

RICHARDS RANCH ANNEXATION FINAL EIR

VOLUME 1: FINAL ENVIRONMENTAL IMPACT REPORT

SCH NO. 2022020194

PREPARED FOR

City of Santa Maria
Community Development Department
110 South Pine Street, Suite 101
Santa Maria, CA 93458

VOLUME 1.2: FINAL EIR APPENDICES

July 2024

PREPARED BY

SWCA Environmental Consultants
4111 Broad Street, Suite 210
San Luis Obispo, CA 93401

APPENDIX A

Notice of Preparation

CITY OF SANTA MARIA
NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING

DATE: February 8, 2022

TO: Governor's Office of Planning and Research State Clearinghouse, Responsible Agencies, Trustee Agencies, Organizations, and Interested Parties

SUBJECT: **Notice of Preparation of an Environmental Impact Report and a Scoping Meeting for the Richards Ranch Annexation Project (AN2021-0001)**

LEAD AGENCY:		**CONSULTANT:**	
Agency Name:	City of Santa Maria Community Development Department	**Firm Name:**	SWCA Environmental Consultants
Street Address:	110 South Pine Street, Room 101	**Street Address:**	1422 Monterey Street, Suite B-C200
City/State/Zip:	Santa Maria, CA 93458	**City/State/Zip:**	San Luis Obispo, CA 93401
Contact:	Dana Eady Planning Division Manager deady@cityofsantamaria.org (805) 925-0951 ext. 2444	**Contact:**	Bobbette Biddulph Senior Project Manager bobbette.biddulph@swca.com

As the Lead Agency, the City of Santa Maria (City) will prepare an Environmental Impact Report (EIR) for the Richards Ranch Annexation Project (project). The EIR is being prepared in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation (NOP) is being distributed to applicable interested, responsible, and trustee agencies and interested parties as required by CEQA. Comments from agencies and interested parties are requested on the scope and content of the environmental analysis to be included in the EIR.

Project Title: Richards Ranch Annexation Project

Project Location: The project consists of four parcels located in Santa Barbara County to the northeast and southeast of the intersection of State Route (SR-) 135 and Union Valley Parkway. These parcels, Assessor's Parcel Numbers (APN) 107-250-19, 107-250-20, 107-250-21, and 107-250-22, are within the City of Santa Maria Sphere of Influence (SOI) and adjacent to the southeastern limits of the city of Santa Maria and total approximately 44 acres. The project description and an initial identification of the probable environmental effects leading to the determination to prepare an EIR are included in the PROJECT SUMMARY ATTACHMENT provided on page 3.

Public Comment Period: February 8 to March 9, 2022

Written comments or questions concerning the EIR for the proposed project should be directed to Dana Eady, Planning Division Manager, at the addresses shown above. Please indicate a contact person for your agency or organization. Due to the time limits mandated by state law, written comments must be sent via United States Postal Service or email **no later than 5:00 p.m. on March 9, 2022.**

All comments provided should identify specific topics of environmental concern and the reason for suggesting the study of these topics in the EIR. All comments will be considered in defining the scope of the EIR in accordance with the State CEQA Guidelines.

Scoping Meeting: The City will hold a virtual EIR scoping meeting on **February 22, 2022, at 3:00 p.m.** To maximize public safety while still maintaining transparency and access, all interested parties are invited to attend the virtual scoping meeting to assist with identifying issues to be addressed in the EIR. The scoping meeting will include a brief presentation of the project to be addressed in the EIR and will provide attendees with an opportunity to provide input on the scope of the EIR.

Register in advance for this meeting to attend and to make public comments during the meeting:

https://us02web.zoom.us/webinar/register/WN_ff15hBbQQX2v8uo3cVwGog

After registering, you will receive a confirmation email containing information about joining the meeting.

Date: February 8, 2022

Signature: Dana Eady Digitally signed by Dana Eady Date: 2022.02.07 17:15:08 -08'00'

Name and Title: Dana Eady, Planning Division Manager

Attachment 1 – Richards Ranch Annexation Project Summary

ATTACHMENT 1

RICHARDS RANCH ANNEXATION PROJECT
NOTICE OF PREPARATION PROJECT SUMMARY

Project Location

Assessor's Parcel Numbers (APN) 107-250-19, 107-250-20, 107-250-21, and 107-250-22
Northeast and southeast intersection of State Route (SR-) 135 and Union Valley Parkway
Santa Barbara, CA 93455

Lead Agency

City of Santa Maria
Contact: Dana Eady, Planning Division Manager
Community Development Department
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Santa Maria, CA 93458
(805) 925-0951 ext. 2444
deady@cityofsantamaria.org

Project Sponsor

MD3 Investments
Contact: Michael D. Stoltey, MBA
Md3investments@gmail.com

Project Site Location and Setting

The Richards Ranch Annexation Project (project) site includes four parcels located to the northeast and southeast of the intersection of SR-135 and Union Valley Parkway in the unincorporated community of Orcutt in Santa Barbara County (Figure 1, Project Vicinity Map). The project site is adjacent to the southeastern limits of the city of Santa Maria and is lies within the City's Sphere of Influence. The project site is approximately 1.5 miles west of U.S. Route (US-) 101 and 2.3 miles northeast of SR-1. The Santa Maria Airport District property is located to the west of SR-135 and northwest of the project site, with the terminus of the main runway approximately 0.75 mile to the northwest. The project site is also partially overlain by the Santa Maria Airport Flight Approach and Clear Zones. The project site is undeveloped and relatively flat. Vegetation on the site includes non-native grassland and coastal scrub habitats, as well as stands of non-native eucalyptus and ornamental trees. As identified in the Santa Barbara County Orcutt Community Plan, the current land use designation is Mixed Commercial/Residential, which provides for general commercial, office and professional, and residential uses. All four parcels have a zoning designation of Retail Commercial (C-2).

Land uses surrounding the site include the following:

North: Existing residential lots
South: Existing church and residential lots
East: Multifamily developments know as Northpoint and Mariposa with their open space.
West: SR-135 and Orcutt Road run parallel along the west property line and further west is the Santa Maria Airport and the Foxenwood Townhomes

Project Description

The project would involve the pre-zoning of four parcels located in unincorporated Santa Barbara County by the City of Santa Maria and annexation of the property into the Santa Maria City limits. Table 1 summarizes the parcels proposed to be annexed, acreages, and the proposed pre-zone designation.

The project would require approval from the Santa Barbara County Local Agency Formation Commission (SBLAFCO) for the annexation of the parcels. The EIR prepared for this project is intended to meet SBLAFCO requirements for annexation.

Table 1: Project Site Parcels and Proposed Pre-Zone Designations

APN	Acreage	Proposed Pre-Zone Designation
107-250-19	2.33	General Commercial (PD/C-2)
107-250-20	1.86	General Commercial (PD/C-2)
107-250-21	12.16	General Commercial (PD/C-2)
107-250-22	27.40	High Density Residential (PD/R-3)
Total	**43.75**	

Note: Acreage totals for APNs obtained from the property Title Report prepared by Stewart Title Guaranty Company Commercial Services (San Diego) for Michael D. Stoltey, an individual, dba MD3 Investments on July 2, 2021.

Pre-zoning is a required component of the annexation process. California Government Code Section 65859 allows the City to adopt (i.e., pre-zone) a zoning designation for land outside its city limits in anticipation of annexation and development. Under the code provisions, the zoning designation adopted by the City would not become effective unless and until the land is annexed to the City. As outlined in Table 1, the project proposes to pre-zone the parcels in the project site as either General Commercial (C-2) or High Density Residential (R-3). The parcels would also be located within the Planned Development (PD) Overlay District, which is designed and intended to provide for the orderly development of land in conformance with the City's General Plan by permitting a flexible design approach to the development of a total community development equal to or better than that resulting from traditional lot by lot development.

A conceptual layout for future development of the project site has been created to include retail commercial, mini-storage, and high-density residential uses (Figure 2, Proposed Richards Ranch Concept Plan). As summarized in Table 2, the concept plan would allow a maximum buildout of 160,800 square feet (sf) of commercial uses on 16.35 acres of the project site, as well as 400 apartments and 95 townhomes on the remaining 27.4 acres. This concept plan show the potential future development that could occur consistent with the project's proposed pre-zone designations and will be used for the purposes of the environmental analysis in the EIR.

Table 2: Summary of Proposed Richards Ranch Concept Plan

Proposed Zoning Category	Acreage	% of Total	Potential Development
General Commercial (C2)	16.35	37%	106,800 sf
High Density Residential (R3)	18.20	42%	400 apartments
High Density Residential (R3)	9.20	21%	95 townhomes
Total	43.75	100%	

Sources: RRM Design Group Site Plans 2021; Title Report 2021.

Probable Environmental Effects and Scope of the EIR

The City has completed a preliminary review of the project, as described in Section 15060 of the State CEQA Guidelines and has determined that a comprehensive EIR will be required for the project. Therefore, all of the topics identified in Appendix G of the State CEQA Guidelines (the initial study checklist) will undergo study, the findings of which will be presented in the EIR.

Each chapter of this EIR will include a discussion of the existing setting, thresholds of significance, evaluation of potential impacts, and, if necessary, feasible mitigation measures to reduce or eliminate potentially significant impacts to the applicable resource. Additionally, the EIR will include analyses of alternatives to the project. Alternatives to be analyzed in the EIR will be defined based on their potential to reduce or eliminate significant environmental impacts associated with the project. The specific alternatives may include, but are not limited to, the “No Project” alternative, as required by CEQA.

Figure 1. Project Vicinity Map

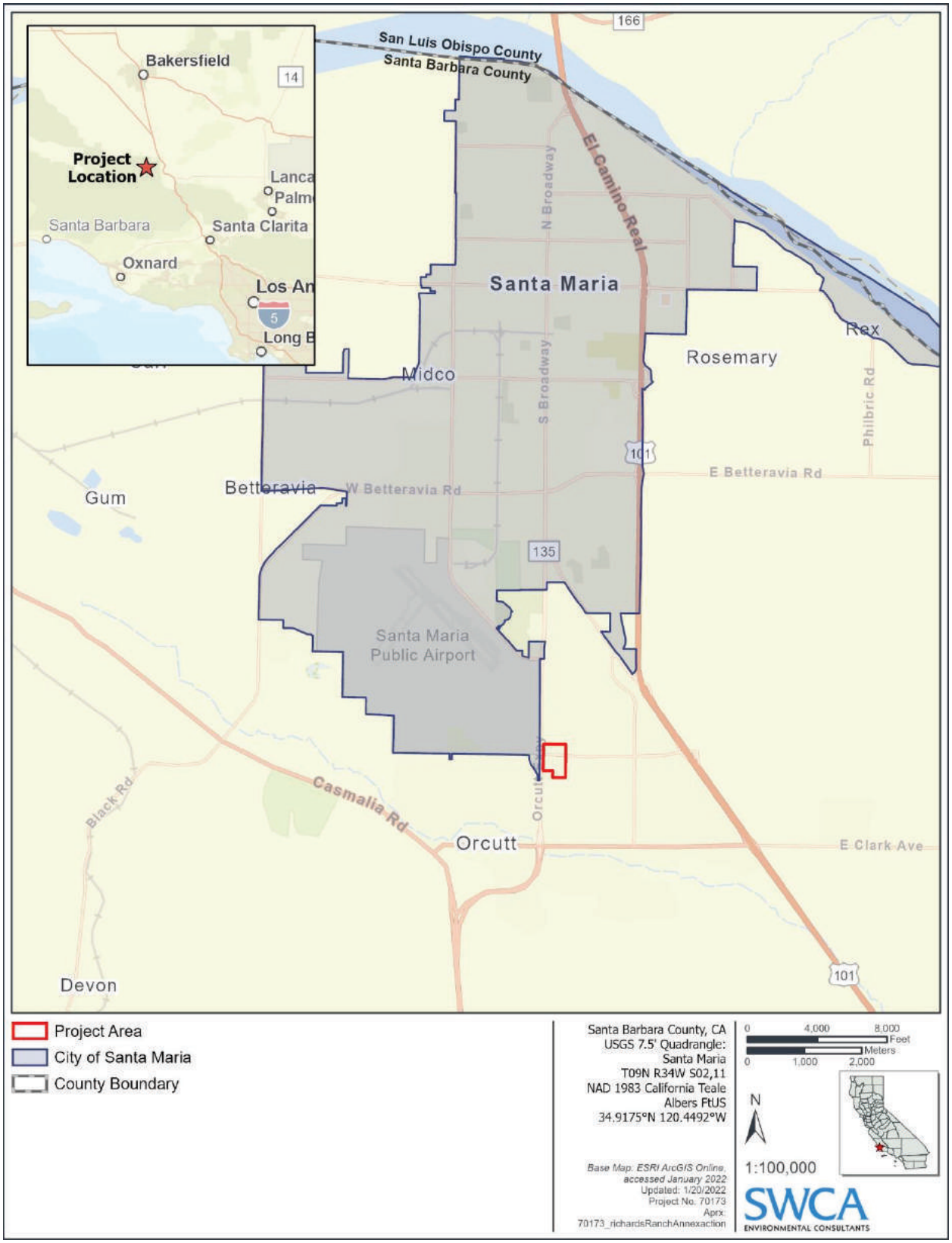
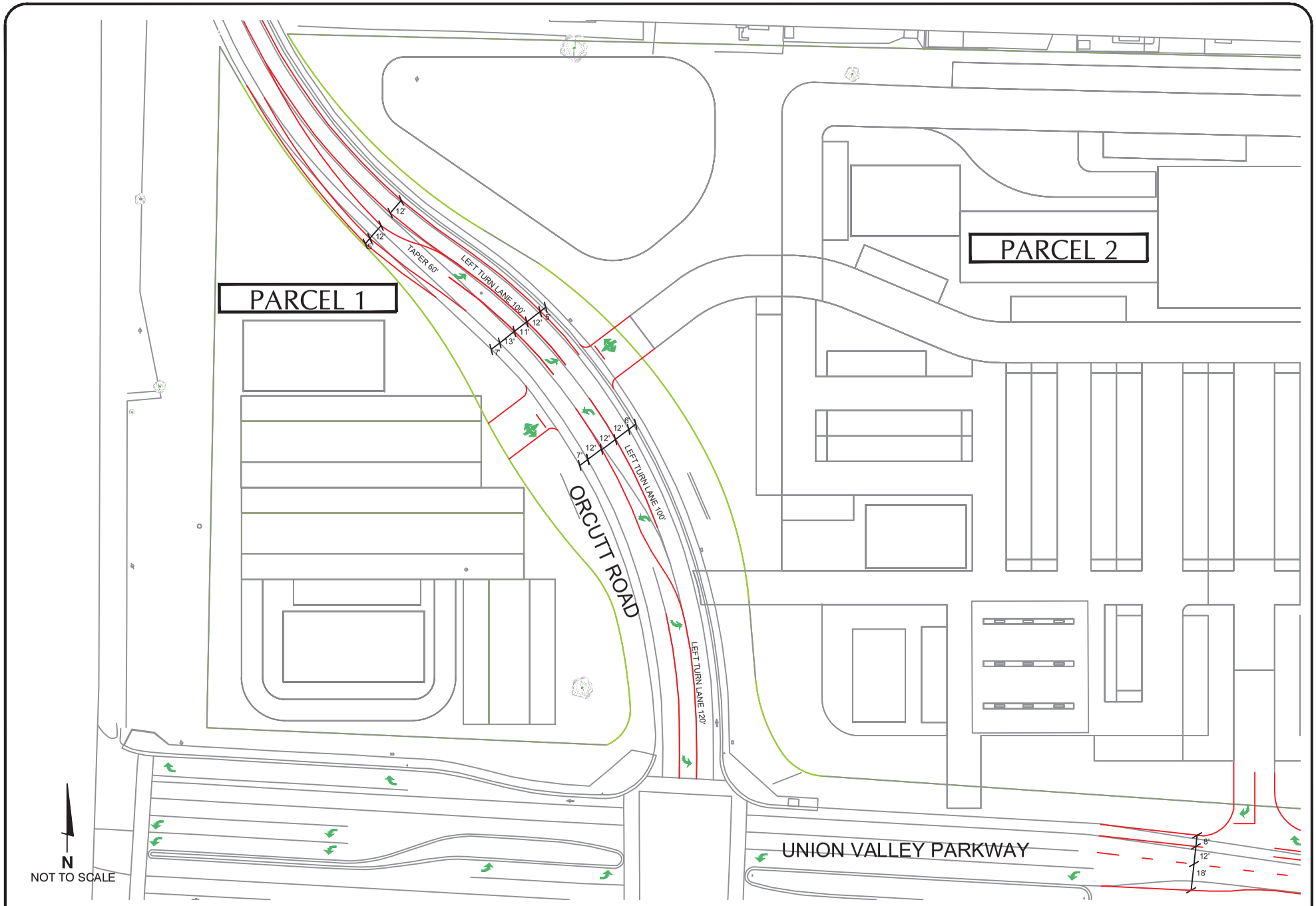


