately 3.57-acre site located at 10129 Riverwalk Drive in the City of Santee. The proposed Project would involve the construction of the Santee Community Center building, which is two stories and includes event space, office space, and support spaces and would total 12,500 gross square feet.

LOCAL TRANSPORTATION ANALYSIS

The study area intersections were analyzed under the Existing, Existing + Project, Existing + Cumulative project and Existing + Cumulative project + Project scenarios. All study area intersections are calculated to operate at LOS D or better. Therefore, improvements are not required under these analyses.

VEHICLE MILED TRAVELED ASSESSMENT

As discussed in *Sections 2.0* and *7.0*, the function and aspects of the proposed Santee Community Center falls under the category of "locally serving public facilities." Therefore, according to the City's screening criteria #5 summarized in *Section 10.2*, the Project would be considered to have a less-than-significant CEQA transportation impact and would be screened out of further analysis.

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

TECHNICAL APPENDICES
SANTEE COMMUNITY CENTER

Santee, California
February 23, 2024

LLG Ref. 3-22-3519

APPENDICES

APPENDIX

A. Intersection Manual Count Sheets

B. Bus Route Schedule and Map

C. Existing Intersection Analysis Worksheets

D. Excerpts from the *Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition)* and *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (dated April 2002)*

E. Existing + Project Intersection Analysis Worksheets

F. Existing + Cumulative Projects Intersection Analysis Worksheets

G. Existing + Cumulative Projects + Project Intersection Analysis Worksheets

APPENDIX A

INTERSECTION MANUAL COUNT SHEETS

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-24-004-01
Intersection:	Cuyamaca Street & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Cuyamaca Street Southbound			Mast Boulevard Westbound			Cuyamaca Street Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	6	35	73	29	177	3	31	13	23	15	44	11	460
7:15	0	44	99	37	225	0	30	23	25	15	60	32	590
7:30	1	52	90	69	217	2	42	26	27	25	65	27	643
7:45	1	51	77	42	186	3	40	19	33	22	71	35	580
8:00	2	62	82	48	150	2	82	19	46	19	75	45	632
8:15	3	51	68	88	155	2	62	43	67	30	88	41	698
8:30	0	29	57	53	112	3	34	30	37	22	89	40	506
8:45	2	43	37	51	76	1	39	22	53	16	51	30	421
Total	15	367	583	417	1298	16	360	195	311	164	543	261	4530
Approach%	1.6	38.0	60.4	24.1	75.0	0.9	41.6	22.5	35.9	16.9	56.1	27.0	
Total%	0.3	8.1	12.9	9.2	28.7	0.4	7.9	4.3	6.9	3.6	12.0	5.8	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	7	216	317	247	708	9	226	107	173	96	299	148	2,553
Approach%	1.3	40.0	58.7	25.6	73.4	0.9	44.7	21.1	34.2	17.7	55.1	27.3	
Total%	0.3	8.5	12.4	9.7	27.7	0.4	8.9	4.2	6.8	3.8	11.7	5.8	
PHF			0.92			0.84			0.74			0.85	0.91

PM	Cuyamaca Street Southbound			Mast Boulevard Westbound			Cuyamaca Street Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	25	20	68	75	1	36	43	69	43	124	38	544
16:15	1	53	29	69	57	1	40	56	73	39	127	43	588
16:30	3	34	36	64	72	3	42	61	84	48	109	33	589
16:45	2	47	27	44	83	9	57	55	95	46	147	47	659
17:00	3	40	30	75	67	3	51	51	87	51	140	39	637
17:15	5	39	21	60	82	1	56	53	93	42	134	36	622
17:30	2	40	29	67	75	5	34	39	92	36	109	40	568
17:45	7	34	20	55	63	2	45	39	63	39	111	39	517
Total	25	312	212	502	574	25	361	397	656	344	1001	315	4724
Approach%	4.6	56.8	38.6	45.6	52.1	2.3	25.5	28.1	46.4	20.7	60.3	19.0	
Total%	0.5	6.6	4.5	10.6	12.2	0.5	7.6	8.4	13.9	7.3	21.2	6.7	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	13	160	114	243	304	16	206	220	359	187	530	155	2,507
Approach%	4.5	55.7	39.7	43.2	54.0	2.8	26.2	28.0	45.7	21.4	60.8	17.8	
Total%	0.5	6.4	4.5	9.7	12.1	0.6	8.2	8.8	14.3	7.5	21.1	6.2	
PHF			0.94			0.97			0.95			0.91	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

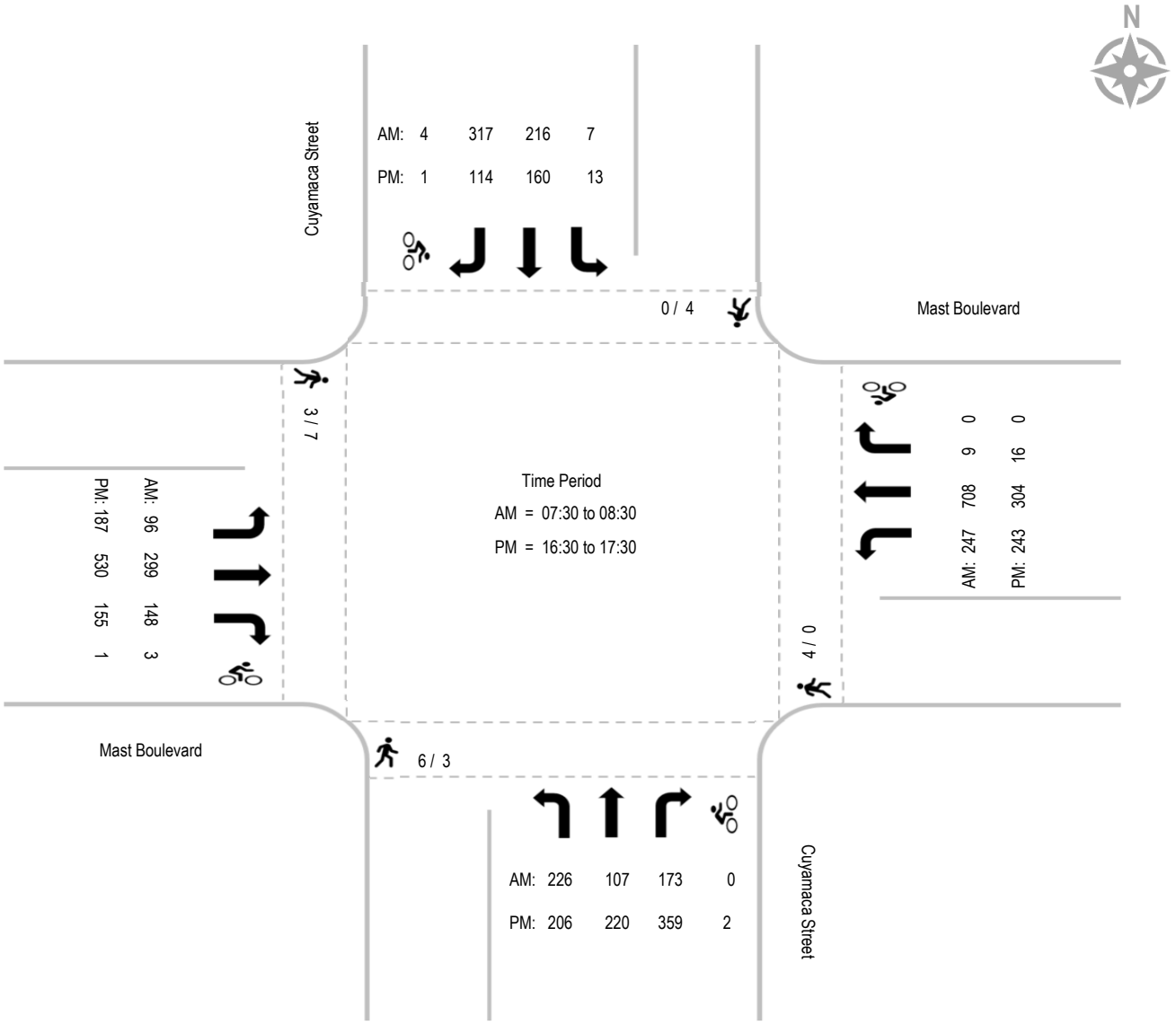
Location:	#01	File Name:	ITM-24-004-01
Intersection:	Cuyamaca Street & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Cuyamaca Street Southbound				Mast Boulevard Westbound				Cuyamaca Street Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:00	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	4	1
8:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
8:45	0	0	1	0	0	0	0	0	1	0	0	0	1	0	3	0	2	4
Ped Total	0				4				6				3				13	
Bike Total		1	3	0		0	0	0		0	0	0		0	3	0		7

PM	Cuyamaca Street Southbound				Mast Boulevard Westbound				Cuyamaca Street Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
16:30	3	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	6	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	7	0
Ped Total	4				0				3				7				14	
Bike Total		0	1	0		0	0	0		0	2	0		0	1	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name: ITM-24-004-01
	Intersection:	Cuyamaca Street & Mast Boulevard	Project: LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024	Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-24-004-02
Intersection:	Park Center Driver & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	- Southbound			Mast Boulevard Westbound			Park Center Drive Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	0	14	183	0	1	0	10	0	68	6	282
7:15	0	0	0	8	212	0	0	0	10	0	102	3	335
7:30	0	0	0	17	204	0	5	0	12	0	103	3	344
7:45	0	0	0	15	196	0	1	0	6	0	123	8	349
8:00	0	0	0	41	15	0	1	0	10	0	142	13	222
8:15	0	0	0	45	179	0	13	0	41	0	157	17	452
8:30	0	0	0	12	134	0	3	0	8	0	142	2	301
8:45	0	0	0	11	93	0	2	0	14	0	106	3	229
Total	0	0	0	163	1216	0	26	0	111	0	943	55	2514
Approach%	-	-	-	11.8	88.2	-	19.0	-	81.0	-	94.5	5.5	
Total%	-	-	-	6.5	48.4	-	1.0	-	4.4	-	37.5	2.2	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	-	-	-	118	594	-	20	-	69	-	525	41	1,367
Approach%	-	-	-	16.6	83.4	-	22.5	-	77.5	-	92.8	7.2	
Total%	-	-	-	8.6	43.5	-	1.5	-	5.0	-	38.4	3.0	
PHF			#DIV/0!			0.79			0.41			0.81	0.76

PM	- Southbound			Mast Boulevard Westbound			Park Center Drive Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	15	130	0	8	0	16	0	196	3	368
16:15	0	0	0	22	128	0	6	0	28	0	226	2	412
16:30	0	0	0	18	139	0	4	0	24	0	214	8	407
16:45	0	0	0	34	150	0	5	0	20	0	220	5	434
17:00	0	0	0	16	156	0	9	0	28	0	234	2	445
17:15	0	0	0	18	171	0	2	0	13	0	227	5	436
17:30	0	0	0	40	126	0	3	0	18	0	200	2	389
17:45	0	0	0	29	120	0	4	0	21	0	217	6	397
Total	0	0	0	192	1120	0	41	0	168	0	1734	33	3288
Approach%	-	-	-	14.6	85.4	-	19.6	-	80.4	-	98.1	1.9	
Total%	-	-	-	5.8	34.1	-	1.2	-	5.1	-	52.7	1.0	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	-	-	-	86	616	-	20	-	85	-	895	20	1,722
Approach%	-	-	-	12.3	87.7	-	19.0	-	81.0	-	97.8	2.2	
Total%	-	-	-	5.0	35.8	-	1.2	-	4.9	-	52.0	1.2	
PHF			#DIV/0!			0.93			0.71			0.97	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

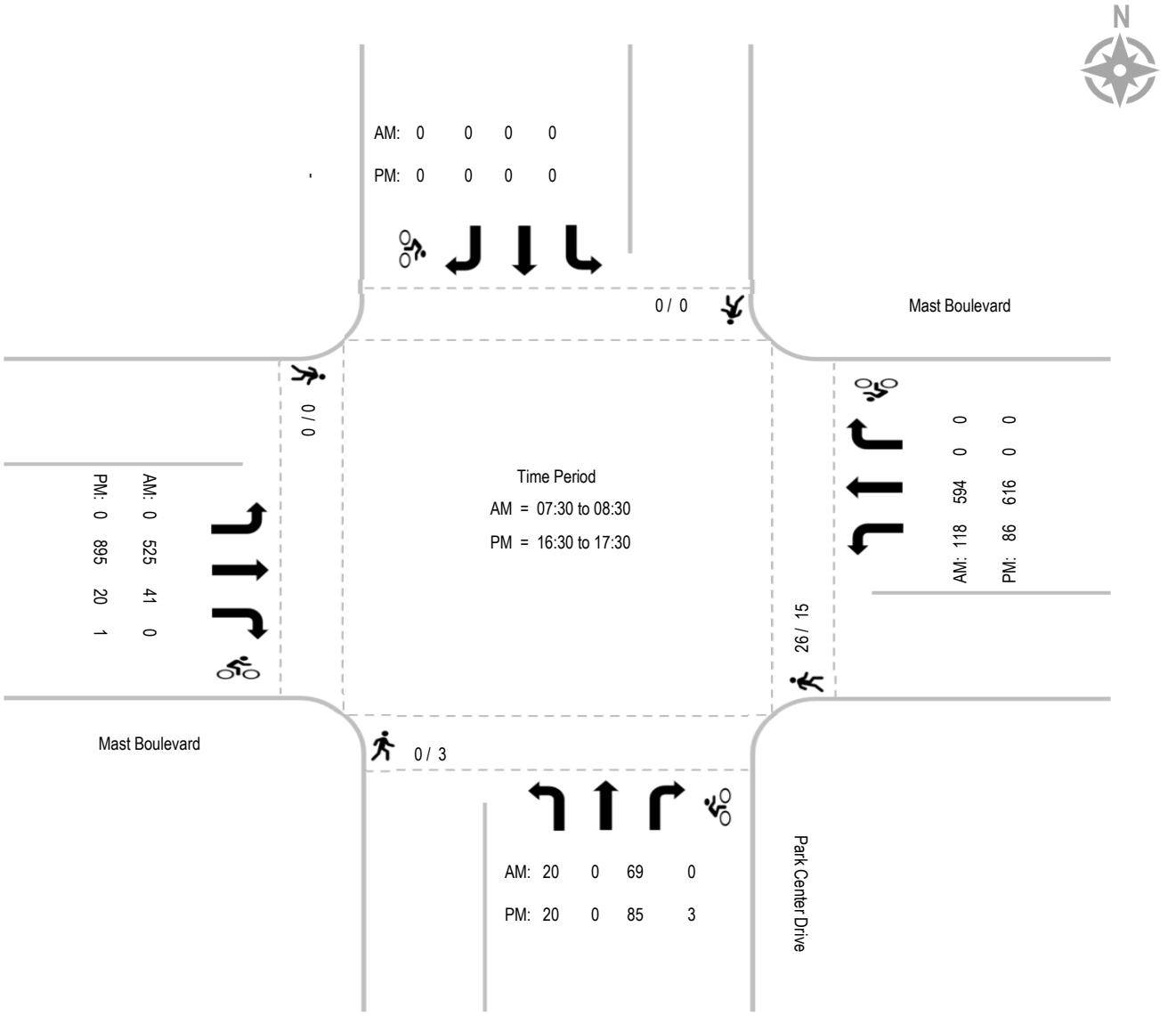
Location:	#02	File Name:	ITM-24-004-02
Intersection:	Park Center Driver & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	- Southbound				Mast Boulevard Westbound				Park Center Drive Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:45	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
8:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
8:15	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:45	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
Ped Total	0				26				0				0				26	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	- Southbound				Mast Boulevard Westbound				Park Center Drive Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	7	1
16:30	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	4	1
16:45	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	4	0
17:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
17:15	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	1
17:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	0				15				3				0				18	
Bike Total		0	0	0		0	0	0		2	0	1		0	1	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name:	ITM-24-004-02
	Intersection:	Park Center Driver & Mast Boulevard	Project:	LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024		Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-24-004-03
Intersection:	Magnolia Avenue & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Magnolia Avenue Southbound			Mast Boulevard Westbound			Magnolia Avenue Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	11	83	75	11	45	3	58	56	6	19	22	34	423
7:15	15	95	75	15	50	6	57	95	8	33	31	47	527
7:30	15	140	72	44	69	14	70	100	9	42	24	37	636
7:45	2	137	66	34	57	5	86	104	7	54	18	61	631
8:00	11	95	67	17	37	0	84	131	16	56	17	38	569
8:15	2	150	67	10	36	2	92	189	14	70	30	53	715
8:30	8	103	43	10	30	4	76	58	10	58	38	51	489
8:45	8	84	45	10	28	2	48	66	7	43	25	28	394
Total	72	887	510	151	352	36	571	799	77	375	205	349	4384
Approach%	4.9	60.4	34.7	28.0	65.3	6.7	39.5	55.2	5.3	40.4	22.1	37.6	
Total%	1.6	20.2	11.6	3.4	8.0	0.8	13.0	18.2	1.8	8.6	4.7	8.0	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	30	522	272	105	199	21	332	524	46	222	89	189	2,551
Approach%	3.6	63.3	33.0	32.3	61.2	6.5	36.8	58.1	5.1	44.4	17.8	37.8	
Total%	1.2	20.5	10.7	4.1	7.8	0.8	13.0	20.5	1.8	8.7	3.5	7.4	
PHF			0.91			0.64			0.76			0.82	0.89

PM	Magnolia Avenue Southbound			Mast Boulevard Westbound			Magnolia Avenue Northbound			Mast Boulevard Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	108	51	17	19	1	56	128	30	95	58	51	619
16:15	10	70	45	12	27	4	69	100	29	66	62	46	540
16:30	16	67	51	12	32	5	75	92	27	94	51	53	575
16:45	21	96	58	9	31	8	74	127	26	81	60	53	644
17:00	16	102	43	20	36	9	58	96	33	88	60	59	620
17:15	9	92	53	17	25	11	87	118	31	89	64	52	648
17:30	9	113	54	28	31	3	63	105	23	76	37	56	598
17:45	14	93	37	21	26	9	76	115	20	86	43	65	605
Total	100	741	392	136	227	50	558	881	219	675	435	435	4849
Approach%	8.1	60.1	31.8	32.9	55.0	12.1	33.7	53.1	13.2	43.7	28.2	28.2	
Total%	2.1	15.3	8.1	2.8	4.7	1.0	11.5	18.2	4.5	13.9	9.0	9.0	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	55	403	208	74	123	31	282	446	113	334	221	220	2,510
Approach%	8.3	60.5	31.2	32.5	53.9	13.6	33.5	53.0	13.4	43.1	28.5	28.4	
Total%	2.2	16.1	8.3	2.9	4.9	1.2	11.2	17.8	4.5	13.3	8.8	8.8	
PHF			0.95			0.88			0.89			0.94	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

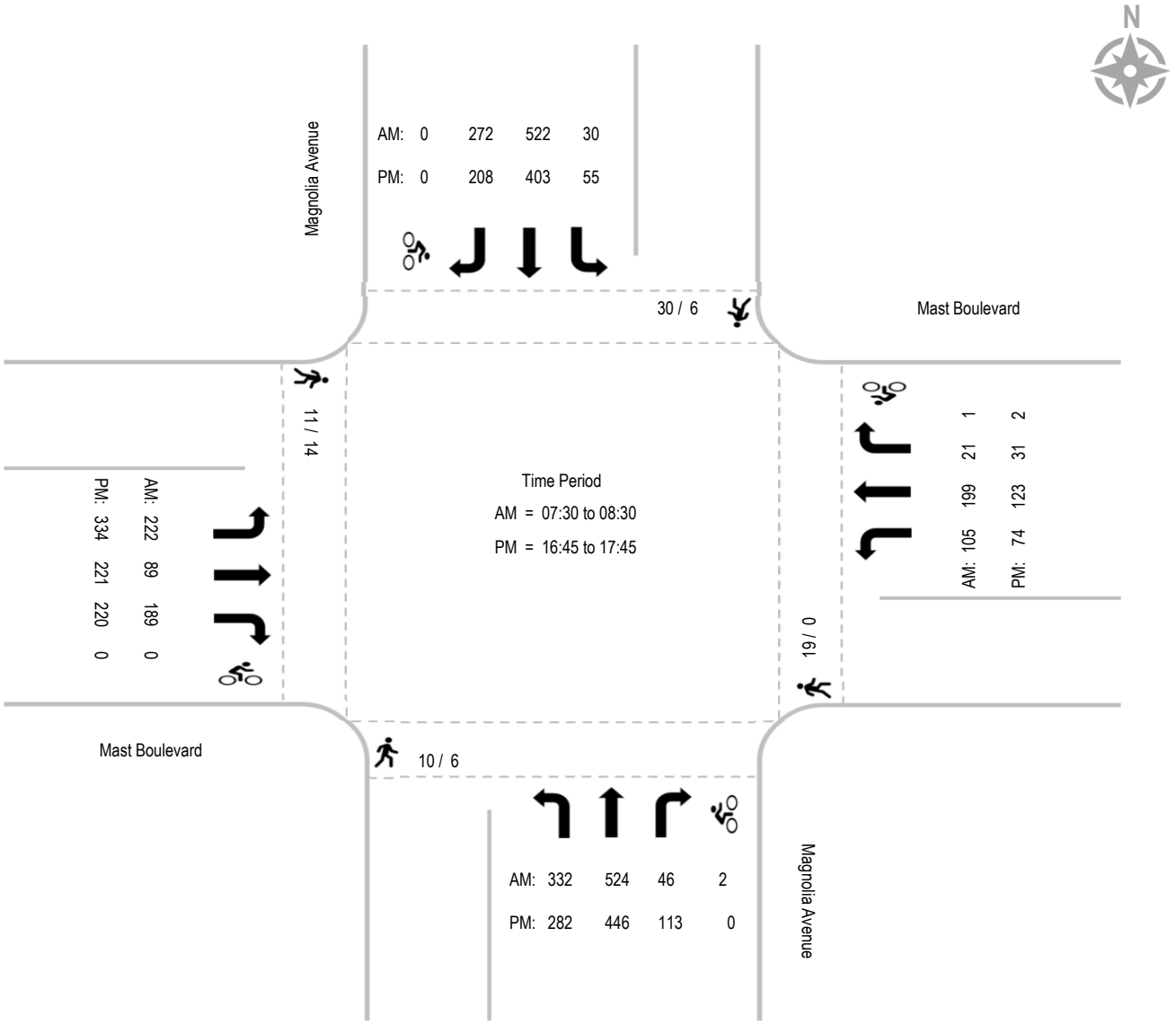
Location:	#03	File Name:	ITM-24-004-03
Intersection:	Magnolia Avenue & Mast Boulevard	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Magnolia Avenue Southbound				Mast Boulevard Westbound				Magnolia Avenue Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0
7:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45	7	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	9	1
8:00	9	0	0	0	5	0	0	0	1	0	0	0	2	0	0	0	17	0
8:15	2	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	6	0
8:30	2	0	0	0	4	0	0	0	3	0	1	0	3	0	0	0	12	1
8:45	10	0	0	0	8	0	0	0	3	0	0	0	0	0	0	0	21	0
Ped Total	30				19				10				11				70	
Bike Total		0	0	0		0	1	0		0	2	0		0	0	0		3

PM	Magnolia Avenue Southbound				Mast Boulevard Westbound				Magnolia Avenue Northbound				Mast Boulevard Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	7	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0
16:30	2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	5	0
16:45	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1
17:00	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	2	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0
17:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Ped Total	6				0				6				14				26	
Bike Total		0	0	0		2	0	0		0	0	0		0	0	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name:	ITM-24-004-03
	Intersection:	Magnolia Avenue & Mast Boulevard	Project:	LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024		Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#04	File Name:	ITM-24-004-04
Intersection:	Cuyamaca Street & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Tuesday January 16, 2024		Santee Community Center

AM	Cuyamaca Street Southbound			Riverwalk Drive Westbound			Cuyamaca Street Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	84	0	18	1	14	0	51	10	0	0	0	183
7:15	5	103	1	17	0	12	7	68	12	0	0	0	225
7:30	10	128	2	29	0	9	4	68	10	0	0	0	260
7:45	1	158	1	27	0	8	15	87	22	0	0	0	319
8:00	25	156	0	17	0	14	36	114	13	0	0	0	375
8:15	45	188	1	21	1	23	52	152	17	0	1	0	501
8:30	11	127	1	12	1	5	45	131	17	0	0	2	352
8:45	11	125	5	20	0	6	9	97	19	0	0	0	292
Total	113	1069	11	161	3	91	168	768	120	0	1	2	2507
Approach%	9.5	89.6	0.9	63.1	1.2	35.7	15.9	72.7	11.4	-	33.3	66.7	
Total%	4.5	42.6	0.4	6.4	0.1	3.6	6.7	30.6	4.8	-	0.0	0.1	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	82	629	3	77	2	50	148	484	69	-	1	2	1,547
Approach%	11.5	88.1	0.4	59.7	1.6	38.8	21.1	69.0	9.8	-	33.3	66.7	
Total%	5.3	40.7	0.2	5.0	0.1	3.2	9.6	31.3	4.5	-	0.1	0.1	
PHF			0.76			0.72			0.79			0.38	0.77

PM	Cuyamaca Street Southbound			Riverwalk Drive Westbound			Cuyamaca Street Northbound			- Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	16	133	2	33	0	13	7	177	36	3	0	2	422
16:15	11	158	1	30	0	9	4	213	20	0	1	1	448
16:30	19	135	0	27	0	3	7	203	29	5	0	2	430
16:45	18	163	1	27	0	14	6	240	30	4	0	0	503
17:00	10	155	0	41	0	19	7	210	29	7	0	1	479
17:15	30	165	0	17	0	16	2	192	32	1	0	3	458
17:30	23	165	1	22	1	17	3	189	34	2	1	4	462
17:45	17	142	0	24	0	21	1	181	25	1	0	3	415
Total	144	1216	5	221	1	112	37	1605	235	23	2	16	3617
Approach%	10.5	89.1	0.4	66.2	0.3	33.5	2.0	85.5	12.5	56.1	4.9	39.0	
Total%	4.0	33.6	0.1	6.1	0.0	3.1	1.0	44.4	6.5	0.6	0.1	0.4	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	81	648	2	107	1	66	18	831	125	14	1	8	1,902
Approach%	11.1	88.6	0.3	61.5	0.6	37.9	1.8	85.3	12.8	60.9	4.3	34.8	
Total%	4.3	34.1	0.1	5.6	0.1	3.5	0.9	43.7	6.6	0.7	0.1	0.4	
PHF			0.94			0.73			0.88			0.72	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

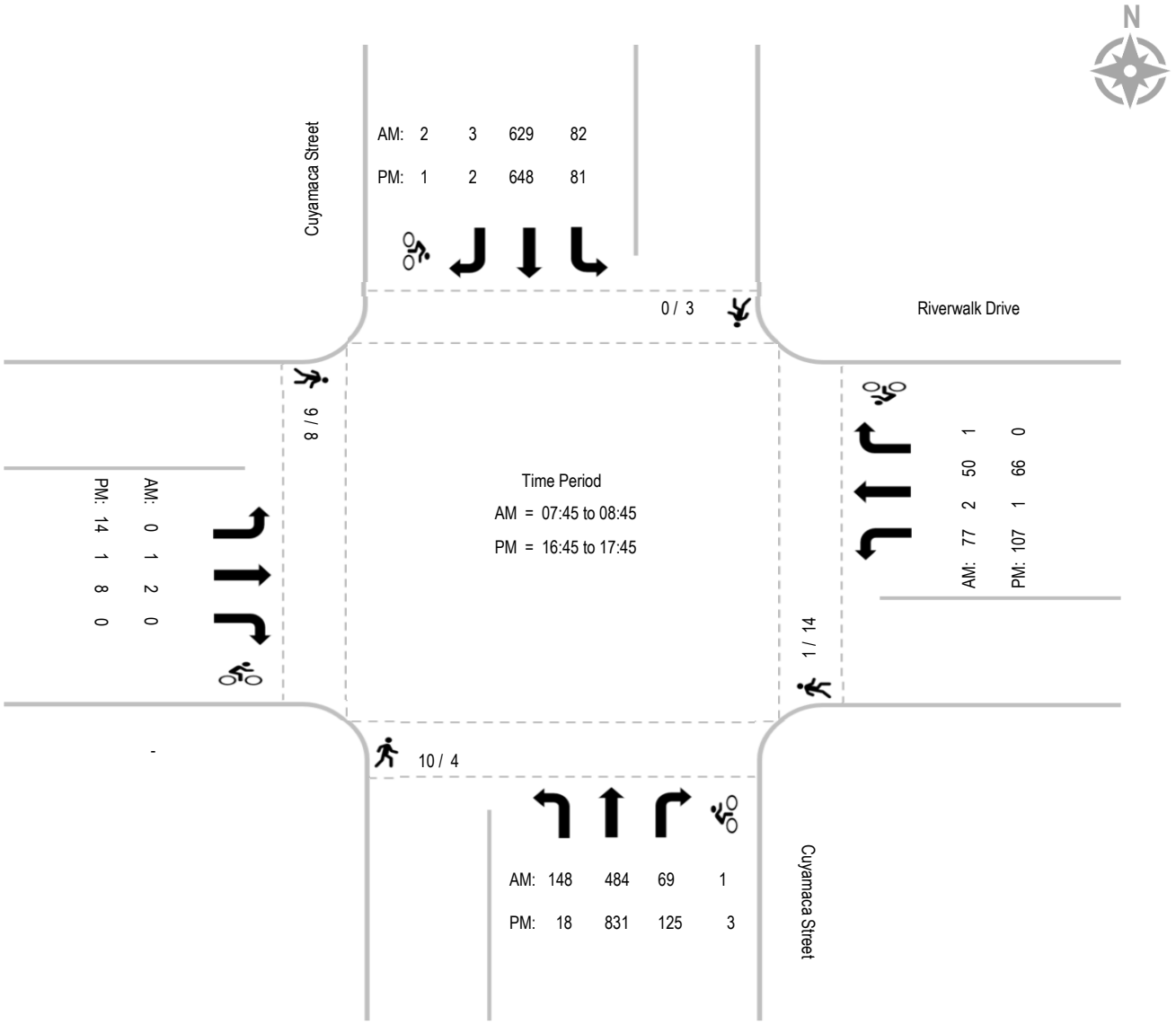
Location:	#04	File Name:	ITM-24-004-04
Intersection:	Cuyamaca Street & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Tuesday January 16, 2024		Santee Community Center

AM	Cuyamaca Street Southbound				Riverwalk Drive Westbound				Cuyamaca Street Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1
8:00	0	0	1	0	1	0	0	0	1	0	0	0	2	0	0	0	4	1
8:15	0	0	0	0	0	1	0	0	4	0	0	1	2	0	0	0	6	2
8:30	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Ped Total	0				1				10				9				20	
Bike Total		0	2	0		1	0	0		0	0	1		0	0	0		4

PM	Cuyamaca Street Southbound				Riverwalk Drive Westbound				Cuyamaca Street Northbound				- Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	1	0	0	0	0	0	4	0	0	0	2	0	0	0	6	1
16:15	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0
16:30	0	0	0	0	8	0	0	0	0	0	0	0	1	0	0	0	9	0
16:45	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
17:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
17:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
Ped Total	3				14				4				8				29	
Bike Total		0	1	0		0	0	0		0	2	1		0	0	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#04	File Name: ITM-24-004-04
	Intersection:	Cuyamaca Street & Riverwalk Drive	Project: LLG Ref. 3-22-3519
	Date of Count:	Tuesday January 16, 2024	Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-24-004-05
Intersection:	Verde Vista Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Verde Vista Lane Southbound			Riverwalk Drive Westbound			- Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	0	10	0	17	0	0	0	0	0	18	0	47
7:15	1	0	13	0	21	0	0	0	0	4	12	0	51
7:30	2	0	12	0	35	1	0	0	0	6	13	0	69
7:45	0	0	6	0	16	0	0	0	0	1	28	0	51
8:00	2	0	15	0	38	0	0	0	0	6	20	0	81
8:15	1	0	4	0	56	1	0	0	0	9	62	0	133
8:30	1	0	7	0	17	0	0	0	0	5	19	0	49
8:45	1	0	3	0	17	1	0	0	0	1	22	0	45
Total	10	0	70	0	217	3	0	0	0	32	194	0	526
Approach%	12.5	-	87.5	-	98.6	1.4	-	-	-	14.2	85.8	-	
Total%	1.9	-	13.3	-	41.3	0.6	-	-	-	6.1	36.9	-	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	5	-	37	-	145	2	-	-	-	22	123	-	334
Approach%	11.9	-	88.1	-	98.6	1.4	-	-	-	15.2	84.8	-	
Total%	1.5	-	11.1	-	43.4	0.6	-	-	-	6.6	36.8	-	
PHF			0.62			0.64			#DIV/0!			0.51	0.63

PM	Verde Vista Lane Southbound			Riverwalk Drive Westbound			- Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	0	4	0	39	0	0	0	0	7	32	0	83
16:15	2	0	6	0	17	1	0	0	0	14	47	0	87
16:30	1	0	7	0	27	4	0	0	0	13	30	0	82
16:45	1	0	4	0	35	0	0	0	0	12	38	0	90
17:00	1	0	5	0	32	1	0	0	0	9	26	0	74
17:15	2	0	3	0	28	1	0	0	0	9	38	0	81
17:30	4	0	9	0	32	2	0	0	0	15	20	0	82
17:45	2	0	4	0	36	4	0	0	0	6	37	0	89
Total	14	0	42	0	246	13	0	0	0	85	268	0	668
Approach%	25.0	-	75.0	-	95.0	5.0	-	-	-	24.1	75.9	-	
Total%	2.1	-	6.3	-	36.8	1.9	-	-	-	12.7	40.1	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	5	-	21	-	118	5	-	-	-	46	147	-	342
Approach%	19.2	-	80.8	-	95.9	4.1	-	-	-	23.8	76.2	-	
Total%	1.5	-	6.1	-	34.5	1.5	-	-	-	13.5	43.0	-	
PHF			0.81			0.79			#DIV/0!			0.79	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

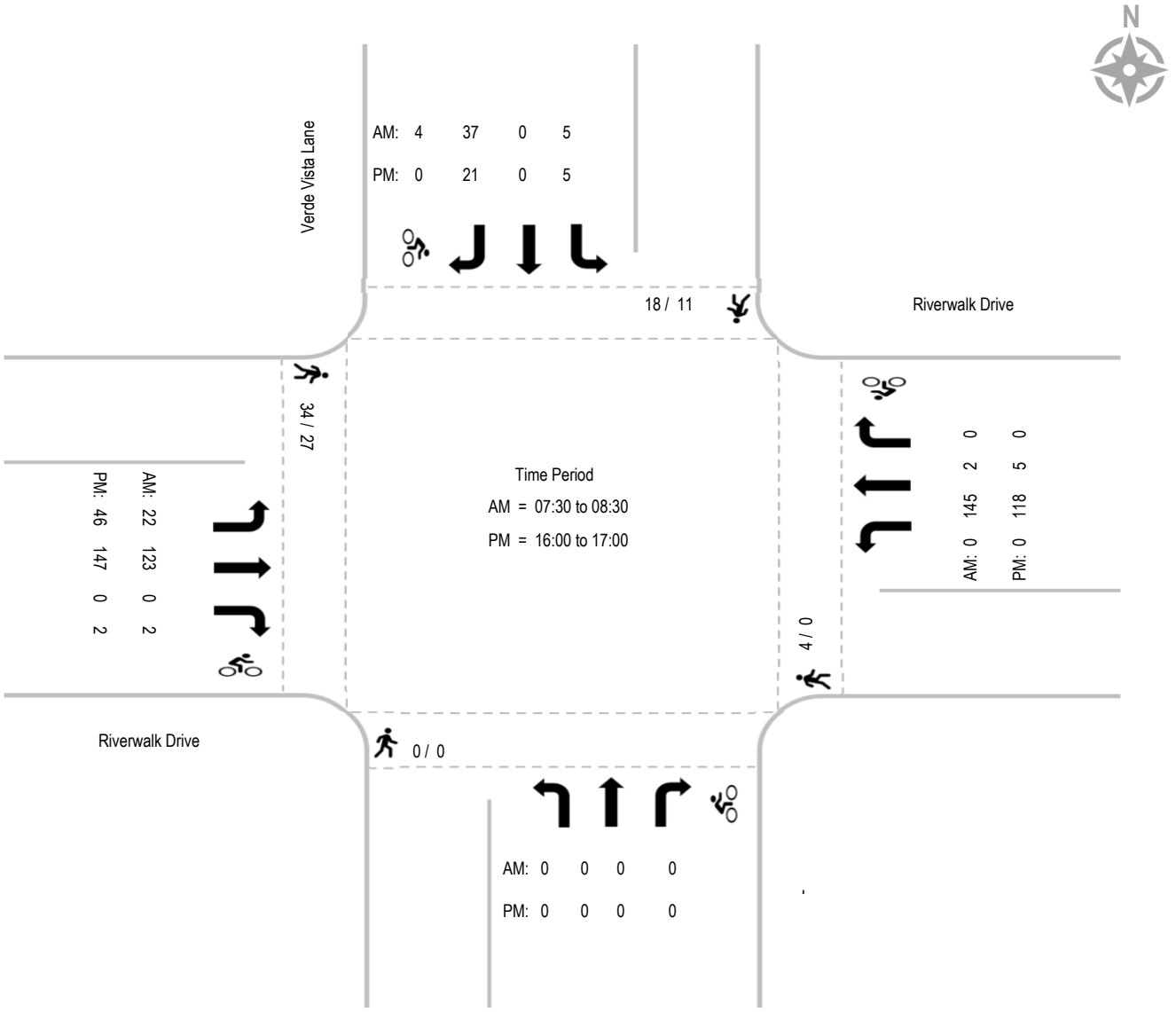
Location:	#05	File Name:	ITM-24-004-05
Intersection:	Verde Vista Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Verde Vista Lane Southbound				Riverwalk Drive Westbound				- Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7	0
7:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5	0
7:45	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0
8:00	2	0	0	3	4	0	0	0	0	0	0	0	7	0	0	0	13	3
8:15	6	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	19	1
8:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
8:45	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1
Ped Total	18				4				0				34				56	
Bike Total		0	0	4		0	0	0		0	0	0		1	1	0		6

PM	Verde Vista Lane Southbound				Riverwalk Drive Westbound				- Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:15	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0
16:30	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0
16:45	4	0	0	0	0	0	0	0	0	0	0	0	8	0	2	0	12	2
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0
Ped Total	11				0				0				27				38	
Bike Total		0	0	0		0	0	0		0	0	0		0	2	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#05	File Name:	ITM-24-004-05
	Intersection:	Verde Vista Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024		Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#06	File Name:	ITM-24-004-06
Intersection:	Canopy Park Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Canopy Park Lane Southbound			Riverwalk Drive Westbound			Canopy Park Lane Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	0	4	2	11	2	2	1	4	0	23	1	52
7:15	6	0	5	0	9	1	7	1	1	0	6	8	44
7:30	4	0	7	9	24	1	5	0	0	1	6	6	63
7:45	1	1	7	10	7	4	2	0	2	0	11	18	63
8:00	2	0	12	2	23	3	3	0	0	4	7	6	62
8:15	6	0	5	9	52	3	2	0	3	4	46	8	138
8:30	1	0	4	3	9	0	6	0	1	2	19	10	55
8:45	3	0	2	3	7	0	4	0	2	1	14	7	43
Total	25	1	46	38	142	14	31	2	13	12	132	64	520
Approach%	34.7	1.4	63.9	19.6	73.2	7.2	67.4	4.3	28.3	5.8	63.5	30.8	
Total%	4.8	0.2	8.8	7.3	27.3	2.7	6.0	0.4	2.5	2.3	25.4	12.3	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	13	1	31	30	106	11	12	-	5	9	70	38	326
Approach%	28.9	2.2	68.9	20.4	72.1	7.5	70.6	-	29.4	7.7	59.8	32.5	
Total%	4.0	0.3	9.5	9.2	32.5	3.4	3.7	-	1.5	2.8	21.5	11.7	
PHF			0.80			0.57			0.85			0.50	0.59

PM	Canopy Park Lane Southbound			Riverwalk Drive Westbound			Canopy Park Lane Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	0	3	10	13	2	22	1	2	3	18	17	93
16:15	2	1	1	1	11	3	9	0	6	1	21	23	79
16:30	5	0	4	4	17	5	9	0	4	8	17	11	84
16:45	5	0	5	8	18	4	12	0	3	9	15	14	93
17:00	1	0	7	4	16	7	10	0	7	3	16	10	81
17:15	3	0	7	6	10	3	13	0	3	8	13	13	79
17:30	0	0	3	6	24	5	5	1	2	3	14	11	74
17:45	7	1	4	3	28	1	9	0	5	8	18	12	96
Total	25	2	34	42	137	30	89	2	32	43	132	111	679
Approach%	41.0	3.3	55.7	20.1	65.6	14.4	72.4	1.6	26.0	15.0	46.2	38.8	
Total%	3.7	0.3	5.0	6.2	20.2	4.4	13.1	0.3	4.7	6.3	19.4	16.3	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	14	1	13	23	59	14	52	1	15	21	71	65	349
Approach%	50.0	3.6	46.4	24.0	61.5	14.6	76.5	1.5	22.1	13.4	45.2	41.4	
Total%	4.0	0.3	3.7	6.6	16.9	4.0	14.9	0.3	4.3	6.0	20.3	18.6	
PHF			0.70			0.80			0.68			0.87	0.94

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

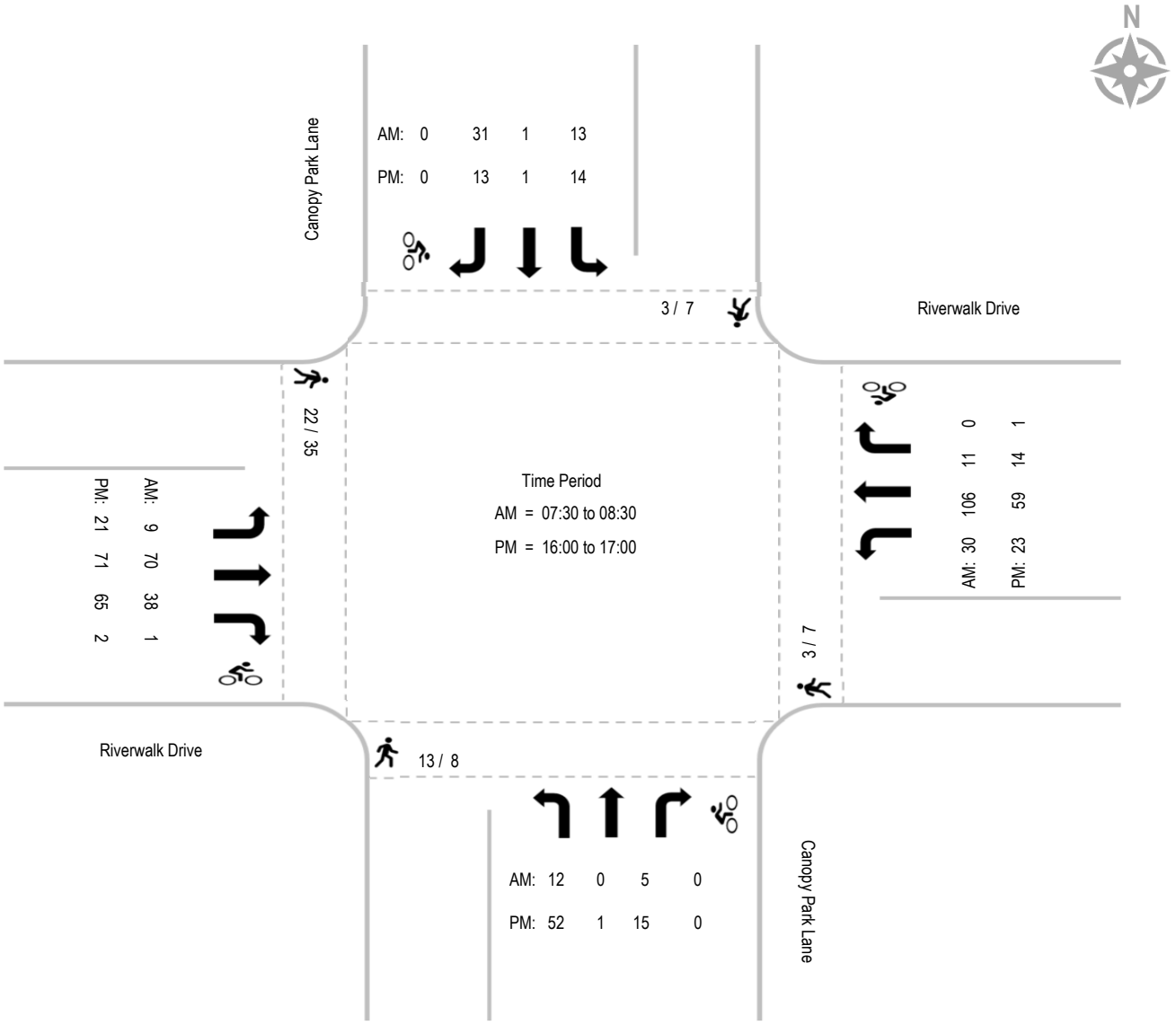
Location:	#06	File Name:	ITM-24-004-06
Intersection:	Canopy Park Lane & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Canopy Park Lane Southbound				Riverwalk Drive Westbound				Canopy Park Lane Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
7:15	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	4	0
7:30	0	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	5	0
7:45	0	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	6	0
8:00	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	7	0
8:15	1	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	8	0
8:30	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	6	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	2	1
Ped Total	3				3				13				22				41	
Bike Total		0	0	0		0	0	0		0	0	0		0	1	0		1

PM	Canopy Park Lane Southbound				Riverwalk Drive Westbound				Canopy Park Lane Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0
16:15	2	0	0	0	1	0	0	0	4	0	0	0	5	0	0	0	12	0
16:30	0	0	0	0	2	0	0	0	0	0	0	0	9	0	0	0	11	0
16:45	1	0	0	0	0	0	0	1	1	0	0	0	8	0	2	0	10	3
17:00	2	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	9	0
17:15	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	0
17:30	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
17:45	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	5	0
Ped Total	7				7				8				35				57	
Bike Total		0	0	0		0	0	1		0	0	0		0	2	0		3

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#06	File Name: ITM-24-004-06
	Intersection:	Canopy Park Lane & Riverwalk Drive	Project: LLG Ref. 3-22-3519
	Date of Count:	Wednesday January 10, 2024	Santee Community Center



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-24-004-07
Intersection:	Park Center Drive & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

AM	Park Center Drive Southbound			Riverwalk Drive Westbound			Park Center Drive Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	7	1	7	0	2	2	1	0	0	10	17	1	48
7:15	3	2	7	0	2	0	0	1	0	11	2	0	28
7:30	3	0	16	0	19	8	1	3	0	6	4	0	60
7:45	4	1	14	0	2	0	1	0	0	8	4	2	36
8:00	3	7	34	1	0	0	0	0	0	9	1	2	57
8:15	2	0	54	0	1	2	1	0	0	53	2	5	120
8:30	6	2	9	0	0	0	2	5	0	8	6	2	40
8:45	3	7	10	0	1	1	0	2	0	15	4	2	45
Total	31	20	151	1	27	13	6	11	0	120	40	14	434
Approach%	15.3	9.9	74.8	2.4	65.9	31.7	35.3	64.7	-	69.0	23.0	8.0	
Total%	7.1	4.6	34.8	0.2	6.2	3.0	1.4	2.5	-	27.6	9.2	3.2	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	12	8	118	1	22	10	3	3	-	76	11	9	273
Approach%	8.7	5.8	85.5	3.0	66.7	30.3	50.0	50.0	-	79.2	11.5	9.4	
Total%	4.4	2.9	43.2	0.4	8.1	3.7	1.1	1.1	-	27.8	4.0	3.3	
PHF			0.62			0.31			0.38			0.40	0.57

PM	Park Center Drive Southbound			Riverwalk Drive Westbound			Park Center Drive Northbound			Riverwalk Drive Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	2	17	0	4	5	1	2	0	19	0	2	53
16:15	0	7	14	0	2	7	0	4	0	25	1	2	62
16:30	0	4	16	0	5	3	3	1	0	22	0	3	57
16:45	0	13	24	0	2	1	4	8	0	18	0	3	73
17:00	0	2	16	0	5	10	5	7	0	20	0	4	69
17:15	1	3	21	0	0	0	1	2	0	17	1	4	50
17:30	3	6	24	0	1	1	6	7	0	14	0	0	62
17:45	0	11	27	1	4	2	1	3	0	23	2	7	81
Total	5	48	159	1	23	29	21	34	0	158	4	25	507
Approach%	2.4	22.6	75.0	1.9	43.4	54.7	38.2	61.8	-	84.5	2.1	13.4	
Total%	1.0	9.5	31.4	0.2	4.5	5.7	4.1	6.7	-	31.2	0.8	4.9	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	4	22	88	1	10	13	13	19	-	74	3	15	262
Approach%	3.5	19.3	77.2	4.2	41.7	54.2	40.6	59.4	-	80.4	3.3	16.3	
Total%	1.5	8.4	33.6	0.4	3.8	5.0	5.0	7.3	-	28.2	1.1	5.7	
PHF			0.75			0.40			0.62			0.72	0.81

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-24-004-07
Intersection:	Park Center Drive & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center

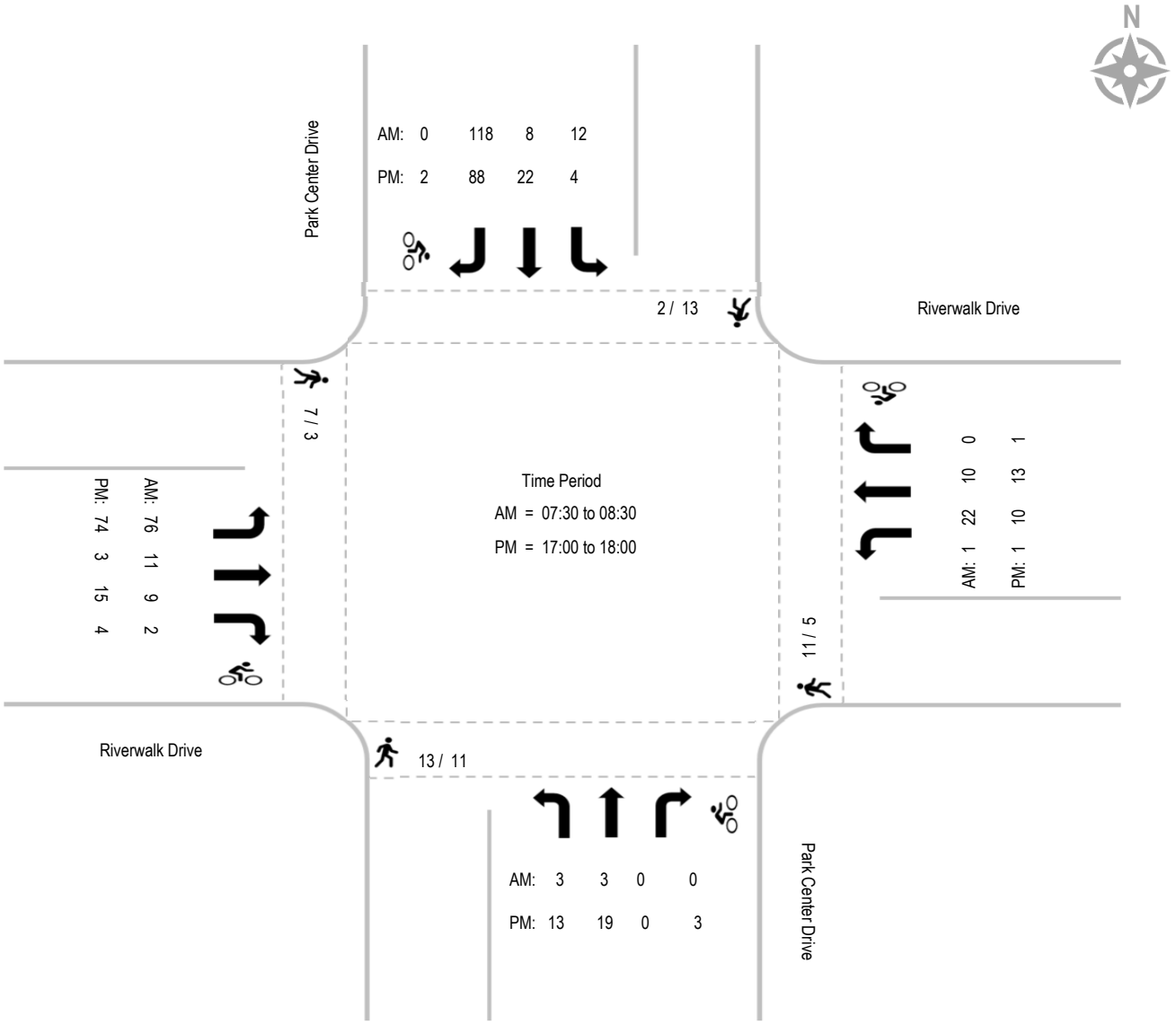
AM	Park Center Drive Southbound				Riverwalk Drive Westbound				Park Center Drive Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15	1	0	0	0	1	0	0	0	4	0	0	0	1	0	0	0	7	0
7:30	0	0	0	0	4	0	0	0	3	0	0	0	0	0	0	0	7	0
7:45	0	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0	8	0
8:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	5	0
8:30	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	3	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
Ped Total	2				11				13				7				33	
Bike Total		0	0	0		0	0	0		0	0	0		1	0	1		2

PM	Park Center Drive Southbound				Riverwalk Drive Westbound				Park Center Drive Northbound				Riverwalk Drive Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0
16:15	5	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	8	1
16:30	3	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	5	2
16:45	2	0	0	1	1	0	0	0	3	0	0	0	0	0	0	2	6	3
17:00	0	0	1	0	1	0	0	0	1	0	2	0	1	0	0	0	3	3
17:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
17:30	1	0	0	0	1	0	0	0	2	0	1	0	1	0	0	0	5	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	13				5				11				3				32	
Bike Total		0	1	1		0	1	0		0	3	0		2	0	2		10

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-24-004-07
Intersection:	Park Center Drive & Riverwalk Drive	Project:	LLG Ref. 3-22-3519
Date of Count:	Wednesday January 10, 2024		Santee Community Center



APPENDIX B

BUS ROUTE SCHEDULE AND MAP

Exact fare, please *Favor de pagar la cantidad exacta*

Fares *Tarifas*	**Adult** *Adulto*	**Senior/Disabled/ Medicare/Youth*** *Personas Mayores/con Discapacidades/Medicare/Jóvenes**
ONE-WAY FARES *Tarifas Sencillas*	**$2.50**	**$1.25**
EARNED DAY PASS *Pase del Día Ganado*	**$6.00**	**$3.00**
MONTH PASS *Pase mensual*	**$72.00**	**$23.00**

Load money into your PRONTO account to earn Day Passes and Month Passes. Tap your PRONTO card ($2) or scan your PRONTO mobile app (free) to ride. *Carga dinero a tu cuenta de PRONTO para ganar Pases del Día y Pases Mensuales. Toca tu tarjeta PRONTO ($2) o escanea tu aplicación móvil PRONTO (gratis) para viajar.*

- **One-ways with PRONTO receive free transfers for two hours. No free transfers for cash.** *Los viajes de ida con PRONTO reciben transbordes gratuitos por dos horas. No se permiten transbordes gratuitos con pagos en efectivo.*
- **Day Passes not sold in advance. Earned with PRONTO.** *Los pases diarios no se venden por adelantado. Se obtienen con PRONTO.*
- **A month pass can be purchased in advanced or earned with PRONTO. Good from first day to last day of the month.** *El Pase Mensual se puede comprar por adelantado o se obtiene mientras viaja con PRONTO. Válido desde el primer día hasta el último día del mes.*

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959. Youth Eligibility: Ages 6-18
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959. Elegibilidad para Jóvenes: edades 6-18*

For more information, visit: / *Para más información, visite:* **sdmts.com/fares**

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** **or/ó** **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** **or/ó** **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com.**

Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a ***sdmts.com.***

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective SEPTEMBER 1, 2021

832

Santee Town Center – North Santee

via Cuyamaca St. / Woodglen Vista Dr. / Magnolia Av.

DESTINATIONS
- Santana High School
- Santee Trolley Square
- Woodglen Vista Park

TROLLEY CONNECTIONS
- Santee Town Center

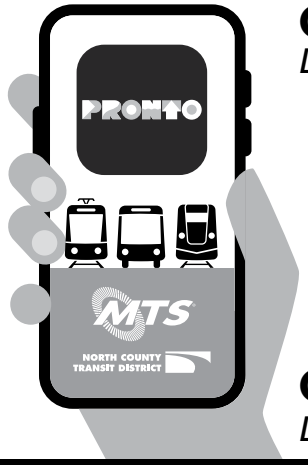
09/21

sdmts.com
Route Alerts, Updated Schedules, Connections & More

PRONTO

Always get the best fare!

¡Obtén siempre la mejor tarifa!



Get the Card.
Descarga la tarjeta.

Trolley ticket machines (cash, credit or debit)
Máquinas expendedoras de boletos (efectivo, tarjeta de crédito o debito)

Retail outlets
Establecimientos comerciales



Transit Store: 12th & Imperial Transit Center
Tienda Transit Store: Centro de Transporte 12th & Imperial

Get the app.
Descarga la aplicación.

Download on the App Store
GET IT ON Google Play

RidePRONTO.com

619-595-5636

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

Route 832 – Monday through Friday / *lunes a viernes*

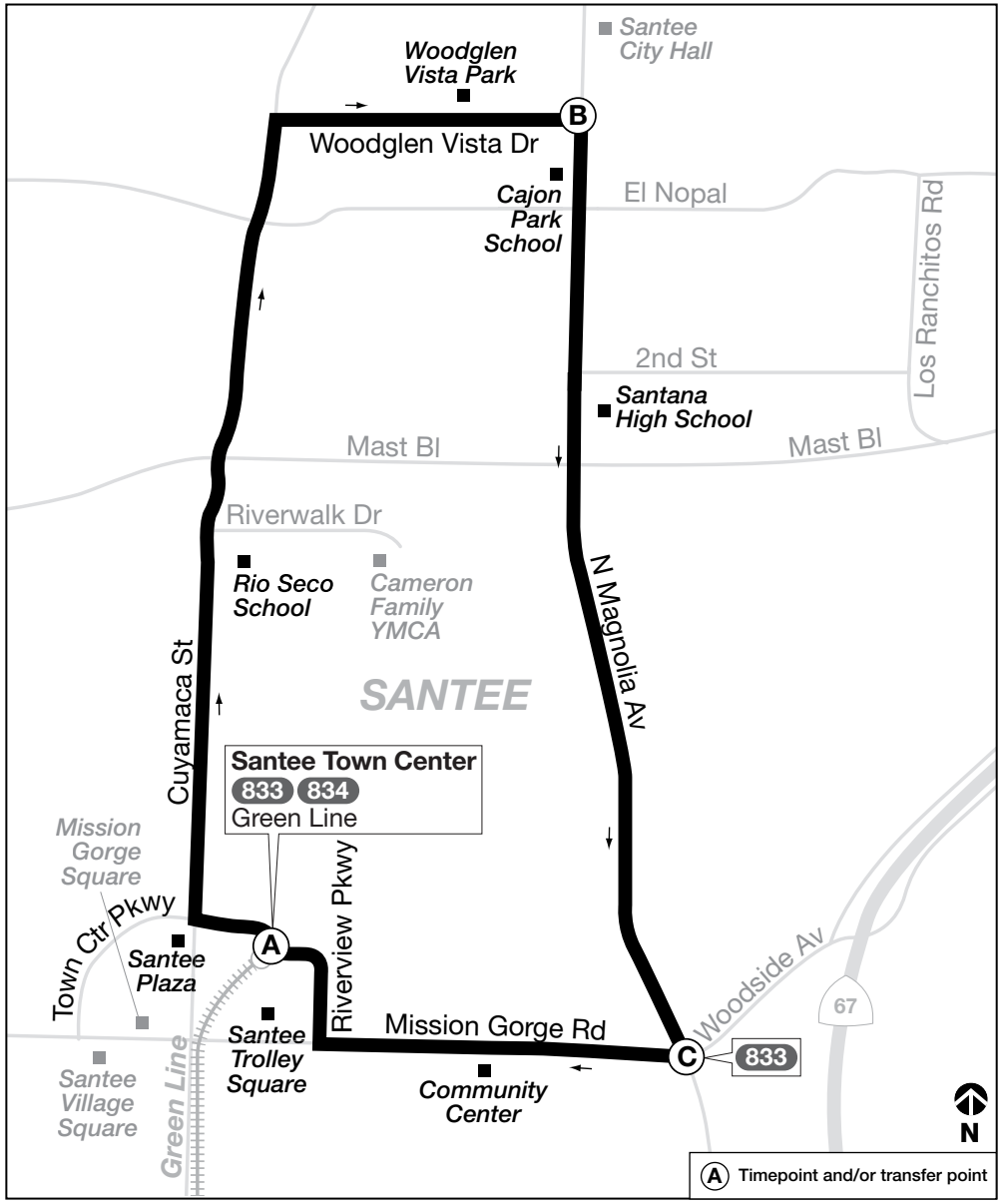
Santee Town Center ➡ North Santee ➡ Santee Town Center

Ⓐ Santee Town Center **DEPART**	Ⓑ Magnolia Av. & Woodglen Vista Dr.	Ⓒ Mission Gorge Rd. & Magnolia Av.	Ⓐ Santee Town Center **ARRIVE**
6:05a	6:14a	6:21a	6:24a
6:50	6:59	7:06	7:09
7:35	7:44	7:52	7:56
8:20	8:29	8:37	8:41
9:20	9:29	9:36	9:39
10:20	10:29	10:36	10:39
11:20	11:29	11:36	11:39
12:20p	**12:29p**	**12:36p**	**12:39p**
1:20	**1:29**	**1:37**	**1:41**
2:08	**2:17**	**2:25**	**2:29**
2:53	**3:02**	**3:10**	**3:14**
3:38	**3:47**	**3:55**	**3:59**
4:23	**4:32**	**4:39**	**4:42**
5:21	**5:30**	**5:37**	**5:40**
6:21	**6:30**	**6:37**	**6:40**
7:21	**7:30**	**7:37**	**7:40**

Route 832 – Saturday and Sunday / *sábado y domingo*

Santee Town Center ➡ North Santee ➡ Santee Town Center

	Ⓐ Santee Town Center **DEPART**	Ⓑ Magnolia Av. & Woodglen Vista Dr.	Ⓒ Mission Gorge Rd. & Magnolia Av.	Ⓐ Santee Town Center **ARRIVE**	
	8:21a	8:29a	8:36a	8:39a	**B**
	9:21	9:30	9:37	9:41	**B**
A	10:21	10:30	10:37	10:41	**B**
A	11:21	11:30	11:37	11:41	**B**
A	**12:21p**	**12:30p**	**12:37p**	**12:41p**	**B**
A	**1:21**	**1:30**	**1:37**	**1:41**	**B**
A	**2:21**	**2:30**	**2:37**	**2:41**	**B**
A	**3:21**	**3:30**	**3:37**	**3:41**	**B**
A	**4:21**	**4:30**	**4:37**	**4:41**	



A = Bus arrives from El Cajon as Route 833 and continues as Route 832. / *El Viaje llega de El Cajon como la ruta 833 y continua como la ruta 832.*
B = Bus continues as Route 833 to El Cajon. / *El viaje continua hacia El Cajon como la ruta 833.*

A Saturday/Sunday schedule will be operated on the following holidays and observed holidays
Se operará con horario de sábado/domingo durante los siguientes días festivos y feriados observados >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

FARES / *Tarifas*

Exact fare, please / *Favor de pagar la cantidad exacta*

Fares *Tarifas*	Adult *Adulto*	Senior/Disabled/ Medicare/Youth* *Personas Mayores/con Discapacidades/Medicare/ Jóvenes**
ONE-WAY FARES *Tarifas Sencillas*	**$2.50**	**$1.25**
EARNED DAY PASS *Pase del Día Ganado*	**$6.00**	**$3.00**
MONTH PASS *Pase mensual*	**$72.00**	**$23.00**
Child (5 and under) / *Niño (5 años o menos):* **FREE** / *GRATIS*		

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.*

For more information, visit: / *Para más información, visite:*

sdmts.com/fares

Load money into your PRONTO account to earn Day Passes and Month Passes. Tap your PRONTO card ($2) or scan your PRONTO mobile app (free) to ride. *Carga dinero a tu cuenta de PRONTO para ganar Pases del Día y Pases Mensuales. Toca tu tarjeta PRONTO ($2) o escanea tu aplicación móvil PRONTO (gratis) para viajar.*

- **One-ways with PRONTO receive free transfers for two hours. No free transfers for cash.** *Los viajes de ida con PRONTO reciben transbordes gratuitos por dos horas. No se permiten transbordes gratuitos con pagos en efectivo.*
- **Day Passes not sold in advance. Earned with PRONTO.** *Los pases diarios no se venden por adelantado. Se obtienen con PRONTO.*
- **A month pass can be purchased in advanced or earned with PRONTO. Good from first day to last day of the month.** *El Pase Mensual se puede comprar por adelantado o se obtiene mientras viaja con PRONTO. Válido desde el primer día hasta el último día del mes.*

TRANSIT FARE / *Tarifa de Transporte Público*

Tap or Scan, Every Time You Ride: Riders must tap their PRONTO card or scan their PRONTO mobile app at station validators every trip. It's the only way to earn a two hour free transfer, day and month passes.