Figure 2. Proposed Richards Ranch Concept Plan



APPENDIX B

Proposed Infrastructure Improvements

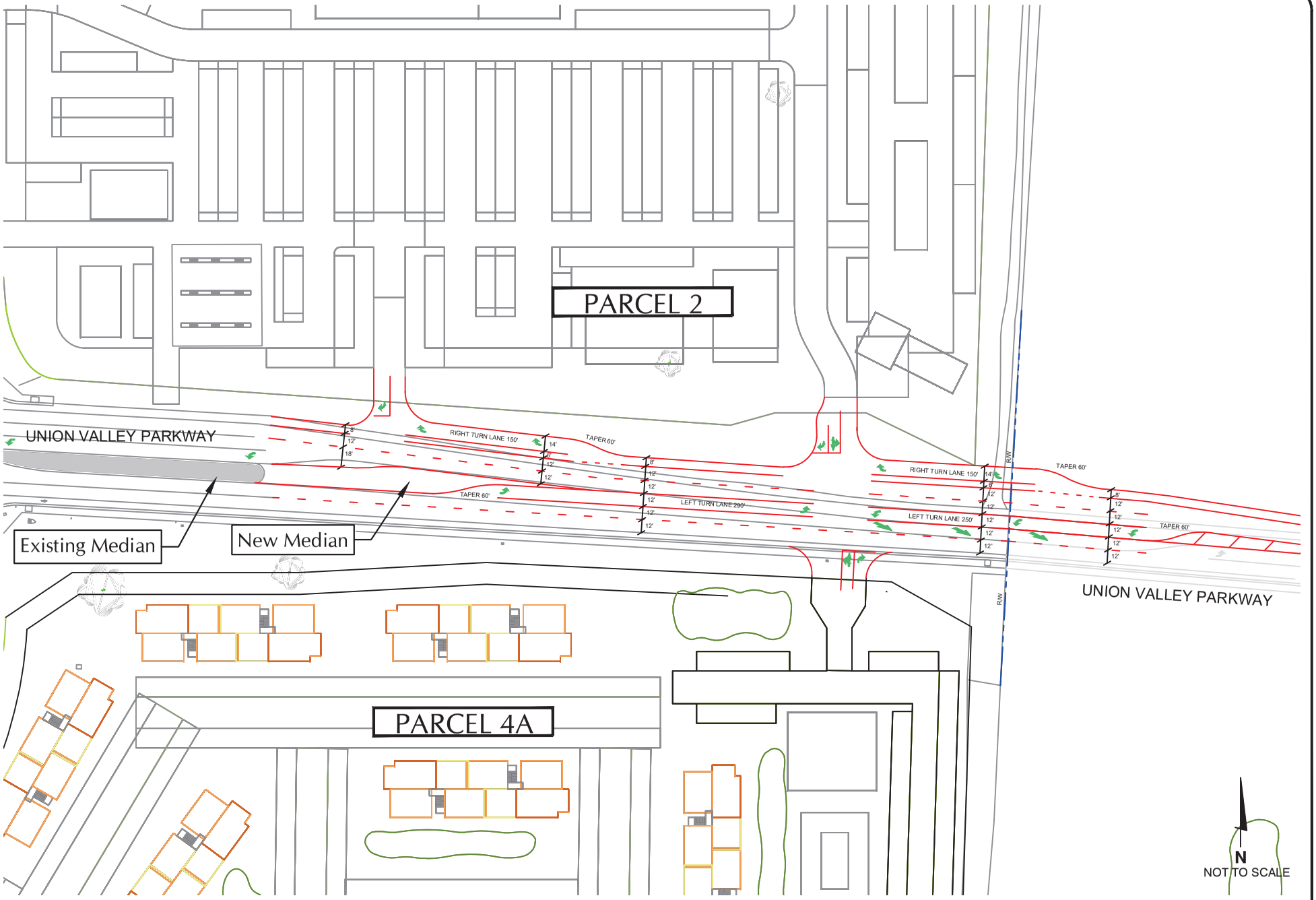


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PARCEL 1 AND PARCEL 2 - ORCUTT ROAD DRIVEWAYS

FIGURE 10

GM- ATE#21069

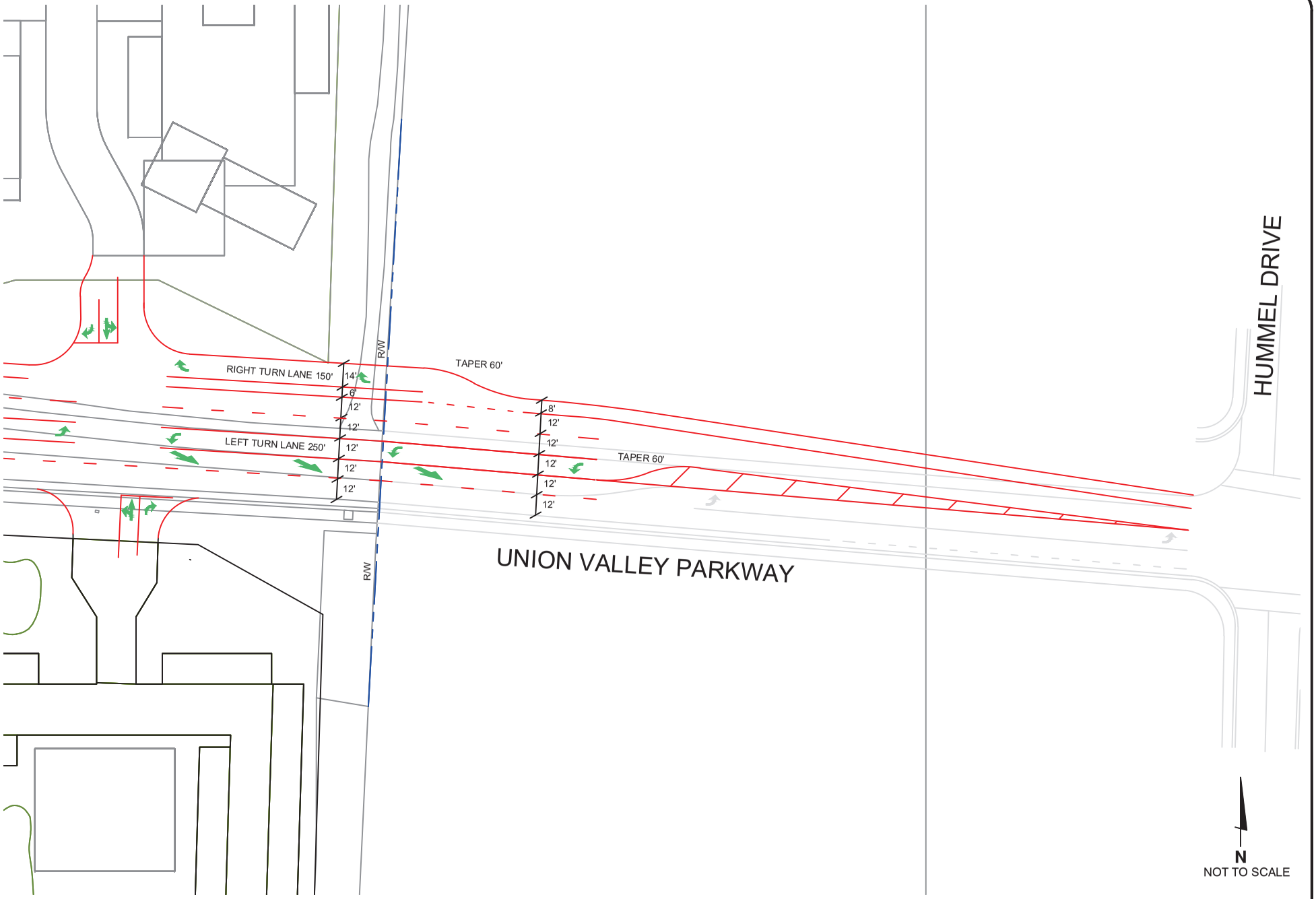


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PARCEL 2 AND PARCEL 4A - UNION VALLEY PARKWAY DRIVEWAYS

FIGURE 11

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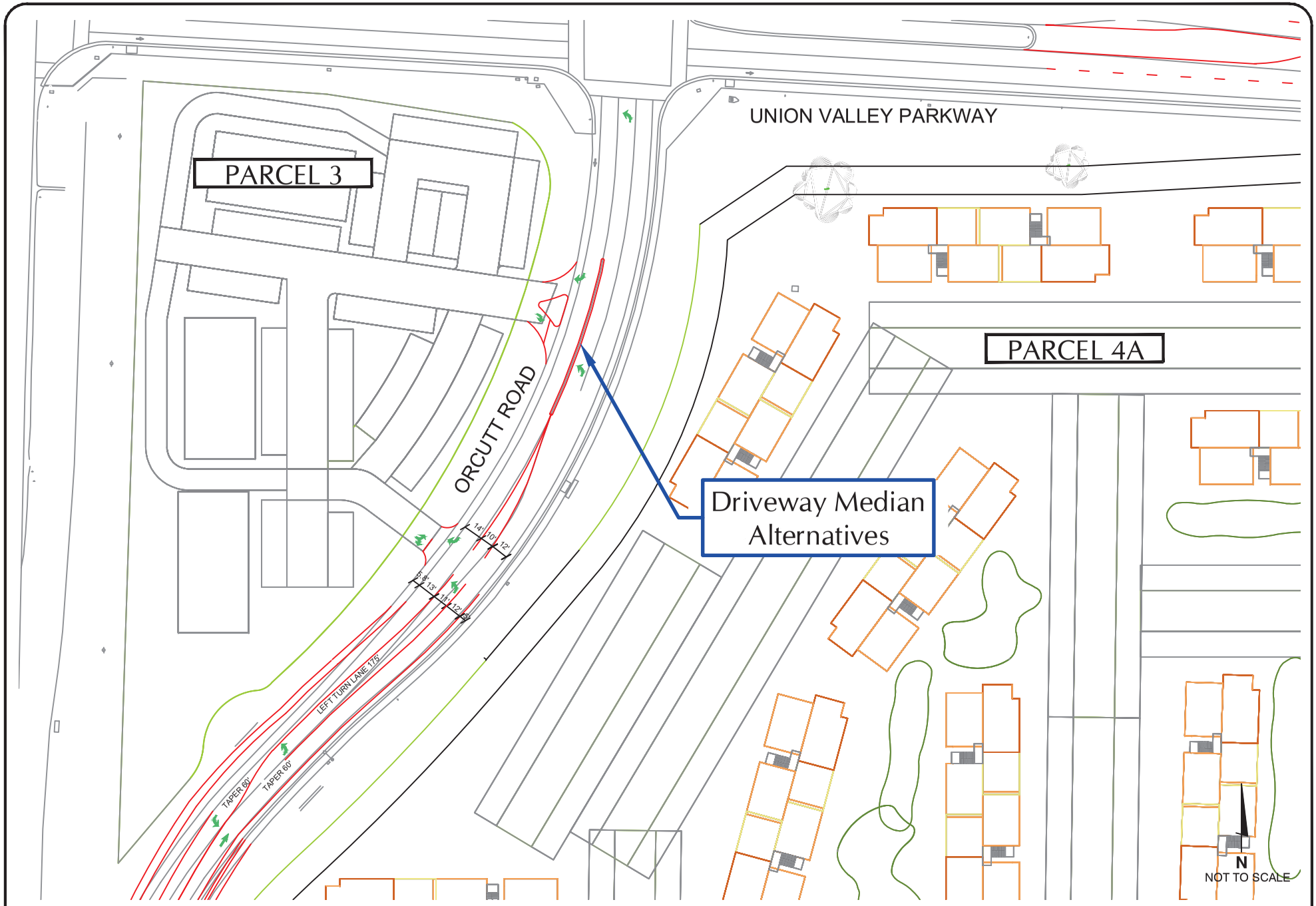


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UVP INTERIM TRANSITION PLAN

FIGURE 12a

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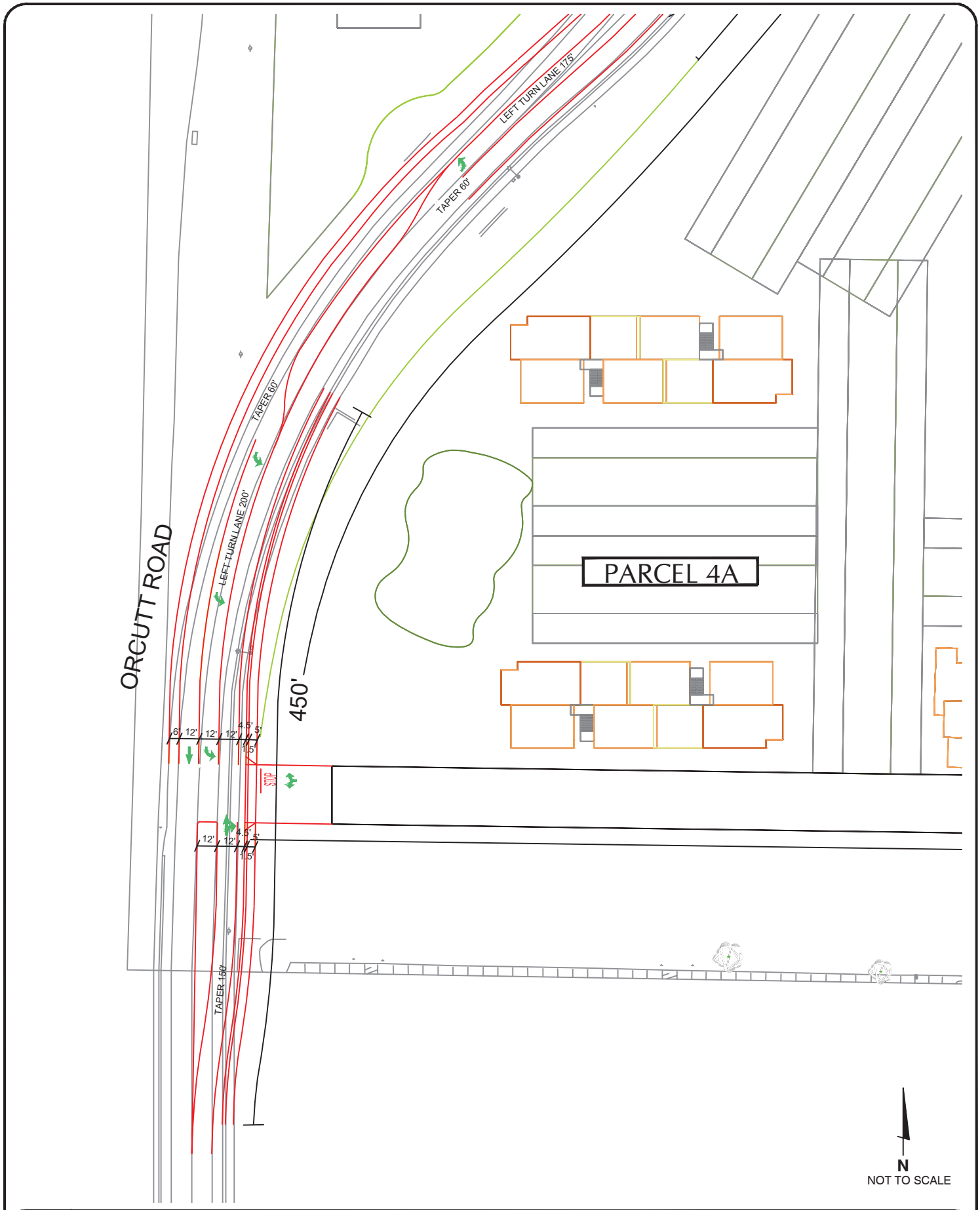


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PARCEL 3 - ORCUTT ROAD DRIVEWAYS

FIGURE 13

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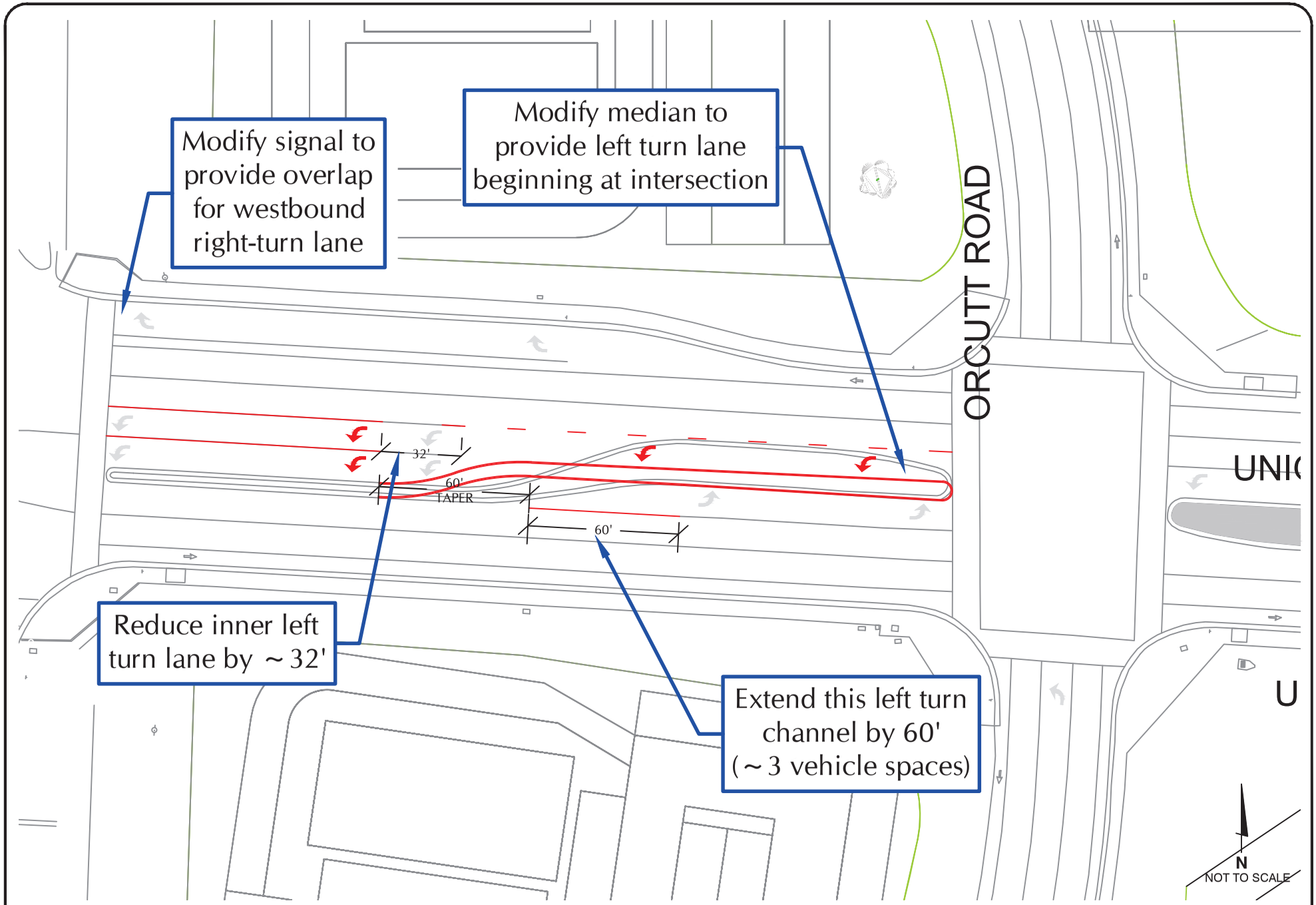