Toca o Escanea Cada Vez que Viajes: *Los pasajeros deben tocar su tarjeta PRONTO o escanear la aplicación móvil PRONTO en validadores de estación antes de cada viaje. Es la única manera de ganar transbordes gratis por dos horas, pases del día y del mes.*

PRONTO Card: PRONTO cards cost $2 at ticket machines, retail outlets or the MTS Transit Store. At the time of purchase, riders will need to load a minimum value onto their PRONTO card ($3 at the Transit Store or ticket machine, $5 at retail outlets). Riders can reload money (or pre-pay for a Month Pass) instantly online at RidePRONTO.com, at ticket machines, retail outlets or the MTS Transit Store.



Tarjeta PRONTO: *Las Tarjetas PRONTO tienen un costo de $2 en las máquinas expendedoras de boletos, establecimientos comerciales o en la tienda MTS Transit Store. Al comprarla, los pasajeros deberán cargar un valor mínimo en su tarjeta PRONTO ($3 en la tienda Transit Store o en máquinas de boletos, $5 en establecimientos comerciales). Los pasajeros pueden recargar dinero (o comprar un pase mensual por adelantado) instantáneamente en línea en ridePRONTO.com, en máquinas de boletos, en establecimientos comerciales o en la tienda MTS Transit Store.*

Aplicación Móvil PRONTO: *La aplicación móvil PRONTO está disponible para descargar en teléfonos Apple y Android.*

PRONTO Mobile App: The PRONTO mobile app is available for download on Apple and Android phones.

Paga mientras viajas y Adquiere la Mejor Tarifa: *Gracias a una nueva función de limitación de tarifas, los pasajeros pueden cargar dinero en su cuenta PRONTO y pagar a su medida para obtener siempre la mejor tarifa. Carga dinero a tu tarjeta o aplicación móvil PRONTO, luego toca o escanea cada vez que viajes.*
Se deducirá una tarifa de viaje sencillo cada vez que toques o escanees, hasta alcanzar el valor de un Pase de Día o Mes. ¡Nunca pagarás más del valor de un Pase de un Día—$6 para adultos, $3 para Adultos Mayores/con Discapacidades/ Medicare (SDM, por sus siglas en inglés) y Jóvenes en un día, o el valor de un Pase Mensual ($72 para Adultos, $23 para SDM y Jóvenes) en un mes del calendario!

Pay-As-You-Go & Earn the Best Fare: Thanks to best fare capabilities, riders can load money to their PRONTO account and pay-as-they-go to always get the best fare! Load money onto your PRONTO card or mobile app, then tap or scan every time you ride.
A one-way fare will be deducted with each tap or scan, up to the value of a Day or Month Pass. You'll never pay more than the value of a Day Pass ($6 Adult, $3 Senior/Disabled/ Medicare and Youth), in a day, or the value of a Month Pass ($72 Adult, $23 SDM/Youth) in a calendar month.

Carga Dinero a PRONTO: *Los pasajeros pueden cargar dinero a su cuenta PRONTO a través de la aplicación móvil, en línea en ridePRONTO.com, en la tienda MTS Transit Store, en las máquinas expendedoras de boletos, en establecimientos comerciales, o teléfono* 619-595-5636. *(No está disponible cargar pases o dinero a cuentas PRONTO a bordo de los autobuses).*

Loading Money to PRONTO: Riders can load money to PRONTO through the mobile app, online at RidePRONTO.com, at the MTS Transit Store, ticket machines, participating retail outlets, or over the phone at 619-595-5636. (Loading passes or money to PRONTO on board buses is not available.)

Transbordes Gratis: *Con la tarjeta o la aplicación móvil PRONTO, las tarifas de viaje sencillo son válidas para transbordes ilimitados dentro de dos horas después de su activación. (Los pasajeros deben seguir tocando su tarjeta o escaneando la aplicación cada vez que aborden, pero no se les cobrará una tarifa dentro de las dos horas después del primer toque o escaneo).*

Free Transfers: With the PRONTO card or mobile app, one-way fares are valid for unlimited transfers within two hours of activation. (Riders should tap or scan their card or app every time they board, but they will not be charged for a fare within two hours of a previous tap or scan.)

Usando Efectivo: *Los pasajeros pueden comprar tarifas de viaje sencillo con efectivo en las máquinas de boletos y a bordo de autobuses. Sin embargo, las tarifas de viaje sencillo en efectivo no son elegibles para transbordes y no contribuyen hacia la ganancia de un Pase de Día o Mes.*

Using Cash: Riders can purchase one-way fares using cash at ticket machines and onboard buses. Cash one-way fares are not eligible for transfers, and do not contribute towards earning a Day Pass or Month Pass.

Reduced Fares: All PRONTO cards will look the same. Reduced fare designations (Senior, Disabled, Medicare, or Youth) are identified at the account level. Riders can have their PRONTO card or mobile app account switched to a reduced fare category by visiting the MTS Transit Store, or calling the PRONTO Support Team at 619-595-5636. Riders with a reduced fare must travel with proof of eligibility at all times. A PRONTO Photo ID card is encouraged, but not required (available at the Transit Store). Approved IDs include: Government-issue Photo ID with birth date (seniors), student school photo ID, Medicare card & Government Photo ID, California DMV Placard ID & Government Photo ID, California Senior ID card, MTS Senior/Disabled Photo ID, NCTD Senior/Disabled Photo ID. **Senior Eligibility: Age 65+ or born on or before September 1, 1959. Youth Eligibility: Age 18 & Under (kids five and under ride free).**

Tarifas Reducidas: *Todas las tarjetas PRONTO tendrán el mismo aspecto. Las designaciones de tarifas reducidas (SDM o Jóvenes) se identifican a nivel de cuenta. Los pasajeros pueden cambiar su tarjeta PRONTO o su cuenta de aplicación móvil a una categoría de tarifa reducida visitando la tienda MTS Transit Store o llamando al equipo de asistencia de PRONTO al 619-595-5636. Los pasajeros con tarifa reducida deben viajar con prueba de elegibilidad en todo momento. Se recomienda una tarjeta de identificación PRONTO con fotografía, pero no es obligatoria. Las identificaciones aprobadas incluyen: identificación con fotografía con fecha de nacimiento emitida por el gobierno (para personas mayores), identificación con fotografía de la escuela del estudiante, tarjeta de Medicare junto con una identificación gubernamental con fotografía, placa de discapacidad del DMV de California junto con identificación gubernamental con fotografía, tarjeta de identificación para personas mayores de California, identificación con fotografía para personas mayores/con discapacidades de MTS, identificación con fotografía para personas mayores/con discapacidades de NCTD.* ***Elegibilidad para Personas Mayores: mayores de 65 años o nacidos el 1 de septiembre de 1959 o antes. Elegibilidad para Jóvenes: menores de 18 años (los niños menores de cinco años viajan gratis).***

Scan for PRONTO information.
Escanea este código para ver información sobre PRONTO.
RidePRONTO.com

ACCESSIBLE SERVICE
Accesibilidad de los servicios

All Trolleys are equipped with ramps. Seats closest to the doors are reserved for senior and disabled riders.
Todos los Trolleys cuentan con rampas para sillas de ruedas. Los asientos más cercanos a las puertas están reservados por gentileza para pasajeros mayores o discapacitados.

ANIMALS / *Animales*

A trained service animal may accompany a rider with disabilities. Non-service animals must be in enclosed carriers and transported by passengers without the assistance of drivers or operators.
Se permite que un animal de servicio entrenado acompañe a un pasajero discapacitado. Los pasajeros deben transportar los animales que no sean de servicio en una jaula cerrada, sin ayuda de los conductores ni de los choferes.

BIKES / *Bicicletas*

On Trolleys with stairs, board at rear doors of each car. Board low-floor cars at any door. Stay with bike to keep it secure One bike is allowed per car during weekday rush hours, two bikes per car at all other times. MTS is not responsible for loss or damage to bicycles.
En los Trolleys con escaleras, aborde en las puertas traseras. Aborde los Trolleys de piso bajo en cualquiera puerta. Por seguridad, manténgase junto a la bicicleta En las horas pico durante la semana, sólo se admite una bicicleta por unidad. En otros tiempos, se admiten dos bicicletas. MTS no es responsable por el extravío o daño de bicicletas.

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / *Servicio al cliente*	**(619) 557-4555**
MTS Security / *Seguridad de MTS*	**(619) 595-4960**
PRONTO Support Center	**(619) 595-5636**
Lost & Found / *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060**

sdmts.com
Trip planning, route alerts, updated schedules, connections and more! *¡Planificación de viajes, alertas de ruta, horarios actualizados, conexiones y más!*

Alternative formats available upon request. Please call (619) 557-4555. *Formato alternativo disponible al preguntar. Favor de llamar (619) 557-4555*

Effective September 4, 2022

Trolley

UC San Diego Blue Line
San Ysidro ↔ America Plaza ↔ UTC

Orange Line
Arnele Ave. ↔ Courthouse (Downtown)

Green Line
Santee ↔ 12th & Imperial (Downtown)

Silver Line
Downtown San Diego Loop

MTS

10/23

Trolley System / *sistema de Trolley*



LEGEND

- Connecting Bus Routes — *Conexión de rutas de autobús*
- Rapid — Connecting *Rapid* Routes — *Conexión de rutas de Rapid*
- Amtrak and COASTER
- Service to Airport — *Transferencia al Aeropuerto*
- P — Parking (Free) — *Estacionamiento (Gratis)*
- $P — Pay Parking — *Estacionamiento de cuota*

DOWNTOWN DETAIL / *Detalle del centro*



PROMOTIONS & DISCOUNTS / *Promociones y descuentos*

Family Weekends / *Fines de semana para la familia*
Two children (12 and under) ride free Saturdays and Sundays with a fare-paying adult (18 or older).
Dos menores (de hasta 12 años) viajan gratis los sábados y domingos con sólo abonar la tarifa de un adulto (de 18 años o más).

Holiday Friends Ride Free / *Los días festivos, los amigos viajan gratis*
On New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, two people may ride any MTS bus or Trolley with one fare or pass.
En New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, y día de Navidad, dos personas pueden viajar en cualquier ruta de autobús o Trolley de MTS con un pase o pasaje.

RIDE ASSURED / *Viaje Tranquilo*

Contact MTS Security for issues of harassment, suspicious or illegal behavior.
Contáctenos en situaciones de hostigamiento y comportamiento sospechoso o ilegal.
Text (619) 318-1338
Call (619) 595-4960

CART POLICY / *Política de carritos*

YES / *Sí*

Smaller than 30" high, 18" wide, 18" deep
Menos de 30" de alto, 18" de ancho, 18" de grueso

Load does not exceed capacity
Carga no sobrepasa de capacidad



Can be loaded in a single trip
Se puede cargar en un solo viaje



Does not block aisle
No obstruye el pasillo



No more than two carry-on items
No más que dos piezas de equipaje de mano

More details on *Más detalles en* **sdmts.com**

NO / *No*

Larger than 30" high, 18" wide, 18" deep
Mayor de 30" de alto, 18" de ancho, 18" de grueso



Load exceeds capacity
Carga sobrepasa de capacidad



Cannot be loaded in a single trip
No se puede cargar en un solo viaje



Blocks aisle
Obstruye el pasillo



More than two carry-on items
Más que dos piezas de equipaje de mano



Bags of cans/ Leaking items
Bolsa de latas/ objetos goteando

Think **FAST**

Fun **A**nd **S**afe **T**ransit

sdmts.com/Think-FAST

Safety at the Station



Stay Behind the Line
Mantente Detrás de la Línea



No Jumping or Climbing between Trolleys
No Brincar o Escalar entre Trolleys



Stay Alert for Vehicles
Mantente Alerta para los Vehículos



Keep Off Tracks
Mantente Fuera de las Vías



Don't Chase a Moving Vehicle
No Persigas un Vehículo en Movimiento



Walk, Don't Ride
Bájate y Camina



Use Crosswalks
Usa los Cruces

Safety On Board



Always Hold On
Agárrate Siempre



Remain Seated
Permanece en tu Asiento



Keep Aisles Clear
Mantén Despejados los Pasillos



Don't Block Doors
Mantén las puertas despejadas



Pull Carts Behind You
Jala tu Carrito Detrás de Ti



Watch Your Step
Cuida Donde Pisas



Stay Awake
No te Duermas

UC San Diego Blue Line

Monday through Friday / *lunes a viernes*

SAN YSIDRO ➡ AMERICA PLAZA ➡ UTC

San Ysidro	Iris Avenue	H Street	8th Street	12th & Imperial	City College	America Plaza	Santa Fe Depot	Old Town	Balboa Avenue	UCSD Central Campus	UTC
—	—	—	—	4:23a	4:28a	4:34a	4:37a	4:46a	4:55a	5:06a	5:12a
—	—	—	—	4:38	4:43	4:49	4:52	5:01	5:10	5:21	5:27
—	4:26a	4:35a	4:43a	4:53	4:58	5:04	5:07	5:16	5:25	5:36	5:42
4:28a	4:35	4:44	4:52	5:02	5:07	5:13	—	—	—	—	—
4:34	4:41	4:50	4:58	5:08	5:13	5:19	5:22	5:31	5:40	5:51	5:57
4:43	4:50	4:59	5:07	5:17	5:22	5:28	—	—	—	—	—
4:49	4:56	5:05	5:13	5:23	5:28	5:34	5:37	5:46	5:55	6:06	6:12
AND THEN EVERY 6/9 & 15 MINUTES AT: / *Y LUEGO CADA 6/9 & 15 MINUTOS A LA:*											
:58	:05	:14	:22	:32	:37	:43	—	—	—	—	—
:04	:11	:20	:28	:38	:43	:49	:52	:01	:10	:21	:27
:13	:20	:29	:37	:47	:52	:58	—	—	—	—	—
:19	:26	:35	:43	:53	:58	:04	:07	:16	:25	:36	:42
:28	:35	:44	:52	:02	:07	:13	—	—	—	—	—
:34	:41	:50	:58	:08	:13	:19	:22	:31	:40	:51	:57
:43	:50	:59	:07	:17	:22	:28	—	—	—	—	—
:49	:56	:05	:13	:23	:28	:34	:37	:46	:55	:06	:12
UNTIL: / *HASTA:*											
7:49p	7:56p	8:05p	8:13p	8:23p	8:28p	8:34p	8:37p	8:46p	8:55p	9:06p	9:12p
7:58	8:05	8:14	8:22	8:32	8:37	8:43	—	—	—	—	—
8:04	8:11	8:20	8:28	8:38	8:43	8:49	8:52	9:01	9:10	9:21	9:27
8:13	8:20	8:29	8:37	8:47	8:52	8:58	—	—	—	—	—
8:19	8:26	8:35	8:43	8:53	8:58	9:04	9:07	9:16	9:25	9:36	9:42
8:34	8:41	8:50	8:58	9:08	9:13	9:19	9:22	9:31	9:40	9:51	9:57
8:49	8:56	9:05	9:13	9:23	9:28	9:34	—	—	—	—	—
9:04	9:11	9:20	9:28	9:38	9:43	9:49	9:52	10:01	10:10	10:21	10:27
9:19	9:26	9:35	9:43	9:53	9:58	10:04	—	—	—	—	—
9:34	9:41	9:50	9:58	10:08	10:13	10:19	10:22	10:31	10:40	10:51	10:57
9:49	9:56	10:05	10:13	10:23	10:28	10:34	—	—	—	—	—
10:04	10:11	10:20	10:28	10:38	10:43	10:49	10:52	11:01	11:10	11:21	11:27
10:19	10:26	10:35	10:43	10:53	10:58	11:04	—	—	—	—	—
10:34	10:41	10:50	10:58	11:08	11:13	11:19	11:22	11:31	11:40	11:51	11:57
10:49	10:56	11:05	11:13	11:23	11:28	11:34	—	—	—	—	—
11:04	11:11	11:20	11:28	11:38	11:43	11:49	—	—	—	—	—
11:19	11:26	11:35	11:43	11:53	11:58	12:04a	—	—	—	—	—
11:34	11:41	11:50	11:58	12:08a	12:13a	12:19	—	—	—	—	—
11:49	11:56	12:05a	12:13a	12:23	12:28	12:34	—	—	—	—	—
12:04a	12:11a	12:20	12:28	12:38	12:43	12:49	—	—	—	—	—
12:19	12:26	12:35	12:43	12:53	12:58	1:04	—	—	—	—	—
12:49	12:56	1:05	1:13	1:23	1:28	1:34	—	—	—	—	—

B = Trip begins at Barrio Logan Station six minutes earlier than time shown. / *Viaje comienza en la estación de Barrio Logan seis minutos antes del tiempo indicado.*

UTC ➡ AMERICA PLAZA ➡ SAN YSIDRO

UTC	UCSD Central Campus	Balboa Avenue	Old Town	Santa Fe Depot	America Plaza	City College	12th & Imperial	8th Street	H Street	Iris Avenue	San Ysidro
—	—	—	—	—	—	—	—	B 4:24a	4:32a	4:41a	4:48a
—	—	—	—	—	—	—	—	B 4:31	4:39	4:48	4:55
—	—	—	—	—	—	—	—	B 4:39	4:47	4:56	5:03
—	—	—	—	—	—	—	—	B 4:46	4:54	5:03	5:10
—	—	—	—	—	—	—	—	B 4:54	5:02	5:11	5:18
—	—	—	—	—	—	—	—	B 5:01	5:09	5:18	5:25
—	—	—	—	—	4:48a	4:54a	5:00a	5:09	5:17	5:26	5:33
—	—	—	—	—	—	—	—	B 5:16	5:14	5:33	5:40
—	—	—	—	—	5:03	5:09	5:15	5:24	5:32	5:41	5:48
—	—	—	—	—	5:10	5:16	5:22	5:31	5:39	5:48	5:55
—	—	—	—	—	5:18	5:24	5:30	5:39	5:47	5:56	6:03
—	—	5:04a	5:13a	5:22a	5:25	5:31	5:37	5:46	5:54	6:03	6:10
—	—	—	—	—	5:33	5:39	5:45	5:54	6:02	6:11	6:18
5:03a	5:09a	5:19	5:28	5:37	5:40	5:46	5:52	6:01	6:09	6:18	6:25
AND THEN EVERY 7/8 & 15 MINUTES AT: / *Y LUEGO CADA 7/8 & 15 MINUTOS A LA:*											
—	—	—	—	—	:48	:54	:00	:09	:17	:26	:33
:18	:24	:34	:43	:52	:55	:01	:07	:16	:24	:33	:40
—	—	—	—	—	:03	:09	:15	:24	:32	:41	:48
:33	:39	:49	:58	:07	:10	:16	:22	:31	:39	:48	:55
—	—	—	—	—	:18	:24	:30	:39	:47	:56	:03
:48	:54	:04	:13	:22	:25	:31	:37	:46	:54	:03	:10
—	—	—	—	—	:33	:39	:45	:54	:02	:11	:18
:03	:09	:19	:28	:37	:40	:46	:52	:01	:09	:18	:25
UNTIL: / *HASTA:*											
7:18p	7:24p	7:34p	7:43p	7:52p	7:55p	8:01p	8:07p	8:16p	8:24p	8:33p	8:40p
7:33	7:39	7:49	7:58	8:07	8:10	8:16	8:22	8:31	8:39	8:48	8:55
7:48	7:54	8:04	8:13	8:22	8:25	8:31	8:37	8:46	8:54	9:03	9:10
8:03	8:09	8:19	8:28	8:37	8:40	8:46	8:52	9:01	9:09	9:18	9:25
8:18	8:24	8:34	8:43	8:52	8:55	9:01	9:07	9:16	9:24	9:33	9:40
8:33	8:39	8:49	8:58	9:07	9:10	9:16	9:22	9:31	9:39	9:48	9:55
8:48	8:54	9:04	9:13	9:22	9:25	9:31	9:37	9:46	9:54	10:03	10:10
9:03	9:09	9:19	9:28	9:37	9:40	9:46	9:52	10:01	10:09	10:18	10:25
9:18	9:24	9:34	9:43	9:52	9:55	10:01	10:07	10:16	10:24	10:33	10:40
9:33	9:39	9:49	9:58	10:07	10:10	10:16	10:22	10:31	10:39	10:48	10:55
9:48	9:54	10:04	10:13	10:22	10:25	10:31	10:37	10:46	10:54	11:03	11:10
10:03	10:09	10:19	10:28	10:37	10:40	10:46	10:52	11:01	11:09	11:18	11:25
10:18	10:24	10:34	10:43	10:52	10:55	11:01	11:07	11:16	11:24	11:33	11:40
—	—	—	—	—	11:10	11:16	11:22	11:31	11:39	11:48	11:55
10:48	10:54	11:04	11:13	11:22	11:25	11:31	11:37	11:46	11:54	12:03a	12:10a
11:18	11:24	11:34	11:43	11:52	11:55	12:01a	12:07a	12:16a	12:24a	12:33	12:40
11:48	11:54	12:04a	12:13a	12:22a	12:25a	12:31	12:37	—	—	—	—
12:18a	12:24a	12:34	12:43	12:52	12:55	1:01	1:07	—	—	—	—

Saturday & Sunday / *sábado & domingo*

SAN YSIDRO ➡ AMERICA PLAZA ➡ UTC

San Ysidro	Iris Avenue	H Street	8th Street	12th & Imperial	City College	America Plaza	Santa Fe Depot	Old Town	Balboa Avenue	UCSD Central Campus	UTC
—	—	—	—	—	—	—	4:52a	5:01a	5:10a	5:21a	5:27a
—	—	—	—	4:53a	4:58a	5:04a	5:07	5:16	5:25	5:36	5:42
4:34a	4:41a	4:50a	4:58a	5:08	5:13	5:19	5:22	5:31	5:40	5:51	5:57
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*											
:49	:56	:05	:13	:23	:28	:34	:37	:46	:55	:06	:12
:04	:11	:20	:28	:38	:43	:49	:52	:01	:10	:21	:27
:19	:26	:35	:43	:53	:58	:04	:07	:16	:25	:36	:42
:34	:41	:50	:58	:08	:13	:19	:22	:31	:40	:51	:57
UNTIL: / *HASTA:*											
7:34p	7:41p	7:50p	7:58p	8:08p	8:13p	8:19p	8:22p	8:31p	8:40p	8:51p	8:57p
7:49	7:56	8:05	8:13	8:23	8:28	8:34	—	—	—	—	—
8:04	8:11	8:20	8:28	8:38	8:43	8:49	8:52	9:01	9:10	9:21	9:27
8:19	8:26	8:35	8:43	8:53	8:58	9:04	—	—	—	—	—
8:34	8:41	8:50	8:58	9:08	9:13	9:19	9:22	9:31	9:40	9:51	9:57
8:49	8:56	9:05	9:13	9:23	9:28	9:34	—	—	—	—	—
9:04	9:11	9:20	9:28	9:38	9:43	9:49	9:52	10:01	10:10	10:21	10:27
9:19	9:26	9:35	9:43	9:53	9:58	10:04	—	—	—	—	—
9:34	9:41	9:50	9:58	10:08	10:13	10:19	10:22	10:31	10:40	10:51	10:57
9:49	9:56	10:05	10:13	10:23	10:28	10:34	—	—	—	—	—
10:04	10:11	10:20	10:28	10:38	10:43	10:49	10:52	11:01	11:10	11:21	11:27
10:19	10:26	10:35	10:43	10:53	10:58	11:04	—	—	—	—	—
10:34	10:41	10:50	10:58	11:08	11:13	11:19	11:22	11:31	11:40	11:51	11:57
10:49	10:56	11:05	11:13	11:23	11:28	11:34	—	—	—	—	—
11:04	11:11	11:20	11:28	11:38	11:43	11:49	—	—	—	—	—
11:19	11:26	11:35	11:43	11:53	11:58	12:04a	—	—	—	—	—
11:34	11:41	11:50	11:58	12:08a	12:13a	12:19	—	—	—	—	—
11:49	11:56	12:05a	12:13a	12:23	12:28	12:34	—	—	—	—	—
12:04a	12:11a	12:20	12:28	12:38	12:43	12:49	—	—	—	—	—
12:19	12:26	12:35	12:43	12:53	12:58	1:04	—	—	—	—	—
12:49	12:56	1:05	1:13	1:23	1:28	1:34	—	—	—	—	—

UTC ➡ AMERICA PLAZA ➡ SAN YSIDRO

UTC	UCSD Central Campus	Balboa Avenue	Old Town	Santa Fe Depot	America Plaza	City College	12th & Imperial	8th Street	H Street	Iris Avenue	San Ysidro
—	—	—	—	—	—	—	—	B 4:31a	4:39a	4:48a	4:55a
—	—	—	—	—	—	—	—	B 4:46	4:54	5:03	5:10
—	—	—	—	—	—	—	—	B 5:01	5:09	5:18	5:25
—	—	—	—	—	4:55a	5:01a	5:07a	5:16	5:24	5:33	5:40
—	—	—	—	—	5:10	5:16	5:22	5:31	5:39	5:48	5:55
—	—	5:04a	5:13a	5:22a	5:25	5:31	5:37	5:46	5:54	6:03	6:10
5:03a	5:09a	5:19	5:28	5:37	5:40	5:46	5:52	6:01	6:09	6:18	6:25
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*											
:18	:24	:34	:43	:52	:55	:01	:07	:16	:24	:33	:40
:33	:39	:49	:58	:07	:10	:16	:22	:31	:39	:48	:55
:48	:54	:04	:13	:22	:25	:31	:37	:46	:54	:03	:10
:03	:09	:19	:28	:37	:40	:46	:52	:01	:09	:18	:25
UNTIL: / *HASTA:*											
9:18p	9:24p	9:34p	9:43p	9:52p	9:55p	10:01p	10:07p	10:16p	10:24p	10:33p	10:40p
—	—	—	—	—	10:10	10:16	10:22	10:31	10:39	10:48	10:55
9:48	9:54	10:04	10:13	10:22	10:25	10:31	10:37	10:46	10:54	11:03	11:10
—	—	—	—	—	10:40	10:46	10:52	11:01	11:09	11:18	11:25
10:18	10:24	10:34	10:43	10:52	10:55	11:01	11:07	11:16	11:24	11:33	11:40
—	—	—	—	—	11:10	11:16	11:22	11:31	11:39	11:48	11:55
10:48	10:54	11:04	11:13	11:22	11:25	11:31	11:37	11:46	11:54	12:03a	12:10a
11:18	11:24	11:34	11:43	11:52	11:55	12:01a	12:07a	12:16a	12:24a	12:33	12:40
11:48	11:54	12:04a	12:13a	12:22a	12:25a	12:31	12:37	—	—	—	—
12:18a	12:24a	12:34	12:43	12:52	12:55	1:01	1:07	—	—	—	—

B = Trip begins at Barrio Logan Station six minutes earlier than time shown. / *Viaje comienza en la estación de Barrio Logan seis minutos antes del tiempo indicado.*

Orange Line

Monday through Friday / *lunes a viernes*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
—	—	—	—	D 4:58a	5:12a	5:17a	5:23a
4:45a	4:48a	4:54a	5:00a	5:13	5:27	5:32	5:38
5:00	5:03	5:09	5:15	5:28	5:42	5:47	5:53
5:15	5:18	5:24	5:30	5:43	5:57	6:02	6:08
5:30	5:33	5:39	5:45	5:58	6:12	6:17	6:23
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:00	6:03	6:09	6:15	6:28	6:42	6:47	6:53
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:30	6:33	6:39	6:45	6:58	7:12	7:17	7:23
—	—	—	6:53	7:06	7:20	7:25	—
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
—	—	—	7:08	7:21	7:35	7:40	—
7:00	7:03	7:09	7:15	7:28	7:42	7:47	7:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
8:15p	8:18p	8:24p	8:30p	8:43p	8:57p	9:02p	9:08p
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a
11:45	11:48	11:54	12:00a	12:13a	12:27a	12:27	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	E 4:09a	4:23a	4:29a	4:36a	4:38a
—	—	—	E 4:24	4:38	4:44	4:51	4:53
—	—	—	E 4:39	4:53	4:59	5:06	5:08
—	—	—	E 4:54	5:08	5:14	5:21	5:23
—	—	—	E 5:09	5:23	5:29	5:36	5:38
5:00a	5:05a	5:11a	5:24	5:38	5:44	5:51	5:53
5:15	5:20	5:26	5:39	5:53	5:59	6:06	6:08
5:30	5:35	5:41	5:54	6:08	6:14	6:21	6:23
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:00	6:05	6:11	6:24	6:38	6:44	6:51	6:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
7:15p	7:20p	7:26p	7:39p	7:53p	7:59p	8:06p	8:08p
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:15	10:20	10:26	10:39	10:53	10:59	11:06	11:08
10:45	10:50	10:56	11:09	11:23	11:29	11:36	11:38
11:15	11:20	11:26	11:39	11:53	11:59	12:06a	12:08a
11:45	11:50	11:56	12:09a	12:23a	12:29a	12:36	12:38

Saturday / *sábado*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
5:15a	5:18a	5:24a	5:30a	5:43a	5:57a	6:02a	6:08a
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
—	—	—	—	—	7:42	7:47	7:53
7:15	7:18	7:24	7:30	7:43	7:57	8:02	8:08
7:30	7:33	7:39	7:45	7:58	8:12	8:17	8:23
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:00	8:03	8:09	8:15	8:28	8:42	8:47	8:53
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:30	8:33	8:39	8:45	8:58	9:12	9:17	9:23
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:00	9:03	9:09	9:15	9:28	9:42	9:47	9:53
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:30	9:33	9:39	9:45	9:58	10:12	10:17	10:23
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:00	10:03	10:09	10:15	10:28	10:42	10:47	10:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
7:15p	7:18p	7:24p	7:30p	7:43p	7:57p	8:02p	8:08p
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a
11:45	11:48	11:54	12:00a	12:13a	12:27a	12:32	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	E 4:39a	4:53a	4:59a	5:06a	5:08a
—	—	—	E 5:09	5:23	5:29	5:36	5:38
5:15a	5:20a	5:26a	5:39	5:53	5:59	6:06	6:08
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:15	6:20	6:26	6:39	6:53	6:59	7:06	7:08
—	—	—	E 6:54	7:08	7:14	7:21	7:23
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
—	—	—	E 7:24	7:38	7:44	7:51	7:53
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
—	—	—	E 7:54	8:08	8:14	8:21	8:23
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:00	8:05	8:11	8:24	8:38	8:44	8:51	8:53
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:30	8:35	8:41	8:54	9:08	9:14	9:21	9:23
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:00	9:05	9:11	9:24	9:38	9:44	9:51	9:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
6:15p	6:20p	6:26p	6:39p	6:53p	6:59p	7:06p	7:08p
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:15	10:20	10:26	10:39	10:53	10:59	11:06	11:08
10:45	10:50	10:56	11:09	11:23	11:29	11:36	11:38
11:15	11:20	11:26	11:39	11:53	11:59	12:06a	12:08a
11:45	11:50	11:56	12:09a	12:23a	12:29a	12:36	12:38

Sunday / *domingo*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
5:15a	5:18a	5:24a	5:30a	5:43a	5:57a	6:02a	6:08a
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
7:15	7:18	7:24	7:30	7:43	7:57	8:02	8:08
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
—	—	—	—	—	9:42	9:47	9:53
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
—	—	—	—	—	10:12	10:17	10:23
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
—	—	—	—	—	10:42	10:47	10:53
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
—	—	—	—	—	11:12	11:17	11:23
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:00	11:03	11:09	11:15	11:28	11:42	11:47	11:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
7:15p	7:18p	7:24p	7:30p	7:43p	7:57p	8:02p	8:08p
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	E 4:39a	4:53a	4:59a	5:06a	5:08a
—	—	—	E 5:09	5:23	5:29	5:36	5:38
5:15a	5:20a	5:26a	5:39	5:53	5:59	6:06	6:08
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:15	6:20	6:26	6:39	6:53	6:59	7:06	7:08
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:00	10:05	10:11	10:24	10:38	10:44	10:51	10:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
6:15p	6:20p	6:26p	6:39p	6:53p	6:59p	7:06p	7:08p
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:15	10:20	10:26	10:39	10:53	10:59	11:06	11:08

E = Trip begins at 25th & Commercial Station ten minutes earlier than time show. / *Este viaje comienza diez minutos antes del tiempo indicado en la estacion de 25th & Commercial.*
D = Trip begins at Encanto/62nd Street Station three minutes earlier than time show. / *Este viaje comienza tres minutos antes del tiempo indicado en la estacion deEncanto/62nd Street.*

Green Line

Monday through Friday / *lunes a viernes*

SANTEE ➡ DOWNTOWN

Santee	El Cajon	Grossmont	SDSU	Stadium	Fashion Valley	Old Town	Santa Fe Depot	12th & Imperial
—	—	—	—	—	—	4:52a	5:01a	5:08a
—	—	—	—	4:52a	5:01a	5:07	5:16	5:23
—	—	—	—	—	—	5:22	5:31	5:38
—	—	—	—	5:22	5:31	5:37	5:46	5:53
5:03a	5:14a	5:20a	5:29a	5:37	5:46	5:52	6:01	6:08
5:18	5:29	5:35	5:44	5:52	6:01	6:07	6:16	6:23
5:33	5:44	5:50	5:59	6:07	6:16	6:22	6:31	6:38
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:48	:59	:05	:14	:22	:31	:37	:46	:53
:03	:14	:20	:29	:37	:46	:52	:01	:08
:18	:29	:35	:44	:52	:01	:07	:16	:23
:33	:44	:50	:59	:07	:16	:22	:31	:38
UNTIL: / *HASTA:*								
8:48p	8:59p	9:05p	9:14p	9:22p	9:31p	9:37p	9:46p	9:53p
9:18	9:29	9:35	9:44	9:52	10:01	10:07	10:16	10:23
9:48	9:59	10:05	10:14	10:22	10:31	10:37	10:46	10:53
10:18	10:29	10:35	10:44	10:52	11:01	11:07	11:16	11:23
10:48	10:59	11:05	11:14	11:22	11:31	11:37	11:46	11:53
—	—	—	11:29	11:37	11:46	11:52	12:01a	12:08a
11:18	11:29	11:35	11:44	11:52	12:01a	12:07a	12:16	12:23
—	—	—	11:59	12:07a	12:16	12:22	12:31	12:38
—	—	—	12:29a	12:37	12:46	12:52	1:01	1:08

DOWNTOWN ➡ SANTEE

12th & Imperial	Santa Fe Depot	Old Town	Fashion Valley	Stadium	SDSU	Grossmont	El Cajon	Santee
—	H 3:58a	4:07a	4:13a	4:22a	4:30a	4:39a	4:46a	4:57a
—	H 4:13	4:22	4:28	4:37	4:45	4:54	5:01	5:12
—	H 4:28	4:37	4:43	4:52	5:00	5:09	5:16	5:27
—	H 4:43	4:52	4:58	5:07	5:15	5:24	5:31	5:42
—	H 4:58	5:07	5:13	5:22	5:30	5:39	5:46	5:57
5:06a	5:13	5:22	5:28	5:37	5:45	5:54	6:01	6:12
5:21	5:28	5:37	5:43	5:52	6:00	6:09	6:16	6:27
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	:30	:39	:46	:57
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	:00	:09	:16	:27
UNTIL: / *HASTA:*								
7:36p	7:43p	7:52p	7:58p	8:07p	8:15p	8:24p	8:31p	8:42p
8:06	8:13	8:22	8:28	8:37	8:45	8:54	9:01	9:12
8:36	8:43	8:52	8:58	9:07	9:15	9:24	9:31	9:42
9:06	9:13	9:22	9:28	9:37	9:45	9:54	10:01	10:12
9:36	9:43	9:52	9:58	10:07	10:15	10:24	10:31	10:42
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:36	10:43	10:52	10:58	11:07	11:15	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	—	—	—
11:36	11:43	11:52	11:58	12:07a	12:15a	—	—	—

Saturday / *sábado*

SANTEE ➡ DOWNTOWN

Santee	El Cajon	Grossmont	SDSU	Stadium	Fashion Valley	Old Town	Santa Fe Depot	12th & Imperial
—	—	—	—	4:52a	5:01a	5:07a	5:16a	5:23a
—	—	—	—	5:22	5:31	5:37	5:46	5:53
5:18a	5:29a	5:35a	5:44a	5:52	6:01	6:07	6:16	6:23
5:48	5:59	6:05	6:16	6:22	6:31	6:37	6:46	6:53
—	—	—	—	6:37	6:46	6:52	7:01	7:08
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:18	:29	:35	:44	:52	:01	:07	:16	:23
—	—	—	—	:07	:16	:22	:31	:38
:48	:59	:05	:14	:22	:31	:37	:46	:53
—	—	—	—	:37	:46	:52	:01	:08
UNTIL: / *HASTA:*								
11:18	11:29	11:35	11:44	11:52	12:01p	12:07p	12:16p	12:23p
11:33	11:44	11:50	11:59	12:07p	12:16	12:22	12:31	12:38
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:48	:59	:05	:14	:22	:31	:37	:46	:53
:03	:14	:20	:29	:37	:46	:52	:01	:08
:18	:29	:35	:44	:52	:01	:07	:16	:23
:33	:44	:50	:59	:07	:16	:22	:31	:38
UNTIL: / *HASTA:*								
7:48p	7:59p	8:05p	8:14p	8:22	8:31	8:37	8:46	8:53
8:18	8:29	8:35	8:44	8:52	9:01	9:07	9:16	9:23
8:48	8:59	9:05	9:14	9:22	9:31	9:37	9:46	9:53
9:18	9:29	9:35	9:44	9:52	10:01	10:07	10:16	10:23
9:48	9:59	10:05	10:14	10:22	10:31	10:37	10:46	10:53
10:18	10:29	10:35	10:44	10:52	11:01	11:07	11:16	11:23
10:48	10:59	11:05	11:14	11:22	11:31	11:37	11:46	11:53
—	—	—	11:29	11:37	11:46	11:52	12:01a	12:08a
11:18	11:29	11:35	11:44	11:52	12:01a	12:07a	12:16	12:23
—	—	—	11:59	12:07a	12:16	12:22	12:31	12:38
—	—	—	12:29a	12:37	12:46	12:52	1:01	1:08

H = Trip begins at Gaslamp Quarter Station five minutes earlier than time show. / Este viaje comienza cinco minutos antes del tiempo indicado en la estacion de Gaslamp Quarter.

DOWNTOWN ➡ SANTEE

12th & Imperial	Santa Fe Depot	Old Town	Fashion Valley	Stadium	SDSU	Grossmont	El Cajon	Santee
—	H 4:13a	4:22a	4:28a	4:37a	4:45a	4:54a	5:01a	5:12a
—	H 4:43	4:52	4:58	5:07	5:15	5:24	5:31	5:42
5:06a	5:13	5:22	5:28	5:37	5:45	5:54	6:01	6:12
5:36	5:43	5:52	5:58	6:07	6:15	6:24	6:31	6:42
5:51	5:58	6:07	6:13	6:22	—	—	—	—
6:06	6:13	6:22	6:28	6:37	6:45	6:54	7:01	7:12
AND THEN EVERY 15-30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:21	:28	:37	:43	:52	—	—	—	—
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	—	—	—	—
:06	:13	:22	:28	:37	:45	:54	:01	:12
UNTIL: / *HASTA:*								
10:21	10:28	10:37	10:43	10:52	11:00	11:09	11:16	11:27
10:36	10:43	10:52	10:58	11:07	11:15	11:24	11:31	11:42
10:51	10:58	11:07	11:13	11:22	11:30	11:39	11:46	11:57
11:06	11:13	11:22	11:28	11:37	11:45	11:54	12:01p	12:12p
11:21	11:28	11:37	11:43	11:52	12:00p	12:09p	12:16	12:27
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	:30	:39	:46	:57
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	:00	:09	:16	:27
UNTIL: / *HASTA:*								
6:36p	6:43p	6:52p	6:58p	7:07p	7:15	7:24	7:31	7:42
7:06	7:13	7:22	7:28	7:37	7:45	7:54	8:01	8:12
7:36	7:43	7:52	7:58	8:07	8:15	8:24	8:31	8:42
8:06	8:13	8:22	8:28	8:37	8:45	8:54	9:01	9:12
8:36	8:43	8:52	8:58	9:07	9:15	9:24	9:31	9:42
9:06	9:13	9:22	9:28	9:37	9:45	9:54	10:01	10:12
9:36	9:43	9:52	9:58	10:07	10:15	10:24	10:31	10:42
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:36	10:43	10:52	10:58	11:07	11:15	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	—	—	—
11:36	11:43	11:52	11:58	12:07a	12:15a	—	—	—

Sunday / *domingo*

SANTEE ➡ DOWNTOWN

Santee	El Cajon	Grossmont	SDSU	Stadium	Fashion Valley	Old Town	Santa Fe Depot	12th & Imperial
—	—	—	—	4:52a	5:01a	5:07a	5:16a	5:23a
—	—	—	—	5:22	5:31	5:37	5:46	5:53
5:18a	5:29a	5:35a	5:44a	5:52	6:01	6:07	6:16	6:23
5:48	5:59	6:05	6:14	6:22	6:31	6:37	6:46	6:53
6:18	6:29	6:35	6:44	6:52	7:01	7:07	7:16	7:23
6:48	6:59	7:05	7:14	7:22	7:31	7:37	7:46	7:53
—	—	—	—	7:37	7:46	7:52	8:01	8:08
7:18	7:29	7:35	7:44	7:52	8:01	8:07	8:16	8:23
—	—	—	—	8:07	8:16	8:22	8:31	8:38
7:48	7:59	8:05	8:14	8:22	8:31	8:37	8:46	8:53
—	—	—	—	8:37	8:46	8:52	9:01	9:08
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:18	:29	:35	:44	:52	:01	:07	:16	:23
—	—	—	—	:07	:16	:22	:31	:38
:48	:59	:05	:14	:22	:31	:37	:46	:53
—	—	—	—	:37	:46	:52	:01	:08
UNTIL: / *HASTA:*								
11:18	11:29	11:35	11:44	11:52	12:01p	12:07p	12:16p	12:23p
—	—	—	11:59	12:07p	12:16	12:22	12:31	12:38
11:48	11:59	12:05p	12:14p	12:22	12:31	12:37	12:46	12:53
—	—	—	12:29	12:37	12:46	12:52	1:01	1:08
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:18	:29	:35	:44	:52	:01	:07	:16	:23
—	—	—	:59	:07	:16	:22	:31	:38
:48	:59	:05	:14	:22	:31	:37	:46	:53
—	—	—	:29	:37	:46	:52	:01	:08
UNTIL: / *HASTA:*								
7:18p	7:29p	7:35	7:44	7:52	8:01	8:07	8:16	8:23
7:48	7:59	8:05	8:14	8:22	8:31	8:37	8:46	8:53
8:18	8:29	8:35	8:44	8:52	9:01	9:07	9:16	9:23
8:48	8:59	9:05	9:14	9:22	9:31	9:37	9:46	9:53
9:18	9:29	9:35	9:44	9:52	10:01	10:07	10:16	10:23
9:48	9:59	10:05	10:14	10:22	10:31	10:37	10:46	10:53
10:18	10:29	10:35	10:44	10:52	11:01	11:07	11:16	11:23
10:48	10:59	11:05	11:14	11:22	11:31	11:37	11:46	11:53
—	—	—	11:29	11:37	11:46	11:52	12:01a	12:08a
11:18	11:29	11:35	11:44	11:52	12:01a	12:07a	12:16	12:23
—	—	—	11:59	12:07a	12:16	12:22	12:31	12:38
—	—	—	12:29a	12:37	12:46	12:52	1:01	1:08

H = Trip begins at Gaslamp Quarter Station five minutes earlier than time show. / Este viaje comienza cinco minutos antes del tiempo indicado en la estacion de Gaslamp Quarter.

DOWNTOWN ➡ SANTEE

12th & Imperial	Santa Fe Depot	Old Town	Fashion Valley	Stadium	SDSU	Grossmont	El Cajon	Santee
—	H 4:13a	4:22a	4:28a	4:37a	4:45a	4:54a	5:01a	5:12a
—	H 4:43	4:52	4:58	5:07	5:15	5:24	5:31	5:42
5:06a	5:13	5:22	5:28	5:37	5:45	5:54	6:01	6:12
5:36	5:43	5:52	5:58	6:07	6:15	6:24	6:31	6:42
6:06	6:13	6:22	6:28	6:37	6:45	6:54	7:01	7:12
6:36	6:43	6:52	6:58	7:07	7:15	7:24	7:31	7:42
6:51	6:58	7:07	7:13	7:22	—	—	—	—
7:06	7:13	7:22	7:28	7:37	7:45	7:54	8:01	8:12
7:21	7:28	7:37	7:43	7:52	—	—	—	—
7:36	7:43	7:52	7:58	8:07	8:15	8:24	8:31	8:42
7:51	7:58	8:07	8:13	8:22	—	—	—	—
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	—	—	—	—
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	—	—	—	—
UNTIL: / *HASTA:*								
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:21	10:28	10:37	10:43	10:52	—	—	—	—
10:36	10:43	10:52	10:58	11:07	11:15	11:24	11:31	11:42
10:51	10:58	11:07	11:13	11:22	11:30	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	11:54	12:01p	12:12p
11:21	11:28	11:37	11:43	11:52	12:00p	—	—	—
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	:30	—	—	—
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	:00	—	—	—
UNTIL: / *HASTA:*								
6:36p	6:43p	6:52p	6:58p	7:07p	7:15	7:24p	7:31	7:42
7:06	7:13	7:22	7:28	7:37	7:45	7:54	8:01	8:12
7:36	7:43	7:52	7:58	8:07	8:15	8:24	8:31	8:42
8:06	8:13	8:22	8:28	8:37	8:45	8:54	9:01	9:12
8:36	8:43	8:52	8:58	9:07	9:15	9:24	9:31	9:42
9:06	9:13	9:22	9:28	9:37	9:45	9:54	10:01	10:12
9:36	9:43	9:52	9:58	10:07	10:15	10:24	10:31	10:42
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:36	10:43	10:52	10:58	11:07	11:15	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	—	—	—
11:36	11:43	11:52	11:58	12:07a	12:15a	—	—	—

Silver Line

Saturday & Sunday / *sábado & domingo*

DOWNTOWN LOOP

12th & Imperial	Gaslamp Quarter	Convention Center	Seaport Village	America Plaza	Civic Center	Fifth Avenue	City College	Park & Market	12th & Imperial
9:07a	9:09a	9:10a	9:12a	9:20a	9:22a	9:24a	9:26a	9:29a	9:32a
9:37	9:39	9:40	9:42	9:50	9:52	9:54	9:56	9:59	10:02
10:07	10:09	10:10	10:12	10:20	10:22	10:24	10:26	10:29	10:32
10:37	10:39	10:40	10:42	10:50	10:52	10:54	10:56	10:59	11:02
11:07	11:09	11:10	11:12	11:20	11:22	11:24	11:26	11:29	11:32
11:52	11:54	11:55	11:57	12:05p	12:07p	12:09p	12:11p	12:14p	12:17p
12:22p	12:24p	12:25p	12:27p	12:35p	12:37p	12:39p	12:41p	12:44p	12:47p
12:52	12:54	12:55	12:57	1:05	1:07	1:09	1:11	1:14	1:17
1:22	1:24	1:25	1:27	1:35	1:37	1:39	1:41	1:44	1:47

times continue next column / *horario continúa en la siguiente columna* -->

DOWNTOWN LOOP

12th & Imperial	Gaslamp Quarter	Convention Center	Seaport Village	America Plaza	Civic Center	Fifth Avenue	City College	Park & Market	12th & Imperial
2:22p	2:24p	2:25p	2:27p	2:35p	2:37p	2:39p	2:41p	2:44p	2:47p
2:52	2:54	2:55	2:57	3:05	3:07	3:09	3:11	3:14	3:17
3:22	3:24	3:25	3:27	3:35	3:37	3:39	3:41	3:44	3:47
3:52	3:54	3:55	3:57	4:05	4:07	4:09	4:11	4:14	4:17
4:37	4:39	4:40	4:42	4:50	4:52	4:54	4:56	4:59	5:02
5:07	5:09	5:10	5:12	5:20	5:22	5:24	5:26	5:29	5:32
5:37	5:39	5:40	5:42	5:50	5:52	5:54	5:56	5:59	6:02
6:07	6:09	6:10	6:12	6:20	6:22	6:24	6:26	6:29	6:32

Silver Line subject to cancellation due to holidays, construction, special events or vehicle maintenance / *Silver Line Sujeto a cancelación por días festivos, construcción, eventos especiales o mantenimiento de vehículos*

Scan for Current schedules and alerts
Escanea para horarios y alertas actuales

Holiday Service

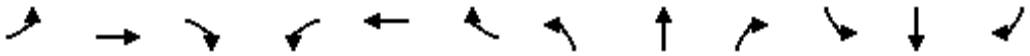
A Saturday or Sunday schedule will be operated on the following holidays and observed holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day and Thanksgiving. Christmas schedule: Trolleys operate every 30 minutes throughout the day on all lines. No Silver Line on Holidays. Call 511 or (619) 233-3004 for more information.

Servicio de los días festivos

Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados: *New Year's Day, Presidents' Day, Memorial Day, Independence Day (EE.UU.), Labor Day y Thanksgiving.* **Servicio durante Navidad:** *Los carros operarán cada 30 minutos durante todo el día en todas las líneas. No habrá Silver Line en días festivos. Llame al 511 ó* (619) 233-3004 *para más información.*

APPENDIX C

EXISTING INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	299	148	247	708	9	226	107	173	7	215	317
Future Volume (veh/h)	96	299	148	247	708	9	226	107	173	7	215	317
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	113	352	174	294	843	11	305	145	234	8	234	345
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1058	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3562	46	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	113	352	174	294	417	437	305	145	234	8	234	345
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1846	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	6.2	8.0	9.3	8.3	21.8	21.8	8.6	2.7	9.4	0.4	10.9	20.7
Cycle Q Clear(g_c), s	6.2	8.0	9.3	8.3	21.8	21.8	8.6	2.7	9.4	0.4	10.9	20.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.65	0.36	0.41	0.75	0.80	0.80	0.76	0.11	0.32	0.11	0.46	0.78
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	28.7	29.2	42.9	32.4	32.4	42.8	20.9	15.9	46.3	29.1	32.6
Incr Delay (d2), s/veh	17.5	1.0	2.8	12.0	11.4	10.9	11.1	0.2	1.0	3.2	2.9	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.4	3.6	4.1	10.5	10.9	4.2	1.1	3.3	0.3	4.9	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	29.7	32.0	54.9	43.8	43.3	53.9	21.0	16.9	49.5	32.0	45.3
LnGrp LOS	E	C	C	D	D	D	D	C	B	D	C	D
Approach Vol, veh/h		639			1148			684			587	
Approach Delay, s/veh		35.9			46.4			34.3			40.1	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	10.3	11.3	10.6	22.7	8.2	23.8	2.4	11.4
Green Ext Time (p_c), s	0.1	3.7	0.1	2.6	0.0	3.4	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	525	41	118	594	20	69
Future Volume (veh/h)	525	41	118	594	20	69
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	648	51	149	752	49	168
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1130	89	200	1974	279	248
Arrive On Green	0.34	0.34	0.11	0.56	0.16	0.16
Sat Flow, veh/h	3391	259	1767	3618	1767	1572
Grp Volume(v), veh/h	346	353	149	752	49	168
Grp Sat Flow(s),veh/h/ln	1763	1794	1767	1763	1767	1572
Q Serve(g_s), s	6.5	6.5	3.3	4.8	1.0	4.1
Cycle Q Clear(g_c), s	6.5	6.5	3.3	4.8	1.0	4.1
Prop In Lane		0.14	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	604	615	200	1974	279	248
V/C Ratio(X)	0.57	0.57	0.74	0.38	0.18	0.68
Avail Cap(c_a), veh/h	1993	2029	1084	6602	1482	1319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	10.9	17.3	5.0	14.7	16.0
Incr Delay (d2), s/veh	0.9	0.8	5.4	0.1	0.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.9	1.4	0.8	0.4	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.7	11.7	22.7	5.1	15.0	19.2
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	699			901	217	
Approach Delay, s/veh	11.7			8.0	18.3	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.8	20.2				28.9	11.5
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 4.6	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	5.3	8.5				6.8	6.1
Green Ext Time (p_c), s	0.3	4.5				5.8	0.7

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	89	189	105	199	21	332	524	46	30	522	272
Future Volume (veh/h)	222	89	189	105	199	21	332	524	46	30	522	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	271	109	230	164	311	33	437	689	61	33	574	299
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	442	775	325	296	897	378	626	1247	110	106	940	402
Arrive On Green	0.13	0.22	0.22	0.17	0.25	0.25	0.18	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1476	1767	3526	1486	3565	3266	289	1767	3526	1508
Grp Volume(v), veh/h	271	109	230	164	311	33	437	372	378	33	574	299
Grp Sat Flow(s),veh/h/ln	1714	1763	1476	1767	1763	1486	1783	1763	1792	1767	1763	1508
Q Serve(g_s), s	8.7	2.9	16.7	9.9	8.4	2.0	13.4	19.2	19.2	2.1	16.6	21.1
Cycle Q Clear(g_c), s	8.7	2.9	16.7	9.9	8.4	2.0	13.4	19.2	19.2	2.1	16.6	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	442	775	325	296	897	378	626	673	684	106	940	402
V/C Ratio(X)	0.61	0.14	0.71	0.55	0.35	0.09	0.70	0.55	0.55	0.31	0.61	0.74
Avail Cap(c_a), veh/h	442	888	372	296	1010	426	626	673	684	106	940	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	36.5	41.9	44.4	35.5	33.1	45.0	28.1	28.2	52.3	37.4	39.0
Incr Delay (d2), s/veh	6.2	0.1	5.2	7.3	0.2	0.1	6.4	3.2	3.2	7.4	3.0	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	1.2	6.4	4.9	3.6	0.7	6.4	8.4	8.6	1.1	7.4	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	36.6	47.1	51.7	35.7	33.2	51.4	31.4	31.4	59.8	40.3	50.8
LnGrp LOS	D	D	D	D	D	C	D	C	C	E	D	D
Approach Vol, veh/h		610			508			1187			906	
Approach Delay, s/veh		48.3			40.7			38.8			44.5	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	31.1	24.9	36.3	20.0	35.1	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	9.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	11.9	18.7	15.4	23.1	10.7	10.4	4.1	21.2
Green Ext Time (p_c), s	0.2	1.0	0.7	2.9	0.4	2.0	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	77	2	50	148	484	69	82	629	3
Future Volume (veh/h)	0	1	2	77	2	50	148	484	69	82	629	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	107	3	69	187	613	87	108	828	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	298	11	245	231	1175	166	139	1184	6
Arrive On Green	0.00	0.06	0.06	0.17	0.17	0.17	0.13	0.38	0.38	0.08	0.33	0.33
Sat Flow, veh/h	1767	606	1010	1767	63	1455	1767	3081	436	1767	3597	17
Grp Volume(v), veh/h	0	0	8	107	0	72	187	350	350	108	406	426
Grp Sat Flow(s),veh/h/ln	1767	0	1617	1767	0	1518	1767	1763	1754	1767	1763	1851
Q Serve(g_s), s	0.0	0.0	0.3	3.6	0.0	2.7	6.8	10.2	10.2	4.0	13.3	13.3
Cycle Q Clear(g_c), s	0.0	0.0	0.3	3.6	0.0	2.7	6.8	10.2	10.2	4.0	13.3	13.3
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.25	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	92	298	0	256	231	672	669	139	580	610
V/C Ratio(X)	0.00	0.00	0.09	0.36	0.00	0.28	0.81	0.52	0.52	0.78	0.70	0.70
Avail Cap(c_a), veh/h	746	0	682	719	0	618	368	874	870	298	808	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	29.7	24.4	0.0	24.1	28.1	15.8	15.9	30.0	19.4	19.4
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.9	0.0	0.8	3.1	0.9	0.9	3.5	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.5	0.0	1.0	2.9	3.8	3.8	1.7	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	30.3	25.3	0.0	24.8	31.2	16.7	16.8	33.5	21.8	21.7
LnGrp LOS	A	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		8			179			887			940	
Approach Delay, s/veh		30.3			25.1			19.8			23.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	30.4		10.1	12.9	26.9		16.5
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	6.0	12.2		2.3	8.8	15.3		5.6
Green Ext Time (p_c), s	0.1	5.9		0.0	0.1	6.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	123	145	2	5	37
Future Vol, veh/h	22	123	145	2	5	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	241	227	3	8	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.7	9.1	8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	0%	12%
Vol Thru, %	85%	99%	0%
Vol Right, %	0%	1%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	145	147	42
LT Vol	22	0	5
Through Vol	123	145	0
RT Vol	0	2	37
Lane Flow Rate	284	230	68
Geometry Grp	1	1	1
Degree of Util (X)	0.346	0.28	0.086
Departure Headway (Hd)	4.378	4.396	4.572
Convergence, Y/N	Yes	Yes	Yes
Cap	825	820	784
Service Time	2.395	2.413	2.598
HCM Lane V/C Ratio	0.344	0.28	0.087
HCM Control Delay	9.7	9.1	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.6	1.1	0.3

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	70	38	30	106	11	12	0	5	13	1	31
Future Vol, veh/h	9	70	38	30	106	11	12	0	5	13	1	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	140	76	53	186	19	14	0	6	16	1	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.9	9.4	8.7	8.2
HCM LOS	A	A	A	A

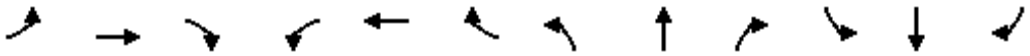
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	8%	20%	29%
Vol Thru, %	0%	0%	60%	72%	2%
Vol Right, %	0%	100%	32%	7%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	5	117	147	45
LT Vol	12	0	9	30	13
Through Vol	0	0	70	106	1
RT Vol	0	5	38	11	31
Lane Flow Rate	14	6	234	258	56
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.024	0.008	0.275	0.314	0.075
Departure Headway (Hd)	6.195	4.982	4.235	4.377	4.799
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	578	717	849	823	746
Service Time	3.932	2.719	2.254	2.395	2.832
HCM Lane V/C Ratio	0.024	0.008	0.276	0.313	0.075
HCM Control Delay	9.1	7.8	8.9	9.4	8.2
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.1	0	1.1	1.3	0.2

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	11	9	1	22	10	3	3	0	12	8	118
Future Vol, veh/h	76	11	9	1	22	10	3	3	0	12	8	118
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	190	28	23	3	71	32	8	8	0	19	13	190
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	8.4	8.3	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	79%	3%	9%
Vol Thru, %	50%	11%	67%	6%
Vol Right, %	0%	9%	30%	86%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	96	33	138
LT Vol	3	76	1	12
Through Vol	3	11	22	8
RT Vol	0	9	10	118
Lane Flow Rate	16	240	106	223
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.314	0.136	0.266
Departure Headway (Hd)	5.142	4.708	4.594	4.298
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	694	761	777	835
Service Time	3.19	2.747	2.639	2.329
HCM Lane V/C Ratio	0.023	0.315	0.136	0.267
HCM Control Delay	8.3	9.9	8.4	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	1.3	0.5	1.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	530	155	243	304	16	206	220	359	13	160	114
Future Volume (veh/h)	187	530	155	243	304	16	206	220	359	13	160	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	582	170	251	313	16	217	232	378	14	170	121
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	906	46	302	1192	718	71	580	386
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3407	173	3428	3526	1530	1767	2002	1329
Grp Volume(v), veh/h	205	582	170	251	161	168	217	232	378	14	148	143
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1818	1714	1763	1530	1767	1763	1568
Q Serve(g_s), s	11.0	13.9	8.8	6.9	7.4	7.5	6.2	4.7	17.5	0.8	6.5	7.1
Cycle Q Clear(g_c), s	11.0	13.9	8.8	6.9	7.4	7.5	6.2	4.7	17.5	0.8	6.5	7.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	279	1044	452	439	469	484	302	1192	718	71	511	455
V/C Ratio(X)	0.73	0.56	0.38	0.57	0.34	0.35	0.72	0.19	0.53	0.20	0.29	0.31
Avail Cap(c_a), veh/h	279	1047	453	439	488	504	302	1192	718	71	511	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	29.7	27.9	41.0	29.6	29.7	44.4	23.5	18.9	46.4	27.5	27.7
Incr Delay (d2), s/veh	15.7	2.2	2.4	5.2	1.9	1.9	9.1	0.2	1.8	6.2	1.4	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	6.0	3.4	3.1	3.3	3.4	3.0	1.9	6.2	0.5	2.9	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	31.8	30.3	46.2	31.6	31.6	53.5	23.7	20.7	52.6	29.0	29.5
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		957			580			827			305	
Approach Delay, s/veh		36.7			37.9			30.2			30.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	8.9	15.9	8.2	9.1	13.0	9.5	2.8	19.5
Green Ext Time (p_c), s	0.2	5.0	0.0	2.4	0.1	2.1	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	895	20	86	616	20	85
Future Volume (veh/h)	895	20	86	616	20	85
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	923	21	92	662	28	120
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1489	34	119	2082	243	216
Arrive On Green	0.42	0.42	0.07	0.59	0.14	0.14
Sat Flow, veh/h	3613	80	1767	3618	1767	1572
Grp Volume(v), veh/h	462	482	92	662	28	120
Grp Sat Flow(s),veh/h/ln	1763	1837	1767	1763	1767	1572
Q Serve(g_s), s	8.6	8.6	2.1	4.0	0.6	3.0
Cycle Q Clear(g_c), s	8.6	8.6	2.1	4.0	0.6	3.0
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	746	777	119	2082	243	216
V/C Ratio(X)	0.62	0.62	0.77	0.32	0.12	0.56
Avail Cap(c_a), veh/h	2344	2443	709	6539	1346	1197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	9.4	19.2	4.3	15.8	16.9
Incr Delay (d2), s/veh	0.8	0.8	10.2	0.1	0.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.4	1.1	0.6	0.2	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.3	10.3	29.4	4.4	16.1	19.1
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	944			754	148	
Approach Delay, s/veh	10.3			7.5	18.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.0	24.0				31.0	10.8
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	4.1	10.6				6.0	5.0
Green Ext Time (p_c), s	0.1	6.7				4.9	0.4

Intersection Summary		
HCM 6th Ctrl Delay		9.8
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	221	220	74	123	31	282	446	113	55	403	208
Future Volume (veh/h)	334	221	220	74	123	31	282	446	113	55	403	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	355	235	234	84	140	35	317	501	127	58	424	219
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	639	741	319	217	499	212	577	1049	264	166	1097	473
Arrive On Green	0.19	0.21	0.21	0.12	0.14	0.14	0.16	0.38	0.38	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1515	1767	3526	1497	3565	2771	698	1767	3526	1522
Grp Volume(v), veh/h	355	235	234	84	140	35	317	318	310	58	424	219
Grp Sat Flow(s),veh/h/ln	1714	1763	1515	1767	1763	1497	1783	1763	1706	1767	1763	1522
Q Serve(g_s), s	9.6	5.7	14.7	4.5	3.6	2.1	8.3	13.9	14.1	3.1	9.6	11.8
Cycle Q Clear(g_c), s	9.6	5.7	14.7	4.5	3.6	2.1	8.3	13.9	14.1	3.1	9.6	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	639	741	319	217	499	212	577	668	646	166	1097	473
V/C Ratio(X)	0.56	0.32	0.73	0.39	0.28	0.17	0.55	0.48	0.48	0.35	0.39	0.46
Avail Cap(c_a), veh/h	639	1366	587	217	1124	477	577	668	646	166	1097	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	34.1	37.6	41.2	39.1	38.5	39.3	24.0	24.0	43.2	27.5	28.3
Incr Delay (d2), s/veh	3.5	0.2	3.3	5.2	0.3	0.4	3.7	2.4	2.6	5.7	1.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	2.4	5.6	2.2	1.5	0.8	3.8	6.0	5.9	1.6	4.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	34.3	40.9	46.3	39.4	38.8	43.0	26.4	26.6	48.9	28.5	31.5
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		824			259			945			701	
Approach Delay, s/veh		39.1			41.6			32.0			31.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	26.9	21.0	37.0	24.0	19.9	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	10.5	16.7	10.3	13.8	11.6	5.6	5.1	16.1
Green Ext Time (p_c), s	0.1	2.2	0.6	3.2	0.7	0.9	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	107	1	66	18	831	125	81	648	2
Future Volume (veh/h)	14	1	8	107	1	66	18	831	125	81	648	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	147	1	90	20	944	142	86	689	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	168	12	132	277	3	233	32	1234	186	110	1617	5
Arrive On Green	0.09	0.09	0.09	0.16	0.16	0.16	0.02	0.40	0.40	0.06	0.45	0.45
Sat Flow, veh/h	1767	127	1392	1767	17	1489	1767	3051	459	1767	3605	10
Grp Volume(v), veh/h	19	0	12	147	0	91	20	545	541	86	337	354
Grp Sat Flow(s),veh/h/ln	1767	0	1519	1767	0	1506	1767	1763	1747	1767	1763	1853
Q Serve(g_s), s	0.7	0.0	0.5	5.7	0.0	4.0	0.8	19.8	19.8	3.6	9.7	9.7
Cycle Q Clear(g_c), s	0.7	0.0	0.5	5.7	0.0	4.0	0.8	19.8	19.8	3.6	9.7	9.7
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.26	1.00		0.01
Lane Grp Cap(c), veh/h	168	0	144	277	0	236	32	713	707	110	791	831
V/C Ratio(X)	0.11	0.00	0.08	0.53	0.00	0.39	0.62	0.76	0.77	0.78	0.43	0.43
Avail Cap(c_a), veh/h	667	0	573	645	0	550	138	879	871	167	910	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7	0.0	30.6	28.8	0.0	28.1	36.2	19.1	19.1	34.3	13.9	13.9
Incr Delay (d2), s/veh	0.4	0.0	0.4	2.0	0.0	1.3	7.1	3.8	3.8	6.0	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	2.5	0.0	1.5	0.4	8.0	7.9	1.6	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	0.0	31.0	30.8	0.0	29.4	43.3	22.8	22.9	40.3	14.5	14.5
LnGrp LOS	C	A	C	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		31			238			1106			777	
Approach Delay, s/veh		31.1			30.3			23.2			17.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.8	35.1		13.3	5.6	38.4		16.9
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 5	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	5.6	21.8		2.7	2.8	11.7		7.7
Green Ext Time (p_c), s	0.0	8.2		0.1	0.0	6.9		1.2