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PARCEL 4A AND PARCEL 4B - ORCUTT ROAD DRIVEWAY

FIGURE 14

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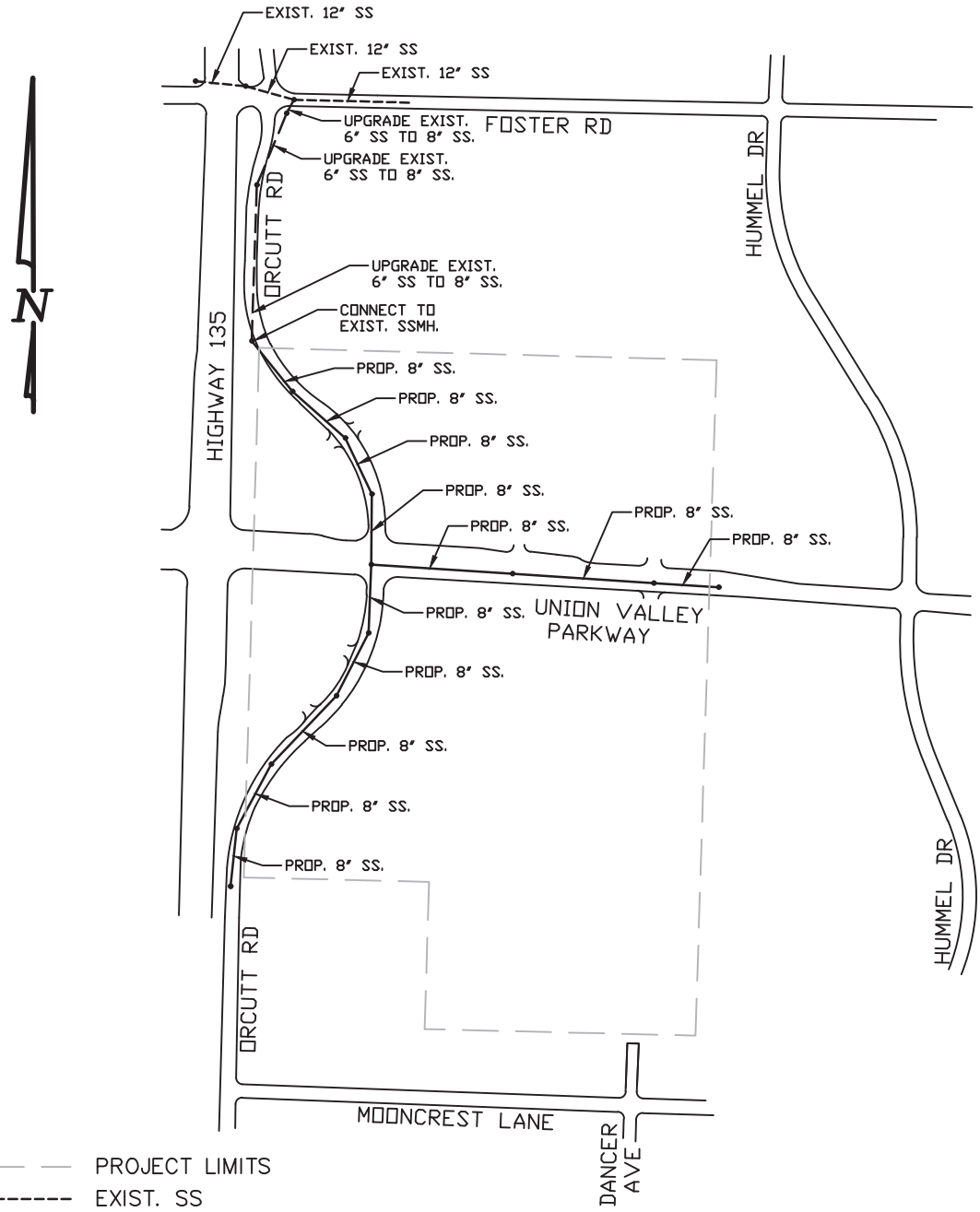


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LEFT TURN CHANNELS AT UVP/ORCUTT ROAD AND ORCUTT EXPY

FIGURE 17

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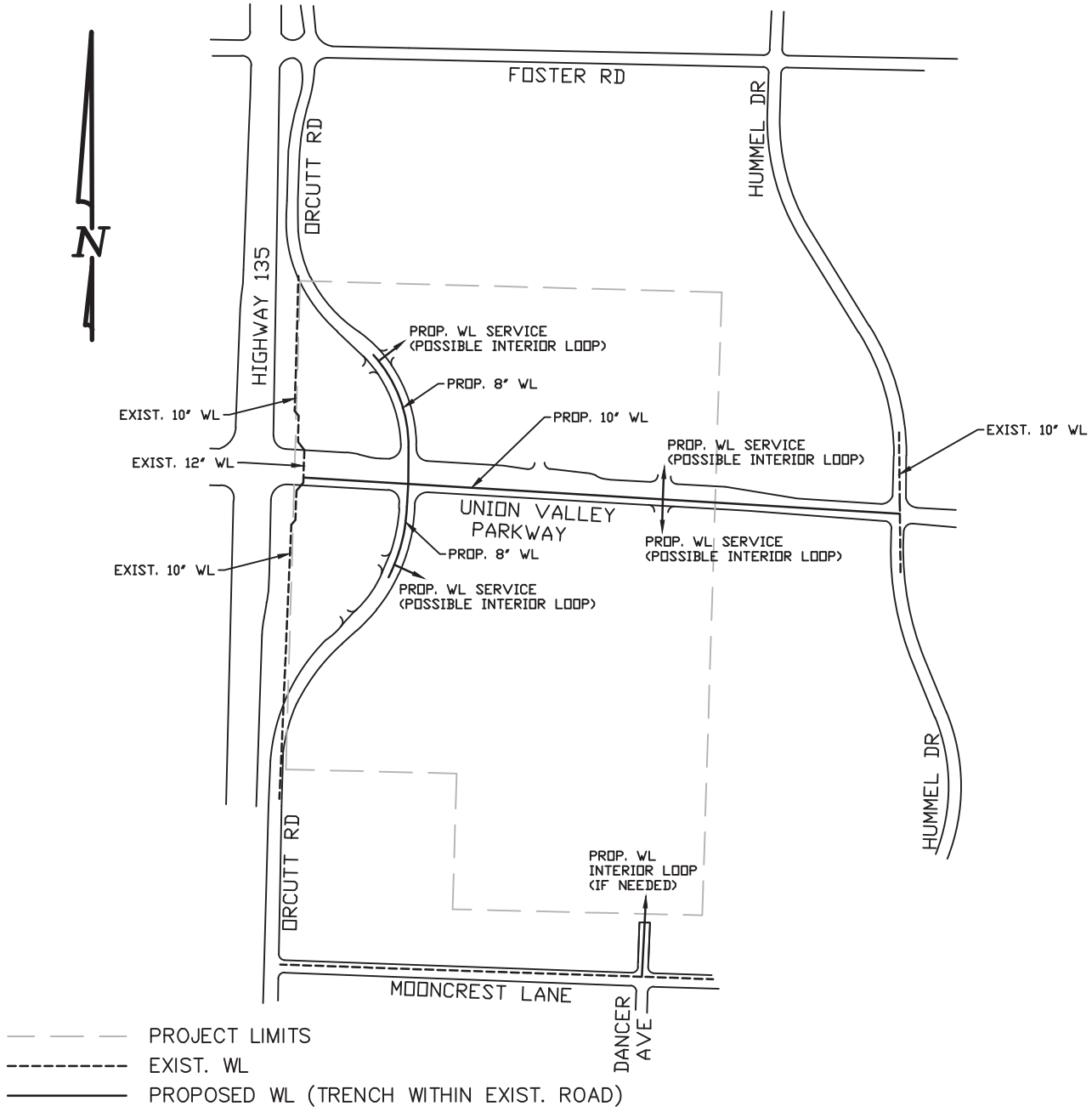


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WATER FACILITIES EXHIBIT

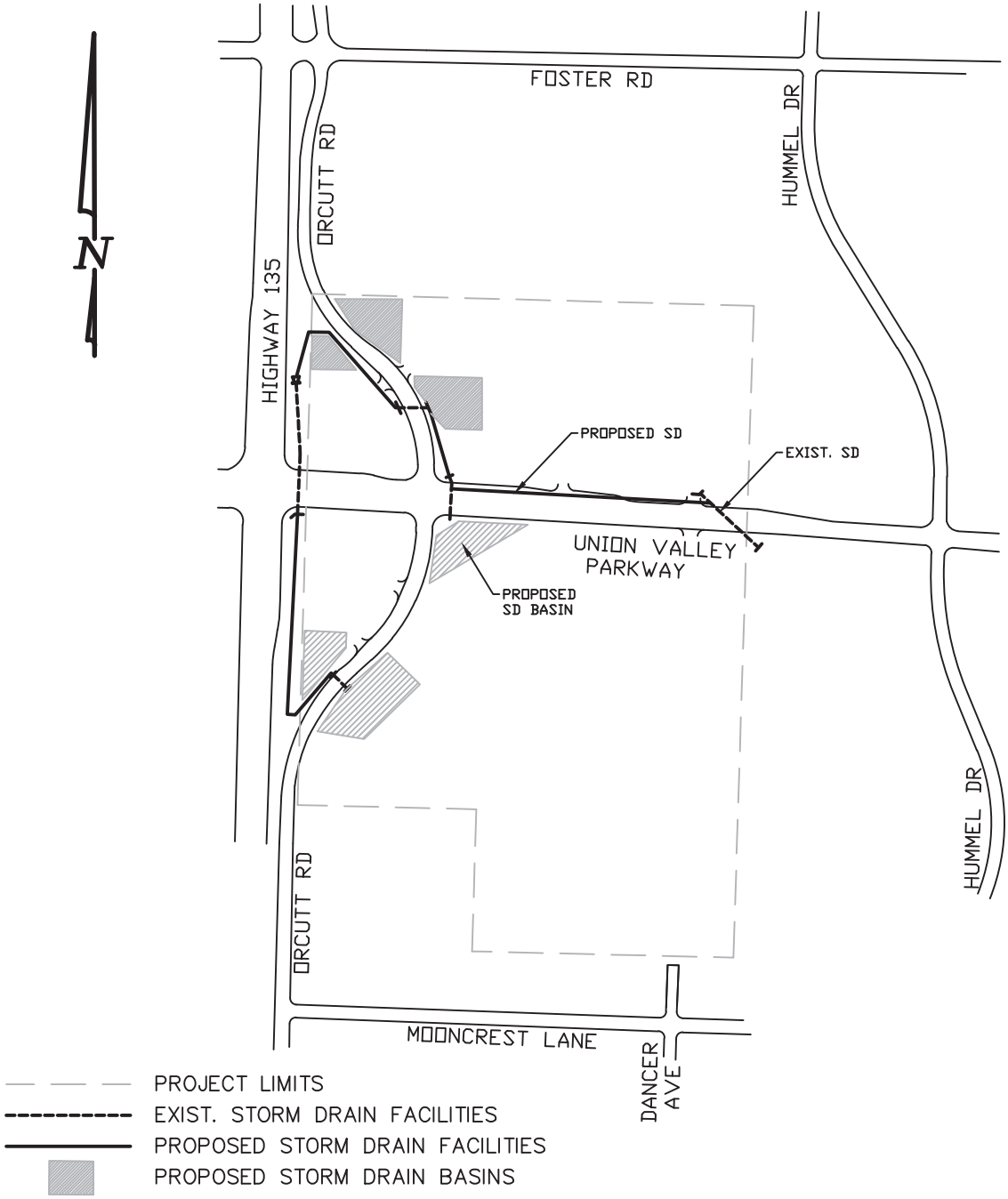
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STORM WATER FACILITIES EXHIBIT

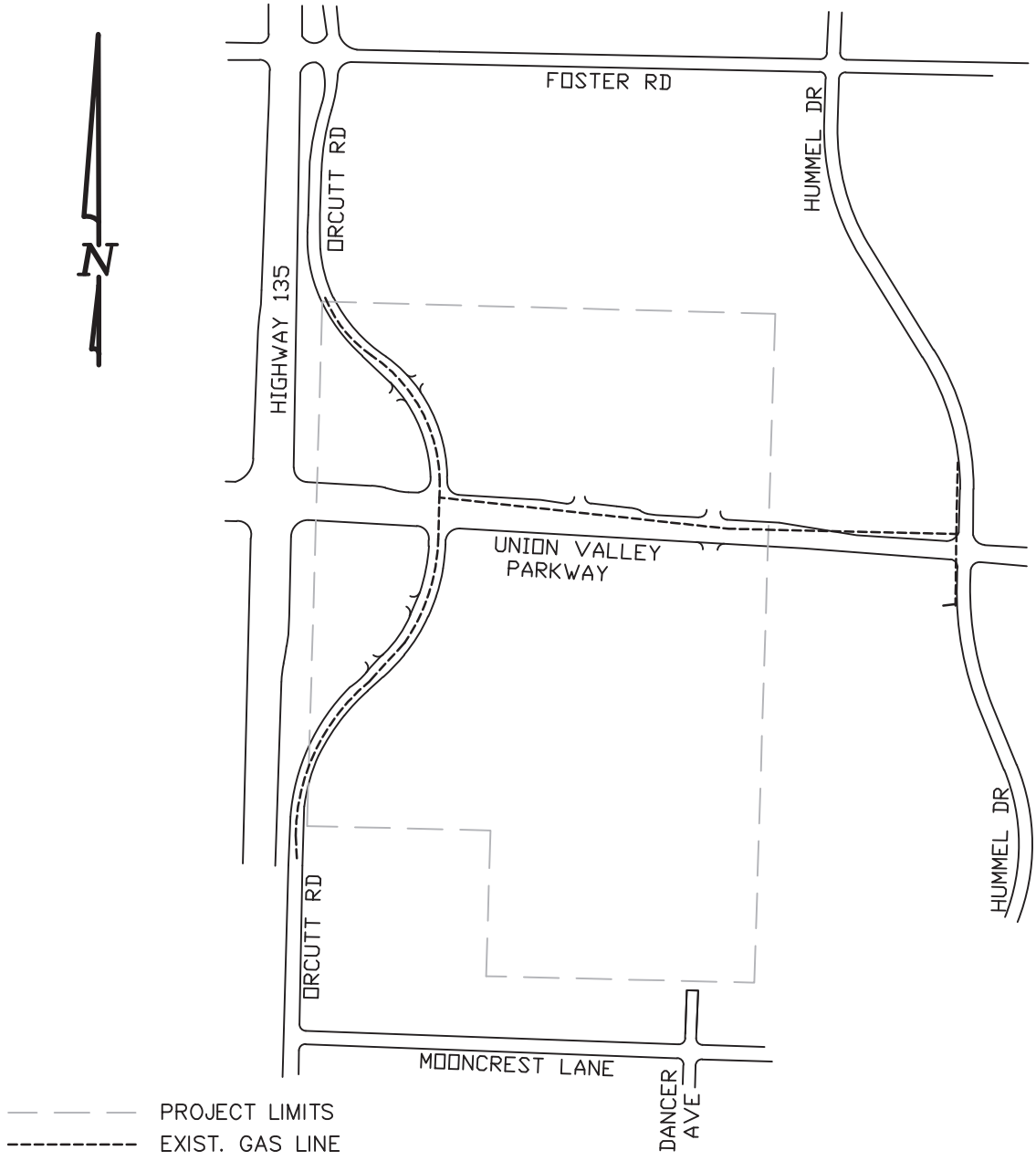
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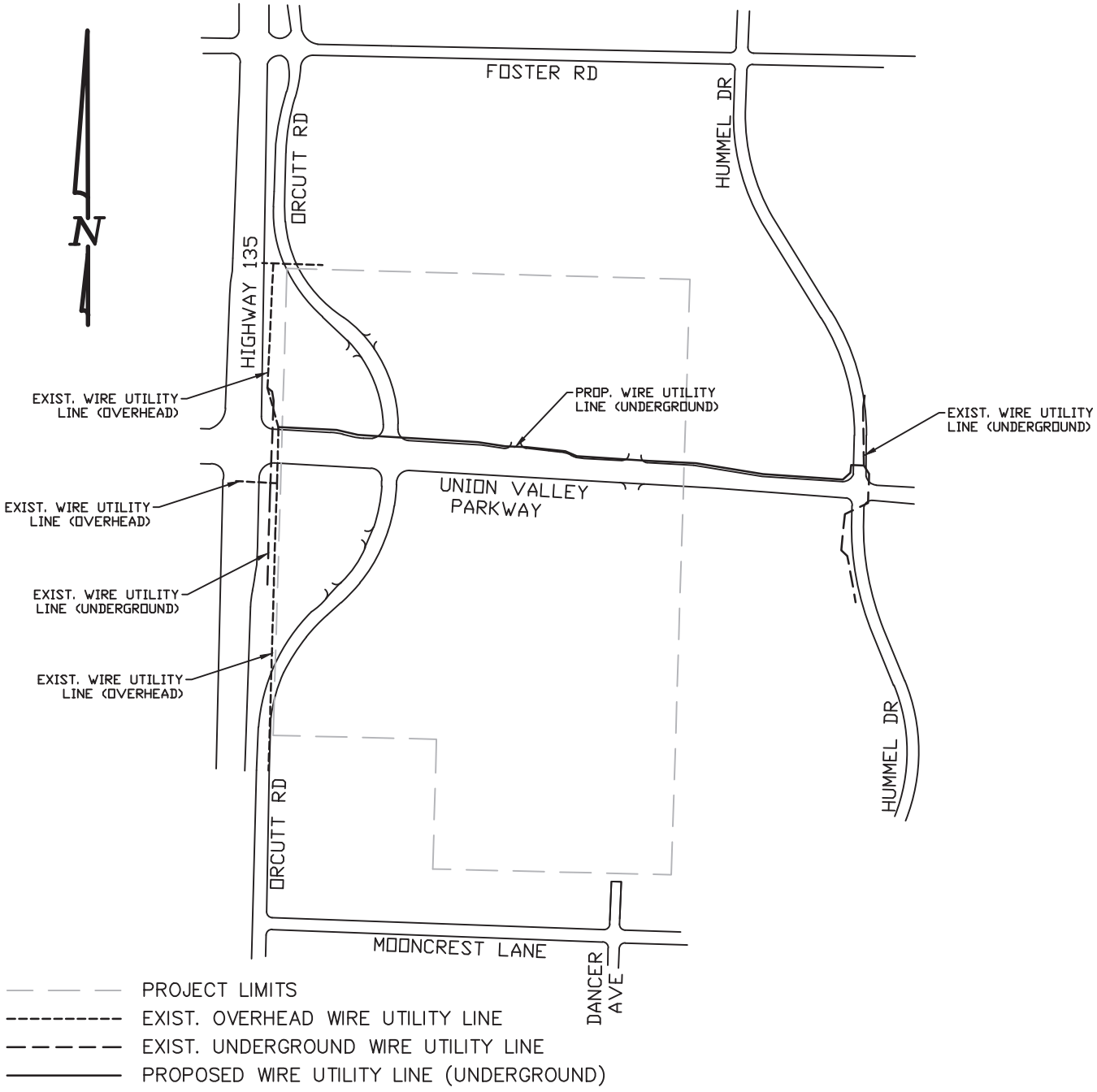
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APPENDIX C

Updated Traffic and Circulation Study

RICHARDS RANCH PROJECT
CITY OF SANTA MARIA, CALIFORNIA

UPDATED TRAFFIC AND CIRCULATION STUDY



October 7, 2022 **ATE #21069**

MD3 Investments
San Luis Obispo, CA

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Since 1978

Richard L. Pool, P.E.
Scott A. Schell

October 7, 2022 21069R03

Michael Stoltey
MD3 Investments
San Luis Obispo, CA

UPDATED TRAFFIC AND CIRCULATION STUDY
FOR THE RICHARDS RANCH PROJECT, CITY OF SANTA MARIA

Associated Transportation Engineers (ATE) has prepared the following updated traffic and circulation study for the Richards Ranch Project, located in the City of Santa Maria. The study evaluates Existing + Project and Cumulative + Project traffic conditions in order to determine the Project's consistency with the City's transportation policies; and determines the Project's potential CEQA traffic impacts based on the City's adopted "Vehicle Miles Traveled" (VMT) impact criteria.