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	147	118	5	5	21
Future Vol, veh/h	46	147	118	5	5	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	186	149	6	6	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.2	7.5
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	24%	0%	19%
Vol Thru, %	76%	96%	0%
Vol Right, %	0%	4%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	193	123	26
LT Vol	46	0	5
Through Vol	147	118	0
RT Vol	0	5	21
Lane Flow Rate	244	156	32
Geometry Grp	1	1	1
Degree of Util (X)	0.283	0.18	0.039
Departure Headway (Hd)	4.173	4.167	4.371
Convergence, Y/N	Yes	Yes	Yes
Cap	855	850	824
Service Time	2.229	2.244	2.371
HCM Lane V/C Ratio	0.285	0.184	0.039
HCM Control Delay	8.9	8.2	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	0.7	0.1

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	71	65	23	59	14	52	1	15	14	1	13
Future Vol, veh/h	21	71	65	23	59	14	52	1	15	14	1	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	82	75	29	74	18	76	1	22	20	1	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.4	8.3	8.9	8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	13%	24%	50%
Vol Thru, %	2%	0%	45%	61%	4%
Vol Right, %	0%	100%	41%	15%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	15	157	96	28
LT Vol	52	0	21	23	14
Through Vol	1	0	71	59	1
RT Vol	0	15	65	14	13
Lane Flow Rate	78	22	180	120	40
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.124	0.028	0.212	0.149	0.052
Departure Headway (Hd)	5.748	4.55	4.234	4.473	4.682
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	624	787	850	803	764
Service Time	3.477	2.278	2.25	2.492	2.713
HCM Lane V/C Ratio	0.125	0.028	0.212	0.149	0.052
HCM Control Delay	9.3	7.4	8.4	8.3	8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0.1	0.8	0.5	0.2

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	3	15	1	10	13	13	19	0	4	22	88
Future Vol, veh/h	74	3	15	1	10	13	13	19	0	4	22	88
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	103	4	21	3	25	33	21	31	0	5	29	117
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	7.6	8	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	80%	4%	4%
Vol Thru, %	59%	3%	42%	19%
Vol Right, %	0%	16%	54%	77%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	92	24	114
LT Vol	13	74	1	4
Through Vol	19	3	10	22
RT Vol	0	15	13	88
Lane Flow Rate	52	128	60	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.066	0.16	0.07	0.168
Departure Headway (Hd)	4.62	4.516	4.218	3.987
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	777	796	851	903
Service Time	2.635	2.532	2.235	1.998
HCM Lane V/C Ratio	0.067	0.161	0.071	0.168
HCM Control Delay	8	8.4	7.6	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.6	0.2	0.6

APPENDIX D

EXCERPTS FROM THE ITE AND SANDAG TRIP GENERATION MANUAL

Recreational Community Center
(495)

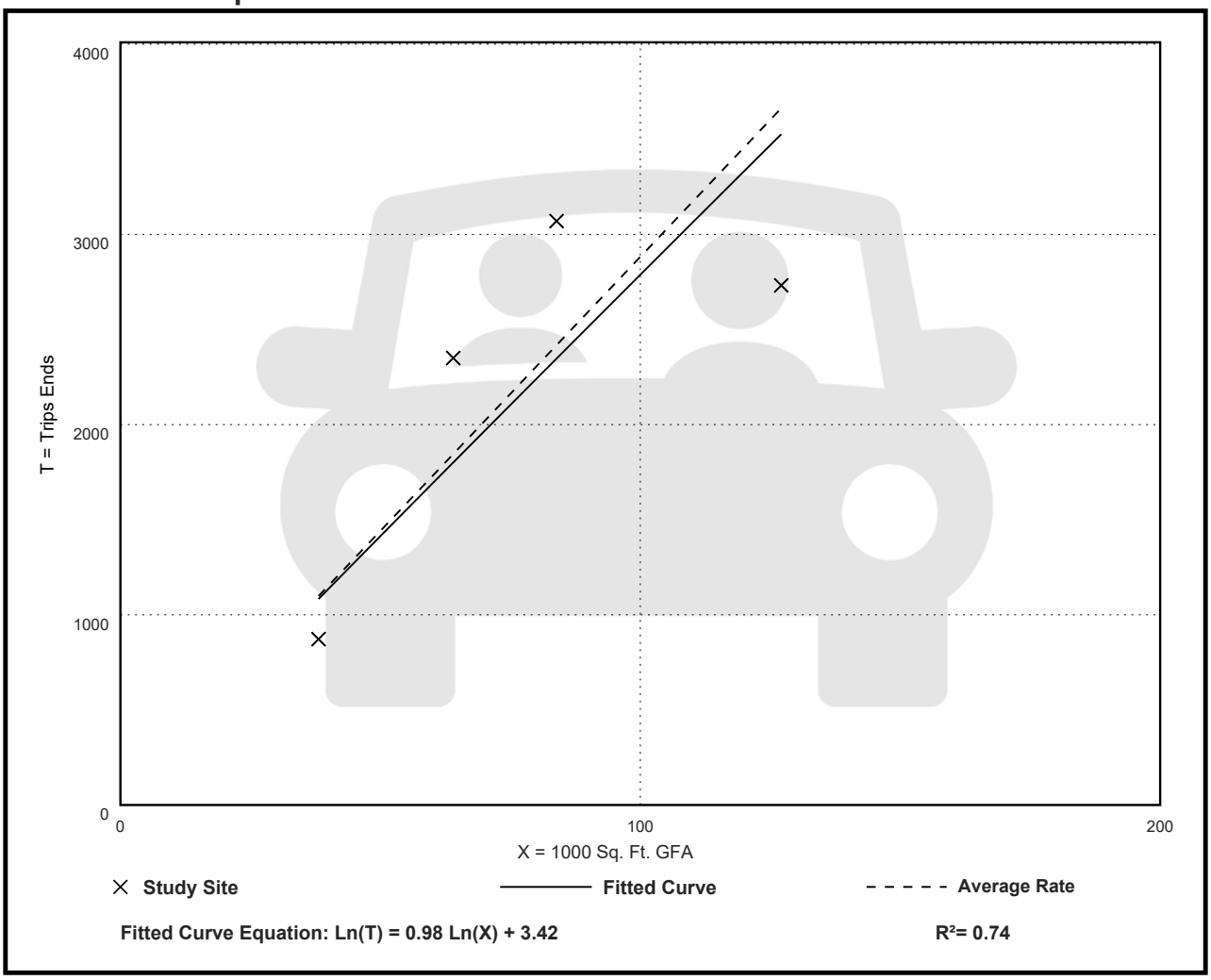
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 78
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
28.82	21.49 - 36.71	8.56

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.98 Ln(X) + 3.42

R^2= 0.74

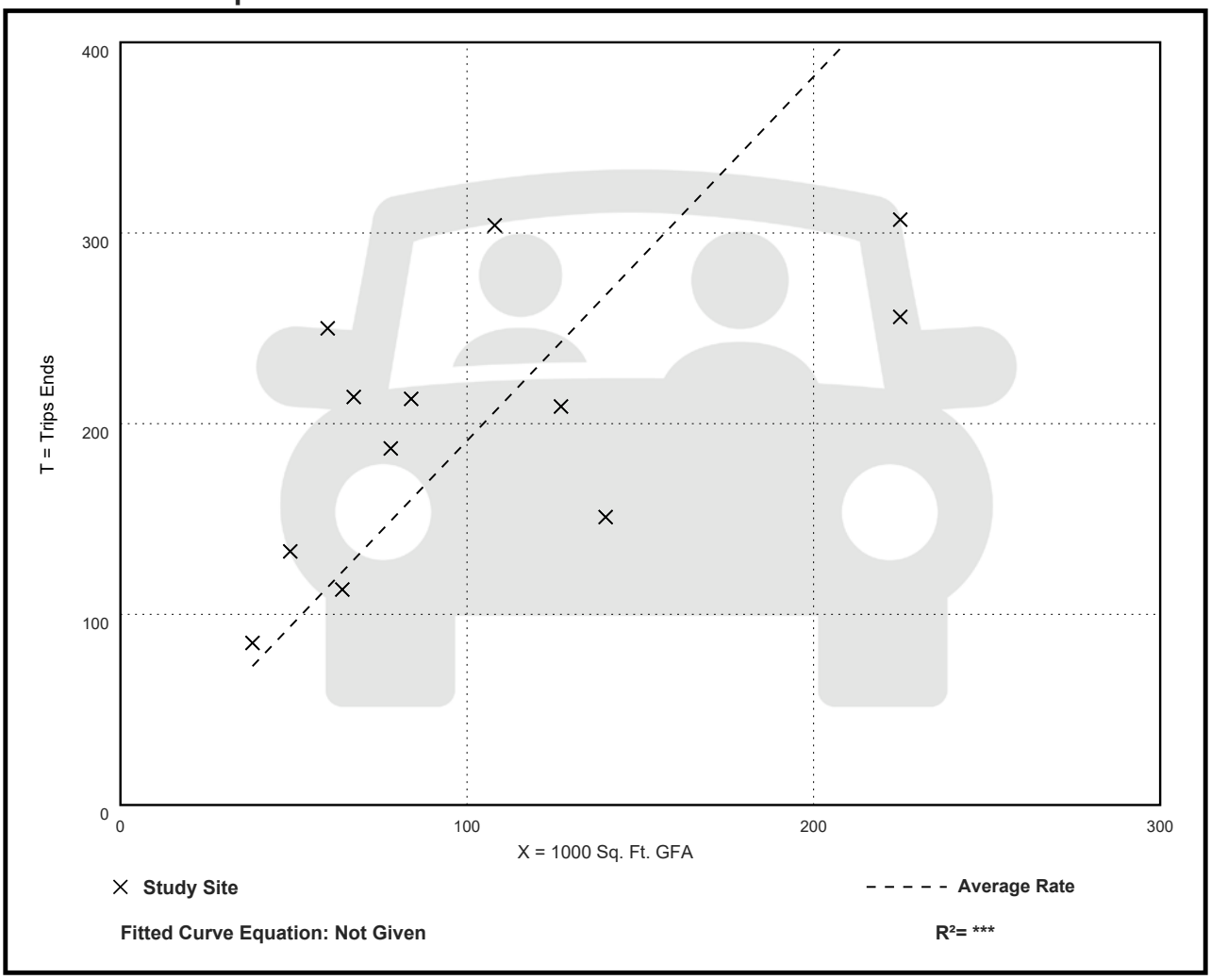
Recreational Community Center
(495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 105
Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.91	1.08 - 4.18	0.88

Data Plot and Equation



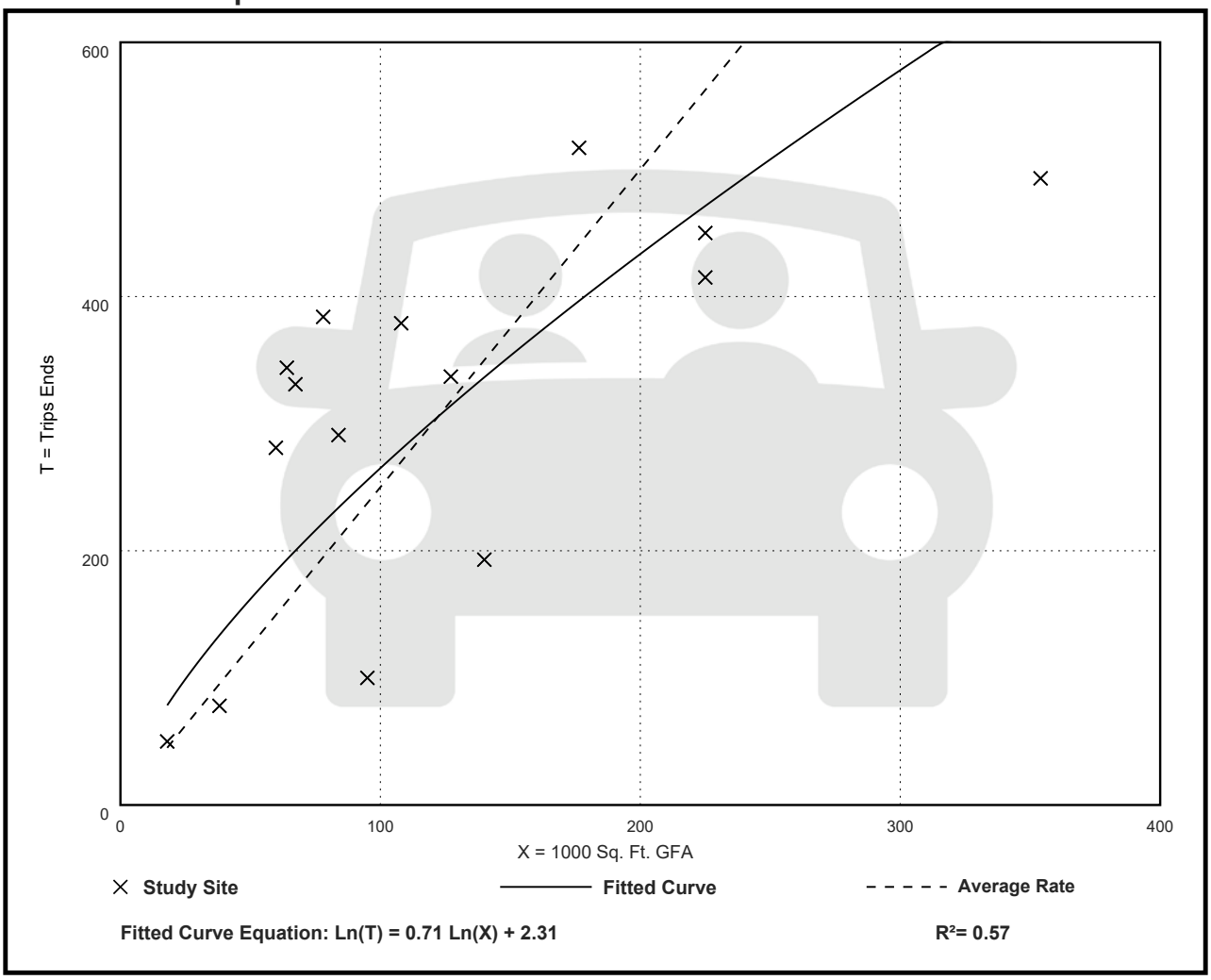
Recreational Community Center
(495)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 15
Avg. 1000 Sq. Ft. GFA: 124
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.50	1.05 - 5.37	1.28

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.71 Ln(X) + 2.31

R^2= 0.57

(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION

APRIL 2002

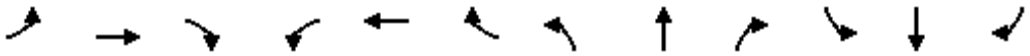
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a ***guide*** of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. ***Always check with local jurisdictions for their preferred or applicable rates.***

LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY][P]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[L]
AGRICULTURE (Open Space)	[80:18:2]	2/acre**					10.8
AIRPORT	[78:20:2]						12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft.* **	5%	(6:4)	6%	(5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft* **	9%	(7:3)	15%	(5:5)	
Heliports		100/acre**					
AUTOMOBILE[S]							
Car Wash							
Automatic		900/site, 600/acre**	4%	(5:5)	9%	(5:5)	
Self-serve		100/wash stall**	4%	(5:5)	8%	(5:5)	
Gasoline	[21:51:28]						2.8
with/Food Mart		160/vehicle fueling space**	7%	(5:5)	8%	(5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space**	8%	(5:5)	9%	(5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station**	7%	(5:5)	9%	(5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall* **	5%	(7:3)	8%	(4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	8%	(7:3)	11%	(4:6)	
Auto Parts Sales		60/1000 sq. ft. **	4%		10%		
Quick Lube		40/service stall**	7%	(6:4)	10%	(5:5)	
Tire Store		25/1000 sq. ft., 30/service stall**	7%	(6:4)	11%	(5:5)	
CEMETERY		5/acre*					
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates for Sunday, or days of assembly)	5%	(6:4)	8%	(5:5)	5.1
COMMERCIAL/RETAIL[S]							
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3 + major stores)		35/1000 sq. ft.,[C] 400/acre*	4%	(7:3)	10%	(5:5)	
Regional Shopping Center (40-80acres, 400,000-800,000 sq. ft., w/usually 2 + major stores)	[54:35:11]	50/1000 sq. ft.,[C] 500/acre*	4%	(7:3)	9%	(5:5)	5.2

APPENDIX E

EXISTING + PROJECT INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	299	161	247	708	9	232	109	173	7	218	317
Future Volume (veh/h)	96	299	161	247	708	9	232	109	173	7	218	317
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	113	352	189	294	843	11	314	147	234	8	237	345
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1058	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3562	46	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	113	352	189	294	417	437	314	147	234	8	237	345
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1846	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	6.2	8.0	10.2	8.3	21.8	21.8	8.9	2.8	9.4	0.4	11.0	20.7
Cycle Q Clear(g_c), s	6.2	8.0	10.2	8.3	21.8	21.8	8.9	2.8	9.4	0.4	11.0	20.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.65	0.36	0.44	0.75	0.80	0.80	0.78	0.11	0.32	0.11	0.46	0.78
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	28.7	29.5	42.9	32.4	32.4	42.9	20.9	15.9	46.3	29.1	32.6
Incr Delay (d2), s/veh	17.5	1.0	3.3	12.0	11.4	10.9	11.8	0.1	0.9	3.2	3.0	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.4	4.0	4.1	10.5	10.9	4.4	1.1	3.3	0.3	5.0	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	29.7	32.8	54.9	43.8	43.3	54.7	21.1	16.8	49.5	32.1	45.3
LnGrp LOS	E	C	C	D	D	D	D	C	B	D	C	D
Approach Vol, veh/h		654			1148			695			590	
Approach Delay, s/veh		36.0			46.4			34.8			40.1	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	10.3	12.2	10.9	22.7	8.2	23.8	2.4	11.4
Green Ext Time (p_c), s	0.1	3.7	0.1	2.6	0.0	3.4	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	525	43	140	594	21	81
Future Volume (veh/h)	525	43	140	594	21	81
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	648	53	177	752	51	198
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1094	89	237	1987	308	274
Arrive On Green	0.33	0.33	0.13	0.56	0.17	0.17
Sat Flow, veh/h	3379	268	1767	3618	1767	1572
Grp Volume(v), veh/h	347	354	177	752	51	198
Grp Sat Flow(s),veh/h/ln	1763	1792	1767	1763	1767	1572
Q Serve(g_s), s	7.1	7.1	4.2	5.1	1.1	5.2
Cycle Q Clear(g_c), s	7.1	7.1	4.2	5.1	1.1	5.2
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	587	597	237	1987	308	274
V/C Ratio(X)	0.59	0.59	0.75	0.38	0.17	0.72
Avail Cap(c_a), veh/h	1852	1883	1008	6137	1378	1226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.1	18.1	5.3	15.3	17.0
Incr Delay (d2), s/veh	1.0	0.9	4.7	0.1	0.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.2	1.7	1.0	0.4	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.0	13.0	22.8	5.4	15.5	20.6
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	701			929	249	
Approach Delay, s/veh	13.0			8.7	19.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	20.8				30.8	12.7
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 5.8	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	6.2	9.1				7.1	7.2
Green Ext Time (p_c), s	0.4	4.5				5.8	0.8

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	91	197	105	202	21	348	524	46	30	522	275
Future Volume (veh/h)	224	91	197	105	202	21	348	524	46	30	522	275
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	273	111	240	164	316	33	458	689	61	33	574	302
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	441	783	328	296	904	381	624	1244	110	106	937	401
Arrive On Green	0.13	0.22	0.22	0.17	0.26	0.26	0.17	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1477	1767	3526	1487	3565	3266	289	1767	3526	1508
Grp Volume(v), veh/h	273	111	240	164	316	33	458	372	378	33	574	302
Grp Sat Flow(s),veh/h/ln	1714	1763	1477	1767	1763	1487	1783	1763	1792	1767	1763	1508
Q Serve(g_s), s	8.8	2.9	17.6	9.9	8.5	2.0	14.2	19.3	19.3	2.1	16.6	21.4
Cycle Q Clear(g_c), s	8.8	2.9	17.6	9.9	8.5	2.0	14.2	19.3	19.3	2.1	16.6	21.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	441	783	328	296	904	381	624	671	682	106	937	401
V/C Ratio(X)	0.62	0.14	0.73	0.55	0.35	0.09	0.73	0.55	0.55	0.31	0.61	0.75
Avail Cap(c_a), veh/h	441	886	371	296	1007	425	624	671	682	106	937	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	36.4	42.1	44.6	35.4	33.0	45.5	28.3	28.3	52.5	37.5	39.3
Incr Delay (d2), s/veh	6.4	0.1	6.3	7.3	0.2	0.1	7.5	3.3	3.2	7.5	3.0	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	1.3	6.8	4.9	3.7	0.7	6.8	8.5	8.6	1.1	7.4	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	36.5	48.5	51.9	35.6	33.1	53.0	31.6	31.6	60.0	40.5	51.6
LnGrp LOS	D	D	D	D	D	C	D	C	C	E	D	D
Approach Vol, veh/h		624			513			1208			909	
Approach Delay, s/veh		49.0			40.7			39.7			44.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	31.4	24.9	36.3	20.0	35.4	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	19.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	11.9	19.6	16.2	23.4	10.8	10.5	4.1	21.3
Green Ext Time (p_c), s	0.2	1.0	0.7	2.9	0.4	2.0	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	43.1
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	89	2	58	148	484	90	98	629	3
Future Volume (veh/h)	0	1	2	89	2	58	148	484	90	98	629	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	124	3	81	187	613	114	129	828	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	301	9	249	230	1078	200	164	1183	6
Arrive On Green	0.00	0.06	0.06	0.17	0.17	0.17	0.13	0.37	0.37	0.09	0.33	0.33
Sat Flow, veh/h	1767	606	1010	1767	54	1463	1767	2945	546	1767	3597	17
Grp Volume(v), veh/h	0	0	8	124	0	84	187	366	361	129	406	426
Grp Sat Flow(s),veh/h/ln	1767	0	1616	1767	0	1517	1767	1763	1728	1767	1763	1851
Q Serve(g_s), s	0.0	0.0	0.3	4.2	0.0	3.2	6.9	11.1	11.1	4.8	13.4	13.4
Cycle Q Clear(g_c), s	0.0	0.0	0.3	4.2	0.0	3.2	6.9	11.1	11.1	4.8	13.4	13.4
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.32	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	92	301	0	258	230	646	633	164	580	609
V/C Ratio(X)	0.00	0.00	0.09	0.41	0.00	0.33	0.81	0.57	0.57	0.79	0.70	0.70
Avail Cap(c_a), veh/h	743	0	680	717	0	615	366	871	854	297	805	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	29.8	24.6	0.0	24.3	28.2	16.9	16.9	29.5	19.5	19.5
Incr Delay (d2), s/veh	0.0	0.0	0.6	1.2	0.0	0.9	3.2	1.1	1.2	3.1	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.8	0.0	1.2	2.9	4.2	4.1	2.0	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	30.4	25.8	0.0	25.2	31.4	18.0	18.1	32.7	22.0	21.8
LnGrp LOS	A	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		8			208			914			961	
Approach Delay, s/veh		30.4			25.6			20.8			23.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	29.5		10.1	12.9	27.0		16.6
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	6.2	13.1		2.3	8.9	15.4		6.2
Green Ext Time (p_c), s	0.1	6.1		0.0	0.1	6.5		1.1

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	160	165	2	6	37
Future Vol, veh/h	22	160	165	2	6	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	314	258	3	10	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	10.9	9.7	8.3
HCM LOS	B	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	0%	14%
Vol Thru, %	88%	99%	0%
Vol Right, %	0%	1%	86%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	182	167	43
LT Vol	22	0	6
Through Vol	160	165	0
RT Vol	0	2	37
Lane Flow Rate	357	261	69
Geometry Grp	1	1	1
Degree of Util (X)	0.438	0.325	0.093
Departure Headway (Hd)	4.419	4.484	4.813
Convergence, Y/N	Yes	Yes	Yes
Cap	817	801	743
Service Time	2.442	2.509	2.85
HCM Lane V/C Ratio	0.437	0.326	0.093
HCM Control Delay	10.9	9.7	8.3
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.2	1.4	0.3

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	70	76	54	106	11	32	0	18	13	2	31
Future Vol, veh/h	9	70	76	54	106	11	32	0	18	13	2	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	140	152	95	186	19	38	0	21	16	3	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.9	10.5	9.2	8.7
HCM LOS	A	B	A	A

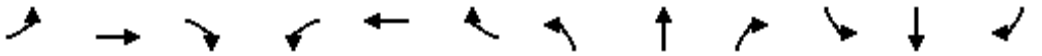
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	6%	32%	28%
Vol Thru, %	0%	0%	45%	62%	4%
Vol Right, %	0%	100%	49%	6%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	18	155	171	46
LT Vol	32	0	9	54	13
Through Vol	0	0	70	106	2
RT Vol	0	18	76	11	31
Lane Flow Rate	38	21	310	300	58
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.068	0.031	0.372	0.385	0.082
Departure Headway (Hd)	6.472	5.256	4.323	4.618	5.148
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	551	676	831	777	691
Service Time	4.243	3.026	2.363	2.66	3.219
HCM Lane V/C Ratio	0.069	0.031	0.373	0.386	0.084
HCM Control Delay	9.7	8.2	9.9	10.5	8.7
HCM Lane LOS	A	A	A	B	A
HCM 95th-tile Q	0.2	0.1	1.7	1.8	0.3

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	11	9	1	22	10	3	3	0	12	8	142
Future Vol, veh/h	89	11	9	1	22	10	3	3	0	12	8	142
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	223	28	23	3	71	32	8	8	0	19	13	229
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	8.6	8.5	9.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	82%	3%	7%
Vol Thru, %	50%	10%	67%	5%
Vol Right, %	0%	8%	30%	88%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	109	33	162
LT Vol	3	89	1	12
Through Vol	3	11	22	8
RT Vol	0	9	10	142
Lane Flow Rate	16	272	106	261
Geometry Grp	1	1	1	1
Degree of Util (X)	0.023	0.365	0.14	0.318
Departure Headway (Hd)	5.293	4.817	4.738	4.376
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	672	744	752	818
Service Time	3.358	2.868	2.798	2.416
HCM Lane V/C Ratio	0.024	0.366	0.141	0.319
HCM Control Delay	8.5	10.6	8.6	9.5
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.1	1.7	0.5	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	530	167	243	304	16	219	223	359	13	163	114
Future Volume (veh/h)	187	530	167	243	304	16	219	223	359	13	163	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	582	184	251	313	16	231	235	378	14	173	121
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	906	46	302	1192	718	71	585	382
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3407	173	3428	3526	1530	1767	2016	1318
Grp Volume(v), veh/h	205	582	184	251	161	168	231	235	378	14	150	144
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1818	1714	1763	1530	1767	1763	1571
Q Serve(g_s), s	11.0	13.9	9.6	6.9	7.4	7.5	6.6	4.7	17.5	0.8	6.6	7.2
Cycle Q Clear(g_c), s	11.0	13.9	9.6	6.9	7.4	7.5	6.6	4.7	17.5	0.8	6.6	7.2
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	279	1044	452	439	469	484	302	1192	718	71	511	456
V/C Ratio(X)	0.73	0.56	0.41	0.57	0.34	0.35	0.77	0.20	0.53	0.20	0.29	0.32
Avail Cap(c_a), veh/h	279	1047	453	439	488	504	302	1192	718	71	511	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	29.7	28.2	41.0	29.6	29.7	44.6	23.5	18.9	46.4	27.5	27.8
Incr Delay (d2), s/veh	15.7	2.2	2.7	5.2	1.9	1.9	10.8	0.2	1.7	6.2	1.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	6.0	3.8	3.1	3.3	3.4	3.2	2.0	6.2	0.5	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	31.8	30.9	46.2	31.6	31.6	55.4	23.7	20.6	52.6	29.0	29.6
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		971			580			844			308	
Approach Delay, s/veh		36.7			37.9			31.0			30.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	8.9	15.9	8.6	9.2	13.0	9.5	2.8	19.5
Green Ext Time (p_c), s	0.2	5.1	0.0	2.4	0.1	2.1	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	895	22	106	616	22	108
Future Volume (veh/h)	895	22	106	616	22	108
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	923	23	114	662	31	152
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1461	36	150	2105	252	224
Arrive On Green	0.42	0.42	0.08	0.60	0.14	0.14
Sat Flow, veh/h	3603	87	1767	3618	1767	1572
Grp Volume(v), veh/h	463	483	114	662	31	152
Grp Sat Flow(s),veh/h/ln	1763	1835	1767	1763	1767	1572
Q Serve(g_s), s	9.1	9.1	2.8	4.1	0.7	4.0
Cycle Q Clear(g_c), s	9.1	9.1	2.8	4.1	0.7	4.0
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	734	764	150	2105	252	224
V/C Ratio(X)	0.63	0.63	0.76	0.31	0.12	0.68
Avail Cap(c_a), veh/h	2243	2335	678	6257	1288	1146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	10.1	19.6	4.4	16.4	17.8
Incr Delay (d2), s/veh	0.9	0.9	7.7	0.1	0.2	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.6	1.3	0.7	0.3	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	11.0	27.3	4.5	16.6	21.4
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	946			776	183	
Approach Delay, s/veh	11.0			7.8	20.6	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.9	24.5				32.4	11.3
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	4.8	11.1				6.1	6.0
Green Ext Time (p_c), s	0.2	6.7				4.9	0.6

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	224	237	74	126	31	296	446	113	55	403	211
Future Volume (veh/h)	337	224	237	74	126	31	296	446	113	55	403	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	359	238	252	84	143	35	333	501	127	58	424	222
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	632	770	331	214	530	226	571	1038	262	165	1085	468
Arrive On Green	0.18	0.22	0.22	0.12	0.15	0.15	0.16	0.37	0.37	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1517	1767	3526	1500	3565	2771	698	1767	3526	1521
Grp Volume(v), veh/h	359	238	252	84	143	35	333	318	310	58	424	222
Grp Sat Flow(s),veh/h/ln	1714	1763	1517	1767	1763	1500	1783	1763	1706	1767	1763	1521
Q Serve(g_s), s	9.8	5.8	16.0	4.5	3.7	2.1	8.9	14.1	14.3	3.2	9.7	12.2
Cycle Q Clear(g_c), s	9.8	5.8	16.0	4.5	3.7	2.1	8.9	14.1	14.3	3.2	9.7	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	632	770	331	214	530	226	571	661	639	165	1085	468
V/C Ratio(X)	0.57	0.31	0.76	0.39	0.27	0.16	0.58	0.48	0.49	0.35	0.39	0.47
Avail Cap(c_a), veh/h	632	1352	582	214	1113	473	571	661	639	165	1085	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	33.7	37.7	41.7	38.7	38.1	40.1	24.6	24.6	43.8	28.0	28.9
Incr Delay (d2), s/veh	3.7	0.2	3.6	5.3	0.3	0.3	4.3	2.5	2.6	5.8	1.1	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	2.5	6.1	2.2	1.6	0.8	4.1	6.1	6.0	1.6	4.1	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	34.0	41.3	47.0	39.0	38.4	44.4	27.0	27.2	49.6	29.1	32.3
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		849			262			961			704	
Approach Delay, s/veh		39.5			41.5			33.1			31.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	28.0	21.0	37.0	24.0	21.0	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	10.5	18.0	10.9	14.2	11.8	5.7	5.2	16.3
Green Ext Time (p_c), s	0.1	2.2	0.6	3.2	0.7	0.9	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	130	1	82	18	831	145	96	648	2
Future Volume (veh/h)	14	1	8	130	1	82	18	831	145	96	648	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	178	1	112	20	944	165	102	689	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	12	130	284	2	240	32	1199	209	130	1652	5
Arrive On Green	0.09	0.09	0.09	0.16	0.16	0.16	0.02	0.40	0.40	0.07	0.46	0.46
Sat Flow, veh/h	1767	126	1390	1767	13	1493	1767	2975	520	1767	3605	10
Grp Volume(v), veh/h	19	0	12	178	0	113	20	559	550	102	337	354
Grp Sat Flow(s),veh/h/ln	1767	0	1516	1767	0	1506	1767	1763	1732	1767	1763	1853
Q Serve(g_s), s	0.8	0.0	0.6	7.3	0.0	5.3	0.9	21.5	21.6	4.4	9.9	9.9
Cycle Q Clear(g_c), s	0.8	0.0	0.6	7.3	0.0	5.3	0.9	21.5	21.6	4.4	9.9	9.9
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.30	1.00		0.01
Lane Grp Cap(c), veh/h	166	0	142	284	0	242	32	710	698	130	808	849
V/C Ratio(X)	0.11	0.00	0.08	0.63	0.00	0.47	0.63	0.79	0.79	0.79	0.42	0.42
Avail Cap(c_a), veh/h	637	0	547	616	0	525	132	840	825	159	869	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	32.2	30.4	0.0	29.6	37.9	20.3	20.3	35.4	14.1	14.1
Incr Delay (d2), s/veh	0.4	0.0	0.4	2.9	0.0	1.8	7.3	4.8	4.9	14.9	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	3.3	0.0	2.0	0.4	8.9	8.8	2.4	3.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	0.0	32.5	33.3	0.0	31.4	45.2	25.1	25.2	50.3	14.6	14.6
LnGrp LOS	C	A	C	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		31			291			1129			793	
Approach Delay, s/veh		32.6			32.6			25.5			19.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	36.4		13.6	5.6	40.7		17.8
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 5	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	10.4	23.6		2.8	2.9	11.9		9.3
Green Ext Time (p_c), s	0.0	7.7		0.1	0.0	6.9		1.5

Intersection Summary		
HCM 6th Ctrl Delay	24.3	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	182	157	6	6	21
Future Vol, veh/h	46	182	157	6	6	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	230	199	8	7	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.4	8.7	7.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	0%	22%
Vol Thru, %	80%	96%	0%
Vol Right, %	0%	4%	78%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	228	163	27
LT Vol	46	0	6
Through Vol	182	157	0
RT Vol	0	6	21
Lane Flow Rate	289	206	33
Geometry Grp	1	1	1
Degree of Util (X)	0.337	0.241	0.043
Departure Headway (Hd)	4.205	4.205	4.599
Convergence, Y/N	Yes	Yes	Yes
Cap	846	840	783
Service Time	2.281	2.301	2.599
HCM Lane V/C Ratio	0.342	0.245	0.042
HCM Control Delay	9.4	8.7	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.5	0.9	0.1

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	71	101	45	59	14	92	2	40	14	2	13
Future Vol, veh/h	21	71	101	45	59	14	92	2	40	14	2	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	82	116	56	74	18	135	3	59	20	3	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.2	9.1	9.7	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	11%	38%	48%
Vol Thru, %	2%	0%	37%	50%	7%
Vol Right, %	0%	100%	52%	12%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	94	40	193	118	29
LT Vol	92	0	21	45	14
Through Vol	2	0	71	59	2
RT Vol	0	40	101	14	13
Lane Flow Rate	138	59	222	148	41
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.228	0.077	0.276	0.198	0.058
Departure Headway (Hd)	5.932	4.732	4.473	4.844	5.014
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	603	752	801	738	708
Service Time	3.693	2.493	2.514	2.892	3.088
HCM Lane V/C Ratio	0.229	0.078	0.277	0.201	0.058
HCM Control Delay	10.5	7.9	9.2	9.1	8.4
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	0.9	0.2	1.1	0.7	0.2

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

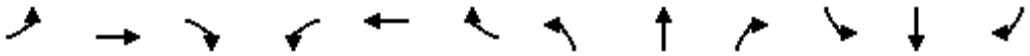
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	99	3	15	1	10	13	13	19	0	4	22	110
Future Vol, veh/h	99	3	15	1	10	13	13	19	0	4	22	110
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	138	4	21	3	25	33	21	31	0	5	29	147
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	7.7	8.1	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	85%	4%	3%
Vol Thru, %	59%	3%	42%	16%
Vol Right, %	0%	13%	54%	81%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	117	24	136
LT Vol	13	99	1	4
Through Vol	19	3	10	22
RT Vol	0	15	13	110
Lane Flow Rate	52	162	60	181
Geometry Grp	1	1	1	1
Degree of Util (X)	0.068	0.208	0.072	0.204
Departure Headway (Hd)	4.746	4.613	4.33	4.055
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	756	778	827	887
Service Time	2.769	2.637	2.357	2.074
HCM Lane V/C Ratio	0.069	0.208	0.073	0.204
HCM Control Delay	8.1	8.9	7.7	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.8	0.2	0.8

APPENDIX F

EXISTING + CUMULATIVE PROJECTS INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	327	170	268	748	10	240	139	185	8	282	345
Future Volume (veh/h)	110	327	170	268	748	10	240	139	185	8	282	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	129	385	200	319	890	12	324	188	250	9	307	375
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1057	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3560	48	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	129	385	200	319	441	461	324	188	250	9	307	375
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1845	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	7.1	8.8	10.9	9.1	23.4	23.4	9.2	3.6	10.1	0.5	15.0	23.1
Cycle Q Clear(g_c), s	7.1	8.8	10.9	9.1	23.4	23.4	9.2	3.6	10.1	0.5	15.0	23.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.74	0.39	0.47	0.82	0.84	0.84	0.81	0.15	0.34	0.13	0.60	0.85
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	29.0	29.7	43.3	32.9	32.9	43.1	21.2	16.1	46.3	30.5	33.4
Incr Delay (d2), s/veh	24.9	1.2	3.6	16.1	14.3	13.8	13.8	0.2	1.0	3.7	5.1	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	4.3	4.6	11.6	12.1	4.6	1.5	3.6	0.3	6.9	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	30.2	33.4	59.4	47.3	46.7	56.9	21.4	17.1	50.0	35.7	51.3
LnGrp LOS	E	C	C	E	D	D	E	C	B	D	D	D
Approach Vol, veh/h		714			1221			762			691	
Approach Delay, s/veh		38.0			50.2			35.1			44.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	11.1	12.9	11.2	25.1	9.1	25.4	2.5	12.1
Green Ext Time (p_c), s	0.0	3.9	0.0	2.0	0.0	2.9	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	553	54	131	646	29	78
Future Volume (veh/h)	553	54	131	646	29	78
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	683	67	166	818	71	190
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1126	110	222	2010	302	269
Arrive On Green	0.35	0.35	0.13	0.57	0.17	0.17
Sat Flow, veh/h	3320	316	1767	3618	1767	1572
Grp Volume(v), veh/h	373	377	166	818	71	190
Grp Sat Flow(s),veh/h/ln	1763	1781	1767	1763	1767	1572
Q Serve(g_s), s	7.7	7.7	4.0	5.7	1.5	5.0
Cycle Q Clear(g_c), s	7.7	7.7	4.0	5.7	1.5	5.0
Prop In Lane		0.18	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	615	621	222	2010	302	269
V/C Ratio(X)	0.61	0.61	0.75	0.41	0.24	0.71
Avail Cap(c_a), veh/h	1831	1850	996	6065	1361	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	11.8	18.6	5.3	15.8	17.2
Incr Delay (d2), s/veh	1.0	1.0	4.9	0.1	0.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.4	1.6	1.1	0.6	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.8	12.8	23.5	5.4	16.2	20.6
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	750			984	261	
Approach Delay, s/veh	12.8			8.5	19.4	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.7	21.6				31.4	12.6
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 5.5	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	6.0	9.7				7.7	7.0
Green Ext Time (p_c), s	0.4	4.9				6.5	0.8

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	105	195	133	243	26	343	560	58	33	573	286
Future Volume (veh/h)	231	105	195	133	243	26	343	560	58	33	573	286
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	282	128	238	208	380	41	451	737	76	36	630	314
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	441	782	328	296	903	381	624	1224	126	106	938	401
Arrive On Green	0.13	0.22	0.22	0.17	0.26	0.26	0.18	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1476	1767	3526	1487	3565	3214	331	1767	3526	1508
Grp Volume(v), veh/h	282	128	238	208	380	41	451	404	409	36	630	314
Grp Sat Flow(s),veh/h/ln	1714	1763	1476	1767	1763	1487	1783	1763	1783	1767	1763	1508
Q Serve(g_s), s	9.1	3.4	17.4	12.9	10.5	2.5	13.9	21.5	21.5	2.3	18.6	22.5
Cycle Q Clear(g_c), s	9.1	3.4	17.4	12.9	10.5	2.5	13.9	21.5	21.5	2.3	18.6	22.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	441	782	328	296	903	381	624	671	679	106	938	401
V/C Ratio(X)	0.64	0.16	0.73	0.70	0.42	0.11	0.72	0.60	0.60	0.34	0.67	0.78
Avail Cap(c_a), veh/h	441	886	371	296	1007	425	624	671	679	106	938	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	36.6	42.1	45.8	36.1	33.2	45.4	29.0	29.0	52.6	38.2	39.7
Incr Delay (d2), s/veh	6.9	0.1	6.1	13.2	0.3	0.1	7.1	4.0	3.9	8.5	3.8	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	1.5	6.8	6.7	4.5	0.9	6.6	9.5	9.6	1.2	8.3	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	36.7	48.2	59.0	36.5	33.3	52.5	32.9	32.9	61.0	42.1	53.8
LnGrp LOS	E	D	D	E	D	C	D	C	C	E	D	D
Approach Vol, veh/h		648			629			1264			980	
Approach Delay, s/veh		48.9			43.7			39.9			46.5	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	31.4	24.9	36.3	20.0	35.4	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	19.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	11.1	19.4	15.9	24.5	11.1	12.5	4.3	23.5
Green Ext Time (p_c), s	0.2	1.1	0.7	2.8	0.3	2.5	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	44.1
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	77	2	50	148	541	69	82	738	3
Future Volume (veh/h)	0	1	2	77	2	50	148	541	69	82	738	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	107	3	69	187	685	87	108	971	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	284	10	234	229	1278	162	138	1286	5
Arrive On Green	0.00	0.06	0.06	0.16	0.16	0.16	0.13	0.41	0.41	0.08	0.36	0.36
Sat Flow, veh/h	1767	605	1009	1767	63	1453	1767	3130	397	1767	3600	15
Grp Volume(v), veh/h	0	0	8	107	0	72	187	385	387	108	475	500
Grp Sat Flow(s),veh/h/ln	1767	0	1614	1767	0	1516	1767	1763	1764	1767	1763	1852
Q Serve(g_s), s	0.0	0.0	0.3	3.8	0.0	3.0	7.3	11.7	11.7	4.2	16.8	16.8
Cycle Q Clear(g_c), s	0.0	0.0	0.3	3.8	0.0	3.0	7.3	11.7	11.7	4.2	16.8	16.8
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.23	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	91	284	0	244	229	720	720	138	630	662
V/C Ratio(X)	0.00	0.00	0.09	0.38	0.00	0.30	0.82	0.54	0.54	0.78	0.76	0.76
Avail Cap(c_a), veh/h	701	0	640	676	0	580	346	822	822	280	759	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.6	26.5	0.0	26.1	29.9	15.8	15.8	31.9	20.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	1.1	0.0	0.9	5.2	0.9	0.9	3.6	4.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.7	0.0	1.1	3.2	4.4	4.4	1.9	6.9	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	32.2	27.5	0.0	26.9	35.1	16.7	16.7	35.5	24.3	24.1
LnGrp LOS	A	A	C	C	A	C	D	B	B	D	C	C
Approach Vol, veh/h		8			179			959			1083	
Approach Delay, s/veh		32.2			27.3			20.3			25.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	33.9		10.3	13.3	30.3		16.6
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	6.2	13.7		2.3	9.3	18.8		5.8
Green Ext Time (p_c), s	0.0	6.4		0.0	0.1	6.5		0.9

Intersection Summary		
HCM 6th Ctrl Delay	23.3	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	146	172	2	5	37
Future Vol, veh/h	22	146	172	2	5	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	286	269	3	8	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	10.4	9.7	8.3
HCM LOS	B	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	0%	12%
Vol Thru, %	87%	99%	0%
Vol Right, %	0%	1%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	168	174	42
LT Vol	22	0	5
Through Vol	146	172	0
RT Vol	0	2	37
Lane Flow Rate	329	272	68
Geometry Grp	1	1	1
Degree of Util (X)	0.405	0.336	0.09
Departure Headway (Hd)	4.426	4.452	4.76
Convergence, Y/N	Yes	Yes	Yes
Cap	814	807	752
Service Time	2.448	2.474	2.795
HCM Lane V/C Ratio	0.404	0.337	0.09
HCM Control Delay	10.4	9.7	8.3
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2	1.5	0.3

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	83	45	35	126	11	14	0	6	13	1	31
Future Vol, veh/h	9	83	45	35	126	11	14	0	6	13	1	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	166	90	61	221	19	16	0	7	16	1	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.4	10.1	8.9	8.5
HCM LOS	A	B	A	A

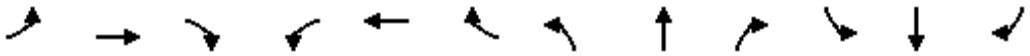
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	7%	20%	29%
Vol Thru, %	0%	0%	61%	73%	2%
Vol Right, %	0%	100%	33%	6%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	6	137	172	45
LT Vol	14	0	9	35	13
Through Vol	0	0	83	126	1
RT Vol	0	6	45	11	31
Lane Flow Rate	16	7	274	302	56
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.029	0.01	0.327	0.373	0.078
Departure Headway (Hd)	6.388	5.173	4.299	4.445	4.993
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	560	690	836	812	716
Service Time	4.137	2.921	2.322	2.468	3.037
HCM Lane V/C Ratio	0.029	0.01	0.328	0.372	0.078
HCM Control Delay	9.3	8	9.4	10.1	8.5
HCM Lane LOS	A	A	A	B	A
HCM 95th-tile Q	0.1	0	1.4	1.7	0.3

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	90	13	11	1	26	12	4	4	0	14	10	140
Future Vol, veh/h	90	13	11	1	26	12	4	4	0	14	10	140
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	225	33	28	3	84	39	11	11	0	23	16	226
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11	8.8	8.6	9.7
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	79%	3%	9%
Vol Thru, %	50%	11%	67%	6%
Vol Right, %	0%	10%	31%	85%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	114	39	164
LT Vol	4	90	1	14
Through Vol	4	13	26	10
RT Vol	0	11	12	140
Lane Flow Rate	21	285	126	265
Geometry Grp	1	1	1	1
Degree of Util (X)	0.031	0.385	0.167	0.329
Departure Headway (Hd)	5.384	4.858	4.784	4.473
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	659	735	744	799
Service Time	3.464	2.918	2.854	2.524
HCM Lane V/C Ratio	0.032	0.388	0.169	0.332
HCM Control Delay	8.6	11	8.8	9.7
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.1	1.8	0.6	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	577	176	260	336	17	229	301	384	15	202	129
Future Volume (veh/h)	217	577	176	260	336	17	229	301	384	15	202	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	238	634	193	268	346	18	241	317	404	16	215	137
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	905	47	302	1192	718	71	605	366
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3404	176	3428	3526	1530	1767	2085	1261
Grp Volume(v), veh/h	238	634	193	268	178	186	241	317	404	16	180	172
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1817	1714	1763	1530	1767	1763	1583
Q Serve(g_s), s	13.1	15.4	10.2	7.4	8.3	8.3	6.9	6.5	19.2	0.9	8.1	8.7
Cycle Q Clear(g_c), s	13.1	15.4	10.2	7.4	8.3	8.3	6.9	6.5	19.2	0.9	8.1	8.7
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	279	1044	452	439	469	483	302	1192	718	71	511	459
V/C Ratio(X)	0.85	0.61	0.43	0.61	0.38	0.38	0.80	0.27	0.56	0.23	0.35	0.37
Avail Cap(c_a), veh/h	279	1047	453	439	488	503	302	1192	718	71	511	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.51	0.51	0.51	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	30.2	28.4	41.2	30.0	30.0	44.7	24.1	19.4	46.5	28.1	28.3
Incr Delay (d2), s/veh	26.6	2.6	2.9	6.0	2.3	2.2	10.8	0.3	1.6	7.3	1.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	6.7	4.0	3.4	3.7	3.8	3.3	2.7	6.8	0.5	3.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	32.8	31.3	47.3	32.2	32.2	55.5	24.4	21.0	53.8	30.0	30.6
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1065			632			962			368	
Approach Delay, s/veh		40.3			38.6			30.8			31.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	9.4	17.4	8.9	10.7	15.1	10.3	2.9	21.2
Green Ext Time (p_c), s	0.2	5.2	0.0	2.9	0.0	2.3	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	958	31	97	657	30	95
Future Volume (veh/h)	958	31	97	657	30	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	988	32	104	706	42	134
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1525	49	136	2145	244	217
Arrive On Green	0.44	0.44	0.08	0.61	0.14	0.14
Sat Flow, veh/h	3573	113	1767	3618	1767	1572
Grp Volume(v), veh/h	500	520	104	706	42	134
Grp Sat Flow(s),veh/h/ln	1763	1830	1767	1763	1767	1572
Q Serve(g_s), s	10.0	10.0	2.6	4.4	0.9	3.6
Cycle Q Clear(g_c), s	10.0	10.0	2.6	4.4	0.9	3.6
Prop In Lane		0.06	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	772	802	136	2145	244	217
V/C Ratio(X)	0.65	0.65	0.76	0.33	0.17	0.62
Avail Cap(c_a), veh/h	2181	2264	659	6085	1252	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	9.9	20.4	4.3	17.1	18.3
Incr Delay (d2), s/veh	0.9	0.9	8.6	0.1	0.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.9	1.2	0.7	0.4	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.8	10.8	28.9	4.4	17.5	21.1
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	1020			810	176	
Approach Delay, s/veh	10.8			7.6	20.2	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.7	26.0				33.7	11.3
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	4.6	12.0				6.4	5.6
Green Ext Time (p_c), s	0.2	7.5				5.3	0.5

Intersection Summary		
HCM 6th Ctrl Delay		10.3
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	269	229	91	146	35	291	505	143	61	440	219
Future Volume (veh/h)	350	269	229	91	146	35	291	505	143	61	440	219
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	372	286	244	103	166	40	327	567	161	64	463	231
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	634	764	328	215	523	223	573	1012	286	165	1088	469
Arrive On Green	0.18	0.22	0.22	0.12	0.15	0.15	0.16	0.38	0.38	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1517	1767	3526	1500	3565	2693	762	1767	3526	1522
Grp Volume(v), veh/h	372	286	244	103	166	40	327	370	358	64	463	231
Grp Sat Flow(s),veh/h/ln	1714	1763	1517	1767	1763	1500	1783	1763	1692	1767	1763	1522
Q Serve(g_s), s	10.2	7.1	15.4	5.6	4.3	2.4	8.7	17.1	17.2	3.5	10.7	12.7
Cycle Q Clear(g_c), s	10.2	7.1	15.4	5.6	4.3	2.4	8.7	17.1	17.2	3.5	10.7	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	634	764	328	215	523	223	573	662	636	165	1088	469
V/C Ratio(X)	0.59	0.37	0.74	0.48	0.32	0.18	0.57	0.56	0.56	0.39	0.43	0.49
Avail Cap(c_a), veh/h	634	1355	583	215	1115	474	573	662	636	165	1088	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	34.3	37.6	42.1	39.1	38.3	39.9	25.4	25.4	43.8	28.3	29.0
Incr Delay (d2), s/veh	3.9	0.3	3.3	7.5	0.3	0.4	4.1	3.4	3.6	6.7	1.2	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.0	5.8	2.8	1.8	0.9	4.0	7.4	7.2	1.8	4.6	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	34.6	40.9	49.6	39.4	38.7	44.0	28.7	29.0	50.5	29.5	32.6
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		902			309			1055			758	
Approach Delay, s/veh		39.5			42.7			33.5			32.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	27.8	21.0	37.0	24.0	20.8	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	7.6	17.4	10.7	14.7	12.2	6.3	5.5	19.2
Green Ext Time (p_c), s	0.1	2.5	0.6	3.4	0.8	1.1	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	35.9
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	107	1	66	18	961	125	81	728	2
Future Volume (veh/h)	14	1	8	107	1	66	18	961	125	81	728	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	147	1	90	20	1092	142	86	774	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	12	130	265	2	223	32	1332	173	110	1700	4
Arrive On Green	0.09	0.09	0.09	0.15	0.15	0.15	0.02	0.43	0.43	0.06	0.47	0.47
Sat Flow, veh/h	1767	126	1390	1767	17	1487	1767	3119	405	1767	3607	9
Grp Volume(v), veh/h	19	0	12	147	0	91	20	616	618	86	378	398
Grp Sat Flow(s),veh/h/ln	1767	0	1516	1767	0	1503	1767	1763	1760	1767	1763	1853
Q Serve(g_s), s	0.8	0.0	0.6	6.0	0.0	4.3	0.9	24.1	24.2	3.8	11.3	11.3
Cycle Q Clear(g_c), s	0.8	0.0	0.6	6.0	0.0	4.3	0.9	24.1	24.2	3.8	11.3	11.3
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.23	1.00		0.01
Lane Grp Cap(c), veh/h	165	0	142	265	0	225	32	753	752	110	831	874
V/C Ratio(X)	0.11	0.00	0.08	0.55	0.00	0.40	0.63	0.82	0.82	0.78	0.46	0.46
Avail Cap(c_a), veh/h	632	0	542	612	0	521	131	833	832	158	863	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	32.4	30.8	0.0	30.1	38.2	19.7	19.8	36.2	13.9	13.9
Incr Delay (d2), s/veh	0.4	0.0	0.4	2.3	0.0	1.5	7.3	6.4	6.6	8.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	2.7	0.0	1.6	0.4	10.2	10.3	1.8	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	32.8	33.2	0.0	31.6	45.5	26.1	26.3	44.8	14.5	14.5
LnGrp LOS	C	A	C	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		31			238			1254			862	
Approach Delay, s/veh		32.9			32.6			26.5			17.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	38.5		13.6	5.6	42.0		17.0
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 5	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	5.8	26.2		2.8	2.9	13.3		8.0
Green Ext Time (p_c), s	0.0	7.2		0.1	0.0	7.8		1.2

Intersection Summary		
HCM 6th Ctrl Delay	24.0	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	174	140	5	5	21
Future Vol, veh/h	46	174	140	5	5	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	220	177	6	6	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.3	8.4	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	0%	19%
Vol Thru, %	79%	97%	0%
Vol Right, %	0%	3%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	220	145	26
LT Vol	46	0	5
Through Vol	174	140	0
RT Vol	0	5	21
Lane Flow Rate	278	184	32
Geometry Grp	1	1	1
Degree of Util (X)	0.324	0.214	0.04
Departure Headway (Hd)	4.188	4.197	4.505
Convergence, Y/N	Yes	Yes	Yes
Cap	849	842	800
Service Time	2.254	2.285	2.505
HCM Lane V/C Ratio	0.327	0.219	0.04
HCM Control Delay	9.3	8.4	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.4	0.8	0.1

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	84	77	28	70	14	62	1	18	14	1	13
Future Vol, veh/h	21	84	77	28	70	14	62	1	18	14	1	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	97	89	35	88	18	91	1	26	20	1	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	8.8	8.6	9.2	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	12%	25%	50%
Vol Thru, %	2%	0%	46%	62%	4%
Vol Right, %	0%	100%	42%	12%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	18	182	112	28
LT Vol	62	0	21	28	14
Through Vol	1	0	84	70	1
RT Vol	0	18	77	14	13
Lane Flow Rate	93	26	209	140	40
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.151	0.034	0.25	0.178	0.054
Departure Headway (Hd)	5.866	4.665	4.31	4.581	4.83
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	611	766	835	783	739
Service Time	3.606	2.405	2.334	2.61	2.875
HCM Lane V/C Ratio	0.152	0.034	0.25	0.179	0.054
HCM Control Delay	9.7	7.6	8.8	8.6	8.2
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.1	1	0.6	0.2

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

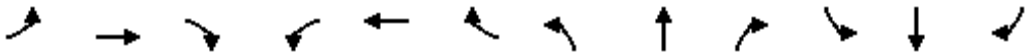
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	4	18	1	12	16	16	23	0	5	26	104
Future Vol, veh/h	88	4	18	1	12	16	16	23	0	5	26	104
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	122	6	25	3	30	40	26	37	0	7	35	139
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	7.8	8.2	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	80%	3%	4%
Vol Thru, %	59%	4%	41%	19%
Vol Right, %	0%	16%	55%	77%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	110	29	135
LT Vol	16	88	1	5
Through Vol	23	4	12	26
RT Vol	0	18	16	104
Lane Flow Rate	63	153	72	180
Geometry Grp	1	1	1	1
Degree of Util (X)	0.083	0.196	0.087	0.205
Departure Headway (Hd)	4.753	4.627	4.342	4.099
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	755	776	825	877
Service Time	2.776	2.651	2.369	2.117
HCM Lane V/C Ratio	0.083	0.197	0.087	0.205
HCM Control Delay	8.2	8.8	7.8	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.7	0.3	0.8

APPENDIX G

EXISTING + CUMULATIVE PROJECTS + PROJECT INTERSECTION ANALYSIS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	327	183	268	748	10	246	141	185	8	285	345
Future Volume (veh/h)	110	327	183	268	748	10	246	141	185	8	285	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	129	385	215	319	890	12	332	191	250	9	310	375
Peak Hour Factor	0.85	0.85	0.85	0.84	0.84	0.84	0.74	0.74	0.74	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	173	991	429	391	1057	14	401	1294	741	71	511	442
Arrive On Green	0.10	0.28	0.28	0.11	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1525	3428	3560	48	3428	3526	1532	1767	1763	1526
Grp Volume(v), veh/h	129	385	215	319	441	461	332	191	250	9	310	375
Grp Sat Flow(s),veh/h/ln	1767	1763	1525	1714	1763	1845	1714	1763	1532	1767	1763	1526
Q Serve(g_s), s	7.1	8.8	11.8	9.1	23.4	23.4	9.5	3.6	10.1	0.5	15.2	23.1
Cycle Q Clear(g_c), s	7.1	8.8	11.8	9.1	23.4	23.4	9.5	3.6	10.1	0.5	15.2	23.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	991	429	391	524	548	401	1294	741	71	511	442
V/C Ratio(X)	0.74	0.39	0.50	0.82	0.84	0.84	0.83	0.15	0.34	0.13	0.61	0.85
Avail Cap(c_a), veh/h	173	994	430	391	543	568	401	1294	741	71	511	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	29.0	30.1	43.3	32.9	32.9	43.2	21.2	16.1	46.3	30.6	33.4
Incr Delay (d2), s/veh	24.9	1.2	4.2	16.1	14.3	13.8	14.8	0.2	1.0	3.7	5.3	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	4.7	4.6	11.6	12.1	4.8	1.5	3.6	0.3	7.0	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	30.2	34.2	59.4	47.3	46.7	58.0	21.4	17.1	50.0	35.9	51.3
LnGrp LOS	E	C	C	E	D	D	E	C	B	D	D	D
Approach Vol, veh/h		729			1221			773			694	
Approach Delay, s/veh		38.2			50.2			35.7			44.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	34.4	15.9	34.1	14.0	36.0	8.2	41.8
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 11	28.2	* 12	* 29	* 9.8	* 31	* 4	36.6
Max Q Clear Time (g_c+I1), s	11.1	13.8	11.5	25.1	9.1	25.4	2.5	12.1
Green Ext Time (p_c), s	0.0	3.9	0.0	2.0	0.0	2.9	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	553	56	153	646	30	90
Future Volume (veh/h)	553	56	153	646	30	90
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.95	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	683	69	194	818	73	220
Peak Hour Factor	0.81	0.81	0.79	0.79	0.41	0.41
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1088	110	256	2014	335	298
Arrive On Green	0.34	0.34	0.15	0.57	0.19	0.19
Sat Flow, veh/h	3310	325	1767	3618	1767	1572
Grp Volume(v), veh/h	374	378	194	818	73	220
Grp Sat Flow(s),veh/h/ln	1763	1779	1767	1763	1767	1572
Q Serve(g_s), s	8.5	8.5	5.0	6.2	1.7	6.3
Cycle Q Clear(g_c), s	8.5	8.5	5.0	6.2	1.7	6.3
Prop In Lane		0.18	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	596	602	256	2014	335	298
V/C Ratio(X)	0.63	0.63	0.76	0.41	0.22	0.74
Avail Cap(c_a), veh/h	1690	1705	919	5598	1257	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	13.3	19.6	5.7	16.3	18.2
Incr Delay (d2), s/veh	1.1	1.1	4.5	0.1	0.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.8	2.1	1.3	0.6	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	14.3	24.1	5.8	16.7	21.8
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	752			1012	293	
Approach Delay, s/veh	14.3			9.3	20.5	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.1	22.4				33.5	14.1
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 6.9	45.7				* 76	33.9
Max Q Clear Time (g_c+I1), s	7.0	10.5				8.2	8.3
Green Ext Time (p_c), s	0.5	4.9				6.5	0.9

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	107	203	133	246	26	359	560	58	33	573	289
Future Volume (veh/h)	233	107	203	133	246	26	359	560	58	33	573	289
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	284	130	248	208	384	41	472	737	76	36	630	318
Peak Hour Factor	0.82	0.82	0.82	0.64	0.64	0.64	0.76	0.76	0.76	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	440	790	331	295	911	384	622	1221	126	106	935	400
Arrive On Green	0.13	0.22	0.22	0.17	0.26	0.26	0.17	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	3428	3526	1477	1767	3526	1487	3565	3214	331	1767	3526	1508
Grp Volume(v), veh/h	284	130	248	208	384	41	472	404	409	36	630	318
Grp Sat Flow(s),veh/h/ln	1714	1763	1477	1767	1763	1487	1783	1763	1783	1767	1763	1508
Q Serve(g_s), s	9.2	3.5	18.3	13.0	10.6	2.5	14.7	21.6	21.6	2.3	18.7	23.0
Cycle Q Clear(g_c), s	9.2	3.5	18.3	13.0	10.6	2.5	14.7	21.6	21.6	2.3	18.7	23.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	440	790	331	295	911	384	622	670	677	106	935	400
V/C Ratio(X)	0.65	0.16	0.75	0.71	0.42	0.11	0.76	0.60	0.60	0.34	0.67	0.80
Avail Cap(c_a), veh/h	440	884	370	295	1004	424	622	670	677	106	935	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	36.5	42.3	46.0	36.1	33.1	45.9	29.2	29.2	52.7	38.4	40.0
Incr Delay (d2), s/veh	7.1	0.1	7.4	13.3	0.3	0.1	8.4	4.0	4.0	8.5	3.9	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	1.5	7.2	6.7	4.6	0.9	7.1	9.5	9.7	1.2	8.4	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	36.6	49.7	59.3	36.4	33.2	54.3	33.2	33.1	61.3	42.3	55.0
LnGrp LOS	E	D	D	E	D	C	D	C	C	E	D	E
Approach Vol, veh/h		662			633			1285			984	
Approach Delay, s/veh		49.6			43.7			40.9			47.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	31.7	24.9	36.3	20.0	35.7	11.5	49.7
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	19.5	29.3	20.4	31.0	15.0	33.3	7.0	44.4
Max Q Clear Time (g_c+I1), s	15.0	20.3	16.7	25.0	11.2	12.6	4.3	23.6
Green Ext Time (p_c), s	0.2	1.1	0.7	2.7	0.3	2.5	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	2	89	2	58	148	541	90	98	738	3
Future Volume (veh/h)	0	1	2	89	2	58	148	541	90	98	738	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	3	5	124	3	81	187	685	114	129	971	4
Peak Hour Factor	0.38	0.38	0.38	0.72	0.72	0.72	0.79	0.79	0.79	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	34	57	286	9	237	229	1182	197	164	1284	5
Arrive On Green	0.00	0.06	0.06	0.16	0.16	0.16	0.13	0.39	0.39	0.09	0.36	0.36
Sat Flow, veh/h	1767	605	1009	1767	54	1460	1767	3004	499	1767	3600	15
Grp Volume(v), veh/h	0	0	8	124	0	84	187	402	397	129	475	500
Grp Sat Flow(s),veh/h/ln	1767	0	1614	1767	0	1514	1767	1763	1740	1767	1763	1852
Q Serve(g_s), s	0.0	0.0	0.3	4.5	0.0	3.5	7.3	12.7	12.7	5.1	16.8	16.8
Cycle Q Clear(g_c), s	0.0	0.0	0.3	4.5	0.0	3.5	7.3	12.7	12.7	5.1	16.8	16.8
Prop In Lane	1.00		0.63	1.00		0.96	1.00		0.29	1.00		0.01
Lane Grp Cap(c), veh/h	100	0	91	286	0	245	229	694	685	164	629	661
V/C Ratio(X)	0.00	0.00	0.09	0.43	0.00	0.34	0.82	0.58	0.58	0.79	0.76	0.76
Avail Cap(c_a), veh/h	699	0	639	674	0	578	345	820	809	280	757	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.7	26.7	0.0	26.3	30.0	16.8	16.9	31.4	20.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	1.3	0.0	1.1	5.3	1.1	1.1	3.2	4.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.9	0.0	1.3	3.3	4.8	4.8	2.2	7.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	32.3	28.0	0.0	27.4	35.3	17.9	18.0	34.6	24.4	24.2
LnGrp LOS	A	A	C	C	A	C	D	B	B	C	C	C
Approach Vol, veh/h		8			208			986			1104	
Approach Delay, s/veh		32.3			27.8			21.2			25.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	33.0		10.3	13.4	30.3		16.8
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 11	32.9		28.0	* 14	* 30		27.0
Max Q Clear Time (g_c+I1), s	7.1	14.7		2.3	9.3	18.8		6.5
Green Ext Time (p_c), s	0.1	6.5		0.0	0.1	6.4		1.1