We appreciate the opportunity to assist you with the project.

Associated Transportation Engineers



Scott A. Schell
Principal Transportation Planner

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INTRODUCTION

The following updated report contains analyses of the traffic and circulation issues associated with the Richards Ranch Project (the "Project"), proposed in the City of Santa Maria. The report evaluates existing and future traffic operations within the Project study area and assesses the Project's consistency with City's adopted transportation policies. An analysis of site access and circulation is also provided. The roadways and intersections analyzed in the study were determined based on input provided by City of Santa Maria staff. An evaluation of the Project's potential CEQA impacts is also provided based on the City's CEQA requirements for Vehicle Miles Traveled (VMT) adopted under Senate Bill 743. The updated study addresses the comments provided in the January 20, 2022 and August 23, 2022 comment letters submitted by City Public Works staff (Mr. Mark Mueller) and Central Coast Transportation Consulting.

PROJECT DESCRIPTION

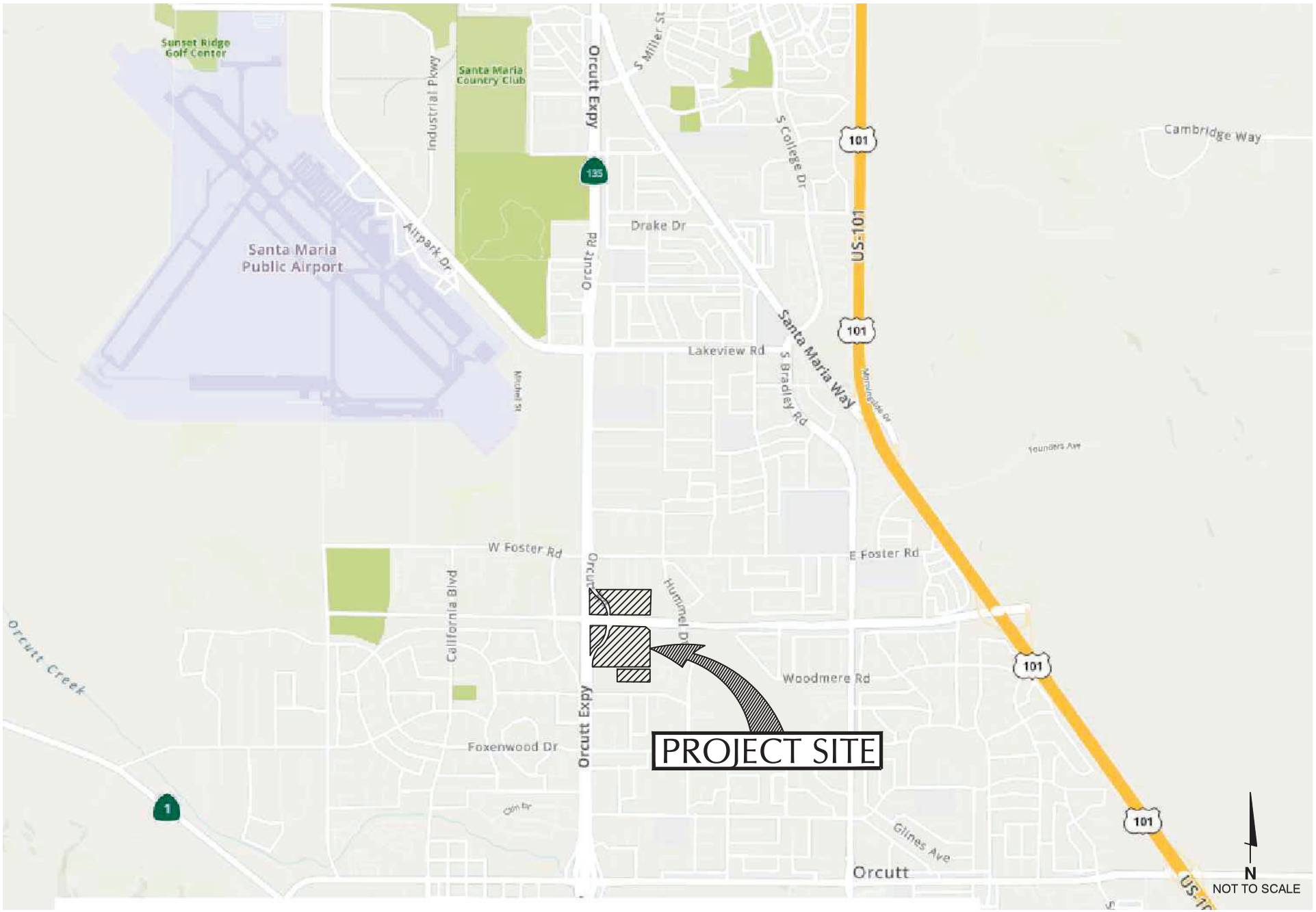
The Project consists of 4 separate parcels located adjacent to the Union Valley Parkway/Orcutt Road and Union Valley Parkway/Orcutt Expressway intersections in the southwestern portion of the City of Santa Maria. Figure 1 shows the location of the 4 parcels. The parcels are currently located within Santa Barbara County and would be annexed to the City of Santa Maria. The proposed zoning for three parcels would be C-2 commercial and the proposed zoning for the remaining parcel would be R-3 residential.

Figure 2a presents the preliminary site plan for the commercial parcels and Figure 2b presents the preliminary site plan for the residential parcel. As shown, the two smaller parcels located west of Orcutt Road would be zoned C-2 commercial and would contain auto service uses and a restaurant. The larger parcel located north of the Union Valley Parkway (UVP) would be zoned C-2 commercial and would contain a shopping center, restaurants, and a mini-storage. The two parcels located south of the UVP would be zoned R-3 Residential and would contain apartments and townhomes. Table 1 provides a summary of the land uses assumed for each parcel for this study.

Table 1
Assumed Land Use Statistics

Parcel	Zoning	Land Use	Size
Parcel 1 (Northwest)	C-2 Commercial	Gas Station with Mart(a) Lube Station(b)	10 Fueling Positions 3 Bays
Parcel 2 (Northeast)	C-2 Commercial	Shopping Center Sit-Down Restaurant Fast-Food Restaurant w/DT (5) Fast Casual Restaurant (2) Mini Storage	55,500 SF 5,000 SF 15,250 SF 6,000 SF 39,500 SF
Parcel 3 (Southwest)	C-2 Commercial	Car Wash-Automated Fast-Food Restaurant w/DT	1 Tunnel 3,500 SF
Parcel 4A (Southeast)	R-3 Residential	Three-Story Apartments	400 Units
Parcel 4B (Southeast)	R-3 Residential	Two-Story Townhomes	95 Units

(a) Gas Station Convenience Market contains 3,950 SF of building area.
(b) Lube Station contains 2,400 SF of building area.



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PROJECT SITE LOCATION

FIGURE 1

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PROJECT SITE PLAN - COMMERCIAL

FIGURE 2a

GM- ATE#21069



N
NOT TO SCALE

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PROJECT SITE PLAN - RESIDENTIAL

FIGURE 2b

GM- ATE#21069

TRAFFIC ANALYSIS SCENARIOS

The following scenarios are included in the traffic and circulation analysis.

Existing Conditions: This scenario describes the existing street network and evaluates peak hour operations at the key study-area intersections identified for analyses.

Existing + Project: This scenario evaluates traffic operations assuming Existing + Project traffic forecasts. The Project's consistency with City transportation policies is evaluated for this scenario.

Cumulative Conditions: This scenario evaluates traffic operations assuming the additional traffic that will be generated by approved and pending developments located in the adjacent areas of the City and the County of Santa Barbara. Traffic volumes generated by the approved and pending projects are layered onto the Existing baseline traffic forecasts for analyses.

Cumulative + Project: This scenario evaluates operations assuming the Cumulative conditions plus the traffic generated by the Project. The Project's consistency with City transportation policies is evaluated for this scenario.

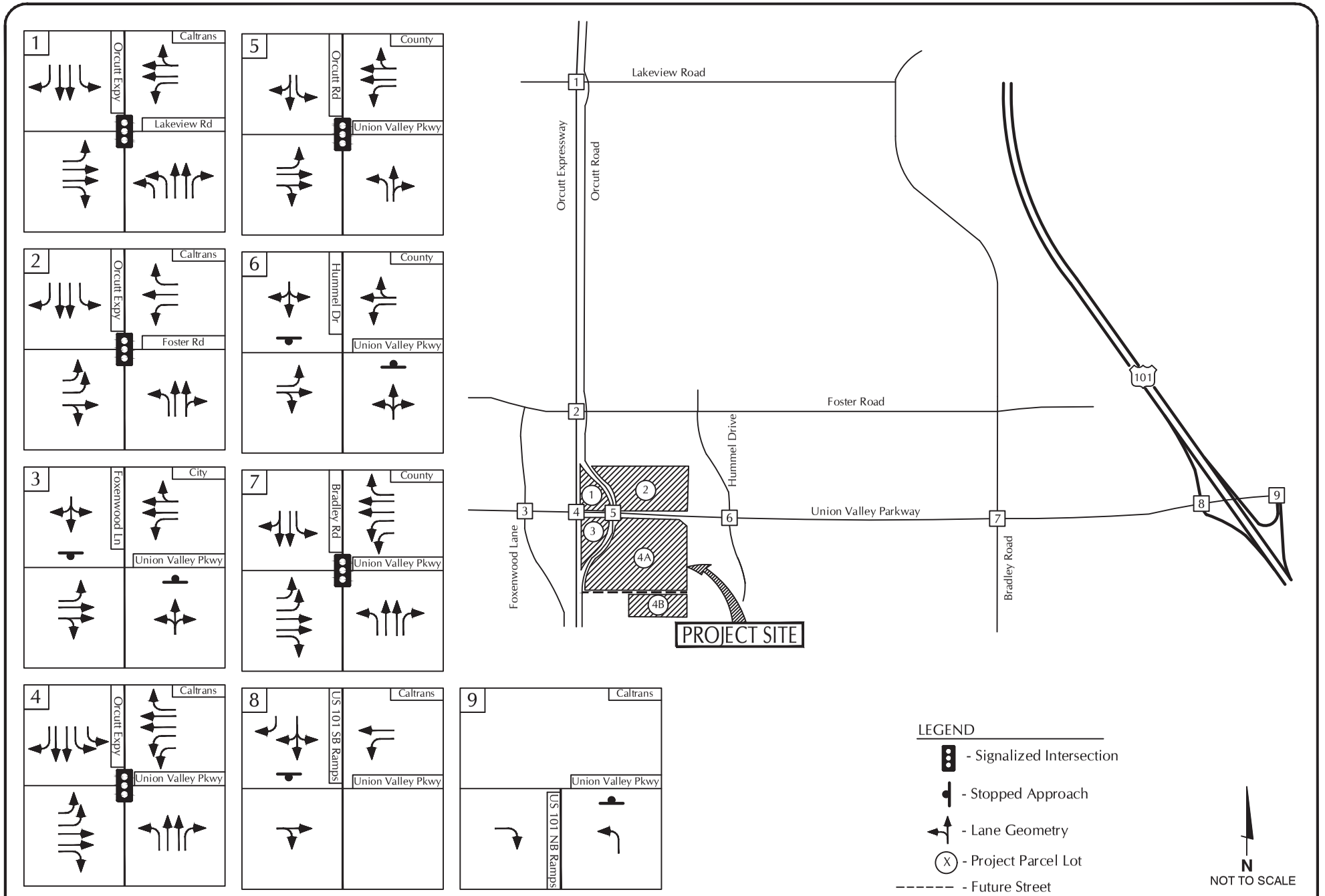
EXISTING CONDITIONS

Existing Street Network

The Project site is served by a network of highways, arterial, and collector streets, as shown on Figure 3. The following text provides a brief discussion of the major components of the street network in the study area.

US 101, located east of the Project site, is a freeway that serves as the major north-south link through the Santa Maria Valley and is the principal inter-city route along the Pacific Coast. US 101 is a 6-lane freeway within the Santa Maria area, with 4 lanes provided north and south of the City. Access to the Project site from US 101 is provided via the UVP interchange.

Orcutt Expressway (State Route 135), located west of the of the Project site, is an arterial roadway that extends from US 101 on the north end of the City to its junction with State Route 1 south of the Orcutt community. Within the study-area, Orcutt Expressway is a 4-lane arterial street north of UVP with turn lanes provided at intersections. South of the UVP, Orcutt Expressway becomes a 4-lane freeway. There are no bikeways or sidewalks on the Orcutt Expressway and vehicle access is limited (no driveways or access connections).



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EXISTING STREET NETWORK

FIGURE 3

GM- ATE#21069

Union Valley Parkway, extends easterly from Blosser Road as a 2-lane arterial roadway to Foxenwood Lane where it widens to 4 lanes. The UVP passes mid-way through the Project site where it transitions from 4 lanes back to 2 lanes. The UVP extends east of the site Project site to its terminus at the US 101 interchange. The UVP provides access between the western areas of the City and Orcutt and US 101. The UVP would provide access to several of the Project parcels via new driveway connections. Within the Project study-area, Class II bike lanes are provided on both sides of the UVP. Additional bicycle improvements proposed in the study-area are shown on Figure 4a, the City's Bicycle Master Plan.

Orcutt Road (Orcutt Frontage Road), located on the west side of the Project site, is a two-lane north-south frontage road that parallels the east side of Orcutt Expressway. Orcutt Road extends from Goodwin Road on the north to Rice Ranch Road on the south. Orcutt Road would provide access to several of the Project parcels via new driveway connections. Class II bikeways are provided on both sides of Orcutt Road adjacent to the Project site.

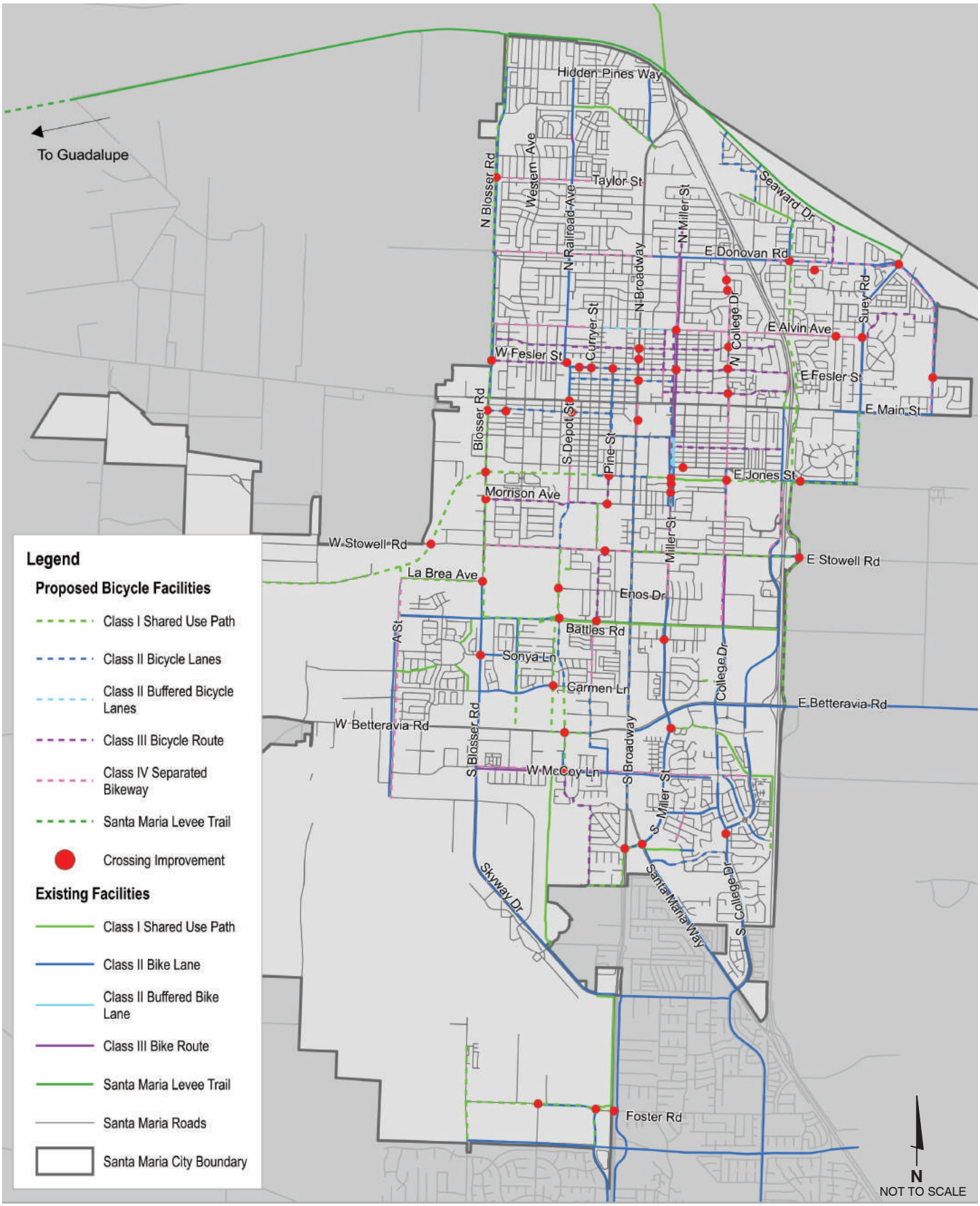
Foxenwood Lane, located west of the Project site, is a two-lane north-south frontage road that parallels the west side of Orcutt Expressway. Foxenwood Lane extends from Foster Road on the north to Clark Avenue on the south. Foxenwood Lane provides access to the residential subdivisions located south of UVP. Class II bike lanes are provided on both sides of the roadway and a Class I bike path extends from the Foster Road terminus north to Skyway Drive.

Foster Road, located north of the Project site is a two-lane east-west collector street within the study area. Foster Road serves primarily institutional and industrial uses west of the Orcutt Expressway and residential uses east of the Orcutt Expressway. No bike lanes are currently provided on Foster Road. The City of Santa Maria Bicycle Master Plan indicates that Class I bike lanes will be provided on Foster Road from the Orcutt Expressway to Blosser Road.

Hummel Drive, located east of the Project site, is a two-lane north-south collector road that extends north from the UVP to Foster Road where it becomes Dartmouth Street; and south from the UVP to its terminus at Patterson Road. Within the Project study-area, no bike lanes are provided on Hummel Drive. It is noted that Hummel Drive is located in Santa Barbara County and would not be annexed to the City as part of the Project.

Existing Pedestrian Facilities

Within the Project study area, sidewalks are currently provided on the south side of the UVP and the east side of Orcutt Road. On the north side of the UVP, sidewalks are provided from the Orcutt Expressway to Orcutt Road; and no sidewalks are provided on the west side of Orcutt Road. ADA accessible crosswalks with pedestrian signals heads are provided on all four legs of the UVP/Orcutt Road intersection and three of the four legs of the UVP/Orcutt Expressway intersection. At the UVP/Hummel Drive intersection, a "continental" style crosswalk with flashing beacons is provided on the east leg of the intersection (across the UVP) and standard crosswalks are provided on the north and south legs. Figure 4b shows the pedestrian improvements proposed in the Project study-area in the City's Pedestrian Master Plan.

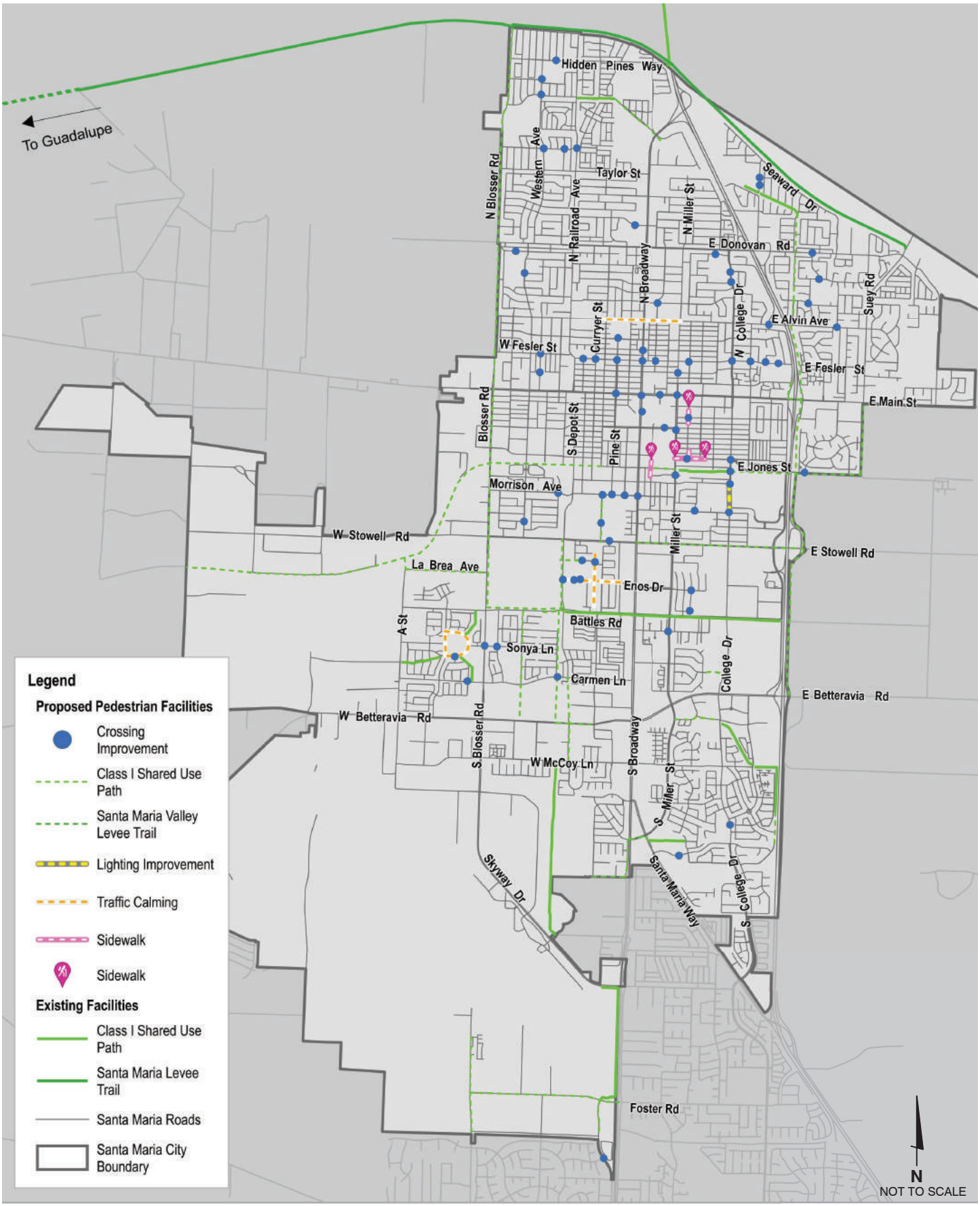


ASSOCIATED TRANSPORTATION ENGINEERS

SANTA MARIA BIKEWAY MASTER PLAN

FIGURE 4a

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Associated Transportation Engineers

SANTA MARIA PEDESTRIAN MASTER PLAN

FIGURE 4b

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Existing Transit Facilities

Transit service in the City of Santa Maria and the community of Orcutt is provided by the Santa Maria Regional Transit (SMRT) service. SMRT Route 6 provides weekday and weekend bus service with 45-minute headways starting at the Crossroads Shopping Center and traveling through Orcutt. The closest transit stops to the Project site are located on Foster Road west of Foxenwood Lane and east of Orcutt Road. The Breeze Bus operates commuter services between the City of Santa Maria, Vandenberg AFB, the City of Lompoc, the community of Los Alamos, the City of Buellton, and the City of Solvang. Breeze Route 100 is a weekday bus service between the Santa Maria and Lompoc Transit Centers with seven trips per day in each direction. The closest stops to the Project site are on Orcutt Road south of Foster Road.

The Clean Air Express bus service, administered by the Santa Barbara Council of Associated Governments (SBCAG), provides service for commuters traveling between northern Santa Barbara County and the Cities of Goleta and Santa Barbara. The closest stop to the project is the Santa Maria Hagerman Softball Complex, where three trips depart each morning to Goleta, and two trips depart each morning to Santa Barbara, with the same number of trips returning in the afternoon. Connections to other services are available at both the Santa Maria and Lompoc Transit Centers.

Intersection Operations

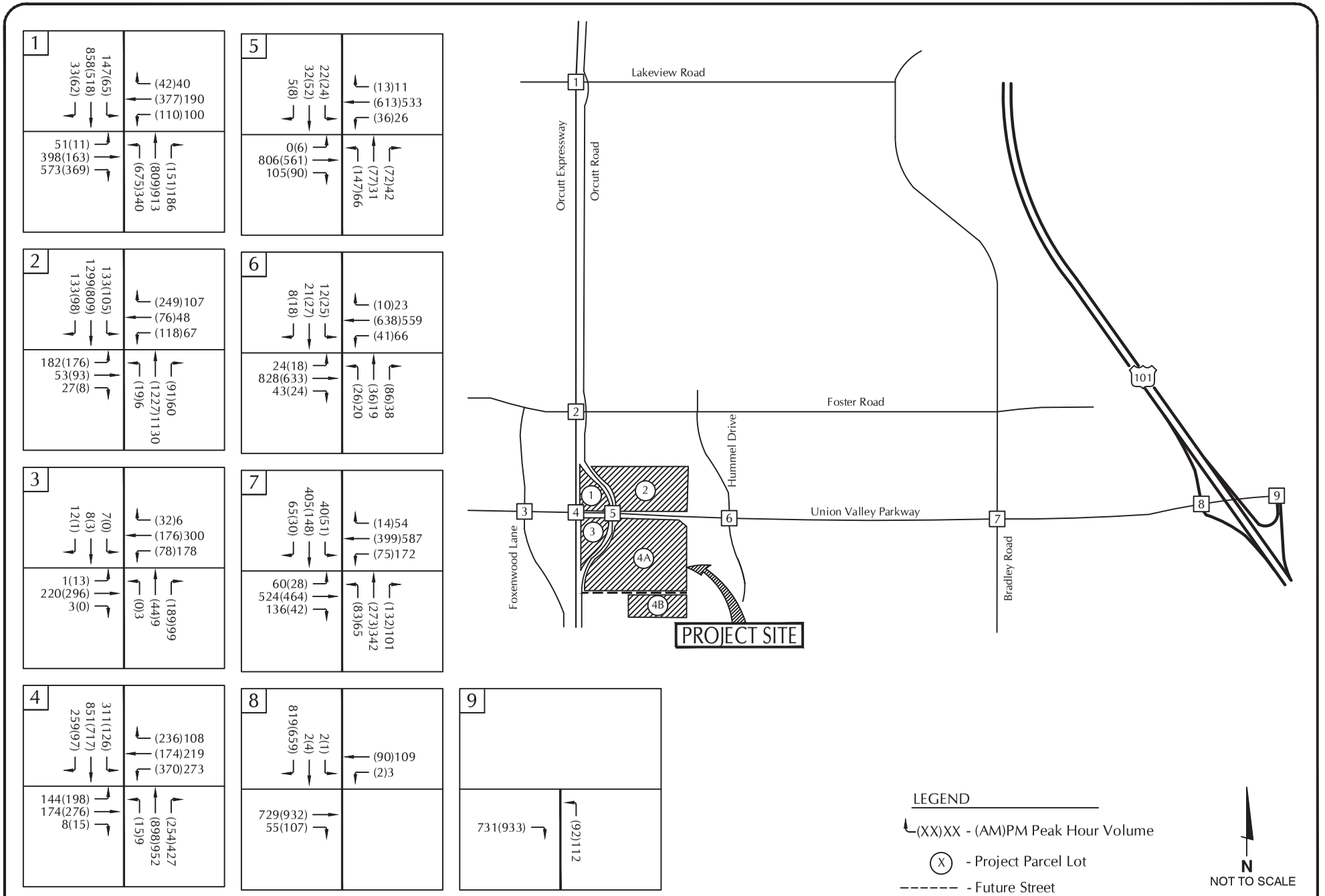
Because traffic flow on urban arterials is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. "Levels of Service" (LOS) A through F are used to rate intersection operations, with LOS A indicating very good operation and LOS F indicating poor operation (more complete definitions are contained in the Technical Appendix for reference). The City of Santa Maria considers LOS D as the performance standard for intersections (maintain LOS D or better), and the County of Santa Barbara considers LOS C as the minimum acceptable operating standard for most intersections (LOS D acceptable for selected locations). Caltrans no longer applies LOS standards in their Transportation Impact Study Guide; instead, they apply VMT thresholds.

Existing traffic volumes were obtained from traffic count data contained in the Santa Maria Airport Business Park Specific Plan Rezone Transportation Impact Study[1] and the Traffic Impact Study for the Orcutt Community Plan General Plan Amendment Project[2] (see Technical Appendix for count data). New Counts were conducted in 2022 at the UVP/Hummel Drive intersection after the area schools were open. Counts were conducted during the AM peak commuter period (7:00-9:00 AM) and PM peak commuter period (4:00-6:00 PM). The peak 1-hour volumes were then identified for the analysis. Figure 5 presents the existing peak hour traffic volumes for the study-area intersections.

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[1] Santa Maria Airport Business Park Specific Plan Rezone Transportation Impact Study, Central Coast Transportation Consulting, October, 2020.

[2] Traffic Impact Study for the Ocrutt Community Plan General Plan Amendment Project, Psomas, May, 2020.



ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING TRAFFIC VOLUMES

FIGURE 5

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Levels of service for the signalized intersections were calculated using the intersection capacity utilization (ICU) methodology adopted by both the City of Santa Maria and the County of Santa Barbara. Levels of service for the STOP-Sign controlled intersections were calculated using the operations methodology outlined in the Highway Capacity Manual.[3] The levels of service for the stop sign controlled intersections are reported as the average weighted delay in seconds for the movements that are required to wait for a gap (rather than for the highest movement or the highest approach), which is the method adopted by both the City and the County. Table 2 lists the existing traffic control, levels of service, and jurisdiction for the study-area intersections identified for the analysis.

Table 2
Existing Levels of Service

Intersection	Jurisdiction	Control	AM Peak Hour		PM Peak Hour	
			ICU or Delay	LOS	ICU or Delay	LOS
Orcutt Expressway/Lakeview Rd	Caltrans	Signal	0.61	LOS B	0.66	LOS B
Orcutt Expressway /Foster Rd	Caltrans	Signal	0.71	LOS C	0.64	LOS B
UVP/Foxenwood Ln(a)	City	STOP-Sign	14.3 sec.	LOS B	9.9 sec.	LOS A
UVP/ Orcutt Expressway	Caltrans	Signal	0.62	LOS B	0.63	LOS B
UVP/Orcutt Road	County	Signal	0.46	LOS A	0.47	LOS A
UVP/Hummel Drive(a)	County	STOP-Sign	**34.7 sec.**	**LOS D**	**34.3 sec.**	**LOS D**
UVP/Bradley Road(a)	County	Signal	0.39	LOS A	0.51	LOS A
UVP/US 101 SB Ramps(a)	Caltrans	STOP-Sign	12.4 sec.	LOS B	15.0 sec.	LOS B
UVP/US 101 NB Ramps(a)	Caltrans	STOP-Sign	9.3 sec.	LOS A	9.4 sec.	LOS A

Bolded Values exceed City/County LOS policy standards.

(a) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

The data presented in Table 2 show that the UVP/Hummel Drive intersection currently operates in the LOS D range during the AM and PM peak hours, which exceeds the County's LOS C standard in this area. The remaining study-area intersections currently operate in the LOS A-C range during the AM and PM peak hours, which meet the City's LOS D operating standard and the County's LOS C - D operating standard.

TRAFFIC POLICY STANDARDS

As noted in Table 2, several of the study-area intersections area located in the City of Santa Maria and several of the intersections are located in the County of Santa Barbara. Both the City and County traffic consistency standards were therefore utilized to assess the Project's traffic additions. There are additional intersections that are under Caltrans' jurisdiction. The current Caltrans Transportation Impact Study Guide is based on VMT and not LOS, thus the VMT section of this report addresses the Caltrans requirements.

[3] Highway Capacity Manual, Transportation Research Board, 6th Edition, 2016.

These standards are outlined below.

City of Santa Maria Standard

The City of Santa Maria Circulation Element considers LOS D acceptable for roadway and intersection operations, with improvements required for LOS E and F.

Santa Barbara County Standard

The County thresholds are based on the policies and standards contained in the Orcutt Community Plan (OCP). These thresholds are outlined below.

Policy CIRC-O-3: The County shall maintain a minimum Level of Service C or better on roadways and intersections within the Orcutt Planning Area, except that Minimum LOS shall be "D" for the following roadway segments and intersections:

- Foster Road and Highway 135 intersection
- Lakeview Road and Skyway Drive intersection
- Stillwell Road and Lakeview Road intersection
- All Clark Avenue roadway segments and intersections between Blosser Road on the west and Foxenwood Lane on the east.

EXISTING + PROJECT CONDITIONS

Project Trip Generation

Trip generation estimates were calculated for the Project using the rates contained in the ITE Trip Generation Manual, 11th edition.[4] Table 3 summarizes the trip generation estimates for the Project and lists the specific ITE rates used for each Project component. Worksheets showing the detailed calculations for each parcel are contained in the Technical Appendix.

[4] Trip Generation, Institute of Transportation Engineers, 11th Edition, 2021.