Intersection Summary	
HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	183	192	2	6	37
Future Vol, veh/h	22	183	192	2	6	37
Peak Hour Factor	0.51	0.51	0.64	0.64	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	359	300	3	10	60
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11.9	10.4	8.6
HCM LOS	B	B	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	0%	14%
Vol Thru, %	89%	99%	0%
Vol Right, %	0%	1%	86%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	205	194	43
LT Vol	22	0	6
Through Vol	183	192	0
RT Vol	0	2	37
Lane Flow Rate	402	303	69
Geometry Grp	1	1	1
Degree of Util (X)	0.499	0.382	0.096
Departure Headway (Hd)	4.469	4.541	4.997
Convergence, Y/N	Yes	Yes	Yes
Cap	808	791	714
Service Time	2.496	2.57	3.047
HCM Lane V/C Ratio	0.498	0.383	0.097
HCM Control Delay	11.9	10.4	8.6
HCM Lane LOS	B	B	A
HCM 95th-tile Q	2.8	1.8	0.3

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	83	83	59	126	11	34	0	19	13	2	31
Future Vol, veh/h	9	83	83	59	126	11	34	0	19	13	2	31
Peak Hour Factor	0.50	0.50	0.50	0.57	0.57	0.57	0.85	0.85	0.85	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	166	166	104	221	19	40	0	22	16	3	39
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	10.7	11.5	9.4	8.9
HCM LOS	B	B	A	A

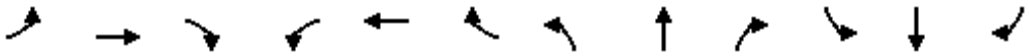
Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	5%	30%	28%
Vol Thru, %	0%	0%	47%	64%	4%
Vol Right, %	0%	100%	47%	6%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	19	175	196	46
LT Vol	34	0	9	59	13
Through Vol	0	0	83	126	2
RT Vol	0	19	83	11	31
Lane Flow Rate	40	22	350	344	58
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.074	0.034	0.428	0.448	0.085
Departure Headway (Hd)	6.667	5.449	4.407	4.688	5.35
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	534	650	812	763	662
Service Time	4.456	3.237	2.454	2.738	3.441
HCM Lane V/C Ratio	0.075	0.034	0.431	0.451	0.088
HCM Control Delay	10	8.4	10.7	11.5	8.9
HCM Lane LOS	A	A	B	B	A
HCM 95th-tile Q	0.2	0.1	2.2	2.3	0.3

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	103	13	11	1	26	12	4	4	0	14	10	164
Future Vol, veh/h	103	13	11	1	26	12	4	4	0	14	10	164
Peak Hour Factor	0.40	0.40	0.40	0.31	0.31	0.31	0.38	0.38	0.38	0.62	0.62	0.62
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	258	33	28	3	84	39	11	11	0	23	16	265
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.9	9.1	8.8	10.5
HCM LOS	B	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	81%	3%	7%
Vol Thru, %	50%	10%	67%	5%
Vol Right, %	0%	9%	31%	87%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	8	127	39	188
LT Vol	4	103	1	14
Through Vol	4	13	26	10
RT Vol	0	11	12	164
Lane Flow Rate	21	318	126	303
Geometry Grp	1	1	1	1
Degree of Util (X)	0.033	0.439	0.173	0.384
Departure Headway (Hd)	5.651	4.973	4.939	4.559
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	637	718	718	782
Service Time	3.651	3.049	3.029	2.623
HCM Lane V/C Ratio	0.033	0.443	0.175	0.387
HCM Control Delay	8.8	11.9	9.1	10.5
HCM Lane LOS	A	B	A	B
HCM 95th-tile Q	0.1	2.2	0.6	1.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	577	188	260	336	17	242	304	384	15	205	129
Future Volume (veh/h)	217	577	188	260	336	17	242	304	384	15	205	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	238	634	207	268	346	18	255	320	404	16	218	137
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	1044	452	439	905	47	302	1192	718	71	608	363
Arrive On Green	0.16	0.30	0.30	0.13	0.27	0.27	0.09	0.34	0.34	0.04	0.29	0.29
Sat Flow, veh/h	1767	3526	1526	3428	3404	176	3428	3526	1530	1767	2096	1252
Grp Volume(v), veh/h	238	634	207	268	178	186	255	320	404	16	182	173
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1714	1763	1817	1714	1763	1530	1767	1763	1585
Q Serve(g_s), s	13.1	15.4	11.0	7.4	8.3	8.3	7.3	6.6	19.2	0.9	8.2	8.7
Cycle Q Clear(g_c), s	13.1	15.4	11.0	7.4	8.3	8.3	7.3	6.6	19.2	0.9	8.2	8.7
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	279	1044	452	439	469	483	302	1192	718	71	511	460
V/C Ratio(X)	0.85	0.61	0.46	0.61	0.38	0.38	0.85	0.27	0.56	0.23	0.36	0.38
Avail Cap(c_a), veh/h	279	1047	453	439	488	503	302	1192	718	71	511	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	0.45	0.45	0.45	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	30.2	28.7	41.2	30.0	30.0	44.9	24.1	19.4	46.5	28.1	28.3
Incr Delay (d2), s/veh	26.6	2.6	3.3	6.0	2.3	2.2	12.4	0.2	1.4	7.3	1.9	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	6.7	4.4	3.4	3.7	3.8	3.6	2.7	6.7	0.5	3.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	32.8	32.0	47.3	32.2	32.2	57.4	24.3	20.8	53.8	30.0	30.7
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1079			632			979			371	
Approach Delay, s/veh		40.3			38.6			31.5			31.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	35.9	13.0	34.1	20.0	32.9	8.2	38.9
Change Period (Y+Rc), s	* 4.2	6.3	* 4.2	* 5.1	* 4.2	* 6.3	* 4.2	5.1
Max Green Setting (Gmax), s	* 13	29.7	* 8.8	* 29	* 16	* 28	* 4	33.7
Max Q Clear Time (g_c+I1), s	9.4	17.4	9.3	10.7	15.1	10.3	2.9	21.2
Green Ext Time (p_c), s	0.2	5.2	0.0	2.9	0.0	2.3	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	958	33	117	657	32	118
Future Volume (veh/h)	958	33	117	657	32	118
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	988	34	126	706	45	166
Peak Hour Factor	0.97	0.97	0.93	0.93	0.71	0.71
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1492	51	166	2160	260	231
Arrive On Green	0.43	0.43	0.09	0.61	0.15	0.15
Sat Flow, veh/h	3564	119	1767	3618	1767	1572
Grp Volume(v), veh/h	502	520	126	706	45	166
Grp Sat Flow(s),veh/h/ln	1763	1828	1767	1763	1767	1572
Q Serve(g_s), s	10.7	10.7	3.3	4.6	1.1	4.8
Cycle Q Clear(g_c), s	10.7	10.7	3.3	4.6	1.1	4.8
Prop In Lane		0.07	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	758	786	166	2160	260	231
V/C Ratio(X)	0.66	0.66	0.76	0.33	0.17	0.72
Avail Cap(c_a), veh/h	2072	2149	626	5780	1189	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	10.8	20.9	4.4	17.7	19.3
Incr Delay (d2), s/veh	1.0	1.0	6.9	0.1	0.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	3.3	1.5	0.8	0.4	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	11.7	27.8	4.5	18.0	23.4
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	1022			832	211	
Approach Delay, s/veh	11.7			8.1	22.3	
Approach LOS	B			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.7	26.7				35.3	12.1
Change Period (Y+Rc), s	* 4.2	6.3				* 6.3	5.1
Max Green Setting (Gmax), s	* 13	55.7				* 78	31.9
Max Q Clear Time (g_c+I1), s	5.3	12.7				6.6	6.8
Green Ext Time (p_c), s	0.2	7.5				5.3	0.7

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	353	272	246	91	149	35	305	505	143	61	440	222
Future Volume (veh/h)	353	272	246	91	149	35	305	505	143	61	440	222
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1930	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	376	289	262	103	169	40	343	567	161	64	463	234
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	627	792	341	213	554	236	567	1001	283	163	1076	464
Arrive On Green	0.18	0.22	0.22	0.12	0.16	0.16	0.16	0.37	0.37	0.09	0.31	0.31
Sat Flow, veh/h	3428	3526	1518	1767	3526	1503	3565	2693	762	1767	3526	1521
Grp Volume(v), veh/h	376	289	262	103	169	40	343	370	358	64	463	234
Grp Sat Flow(s),veh/h/ln	1714	1763	1518	1767	1763	1503	1783	1763	1692	1767	1763	1521
Q Serve(g_s), s	10.4	7.2	16.8	5.7	4.4	2.4	9.3	17.4	17.5	3.5	10.9	13.1
Cycle Q Clear(g_c), s	10.4	7.2	16.8	5.7	4.4	2.4	9.3	17.4	17.5	3.5	10.9	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	627	792	341	213	554	236	567	655	629	163	1076	464
V/C Ratio(X)	0.60	0.36	0.77	0.48	0.30	0.17	0.61	0.57	0.57	0.39	0.43	0.50
Avail Cap(c_a), veh/h	627	1341	577	213	1104	470	567	655	629	163	1076	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	34.0	37.7	42.7	38.7	37.9	40.6	25.9	26.0	44.4	28.8	29.6
Incr Delay (d2), s/veh	4.2	0.3	3.7	7.7	0.3	0.3	4.7	3.5	3.7	6.9	1.3	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	3.0	6.4	2.9	1.9	0.9	4.3	7.6	7.3	1.8	4.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	34.3	41.4	50.3	39.0	38.2	45.4	29.4	29.7	51.3	30.1	33.5
LnGrp LOS	D	C	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		927			312			1071			761	
Approach Delay, s/veh		39.9			42.7			34.6			32.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	28.8	21.0	37.0	24.0	21.8	14.1	43.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.3	5.0	5.5	4.5	5.3
Max Green Setting (Gmax), s	12.5	39.5	16.5	31.7	19.0	32.5	9.6	38.6
Max Q Clear Time (g_c+I1), s	11.7	18.8	11.3	15.1	12.4	6.4	5.5	19.5
Green Ext Time (p_c), s	0.1	2.6	0.6	3.4	0.7	1.1	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1	8	130	1	82	18	961	145	96	728	2
Future Volume (veh/h)	14	1	8	130	1	82	18	961	145	96	728	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	1	11	178	1	112	20	1092	165	102	774	2
Peak Hour Factor	0.72	0.72	0.72	0.73	0.73	0.73	0.88	0.88	0.88	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	12	128	279	2	236	32	1285	194	129	1720	4
Arrive On Green	0.09	0.09	0.09	0.16	0.16	0.16	0.02	0.42	0.42	0.07	0.48	0.48
Sat Flow, veh/h	1767	126	1387	1767	13	1492	1767	3050	460	1767	3607	9
Grp Volume(v), veh/h	19	0	12	178	0	113	20	630	627	102	378	398
Grp Sat Flow(s),veh/h/ln	1767	0	1513	1767	0	1505	1767	1763	1747	1767	1763	1853
Q Serve(g_s), s	0.8	0.0	0.6	7.7	0.0	5.6	0.9	26.4	26.6	4.7	11.7	11.7
Cycle Q Clear(g_c), s	0.8	0.0	0.6	7.7	0.0	5.6	0.9	26.4	26.6	4.7	11.7	11.7
Prop In Lane	1.00		0.92	1.00		0.99	1.00		0.26	1.00		0.01
Lane Grp Cap(c), veh/h	163	0	140	279	0	238	32	743	736	129	840	884
V/C Ratio(X)	0.12	0.00	0.09	0.64	0.00	0.47	0.63	0.85	0.85	0.79	0.45	0.45
Avail Cap(c_a), veh/h	603	0	517	584	0	498	125	795	788	151	840	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	0.0	34.0	32.3	0.0	31.4	40.0	21.4	21.4	37.4	14.3	14.3
Incr Delay (d2), s/veh	0.5	0.0	0.4	3.1	0.0	1.9	7.6	8.5	8.9	17.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	3.5	0.0	2.1	0.5	11.6	11.7	2.6	4.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	34.4	35.4	0.0	33.3	47.6	29.9	30.3	55.0	14.9	14.9
LnGrp LOS	C	A	C	D	A	C	D	C	C	E	B	B
Approach Vol, veh/h		31			291			1277			878	
Approach Delay, s/veh		34.5			34.6			30.4			19.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	39.7		13.9	5.7	44.2		18.3
Change Period (Y+Rc), s	* 4.2	5.1		6.3	* 4.2	* 5.1		5.3
Max Green Setting (Gmax), s	* 6	37.0		28.0	* 5.8	* 38		27.1
Max Q Clear Time (g_c+I1), s	10.7	28.6		2.8	2.9	13.7		9.7
Green Ext Time (p_c), s	0.0	6.0		0.1	0.0	7.7		1.5

Intersection Summary		
HCM 6th Ctrl Delay	27.1	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	209	179	6	6	21
Future Vol, veh/h	46	209	179	6	6	21
Peak Hour Factor	0.79	0.79	0.79	0.79	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	265	227	8	7	26
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.9	9	8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	0%	22%
Vol Thru, %	82%	97%	0%
Vol Right, %	0%	3%	78%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	255	185	27
LT Vol	46	0	6
Through Vol	209	179	0
RT Vol	0	6	21
Lane Flow Rate	323	234	33
Geometry Grp	1	1	1
Degree of Util (X)	0.379	0.282	0.044
Departure Headway (Hd)	4.222	4.335	4.731
Convergence, Y/N	Yes	Yes	Yes
Cap	839	834	760
Service Time	2.314	2.341	2.743
HCM Lane V/C Ratio	0.385	0.281	0.043
HCM Control Delay	9.9	9	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.8	1.2	0.1

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	84	113	50	70	14	102	2	43	14	2	13
Future Vol, veh/h	21	84	113	50	70	14	102	2	43	14	2	13
Peak Hour Factor	0.87	0.87	0.87	0.80	0.80	0.80	0.68	0.68	0.68	0.70	0.70	0.70
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	24	97	130	63	88	18	150	3	63	20	3	19
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.8	9.5	10.1	8.6
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	98%	0%	10%	37%	48%
Vol Thru, %	2%	0%	39%	52%	7%
Vol Right, %	0%	100%	52%	10%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	43	218	134	29
LT Vol	102	0	21	50	14
Through Vol	2	0	84	70	2
RT Vol	0	43	113	14	13
Lane Flow Rate	153	63	251	168	41
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.257	0.085	0.318	0.23	0.06
Departure Headway (Hd)	6.054	4.853	4.564	4.951	5.177
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	589	731	784	720	684
Service Time	3.833	2.631	2.616	3.013	3.272
HCM Lane V/C Ratio	0.26	0.086	0.32	0.233	0.06
HCM Control Delay	10.9	8.1	9.8	9.5	8.6
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1	0.3	1.4	0.9	0.2

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	113	4	18	1	12	16	16	23	0	5	26	126
Future Vol, veh/h	113	4	18	1	12	16	16	23	0	5	26	126
Peak Hour Factor	0.72	0.72	0.72	0.40	0.40	0.40	0.62	0.62	0.62	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	157	6	25	3	30	40	26	37	0	7	35	168
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	7.9	8.4	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	84%	3%	3%
Vol Thru, %	59%	3%	41%	17%
Vol Right, %	0%	13%	55%	80%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	135	29	157
LT Vol	16	113	1	5
Through Vol	23	4	12	26
RT Vol	0	18	16	126
Lane Flow Rate	63	188	72	209
Geometry Grp	1	1	1	1
Degree of Util (X)	0.085	0.246	0.09	0.243
Departure Headway (Hd)	4.885	4.723	4.458	4.174
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	732	759	801	860
Service Time	2.921	2.758	2.498	2.201
HCM Lane V/C Ratio	0.086	0.248	0.09	0.243
HCM Control Delay	8.4	9.3	7.9	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1	0.3	1

Appendix H

Noise Supporting Documentation

Baseline Noise Measurement Field Data

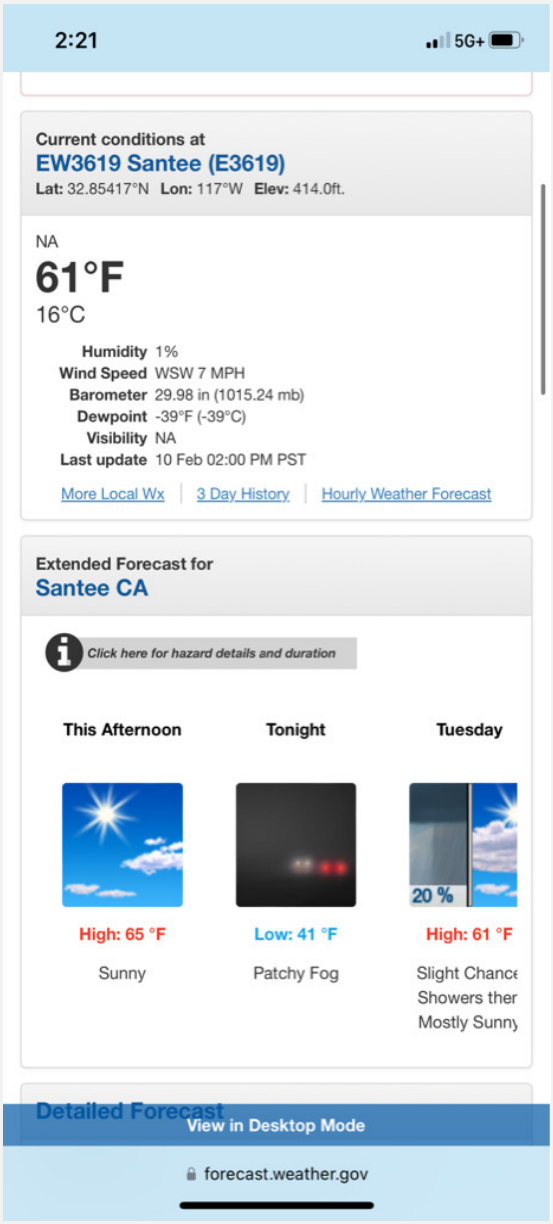
FORMS FIELD DATA REPORT

Field Noise Measurement Data

Record: 2040	
Project Name	*Santee Recreation Center*
Project #	*14169*
Date	*2025-02-10*

Meteorological Conditions

Upload NOAA Forecast



Temp (F)	*61*
Humidity % (R.H.)	*1*
Wind	*Calm*
Wind Speed (MPH)	*7*
Wind Direction	*West*
Sky	*Clear*

Instrument and Calibrator Information	
Instrument Name List	*(SAC) NL-62*
Instrument Name	*(SAC) NL-62*
Instrument Name Lookup Key	*(SAC) NL-62*
Manufacturer	*Rion*
Model	*NL-62*
Serial Number	*350815*
Calibration Date	
Calibrator Name	*(SAC) Rion NC-74*
Calibrator Name	*(SAC) Rion NC-74*
Calibrator Name Lookup Key	*(SAC) Rion NC-74*
Calibrator Manufacturer	*Rion*
Calibrator Model	*NC-74*
Calibrator Serial #	*34167529*
Pre-Test (dBA SPL)	*94.2*
Post-Test (dBA SPL)	*94*

Windscreen	*Yes*
Weighting?	*A-WTD*
Slow/Fast?	*Slow*
ANSI?	*Yes*

Monitoring	
Record #	*1*
Site ID	*ST1*
Site Location Lat/Long	*32.851636, -116.978515*
Begin (Time)	*14:30:00*
End (Time)	*14:45:00*
Leq	*55.1*
Lmax	*66.8*
Lmin	*47.5*
Other Lx?	*L90, L50, L10*
L90	*48.4*
L50	*50.4*
L10	*53.4*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Conversations / Yelling*
Other Noise Sources Additional Description	*Traffic on Riverwalk Dr, distant aircraft, activity at nearby park*
Is the same instrument and calibrator being used as previously noted?	*Yes*

Are the meteorological conditions the same as previously noted?	*Yes*

Source Info and Traffic Counts	
Number of Lanes	*2*
Lane Width (feet)	*6*
Roadway Width (feet)	*12*
Roadway Width (m)	*3.7*
Distance to Roadway (feet)	*20*
Distance to Roadway (m)	*6.1*
Distance Measured to Centerline or Edge of Pavement?	*Centerline*
Estimated Vehicle Speed (MPH)	*25*

Traffic Counts	
Vehicle Count Summary	*A 39, MT 0, HT 0, B 0, MC 0*
Select Method for Recording Count Duration	*Enter Manually*
Counting Both Directions?	*No*
Count Duration (minutes)	*15*
Direction	*EB*
Vehicle Count Tally	
Select Method for Vehicle Counts	*Use Counter (+/-)*
Number of Vehicles - Autos	*39*
Number of Vehicles - Medium Trucks	*0*

Number of Vehicles - Heavy Trucks	*0*
Number of Vehicles - Buses	*0*
Number of Vehicles - Motorcyles	*0*

Traffic Counts	
Vehicle Count Summary	*A 26, MT 0, HT 0, B 0, MC 0*
Select Method for Recording Count Duration	*Enter Manually*
Counting Both Directions?	*No*
Count Duration (minutes)	*15*
Direction	*WB*
Vehicle Count Tally	
Select Method for Vehicle Counts	*Use Counter (+/-)*
Number of Vehicles - Autos	*26*
Number of Vehicles - Medium Trucks	*0*
Number of Vehicles - Heavy Trucks	*0*
Number of Vehicles - Buses	*0*
Number of Vehicles - Motorcyles	*0*

Description / Photos	
Terrain	*Hard*

Site Photos

Photo	
Comments / Description	*Facing W*

Site Photos

Photo	
Comments / Description	*Facing S*

Site Photos

Photo	
Comments / Description	*Facing E*

Site Photos

Photo	
Comments / Description	*Facing N*

Monitoring	
Record #	*2*
Site ID	*ST2*
Site Location Lat/Long	*32.851692, -116.976215*

Begin (Time)	*14:50:00*
End (Time)	*15:05:00*
Leq	*50.7*
Lmax	*62.1*
Lmin	*43.5*
Other Lx?	*L90, L50, L10*
L90	*44.2*
L50	*45.9*
L10	*52.2*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Conversations / Yelling*
Other Noise Sources Additional Description	*Traffic on Riverwalk Dr, aircraft, park activity. Helicopter flyover near adjacent hospital*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Source Info and Traffic Counts	
Number of Lanes	*2*
Lane Width (feet)	*6*
Roadway Width (feet)	*12*
Roadway Width (m)	*3.7*
Distance to Roadway (feet)	*20*

Distance to Roadway (m)	*6.1*
Distance Measured to Centerline or Edge of Pavement?	*Centerline*
Estimated Vehicle Speed (MPH)	*25*

Traffic Counts	
Vehicle Count Summary	*A 25, MT 0, HT 0, B 0, MC 0*
Select Method for Recording Count Duration	*Enter Manually*
Counting Both Directions?	*No*
Count Duration (minutes)	*15*
Direction	*EB*
Vehicle Count Tally	
Select Method for Vehicle Counts	*Use Counter (+/-)*
Number of Vehicles - Autos	*25*
Number of Vehicles - Medium Trucks	*0*
Number of Vehicles - Heavy Trucks	*0*
Number of Vehicles - Buses	*0*
Number of Vehicles - Motorcyles	*0*

Traffic Counts	
Vehicle Count Summary	*A 9, MT 0, HT 0, B 0, MC 0*
Select Method for Recording Count Duration	*Enter Manually*
Counting Both Directions?	*No*

Count Duration (minutes)	*15*
Direction	*WB*
Vehicle Count Tally	
Select Method for Vehicle Counts	*Use Counter (+/-)*
Number of Vehicles - Autos	*9*
Number of Vehicles - Medium Trucks	*0*
Number of Vehicles - Heavy Trucks	*0*
Number of Vehicles - Buses	*0*
Number of Vehicles - Motorcyles	*0*

Description / Photos	
Terrain	*Hard*

Site Photos	
Photo	

Comments / Description	*Facing E*

Site Photos

Photo	
Comments / Description	*Facing S*

Site Photos

Photo	
Comments / Description	*Facing W*

Site Photos

Photo	
Comments / Description	*Facing N*

Monitoring	
Record #	*3*
Site ID	*ST4*
Site Location Lat/Long	*32.850467, -116.976726*

Begin (Time)	*15:11:00*
End (Time)	*15:26:00*
Leq	*48.9*
Lmax	*53*
Lmin	*46*
Other Lx?	*L90, L50, L10*
L90	*46.3*
L50	*48*
L10	*51.6*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Traffic*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Conversations / Yelling, Distant Dog Barking*
Other Noise Sources Additional Description	*Aircraft, car alarm at adjacent hospital, traffic on Riverwalk Dr and in parking lot, activity at nearby park/soccer fields*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos	
Terrain	*Mixed*

Site Photos

Photo	
Comments / Description	*Facing E*

Site Photos

Photo	
Comments / Description	*Facing S*

Site Photos

Photo	
Comments / Description	*Facing W*

Site Photos

Photo	
Comments / Description	*Facing N*

Monitoring	
Record #	*4*
Site ID	*ST3*
Site Location Lat/Long	*32.850620, -116.973442*

Begin (Time)	*15:32:00*
End (Time)	*15:47:00*
Leq	*42.6*
Lmax	*44.8*
Lmin	*41.1*
Other Lx?	*L90, L50, L10*
L90	*41.6*
L50	*42.4*
L10	*44*
Other Lx (Specify Metric)	*L*
Primary Noise Source	*Aircraft*
Other Noise Sources (Background)	*Birds, Distant Aircraft, Distant Conversations / Yelling, Distant Dog Barking, Distant Traffic, Rustling Leaves*
Other Noise Sources Additional Description	*Aircraft, intermittent residential traffic on Cottonwood Ave, distant conversations/yelling at adjacent park/soccer field, birds*
Is the same instrument and calibrator being used as previously noted?	*Yes*
Are the meteorological conditions the same as previously noted?	*Yes*

Description / Photos	
Terrain	*Mixed*

Site Photos

Photo	
Comments / Description	*Facing E*

Site Photos

Photo	
Comments / Description	*Facing S*

Site Photos

Photo	
Comments / Description	*Facing W*

Site Photos

Photo	
Comments / Description	*Facing N*

Construction Noise Prediction Model Worksheets

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase at residential land use, per FTA guidance = 80

allowable hours over which Leq is to be averaged = 8

0 = temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	**dozer**	1	40	82		80	0.1		76.6	8	480	73	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		250	0.1		63.7	8	480	60	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete saw	1	20	90		250	0.1		71.7	8	480	65	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	8	480	61	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Demolition Phase:			**73.7**																
Site Preparation	backhoe	4	40	78		250	0.1		59.7	8	480	62	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		80	0.1		76.6	8	480	73	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	2	40	82		250	0.1		63.7	8	480	63	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Site Preparation Phase:			**73.4**																
Grading	dozer	1	40	82		250	0.1		63.7	8	480	60	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	8	480	61	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	excavator	1	40	81		250	0.1		62.7	8	480	59	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	grader	1	40	85		80	0.1		79.6	8	480	76	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Grading Phase:			**76.0**																
Building Construction	**crane**	1	16	81		80	0.1		75.6	7	420	67	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	3	20	75		250	0.1		56.7	8	480	55	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	8	480	61	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	1	40	73		250	0.1		54.7	8	480	51	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		250	0.1		53.7	8	480	51	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Building Construction Phase:			**68.3**																
Paving	paver	1	50	77		250	0.1		58.7	8	480	56	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete mixer truck	2	40	79		250	0.1		60.7	6	360	59	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		80	0.1		74.6	6	360	66	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		250	0.1		61.7	8	480	55	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		250	0.1		59.7	8	480	56	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	2	50	77	"paving equipment"	250	0.1		58.7	6	360	57	5	5	0	10	240	250	11.2	240.1	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Paving Phase:			**68.3**																
Architectural Coating	**compressor (air)**	1	40	78		80	0.1		72.6	6	360	67	5	5	0	10	70	80	11.2	70.2	80.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Architectural Coating Phase:			**67.4**																

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase for sensitive wildlife = 60

allowable hours over which Leq is to be averaged = 1

0 = temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 1-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	**dozer**	1	40	82		25	0.1		87.9	0.08	4.8	73	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		250	0.1		63.7	1	60	60	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete saw	1	20	90		250	0.1		71.7	1	60	65	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	1	60	61	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Demolition Phase:			74.0																
Site Preparation	backhoe	4	40	78		250	0.1		59.7	1	60	62	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	1	40	82		25	0.1		87.9	0.08	4.8	73	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	dozer	2	40	82		250	0.1		63.7	1	60	63	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Site Preparation Phase:			73.7																
Grading	dozer	1	40	82		250	0.1		63.7	1	60	60	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	3	40	78		250	0.1		59.7	1	60	61	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	excavator	1	40	81		250	0.1		62.7	1	60	59	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	grader	1	40	85		25	0.1		90.9	0.08	4.8	76	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Grading Phase:			76.0																
Building Construction	crane	1	16	81		75	0.1		76.6	1	60	69	5	5	0	60	15	75	60.2	15.8	75.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	man lift	3	20	75		250	0.1		56.7	1	60	55	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		25	0.1		83.9	0.08	4.8	69	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	2	40	78		250	0.1		59.7	1	60	59	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	welder / torch	1	40	73		250	0.1		54.7	1	60	51	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	generator	1	50	72		250	0.1		53.7	1	60	51	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Building Construction Phase:			72.2																
Paving	paver	1	50	77		250	0.1		58.7	1	60	56	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	concrete mixer truck	2	40	79		250	0.1		60.7	1	60	60	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		25	0.1		85.9	0.08	4.8	68	5	5	0	10	15	25	11.2	15.8	25.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	roller	1	20	80		250	0.1		61.7	1	60	55	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	backhoe	1	40	78		250	0.1		59.7	1	60	56	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	paver	2	50	77	"paving equipment"	250	0.1		58.7	1	60	59	5	5	0	235	15	250	235.1	15.8	250.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Paving Phase:			69.6																
Architectural Coating	**compressor (air)**	1	40	78		75	0.1		73.6	1	60	70	5	5	0	60	15	75	60.2	15.8	75.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
									Total for Architectural Coating Phase:			69.6																

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase for sensitive wildlife = 60

allowable hours over which Leq is to be averaged = 1

12 = temporary barrier (TB) of input height inserted between source and receptor

Construction Activity	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 1-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	**dozer**	1	40	82		25	15.6		72.4	0.08	4.8	57	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	dozer	1	40	82		250	13.5		50.3	1	60	46	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	concrete saw	1	20	90		250	13.5		58.3	1	60	51	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	3	40	78		250	13.5		46.3	1	60	47	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
									Total for Demolition Phase:			**58.9**																
Site Preparation	backhoe	4	40	78		250	13.5		46.3	1	60	48	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	dozer	1	40	82		25	15.6		72.4	0.08	4.8	57	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	dozer	2	40	82		250	13.5		50.3	1	60	49	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
									Total for Site Preparation Phase:			**58.5**																
Grading	dozer	1	40	82		250	13.5		50.3	1	60	46	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	3	40	78		250	13.5		46.3	1	60	47	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	excavator	1	40	81		250	13.5		49.3	1	60	45	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	grader	1	40	85		25	15.6		75.4	0.08	4.8	60	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
									Total for Grading Phase:			**60.0**																
Building Construction	crane	1	16	81		75	14.6		62.0	1	60	54	5	5	12	60	15	75	60.4	16.6	75.0	1.96	15.0	17.0	5.0	0.4	0.7	14.6
	man lift	3	20	75		250	13.5		43.3	1	60	41	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	1	40	78		25	15.6		68.4	0.08	4.8	53	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	backhoe	2	40	78		250	13.5		46.3	1	60	45	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	welder / torch	1	40	73		250	13.5		41.3	1	60	37	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	generator	1	50	72		250	13.5		40.3	1	60	37	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
									Total for Building Construction Phase:			**57.2**																
Paving	paver	1	50	77		250	13.5		45.3	1	60	42	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	concrete mixer truck	2	40	79		250	13.5		47.3	1	60	46	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	roller	1	20	80		25	15.6		70.4	0.08	4.8	52	5	5	12	10	15	25	12.2	16.6	25.0	3.76	15.0	17.0	5.0	0.4	0.7	15.6
	roller	1	20	80		250	13.5		48.3	1	60	41	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	backhoe	1	40	78		250	13.5		46.3	1	60	42	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
	paver	2	50	77	"paving equipment"	250	13.5		45.3	1	60	45	5	5	12	235	15	250	235.1	16.6	250.0	1.66	15.0	17.0	5.0	0.4	0.7	13.5
									Total for Paving Phase:			**54.7**																
Architectural Coating	**compressor (air)**	1	40	78		75	14.6		59.0	1	60	55	5	5	12	60	15	75	60.4	16.6	75.0	1.96	15.0	17.0	5.0	0.4	0.7	14.6
									Total for Architectural Coating Phase:			**55.0**																