Table 3
Project Trip Generation

Land Use	Size	ADT		AM Peak		PM Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Parcel 1							
Gas Station with Mart (a)	10 Fueling Positions	200.80	2,008	16.06	161	18.42	184
Lube Station (b)	3 Bays	40.00	120	3.00	9	4.85	15
Parcel 2							
Shopping Center (c)	55,000 SF	94.49	5,197	3.53	194	9.84	541
Sit-Down Restaurant (d)	5,000 SF	107.20	536	9.57	48	9.05	45
Fast-Food Restaurant w/DT (5) (e)	15,250 SF	467.48	7,129	44.61	681	33.03	505
Fast Casual Restaurant (2) (f)	6,000 SF	97.14	582	1.43	8	12.55	76
Mini Storage (g)	39,500 SF	1.45	57	0.09	4	0.15	6
Parcel 3							
Car Wash-Automated (h)	1 Tunnel	249.00	249	8.50	9	23.70	24
Fast-Food Restaurant w/DT (e)	3,500 SF	467.48	1,636	44.61	156	33.03	116
Parcel 4A							
Apartments (i)	400 Units	6.60	2,639	0.37	147	0.48	193
Parcel 4B							
Townhomes (i)	95 Units	6.60	627	0.37	35	0.48	46
Totals			**20,780**		**1,452**		**1,751**

(a) Trip generation based on ITE Code #945 (Convenience Store/Gas Station).
(b) Trip generation based on ITE Code #941 (Quick Lubrication Vehicle Shop).
(c) Trip generation based on ITE Code #821 (Shopping Plaza).
(d) Trip generation based on ITE Code #932 (High-Turnover (Sit-Down) Restaurant).
(e) Trip generation based on ITE Code #934 (Fast-Food Restaurant with Drive-Through Window).
(f) Trip generation based on ITE Code #930 (Fast Casual Restaurant).
(g) Trip generation based on ITE Code #151 (Mini-Warehouse).
(h) Trip generation for Car Wash-Automated derived from local studies.
(i) Trip generation based on ITE Code #220 (Multi-Family Housing – Low Rise).

As shown in Table 3, the Project is forecast to generate 20,780 ADT, with 1,452 AM peak hour trips and 1,751 PM peak hour trips.

Internal Capture Trip Analysis

Given the mix of land uses, there will be some trips that travel between the various parcels that comprise the site and not affect the off-site street network. "Internal Capture" trips include trip interactions between the commercial uses as well as between the commercial uses and residential uses. The ITE mixed-use traffic model was used to estimate the number of trips that would be captured within the site (a copy of the mixed-use model is contained in the Technical Appendix for reference). Based on the results of the model, internal factors of 30% for ADT, 13% for the AM peak hour, and 45% for the PM peak hour were used. The traffic study assumes 45% of the automated carwash customers would come from the service station or convenience market. The 45% capture rate was determined based on data collected at two local service station sites in the Santa Barbara-Goleta area: 1) Mesa Fuel Depot located at 1929 Cliff Drive in Santa Barbara, and 2) Walnut Shell located at 5097 Hollister Avenue in Goleta. Worksheets showing the detailed calculations are contained in the Technical Appendix. Table 4 summarizes the internal/external trip generation estimates for the Project (also see trip generation worksheets in Technical Appendix for details).

Table 4
Project Trip Generation – Internal & External Trip Breakdown

Trip Type	ADT	AM Peak	PM Peak
Internal (30% ADT, 13% AM, 45% PM)	6,272	192	787
External (70% ADT, 87% AM, 55% PM)	14,509	1,260	961
Totals	**20,781**	**1,452**	**1,748**

The data presented in Table 4 show that 6,234 ADT, 189 AM peak hour trips, and 787 PM peak hour trips would be internal to the Project site. The remaining 14,547 daily trips, 1,263 AM peak hour trips, and 961 PM peak hour trips would be external to the Project site.

Commercial Pass-By/Primary Trip Analysis

Pursuant to ITE recommendations, the trip generation analysis also accounts for "Pass-By" trips and "Primary" trips that would be generated by the retail and restaurant uses. Pass-By trips are trips that would come from the existing traffic streams on Orcutt Expressway, the UVP, and Orcutt Road; and would not affect the study-area street network beyond the Project site. Primary trips are trips with the sole purpose of patronizing the commercial center (i.e., from home to the store and then return home). Based on the data presented in the ITE Trip Generation manual, the Pass-By trip percentages for the shopping center and restaurant uses range between 40% - 55%, the Pass-By trip percentage for the gas station is 75%, and the Pass-By trip percentage for the car wash is 20%. The trip generation worksheets contained in the Technical Appendix show the specific pass-by adjustments applied to each of the uses. Table 5 shows the breakdown of the retail/restaurant Pass-By and Primary trips.

Table 5
Project Trip Generation – Commercial Trip Breakdown

Land Use	Pass-By Percentage	ADT		AM Peak Trips		PM Peak Trips	
		Pass-By Trips	Primary Trips	Pass-By Trips	Primary Trips	Pass-By Trips	Primary Trips
Shopping Center	40%	1,455	2,183	68	101	119	179
Sit Down Restaurants	43%	337	446	21	28	28	38
Fast Food Restaurants w/DT	55%	3,375	2,761	400	328	188	153
Gas Station	75%	1,055	352	105	35	76	25
Car Wash	20%	27	110	1	4	3	10
Totals		**6,249**	**5,852**	**595**	**496**	**414**	**405**

The data in Table 5 show that the commercial uses would generate 6,249 daily, 595 AM peak hour, and 414 PM peak hour Pass-By trips. The remaining 5,852 daily, 496 AM peak hour, and 405 PM peak hour trips generated by the commercial uses would be the Primary trips.

Table 6 summarizes the total Primary trips that would be external to the site – the trips that would affect the intersections in the study area.

Table 6
Project Trip Generation – External Trip Summary

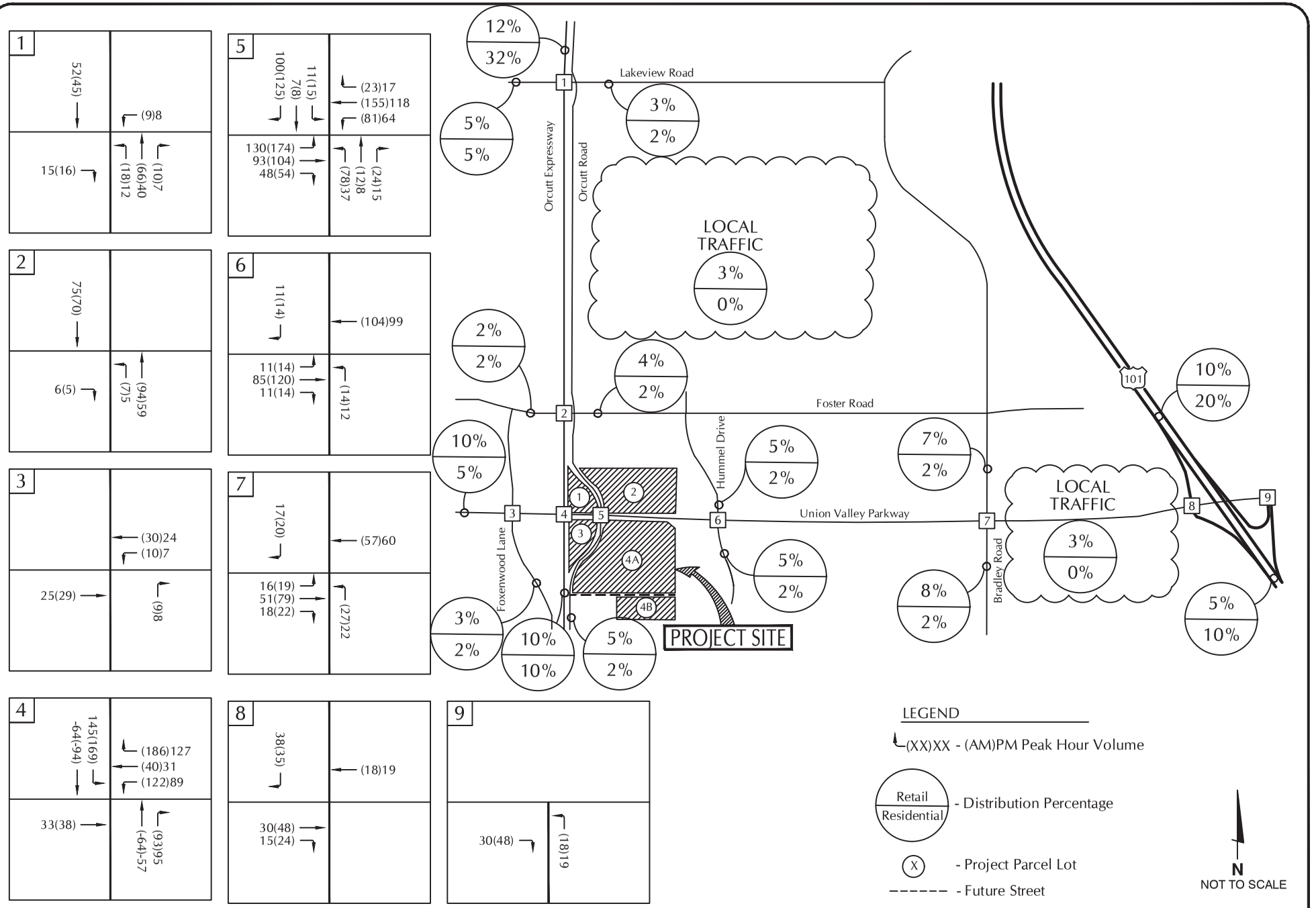
Land use	ADT	AM Peak Trips	PM Peak Trips
Shopping Center	2,183	101	179
Sit Down Restaurants	446	28	38
Fast Food Restaurants w/DT	2,761	328	153
Gas Station	352	35	25
Car Wash	110	4	10
Lube Station	84	8	8
Mini-Storage	40	3	3
Residential	2,286	158	131
Total	**8,262**	**665**	**547**

Project Trip Distribution

The distribution pattern developed for the Project is based on existing traffic counts as well as general knowledge of the population, employment, and commercial centers in the Santa Maria area. Given that the traffic generated by the retail uses would be more locally oriented than the traffic generated by the residential uses, two different distribution patterns were developed for these Project components. The retail pass-by trips were assigned to the driveways and the adjacent intersections based on the existing AM and PM peak hour traffic flows. Table 7 presents trip distribution patterns developed for the Project components and Figure 6 illustrates the distribution and assignment of Project traffic at the study-area intersections.

Table 7
Project Trip Distribution

Origin/Destination	Direction	Retail Percentage	Residential Percentage
US Highway 101	North South	10% 5%	20% 10%
Orcutt Expressway n/o Lakeview Rd Orcutt Expressway s/o UVP	North South	12% 10%	32% 10%
Orcutt Road	North (Local) South	3% 5%	0% 2%
Hummel Drive	North South	5% 5%	2% 2%
Foxenwood Lane	South	3%	2%
Bradley Road	North South	7% 8%	2% 2%
Lakeview Road w/o Orcutt Expressway Lakeview Road e/o Orcutt Expressway	West East	5% 3%	5% 2%
Foster Road	East West	2% 4%	2% 2%
UVP	East (local) West	3% 10%	0% 5%
Totals		**100%**	**100%**



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT (PRIMARY AND PASS-BY)

FIGURE 6

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Existing + Project Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes shown on Figure 7. Tables 8 and 9 compare the Existing and Existing + Project level of service forecasts and identify the Project's consistency with the City's LOS D standard and the County's LOS C – D standard.

Table 8
Existing + Project Levels of Service – AM Peak Hour

Intersection	Existing		Existing + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.61	LOS B	0.63	LOS B	Yes
Orcutt Expressway /Foster Rd	0.71	LOS C	0.74	LOS C	Yes
UVP/Foxenwood Ln (a)	14.3 sec.	LOS B	15.8 sec.	LOS B	Yes
UVP/ Orcutt Expressway	0.62	LOS B	0.67	LOS B	Yes
UVP/Orcutt Road	0.46	LOS A	0.73	LOS C	Yes
UVP/Hummel Drive (a)	**34.7 sec.**	**LOS D**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.39	LOS A	0.42	LOS A	Yes
UVP/US 101 SB Ramps (a)	12.4 sec.	LOS B	13.2 sec.	LOS B	Yes
UVP/US 101 NB Ramps(a)	9.3 sec.	LOS A	9.4 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

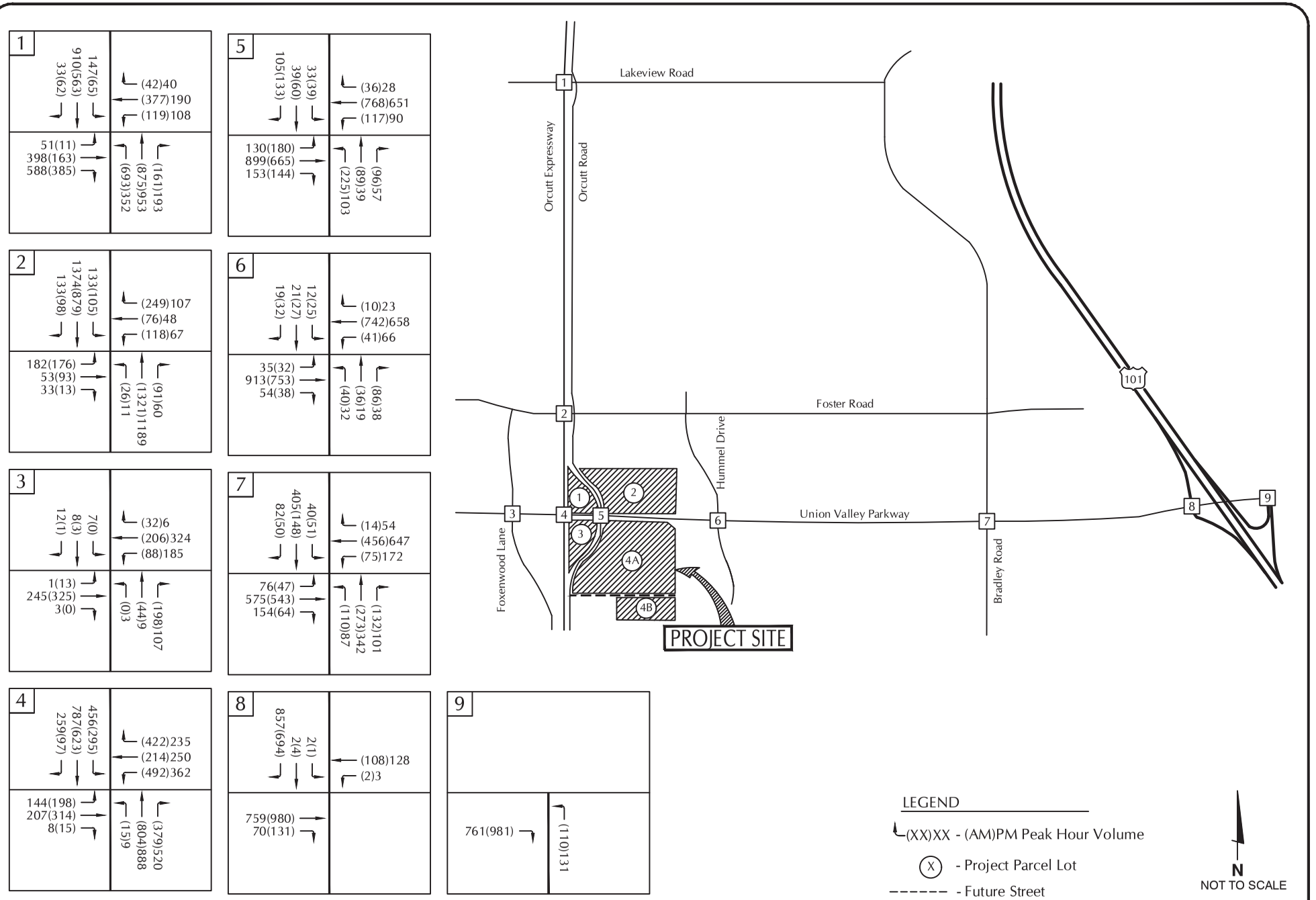
(a) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

Table 9
Existing + Project Levels of Service – PM Peak Hour

Intersection	Existing		Existing + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.66	LOS B	0.69	LOS B	Yes
Orcutt Expressway /Foster Rd	0.64	LOS B	0.66	LOS B	Yes
UVP/Foxenwood Ln (a)	9.9 sec.	LOS A	10.2 sec.	LOS B	Yes
UVP/ Orcutt Expressway	0.63	LOS B	0.70	LOS B	Yes
UVP/Orcutt Road	0.47	LOS A	0.64	LOS B	Yes
UVP/Hummel Drive (a)	**34.3 sec.**	**LOS D**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.51	LOS A	0.54	LOS A	Yes
UVP/US 101 SB Ramps (a)	15.0 sec.	LOS B	16.6 sec.	LOS C	Yes
UVP/US 101 NB Ramps(a)	9.4 sec.	LOS A	9.5 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

(a) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.



ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 7

GM- ATE#21069

The data presented in Tables 8 and 9 indicate that the UVP/Hummel Drive intersection is forecast to operate in the LOS F range during the AM and PM peak hours with the addition of Project traffic, which exceeds the County's LOS C standard. The remaining intersections are forecast to operate in the LOS A-C range during the AM and PM peak hours with Existing + Project traffic, which meet the City's LOS D operating standard and the County's LOS C - D operating standard. Improvements for the UVP/Hummel Drive intersection are presented in the Recommended Improvements section of this report.

CUMULATIVE CONDITIONS

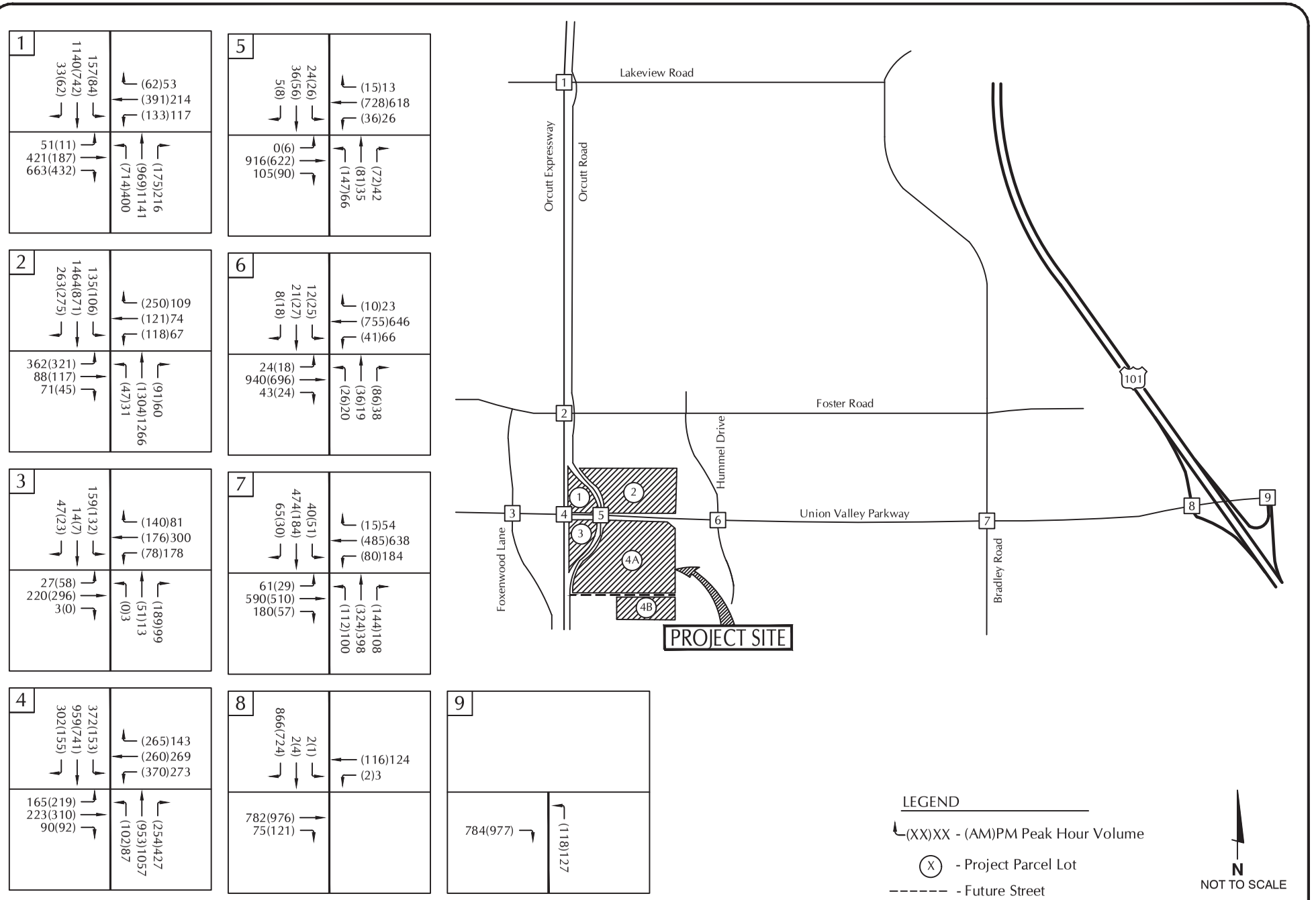
Cumulative Traffic Volumes

Cumulative traffic volumes were forecast for the study-area intersections assuming development of the approved and pending projects located in the adjacent portions of the City and the County (list of cumulative projects is contained in the Technical Appendix). Trip generation estimates were developed for the cumulative projects using ITE rates or from traffic studies prepared for the cumulative projects (cumulative trip generation calculations are contained in the Technical Appendix). The traffic generated by the Santa Maria Airport Business Park Rezone Project was included in cumulative traffic forecasts. It is noted that the SEIR prepared for this project required that the traffic signals be installed at the UVP/Foxenwood Lane intersection; this improvement is therefore included in the cumulative analysis. It is also noted that Santa Barbara County approved an amendment to the Orcutt Community Plan to provide a local road connection between the UVP/US 101 interchange and the adjoining frontage road on the east side of US 101. This Project is not scheduled or funded at this time and thus is not included in the Cumulative analysis.

Traffic generated by the cumulative projects was then added to the Existing volumes to produce the Cumulative traffic forecasts. Figure 8 shows the Cumulative traffic volumes and Figure 9 shows the Cumulative + Project volumes.

Cumulative Intersection Operations

Levels of service were calculated for the study-area intersections assuming the Cumulative and Cumulative + Project traffic volumes presented on Figures 8 and 9. Tables 10 and 11 compare the Cumulative and Cumulative + Project levels of service forecasts and identify the Project's consistency with the City's LOS D standard and the County's LOS C - D standard.

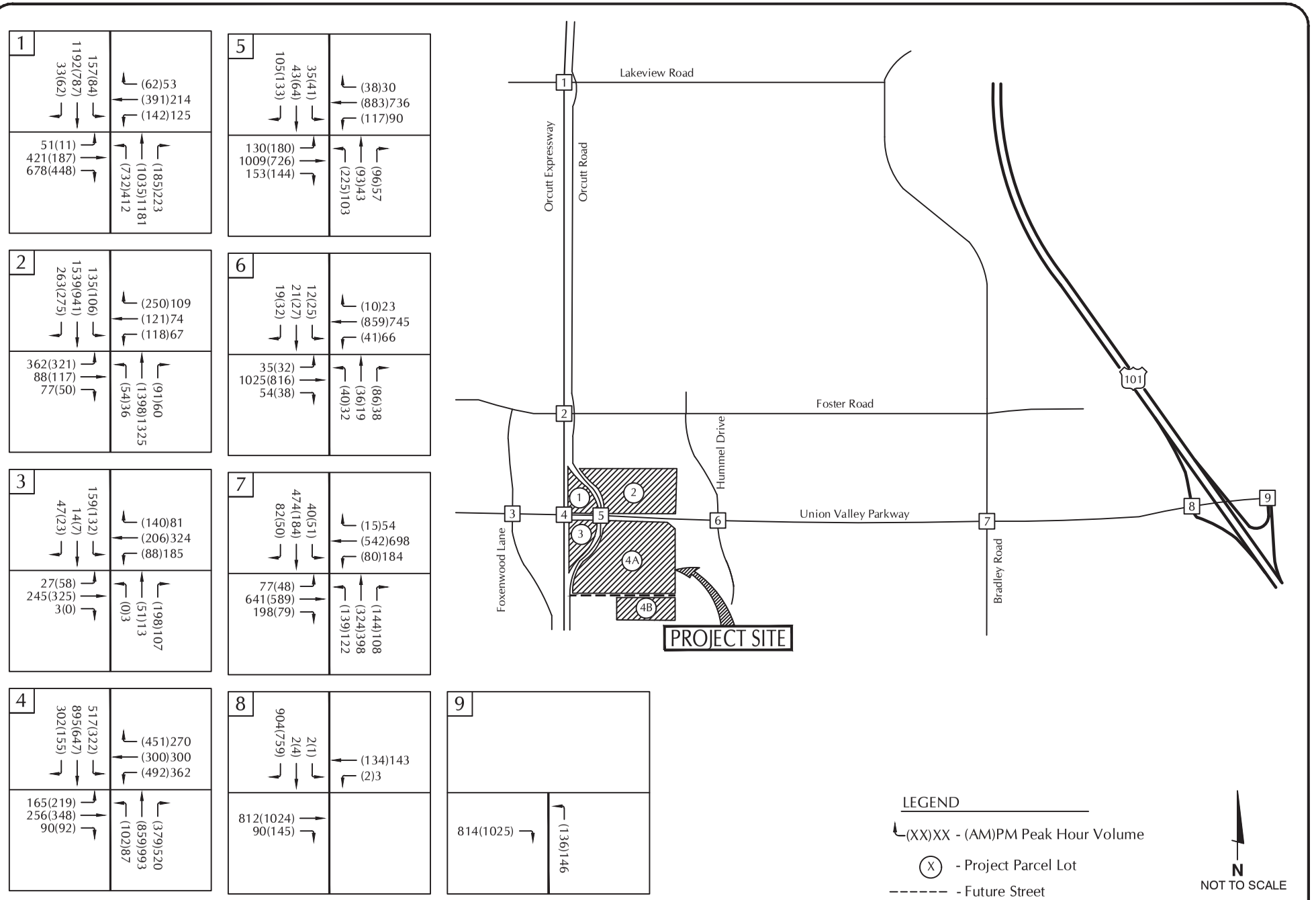


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CUMULATIVE TRAFFIC VOLUMES

FIGURE 8

GM- ATE#21069



ASSOCIATED TRANSPORTATION ENGINEERS

CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 9

GM- ATE#21069

Table 10
Cumulative + Project Levels of Service – AM Peak Hour

Intersection	Cumulative		Cumulative + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.70	LOS B	0.72	LOS C	Yes
Orcutt Expressway /Foster Rd	0.78	LOS C	0.81	LOS D	Yes
UVP/Foxenwood Ln (a)	0.48	LOS A	0.50	LOS A	Yes
UVP/ Orcutt Expressway	0.66	LOS B	0.73	LOS C	Yes
UVP/Orcutt Road	0.48	LOS A	0.77	LOS C	Yes
UVP/Hummel Drive (b)	**>50.0 sec.**	**LOS F**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.42	LOS A	0.47	LOS A	Yes
UVP/US 101 SB Ramps (b)	13.8 sec.	LOS B	14.8 sec.	LOS B	Yes
UVP/US 101 NB Ramps(b)	9.4 sec.	LOS A	9.5 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

(a) Cumulative analysis assumes installation of traffic signals by Airport Business Park Specific Plan.

(b) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

Table 11
Cumulative + Project Levels of Service – PM Peak Hour

Intersection	Cumulative		Cumulative + Project		Consistent?
	ICU or Delay	LOS	ICU or Delay	LOS	
Orcutt Expressway/Lakeview Rd	0.79	LOS C	0.81	LOS D	Yes
Orcutt Expressway /Foster Rd	0.75	LOS C	0.77	LOS C	Yes
UVP/Foxenwood Ln (a)	0.45	LOS A	0.47	LOS A	Yes
UVP/ Orcutt Expressway	0.70	LOS B	0.78	LOS C	Yes
UVP/Orcutt Road	0.50	LOS A	0.68	LOS B	Yes
UVP/Hummel Drive (b)	**>50.0 sec.**	**LOS F**	**>50.0 sec.**	**LOS F**	**No**
UVP/Bradley Road	0.57	LOS A	0.61	LOS B	Yes
UVP/US 101 SB Ramps (b)	16.6 sec.	LOS C	18.7 sec.	LOS C	Yes
UVP/US 101 NB Ramps(b)	9.5 sec.	LOS A	9.6 sec.	LOS A	Yes

Bolded Values exceed City/County LOS policy standards.

(a) Cumulative analysis assumes installation of traffic signals by Airport Business Park Specific Plan.

(b) Unsignalized intersection. LOS based on average weighted control delay per vehicle in seconds.

As shown in Tables 10 and 11, the UVP/Hummel Drive intersection is forecast to operate in the LOS F range during the AM and PM peak hours with and without the addition of Project traffic, which exceeds the County's LOS C - D standard. The Orcutt Expressway/Lakeview Road intersection is forecast to operate in the LOS D range, which is considered acceptable for this location in OCP Policy CIRC-O-3 (see Transportation Policy Standards section). The remaining intersections are forecast to operate in the LOS A-C range during the AM and PM peak hours with Cumulative + Project traffic, which meet the City's LOS D operating standard and the County's LOS C - D operating standard. Improvements for the UVP/Hummel Drive intersection are presented in the Recommended Improvements section of this report.

County Roadway Segment Operations

The Project is an annexation to the City of Santa Maria, thus the City's Circulation Element policies will be the applicable standards to assess the transportation aspects of the Project.

With respect to the Orcutt Community Plan, the roadway policy applicable to the UVP states that:

"For Primary roadway segments where the Estimated Future Volume exceeds the Acceptable Capacity, a project is considered consistent with this section of the Community Plan if: 1) intersections affected by traffic assigned from the project operate at or above minimum level of service standards, or 2) if the project provides a contribution toward an alternative transportation project (as identified in the OTIP) that is deemed to offset the effects of project-generated traffic."

The LOS analysis presented previously in the report shows that the intersections along the UVP from SR 135 to US 101, including Hummel Drive and Bradley Road, are forecast to operate in the LOS A – C range (assumes installation of signals at UVP/Hummel Drive intersection). The Project would therefore be consistent with the County's policies.

SITE ACCESS AND CIRCULATION

No detailed access plans were developed for the preliminary site plan that was submitted for review. An access and circulation analysis were therefore completed for each parcel, as reviewed review below. It is noted that the design and location of bus turnouts, non-motorized access elements, bike lanes, internal access designs, frontage improvements, streetlights, etc. will be addressed in more detail during the development review stage of the Project. The improvements will conform to City standards.

Parcel 1 Access and Circulation

This parcel is located on the northwest corner of the UVP/Orcutt Road intersection and would contain a gas station with a convenience mart and an auto lube facility. As shown on the retail site plan (see Figure 2a), access to this parcel is proposed via a driveway on the west side of Orcutt Road that would be aligned with a new driveway on the east side of Orcutt Road that would provide access to Parcel 2. Figure 10 shows the access improvements that should be considered for Parcel 1, which are reviewed below.

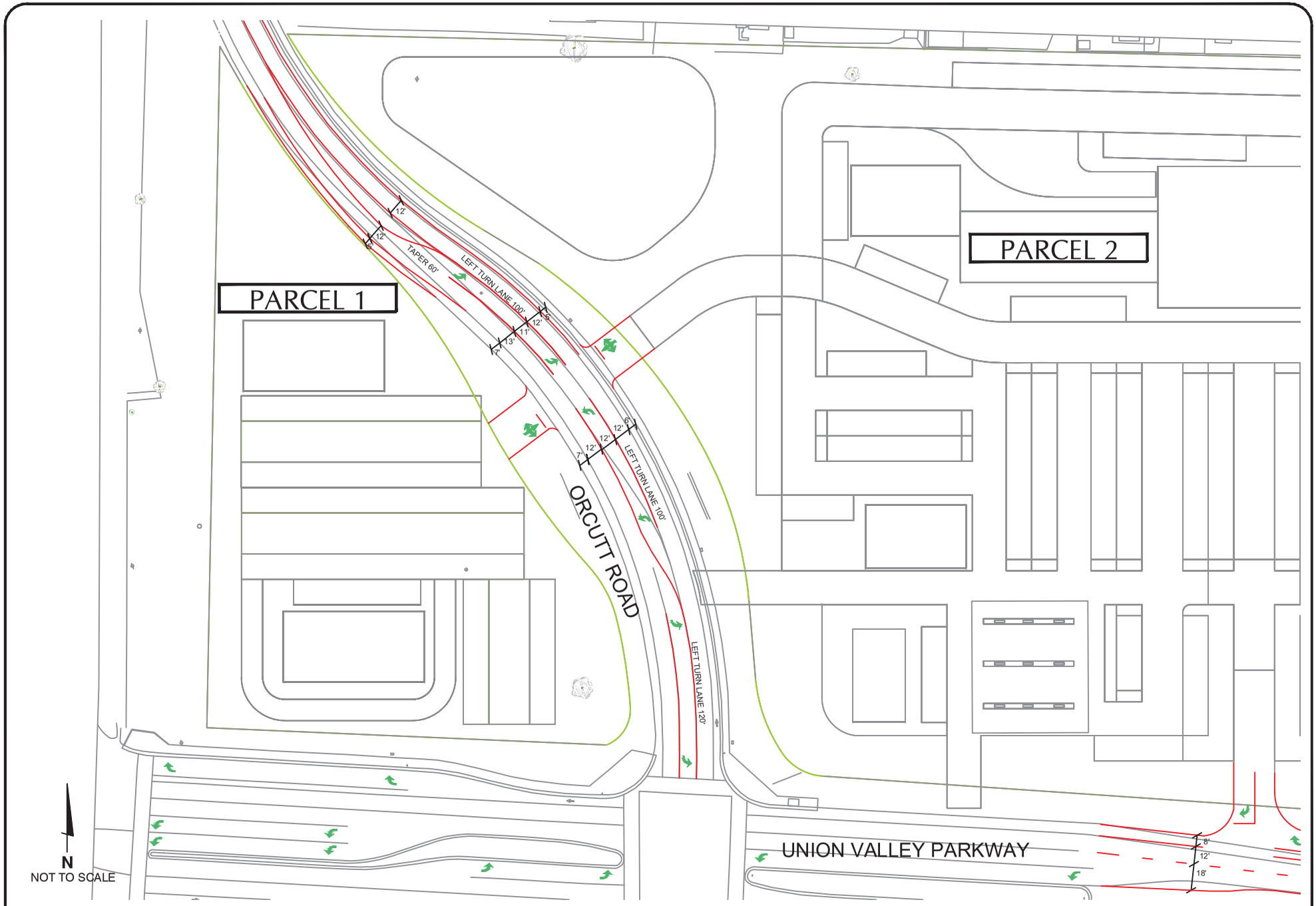
1. Frontage improvements should be implemented on the west side of Orcutt Road including curb, gutter, and sidewalk consistent, with the improvements that have been implemented on the east side of the roadway.
2. The driveway for Parcel 1 should be aligned with the driveway proposed for Parcel 2 on the east side of the roadway.
3. Orcutt Road should be widened to provide northbound and southbound left-turn lanes at the new driveway intersection.
4. The driveway approaches should be controlled by stop signs.
5. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed a convenience mart.

Parcel 2 Access and Circulation

This parcel is located on the north side of the UVP east of Orcutt Road and would contain 8 restaurant buildings, a neighborhood retail center, and a mini-storage facility. As shown on the retail site plan (see Figure 2a), access to the site is proposed via one driveway on the east side of Orcutt Road and two driveways on the north side of the UVP. Figures 10 and 11 show the access improvements that should be considered for Parcel 2, which are reviewed below.

Orcutt Road

1. The driveway for Parcel 2 should be aligned with the driveway proposed for Parcel 1 on the west side of the roadway.
2. Northbound and southbound left-turn lanes should be provided on Orcutt Road at the new driveway intersection.
3. The driveway approaches at the intersection should be controlled by stop signs.
4. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed retail buildings.