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Lesser of or available Lmax	Spec. 721 Lmax	Measured L_{max} @50ft (dBA, slow)
All Other Equipment > 5 HP	No	50	85	85	-- N/A --
Auger Drill Rig	No	20	84	85	84
Backhoe	No	40	78	80	78
Bar Bender	No	20	80	80	-- N/A --
Blasting	Yes	-- N/A --	94	94	-- N/A --
Boring Jack Power Unit	No	50	80	80	83
Chain Saw	No	20	84	85	84
Clam Shovel (dropping)	Yes	20	87	93	87
Compactor (ground)	No	20	80	80	83
Compressor (air)	No	40	78	80	78
Concrete Batch Plant	No	15	83	83	-- N/A --
Concrete Mixer Truck	No	40	79	85	79
Concrete Pump Truck	No	20	81	82	81
Concrete Saw	No	20	90	90	90
Crane	No	16	81	85	81
Dozer	No	40	82	85	82
Drill Rig Truck	No	20	79	84	79
Drum Mixer	No	50	80	80	80
Dump Truck	No	40	76	84	76
Excavator	No	40	81	85	81
Flat Bed Truck	No	40	74	84	74
Front End Loader	No	40	79	80	79
Generator	No	50	72	72	81
Generator (<25KVA, VMS signs)	No	50	70	70	73
Gradall	No	40	83	85	83
Grader	No	40	85	85	-- N/A --
Grapple (on backhoe)	No	40	85	85	87
Horizontal Boring Hydr. Jack	No	25	80	80	82
Hydra Break Ram	Yes	10	90	90	-- N/A --
Impact Pile Driver	Yes	20	95	95	101
Jackhammer	Yes	20	85	85	89
Man Lift	No	20	75	85	75
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	90
Pavement Scarafier	No	20	85	85	90
Paver	No	50	77	85	77
Pickup Truck	No	40	55	55	75
Pneumatic Tools	No	50	85	85	85
Pumps	No	50	77	77	81
Refrigerator Unit	No	100	73	82	73
Rivit Buster/chipping gun	Yes	20	79	85	79
Rock Drill	No	20	81	85	81
Roller	No	20	80	85	80
Sand Blasting (Single Nozzle)	No	20	85	85	96
Scraper	No	40	84	85	84
Shears (on backhoe)	No	40	85	85	96
Slurry Plant	No	100	78	78	78
Slurry Trenching Machine	No	50	80	82	80
Soil Mix Drill Rig	No	50	80	80	-- N/A --
Tractor	No	40	84	84	-- N/A --
Vacuum Excavator (Vac-truck)	No	40	85	85	85
Vacuum Street Sweeper	No	10	80	80	82
Ventilation Fan	No	100	79	85	79
Vibrating Hopper	No	50	85	85	87
Vibratory Concrete Mixer	No	20	80	80	80
Vibratory Pile Driver	No	20	95	95	101
Warning Horn	No	5	83	85	83
Welder / Torch	No	40	73	73	74

Operation Noise Prediction Model Inputs

Point Sources

Name	Sel.	M.	ID	Result. PWL Day (dBA)	Evening (dBA)	Night (dBA)	Lw / Li Type	Value	norm. dB(A)	Correction Day dB(A)	Evening dB(A)	Night dB(A)	Sound Reduction R	Area (ft²)	Attenuatio	Operating Time Day (min)	Special (min)	Night (min)	K0 (dB)	Freq. (Hz)	Direct.	Height (ft)		Coordinates X (ft)	Y (ft)	Z (ft)
Emergency Generator		-	EGEN	96.7	96.7	96.7	Lw	EGEN		0	0	0							0		(none)	6	r	1098.39	828.22	6
HVAC Fan			EF-1	59.9	59.9	59.9	Lw	EF1		0	0	0							0		(none)	3	g	1091.75	816.92	24
HVAC Fan			EF-2	45.9	45.9	45.9	Lw	EF2		0	0	0							0		(none)	3	g	968.43	772.07	27
HVAC Fan			EF-3	58.9	58.9	58.9	Lw	EF3		0	0	0							0		(none)	3	g	976.77	772.07	27
Split System Condensing Unit			SSCU-1	71.7	71.7	71.7	Lw	SSCU		0	0	0							0		(none)	2.5	g	974.99	775.77	26.5
Split System Condensing Unit			SSCU-2	71.7	71.7	71.7	Lw	SSCU		0	0	0							0		(none)	2.5	g	1059.62	789.3	23.5
Split System Condensing Unit			SSCU-3	71.7	71.7	71.7	Lw	SSCU		0	0	0							0		(none)	2.5	g	1064.68	790.67	23.5
Split System Condensing Unit			SSCU-4	71.7	71.7	71.7	Lw	SSCU		0	0	0							0		(none)	2.5	g	1054.42	787.8	23.5
Air Cooled Condensing Unit			CU-1	68.8	68.8	68.8	Lw	CU		0	0	0							0		(none)	5.5	g	1027.22	779.46	26.5
Packaged Rooftop Heat Pump			RTU-1	63.9	63.9	63.9	Lw	RTU		0	0	0							0		(none)	3.5	g	1023.25	793.2	24.5
Packaged Rooftop Heat Pump			RTU-2	63.9	63.9	63.9	Lw	RTU		0	0	0							0		(none)	3.5	g	1050.32	800.51	24.5
Energy Recovery Ventilator			ERV-1	69.7	69.7	69.7	Lw	ERV		0	0	0							0		(none)	4	g	971.58	782.74	28
Energy Recovery Ventilator			ERV-2	69.7	69.7	69.7	Lw	ERV		0	0	0							0		(none)	4	g	1061.67	802.83	25
Ampitheatre Speaker 1		-	AMPS1	96	96	96	Lw	vocal		0	0	0			-95.2				0		(none)	5	r	929.17	755.5	5
Ampitheatre Speaker 2		-	AMPS2	96	96	96	Lw	vocal		0	0	0			-95.2				0		(none)	5	r	957.1	755.5	5
Outdoor Patio Speaker 1		+	OPS1	90	90	90	Lw	vocal		0	0	0			-89.2				0		(none)	5	r	1035.88	744.47	5
Outdoor Patio Speaker 2		+	OPS2	90	90	90	Lw	vocal		0	0	0			-89.2				0		(none)	5	r	1066.39	753.86	5

Area Sources

Name	Sel.	M.	ID	Result. PWL Day (dBA)	Evening (dBA)	Night (dBA)	Result. PWL'' Day (dBA)	Evening (dBA)	Night (dBA)	Lw / Li Type	Value	norm. dB(A)	Correction Day dB(A)	Evening dB(A)	Night dB(A)	Sound Reduction R	Area (ft²)	Attenuatio	Operating Time Day (min)	Special (min)	Night (min)	K0 (dB)	Freq. (Hz)	Direct.	Moving Pt. Src Number Day	Evening
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
7Idling Car Engines		+	7Parked	72.5	72.5	72.5	56.4	56.4	56.4	Lw	Car		0	0	0			21.1-8.5				0		(none)		
6Idling Car Engines		+	6Parked	71.8	71.8	71.8	56.3	56.3	56.3	Lw	Car		0	0	0			21.1-7.8				0		(none)		
3Idling Car Engines		+	3Parked	68.8	68.8	68.8	56.9	56.9	56.9	Lw	Car		0	0	0			21.1-4.8				0		(none)		
7Idling Car Engines		+	7Parked	72.5	72.5	72.5	56.4	56.4	56.4	Lw	Car		0	0	0			21.1-8.5				0		(none)		
8Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
3Idling Car Engines		+	3Parked	68.8	68.8	68.8	55.5	55.5	55.5	Lw	Car		0	0	0			21.1-4.8				0		(none)		
18Idling Car Engines		+	18Parked	76.6	76.6	76.6	56.2	56.2	56.2	Lw	Car		0	0	0			21.1-12.6				0		(none)		
18Idling Car Engines		+	18Parked	76.6	76.6	76.6	56.2	56.2	56.2	Lw	Car		0	0	0			21.1-12.6				0		(none)		
2Idling Car Engines		+	2Parked	67	67	67	55.3	55.3	55.3	Lw	Car		0	0	0			21.1-3				0		(none)		
2Idling Car Engines		+	2Parked	67	67	67	55.3	55.3	55.3	Lw	Car		0	0	0			21.1-3				0		(none)		
1Idling Car Engines		+	1Parked	64	64	64	56.3	56.3	56.3	Lw	Car		0	0	0			21.1				0		(none)		
1Idling Car Engines		+	1Parked	64	64	64	56.7	56.7	56.7	Lw	Car		0	0	0			21.1				0		(none)		
1Idling Car Engines		+	1Parked	64	64	64	56.7	56.7	56.7	Lw	Car		0	0	0			21.1				0		(none)		
1Idling Car Engines		+	1Parked	64	64	64	53.6	53.6	53.6	Lw	Car		0	0	0			21.1				0		(none)		
1Idling Car Engines		+	1Parked	64	64	64	53.6	53.6	53.6	Lw	Car		0	0	0			21.1				0		(none)		
21Idling Car Engines		+	21Parked	77.2	77.2	77.2	56.2	56.2	56.2	Lw	Car		0	0	0			21.1-13.2				0		(none)		
21Idling Car Engines		+	21Parked	77.2	77.2	77.2	56.2	56.2	56.2	Lw	Car		0	0	0			21.1-13.2				0		(none)		
21Idling Car Engines		+	21Parked	77.2	77.2	77.2	56.2	56.2	56.2	Lw	Car		0	0	0			21.1-13.2				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
3Idling Car Engines		+	3Parked	68.8	68.8	68.8	56.9	56.9	56.9	Lw	Car		0	0	0			21.1-4.8				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
8 Idling Car Engines		+	8Parked	73	73	73	55.8	55.8	55.8	Lw	Car		0	0	0			21.1-9				0		(none)		
11 Idling Car Engines		+	11Parked	74.4	74.4	74.4	56	56	56	Lw	Car		0	0	0			21.1-10.4				0		(none)		
26Idling Car Engines		+	26Parked	78.1	78.1	78.1	56	56	56	Lw	Car		0	0	0			21.1-14.1				0		(none)		
Event with Fireworks		-	Fireworks	137	137	137	98.1	98.1	98.1	Lw	Fireworks		0	0	0			-58.1				0	1000	(none)		
Amphitheatre Event Crowd - 100 ppl, Haynes Loud, 50% time		-	AEC	90	90	90	66	66	66	Lw	vocal		0	0	0			-89.2				0		(none)		
Outdoor Patio Event Crowd - 80 ppl, Haynes Loud, 50% time		+	OPEC	87	87	87	63.9	63.9	63.9	Lw	vocal		0	0	0			-86.2				0		(none)		

Vert Area Sources

Name	Sel.	M.	ID	Result. PWL Day (dBA)	Evening (dBA)	Night (dBA)	Result. PWL'' Day (dBA)	Evening (dBA)	Night (dBA)	Lw / Li Type	Value	norm. dB(A)	Correction Day dB(A)	Evening dB(A)	Night dB(A)	Sound Reduction R	Area (ft²)	Attenuatio	Operating Time Day (min)	Special (min)	Night (min)	K0 (dB)	Freq. (Hz)	Direct.
Indoor Event Interor to Exterior		-	Event	65.8	65.8	65.8	58.8	58.8	58.8	Lw	vocal		0	0	0			-65				3		(none)
		-		65.8	65.8	65.8	58.8	58.8	58.8	Lw	vocal		0	0	0			-65				3		(none)
		-		65.8	65.8	65.8	68.1	68.1	68.1	Lw	vocal		0	0	0			-65				3		(none)

Barriers

Name	Sel.	M.	ID	Absorption left	Absorption right	Z-Ext. (ft)	Cantilever horz. (ft)	Cantilever vert. (ft)	Height Begin (ft)	
Parapet			Parapet							6
Concrete Masonry Unit			CMU							9 r

Buildings

Name	Sel.	M.	ID	RB	Residents	Absorption	Height Begin (ft)	
Event Center			Event				21	r
Lobby Multi Purp			Lobby				24	r
Existing YMCA Bldg			YMCA				40	r
Lobby Roof Ceiling			Ceiling				29	a

AHUs (plenum-type return fan only, no condenser units [see separate worksheet]):

Building Minimum Ventilation

percent GSF actually occupied (and need ventilation): 90

		63	125	250	500	1000	2000	4000	8000
A-weighting adjustments		26	13	9	3	0	-1	-1	1
average of values for the two fan diameter ranges, per Guyer (Table 12)	plug	40	40	38	34	29	23	19	16
average of values for the two fan diameter ranges, per Guyer (Table 12)	tube	47	44	46	47	44	45	38	35
per Guyer (Table 12, presumed based on Bies & Hansen ENC)	prop	46	48	55	53	52	48	43	38

Tag	Building	GSF	Avail. SF	Height (ft)	Avg. minutes to change air*	Volume (ft3)	CFM	m^2	comparable facility function	Pressure (iwg)	Pressure (Pa)	Q (m^3/s)	fantype = plug, tube, or prop	A-weighted PWL (for CadnaA inputs) 63	125	250	500	1000	2000	4000	8000	OA dB
return air fans in building rooftop AHUs:																						
RTU 1 / 2	Santee Rec Center	2876	2588	3.5	3	9059	3019.8	241	residences	1.25	312.5	1	plug	45	57	58	59	56	49	43	38	**64**
EF-1	kitchen	760	684	3.5	3	2394	798	10	residences	1.5	375	0	plug	41	53	54	55	52	45	39	34	**60**
EF-1	janitor	119	107	3.5	3	375	124.95	73	residences	0.75	187.5	0	plug	27	39	40	41	38	31	25	20	**46**
EF-3	restroom	867	780	3.5	3	2731	910.35	73	residences	1.25	312.5	0	plug	40	52	53	54	51	44	38	33	**59**
													fan or AHU cabinet liner/interior attenuation (excludes inlet/outlet PWL split, already in calcs above:	2	3	4	5	6	8	10	10	

*from 3-10 minute range for "retail stores", 2-5 minute range for "residences" per Loren Cook's "Engineering Cookbook", 1999 edition, p. 41

ACCs (air-cooled chillers on rooftops):

Building Interior Comfort

actual percent of GSF occupied: 90.5

with or without sound insulation? (enter Y/N): Y

	tons	LWA	**unweighted** PWL (dB) per OCBF (Hz) at full load (100%) 63	125	250	500	1000	2000	4000	8000	*data for models "without sound insulation" or no "sound blankets"* LWA	63	125	250	500	1000	2000	4000	8000	*data for models "with sound insulation" or "sound blankets"* LWA	63	125	250	500	1000	2000	4000	8000
Bryant BH16-018 (no sound blanket)	1.5	67	66.2	66.2	63.9	63.8	62.3	58.4	56.4	50.3	68	66.2	66.2	63.8	64.1	64.6	59.9	57.7	53.6	67	66.2	66.2	63.9	63.8	62.3	58.4	56.4	50.3
Bryant BH16-024 (no sound blanket)	2	71	65	65	63.7	63.4	68.5	64.7	58.7	52.8	72	63.4	63.4	63.3	63.3	70.4	64.5	59.3	55.5	71	65	65	63.7	63.4	68.5	64.7	58.7	52.8
Bryant BH16-036 (no sound blanket)	3	71	68.2	68.2	66.4	67.5	68.4	59.6	58.2	52.4	72	67.7	67.7	66.8	68.1	69.9	62.8	60.3	55.2	71	68.2	68.2	66.4	67.5	68.4	59.6	58.2	52.4
Bryant BH16-048 (no sound blanket)	4	71	68.4	68.4	67.7	69.7	67.6	59.4	56.4	50	73	67.5	67.5	67.8	70.1	70.6	63.1	58.5	53.3	71	68.4	68.4	67.7	69.7	67.6	59.4	56.4	50
Bryant BH16-060 (no sound blanket)	5	69	63.7	63.7	65.4	67.3	64.9	58.3	56.2	51.9	70	61.7	61.7	65.6	68.1	65.8	59.8	58.4	56.1	69	63.7	63.7	65.4	67.3	64.9	58.3	56.2	51.9
Daikin AGZ-E 30 (w/out sound insulation)	30	85	84	84	83	84	77	75	74	70	88	92	91	88	87	83	78	73	68	85	84	84	83	84	77	75	74	70
Daikin AGZ-E 40 (w/out sound insulation)	40	85	84	84	83	84	77	75	74	70	89	92	91	90	88	84	79	74	69	85	84	84	83	84	77	75	74	70
Daikin AGZ-E 50 (w/out sound insulation)	50	87	85	85	85	86	80	77	75	70	90	93	93	91	89	85	79	74	69	87	85	85	85	86	80	77	75	70
Daikin AGZ-E 60 (w/out sound insulation)	60	87	85	85	85	86	80	77	75	70	91	94	93	94	89	86	81	76	71	87	85	85	85	86	80	77	75	70
Daikin AGZ-E 70 (w/out sound insulation)	70	87	85	85	85	86	80	77	75	70	92	95	95	94	89	87	81	76	71	87	85	85	85	86	80	77	75	70
Daikin AGZ-E 80 (w/out sound insulation)	80	88	88	85	87	86	81	81	77	71	92	95	95	95	89	87	81	76	71	88	88	85	87	86	81	81	77	71
Daikin AGZ-E 90 (w/out sound insulation)	90	88	88	87	87	86	83	80	77	71	93	94	95	92	91	89	83	81	81	88	88	87	87	86	83	80	77	71
Daikin AGZ-E 120 (w/out sound insulation)	120	89	91	85	88	86	82	81	79	72	95	93	96	92	92	90	84	84	82	89	91	85	88	86	82	81	79	72
Daikin AGZ-E 240 (w/out sound insulation)	241	94	94	88	91	90	91	84	82	75	100	98	98	98	95	96	90	90	86	94	94	88	91	90	91	84	82	75

Phase	Building Tag	GSF	Avail. SF	comparable facility function	Avg. GSF per ton*	tons of refrig.	Approx. Qty. of ACCs	tons per ACC	Approx. Total PWL (dBA)	**unweighted** PWL (dB) per OCBF (Hz) at full load (100%) 63	125	250	500	1000	2000	4000	8000
CU	Santee Rec Center	15171	13730	Auditorium	625	22.0	1	22	**69**	64	64	65	67	65	58	56	52
SSCU	Santee Rec Center	15171	13730	Auditorium	5500	2.5	1	2	**71**	65	65	64	63	69	65	59	53
ERV	Santee Rec Center	1474	1334	Auditorium	345	3.9	2	2	**70**	69	69	67	67	65	61	59	53

*based upon "to" value per Loren Cook's "Engineering Cookbook", 1999 edition, pp. 59-60

Sound Levels (local)

Name	ID	Type	1/3 Oktave Spectrum (dB) Weight.	25	31.5	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	A	lin	Source
Emergency Generator	EGEN	Lw	A					96.7																							96.7	122.9	Syska Hennessy Group 85 dBA @ 5 feet w/ enclosure
Rooftop Heat Pump	RTU	Lw	A					45			57			58			59			56			49			43			38		63.9	76.1	
Kitchen HVAC Fan	EF1	Lw	A					41			53			54			55			52			45			39			34		59.9	72.1	
Janitor Closet HVAC Fan	EF2	Lw	A					27			39			40			41			38			31			25			20		45.9	58.1	
Restroom HVAC Fan	EF3	Lw	A					40			52			53			54			51			44			38			33		58.9	71.1	
Air Cooled Condensing Unit	CU	Lw						64			64			65			67			65			58			56			52		68.8	72.4	
Split System Condensing Unit	SSCU	Lw						65			65			64			63			69			65			59			53		71.7	73.6	
Energy Recovery Ventilator	ERV	Lw						69			69			67			67			65			61			59			53		69.7	75	
Parking (Idling Cars)	Car	Lw	A		62.5			66.5			70.5			74.6			77.6			80.6			78.6			73.6			68.6		85.1	102.6	forum SCHALL, Emissionsdatenkatalog, August 2016
Speech Spectrum	vocal	Lw	A		-13			-10			-7			-5			-5			-8			-14			-20			-26		0.8	26.9	Hayne 2006
Fireworks	Fireworks	Lw		49.3	49.9	51.2	57.6	63.3	67.6	64.2	61.8	57.1	58	65.9	67	68	69.3	71.5	72.9	76.4	71.7	76.2	75.7	75.1	72.7	70.6	64.9	62.8	58.2	52.4	84.5	84.4	Size 4 type Lmax - Tanaka, Inaba, Aoyama 2016

Traffic Noise Model Calculations

Appendix H

Traffic Noise Modeling Calculations - Summary

Project: **14169Santee Recreation Center**

Segment Description and Location									
Number	Name	From	To	Existing	Existing + Project	Δ Existing – Existing + Project	Cumulative	Cumulative + Project	Δ Cumulative – Cumulative + Project
Summary of Net Changes									
1	Riverwalk Drive	Cuyamaca Street	Verde Vista Lane	61.4	62.1	0.7	61.6	62.3	0.7
2	Riverwalk Drive	Verde Vista Lane	Canopy Park Lane	59.0	60.3	1.3	59.8	60.9	1.1
3	Riverwalk Drive	Canopy Park Lane	Park Center Drive	58.6	59.8	1.1	59.6	60.5	0.9

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix H - 1

Traffic Noise Model Calculations

Project: 14169Santee Recreation Center

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 10

Segment Description and Location				Input											Output				
						Distance to Directional Centerline, (feet)$_4$		Traffic Distribution Characteristics								Distance to Contour, (feet)$_3$			
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	Ldn, (dBA)$_{5,6,7}$	70 dBA	65 dBA	60 dBA	55 dBA
Existing Conditions																		
1	Riverwalk Drive	Cuyamaca Street	Verde Vista Lane	595	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	61.4	5	17	55	173
2	Riverwalk Drive	Verde Vista Lane	Canopy Park Lane	344	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	59.0	3	10	32	100
3	Riverwalk Drive	Canopy Park Lane	Park Center Drive	314	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	58.6	3	9	29	91

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix H - 2

Traffic Noise Model Calculations

Project: 14169Santee Recreation Center

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project Conditions																		
1	Riverwalk Drive	Cuyamaca Street	Verde Vista Lane	704	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	62.1	6	21	65	205
2	Riverwalk Drive	Verde Vista Lane	Canopy Park Lane	461	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	60.3	4	13	42	134
3	Riverwalk Drive	Canopy Park Lane	Park Center Drive	408	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	59.8	4	12	38	119

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix H - 3

Traffic Noise Model Calculations

Project: 14169Santee Recreation Center

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative Conditions																		
1	Riverwalk Drive	Cuyamaca Street	Verde Vista Lane	625	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	61.6	6	18	58	182
2	Riverwalk Drive	Verde Vista Lane	Canopy Park Lane	412	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	59.8	4	12	38	120
3	Riverwalk Drive	Canopy Park Lane	Park Center Drive	390	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	59.6	4	11	36	114

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix H - 4

Traffic Noise Model Calculations

Project: 14169Santee Recreation Center

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 10

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Med	% Hvy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative + Project Conditions																		
1	Riverwalk Drive	Cuyamaca Street	Verde Vista Lane	734	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	62.3	7	21	68	214
2	Riverwalk Drive	Verde Vista Lane	Canopy Park Lane	529	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	60.9	5	15	49	154
3	Riverwalk Drive	Canopy Park Lane	Park Center Drive	484	25	35	45	97.0%	2.0%	1.0%	80.0%	5.0%	15.0%	60.5	4	14	45	141

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Appendix I
AB 52 Letters

Santee
CALIFORNIA

DO MORE ▶ DUE EAST

Mayor
John W. Minto
City Council
Ronn Hall
Laura Koval
Rob McNelis
Dustin Trotter

December 27, 2022

Ms. Lisa Cumper
Secretary/Treasurer
Jamul Indian Village
14191 Highway 94
Jamul, CA 91935

Subject: **Santee Community Center – AB 52 Formal Notice (CIP 2018-31)**

Dear Ms. Lisa Cumper:

This letter is in response to your request for formal notification of projects for which the City of Santee is lead agency under California Public Resources Code section 21080.3.1, subdivision (b) of the California Environmental Quality Act. Pursuant to Public Resources Code section 21080.3.1, subdivision (d), the City of Santee, Department of Development Services (City) is planning to develop a Santee Community Center located at 10129 Riverwalk Drive, Santee, CA 92071 (CIP 2018-31).

The project is a proposed 12,500 square-foot Santee Community Center in the TC (Town Center) zone. The community center will consist of two stories and include an event space, office space, and support spaces.

As part of our cultural resources inventory, our consultant, Dudek, performed an NAHC search. Results of the search were positive and linked to two bands for direct contact. The Native American Heritage Commission (NAHC) provided a list of local Native American tribes and individuals to be contacted regarding the project for information on cultural resources on the project site or project area.

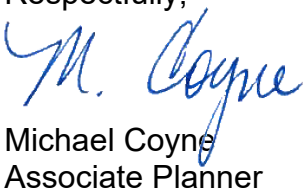
The attached Exhibits (A & B) show the regional location and the site location of the Project.

In accordance with Public Resources Code section 21080.3.1, subdivisions (b) and (d), Jamul Indian Village has 30 days from receipt of this formal notification to request in writing consultation regarding the Project. Such request should be directed to:

Michael Coyne
Associate Planner
City of Santee
10601 Magnolia Avenue
Santee, CA 92071
Phone: (619) 258-4100, Extension 160
Email: MCoyne@cityofsanteeca.gov

Please contact me if you have any comments or questions.

Respectfully,



Michael Coyne
Associate Planner

Attachments:

Exhibit A – Regional Location Map
Exhibit B – Submitted Plans

Exhibit A Regional Location Map



SOURCE: SANDAG 2017, Open Streets Map 2019

DUDEK

0 200 400 Feet

FIGURE 1

Project Location

Santee Community Center Initial Study/Mitigated Negative Declaration

Exhibit B Submitted Plans



SOURCE: HMC Architects, 2022

FIGURE 2

Site Plan

Santee Community Center Initial Study/Mitigated Negative Declaration

DUDEK

Mayor
John W. Minto
City Council
Ronn Hall
Laura Koval
Rob McNelis
Dustin Trotter

December 27, 2022

Mr. Art Bunce
Tribal Attorney
Barona Band of Mission Indians
P.O. Box 2516
Escondido, CA 92033-2516

Subject: **Santee Community Center – AB 52 Formal Notice (CIP 2018-31)**

Dear Mr. Art Bunce:

This letter is in response to your request for formal notification of projects for which the City of Santee is lead agency under California Public Resources Code section 21080.3.1, subdivision (b) of the California Environmental Quality Act. Pursuant to Public Resources Code section 21080.3.1, subdivision (d), the City of Santee, Department of Development Services (City) is planning to develop a Santee Community Center located at 10129 Riverwalk Drive, Santee, CA 92071 (CIP 2018-31).

The project is a proposed 12,500 square-foot Santee Community Center in the TC (Town Center) zone. The community center will consist of two stories and include an event space, office space, and support spaces.

As part of our cultural resources inventory, our consultant, Dudek, performed an NAHC search. Results of the search were positive and linked to two bands for direct contact. The Native American Heritage Commission (NAHC) provided a list of local Native American tribes and individuals to be contacted regarding the project for information on cultural resources on the project site or project area.

The attached Exhibits (A & B) show the regional location and the site location of the Project.

In accordance with Public Resources Code section 21080.3.1, subdivisions (b) and (d), Jamul Indian Village has 30 days from receipt of this formal notification to request in writing consultation regarding the Project. Such request should be directed to:

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Santee, CA 92071
Phone: (619) 258-4100, Extension 160
Email: MCoyne@cityofsanteeca.gov

Please contact me if you have any comments or questions.

Respectfully,



Michael Coyne
Associate Planner

Attachments:

Exhibit A – Regional Location Map
Exhibit B – Submitted Plans

Exhibit A Regional Location Map



SOURCE: SANDAG 2017, Open Streets Map 2019

DUDEK

0 200 400 Feet

FIGURE 1

Project Location

Santee Community Center Initial Study/Mitigated Negative Declaration

Exhibit B Submitted Plans



SOURCE: HMC Architects, 2022

FIGURE 2

Site Plan

Santee Community Center Initial Study/Mitigated Negative Declaration

DUDEK

Mayor
John W. Minto
City Council
Ronn Hall
Laura Koval
Rob McNelis
Dustin Trotter

December 27, 2022

Mr. Mario Morales
Mesa Grande Band of Mission Indians
PMB 366
35008 Pala Temecula Road
Pala, CA 92059

Subject: **Santee Community Center – AB 52 Formal Notice (CIP 2018-31)**

Dear Mr. Mario Morales:

This letter is in response to your request for formal notification of projects for which the City of Santee is lead agency under California Public Resources Code section 21080.3.1, subdivision (b) of the California Environmental Quality Act. Pursuant to Public Resources Code section 21080.3.1, subdivision (d), the City of Santee, Department of Development Services (City) is planning to develop a Santee Community Center located at 10129 Riverwalk Drive, Santee, CA 92071 (CIP 2018-31).

The project is a proposed 12,500 square-foot Santee Community Center in the TC (Town Center) zone. The community center will consist of two stories and include an event space, office space, and support spaces.

As part of our cultural resources inventory, our consultant, Dudek, performed an NAHC search. Results of the search were positive and linked to two bands for direct contact. The Native American Heritage Commission (NAHC) provided a list of local Native American tribes and individuals to be contacted regarding the project for information on cultural resources on the project site or project area.

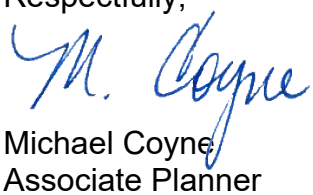
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Santee, CA 92071
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Email: MCoyne@cityofsanteeca.gov

Please contact me if you have any comments or questions.

Respectfully,



Michael Coyne
Associate Planner

Attachments:

Exhibit A – Regional Location Map
Exhibit B – Submitted Plans

Exhibit A Regional Location Map



SOURCE: SANDAG 2017, Open Streets Map 2019

DUDEK 0 200 400 Feet

FIGURE 1

Project Location

Santee Community Center Initial Study/Mitigated Negative Declaration

Exhibit B Submitted Plans



SOURCE: HMC Architects, 2022

FIGURE 2

Site Plan

Santee Community Center Initial Study/Mitigated Negative Declaration

DUDEK

Mayor
John W. Minto
City Council
Ronn Hall
Laura Koval
Rob McNelis
Dustin Trotter

December 27, 2022

Tom Holm, Executive Director
Kumeyaay Heritage Preservation Council
5663 Balboa Avenue, Suite 610
San Diego, CA 92111

Subject: **Santee Community Center – AB 52 Formal Notice (CIP 2018-31)**

Dear Mr. Tom Holm:

This letter is in response to your request for formal notification of projects for which the City of Santee is lead agency under California Public Resources Code section 21080.3.1, subdivision (b) of the California Environmental Quality Act. Pursuant to Public Resources Code section 21080.3.1, subdivision (d), the City of Santee, Department of Development Services (City) is planning to develop a Santee Community Center located at 10129 Riverwalk Drive, Santee, CA 92071 (CIP 2018-31).

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As part of our cultural resources inventory, our consultant, Dudek, performed an NAHC search. Results of the search were positive and linked to two bands for direct contact. The Native American Heritage Commission (NAHC) provided a list of local Native American tribes and individuals to be contacted regarding the project for information on cultural resources on the project site or project area.

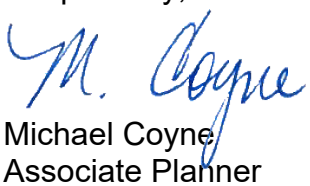
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In accordance with Public Resources Code section 21080.3.1, subdivisions (b) and (d), Jamul Indian Village has 30 days from receipt of this formal notification to request in writing consultation regarding the Project. Such request should be directed to:

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Santee, CA 92071
Phone: (619) 258-4100, Extension 160
Email: MCoyne@cityofsanteeca.gov

Please contact me if you have any comments or questions.

Respectfully,



Michael Coyne
Associate Planner

Attachments:

Exhibit A – Regional Location Map
Exhibit B – Submitted Plans

Exhibit A – Regional Location Map



SOURCE: SANDAG 2017; Open Streets Map 2019

DUDEK 0 200 400 Feet

FIGURE 1

Project Location

Santee Community Center Initial Study/Mitigated Negative Declaration

Exhibit B – Submitted Plans



SOURCE: HMC Architects, 2022

DUDEK

FIGURE 2

Site Plan

Santee Community Center Initial Study/Mitigated Negative Declaration