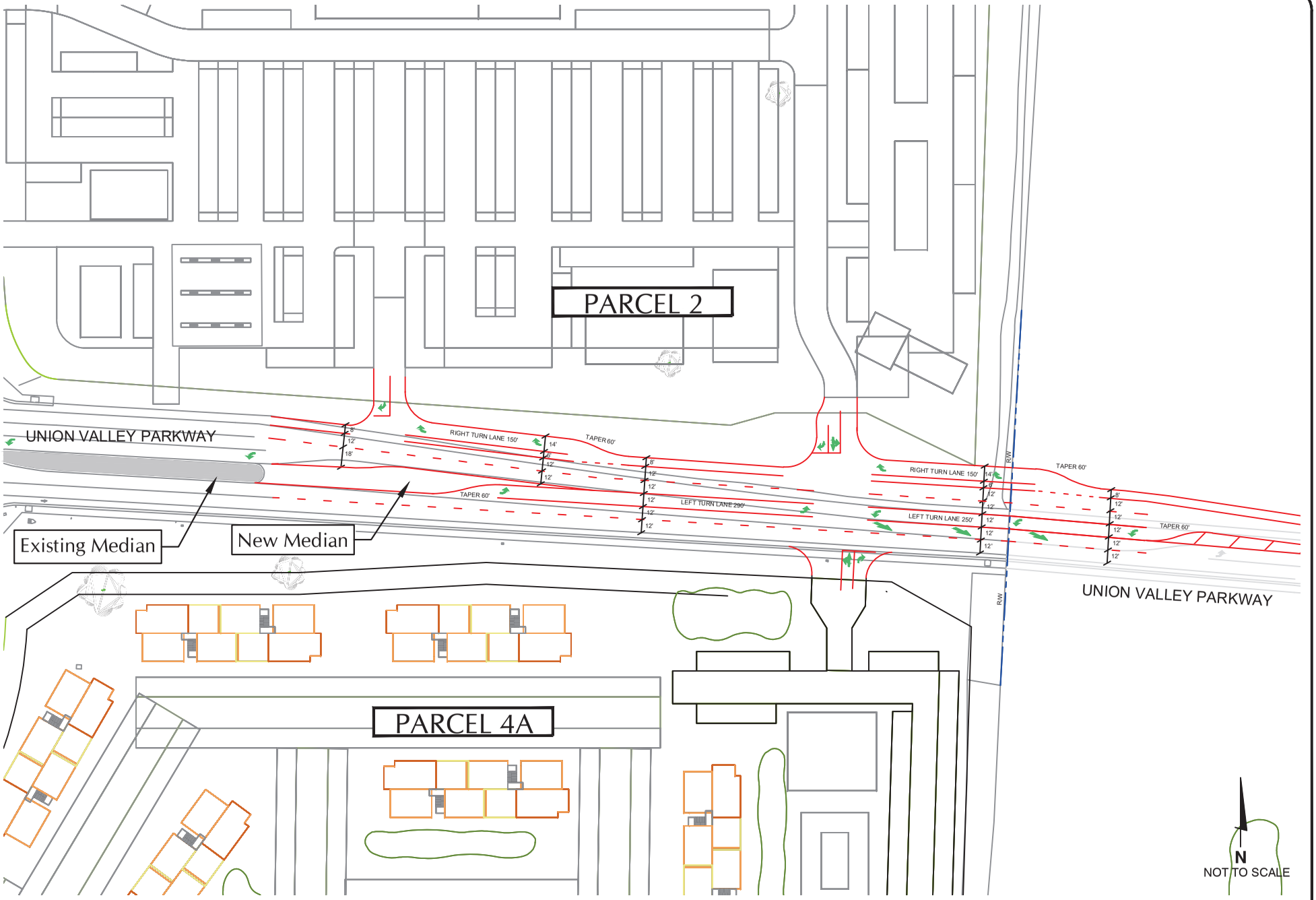


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PARCEL 1 AND PARCEL 2 - ORCUTT ROAD DRIVEWAYS

FIGURE 10

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PARCEL 2 AND PARCEL 4A - UNION VALLEY PARKWAY DRIVEWAYS

FIGURE 11

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UVP

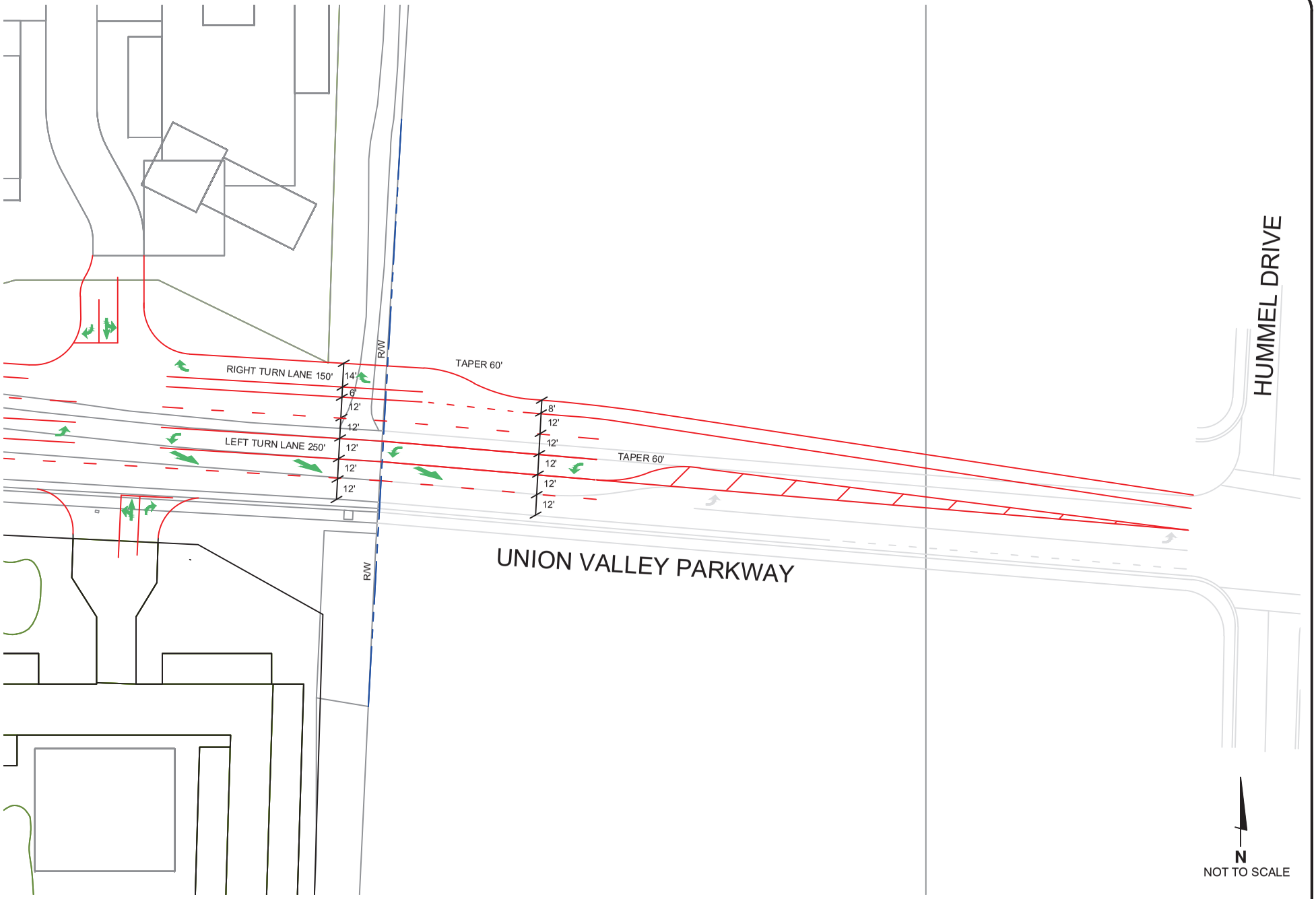
1. Frontage improvements should be implemented on the north side of the UVP including curb, gutter, and sidewalk, consistent with the improvements that have been implemented on the south side of the UVP.
2. The westerly driveway for Parcel 2 should be restricted to right-turns in/right-turns out with the easterly extension of the existing median on the UVP. A westbound right-turn lane should be provided at the driveway.
3. The easterly driveway for Parcel 2 should be aligned with the driveway proposed for Parcel 4A on the south side of the UVP. A westbound right-turn lane should be provided at the driveway.
4. Eastbound and westbound left-turn lanes should be provided on the UVP at the new easterly driveways
5. The easterly driveway should be configured with a through-left-turn lane and a right-turn lane.
6. The driveway approaches at the intersection should be controlled by stop signs.
7. Adequate vehicle storage should be provided in the proposed drive-through lanes.
8. Pedestrian connections should be provided between the sidewalks on the UVP and the proposed retail buildings

Implementation of the proposed frontage improvements on the north side of the UVP will require a transition to the two-lane section of the UVP west of the site and the UVP/Hummel Drive intersection. The interim transition plan, shown on Figure 12a, would transition the UVP back to a two-lane section on the east side of the UVP/Hummel Drive intersection. The long-term transition plan shown on Figure 12b, would provide full width improvements along the UVP through the Hummel Drive intersection and then transition back to the 2-lane section west of the intersection.

Parcel 3 Access and Circulation

This parcel is located on the southwest corner of the UVP/Orcutt Road intersection and would contain a restaurant with a drive-thru lane and an automated carwash. As shown on the retail site plan, access to this parcel is proposed via two driveways on the west side of Orcutt Road. Figure 13 shows the access improvements that should be considered for Parcel 3, which are reviewed below.

1. Frontage improvements should be implemented on the west side of Orcutt Road including curb, gutter, and sidewalk, consistent with the improvements that have been implemented on the east side of the roadway.
2. The northerly driveway would be designed with a median island treatment to limit movements to right-turn in/right-turn out (two options shown).
3. Orcutt Road should be widened to provide a northbound left-turn lane at the southerly driveway intersection.
4. The driveway approaches should be controlled by stop signs.
5. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed restaurant.

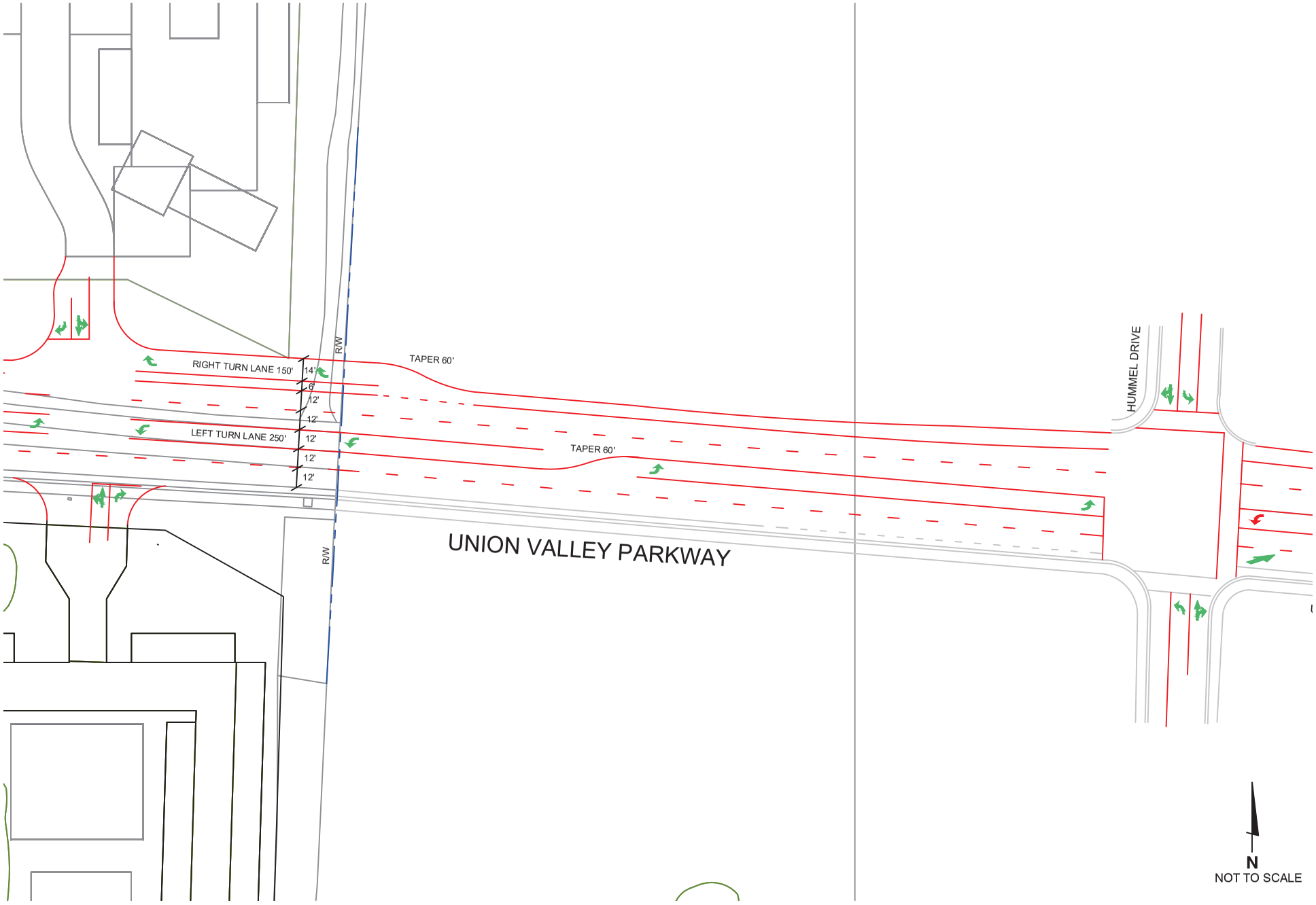


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UVP INTERIM TRANSITION PLAN

FIGURE 12a

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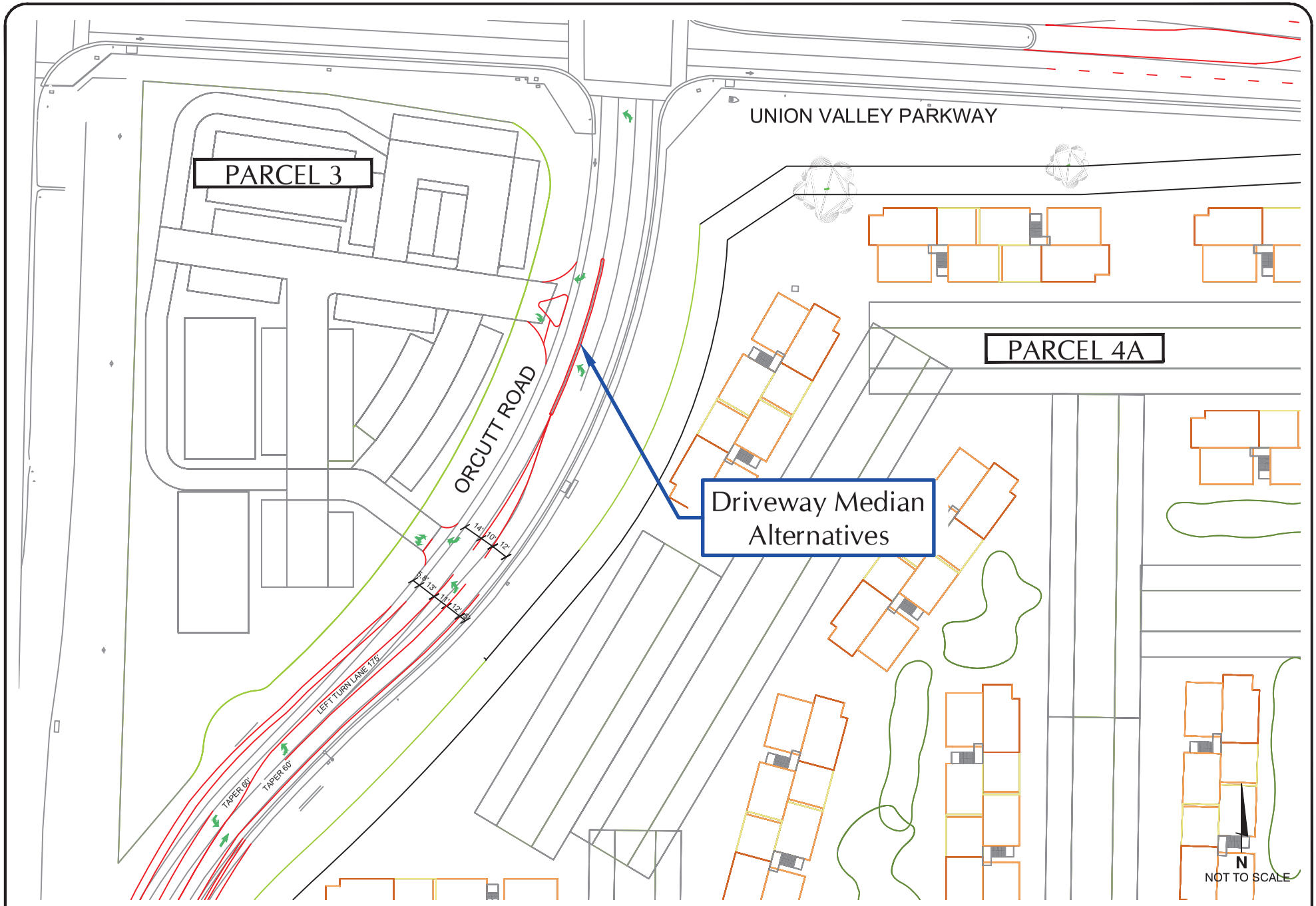


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UVP LONG TERM TRANSITION PLAN

FIGURE 12b

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PARCEL 3 - ORCUTT ROAD DRIVEWAYS

FIGURE 13

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Parcel 4A Access and Circulation

This parcel is located on the south side of the UVP east of Orcutt Road and would contain 400 apartments. As shown on the residential site plan (see Figure 2b), access to the site is proposed via a driveway on the UVP and a connection to a new east-west access road that would extend easterly from Orcutt Road between Parcels 4A and 4B. Figure 14 shows the access improvements that should be considered for Parcel 4A, which are reviewed below.

UVP

1. The driveway for Parcel 4A should be aligned with the easterly driveway for Parcel 2 on the north side of the UVP.
2. Eastbound and westbound left-turn lanes should be provided on the UVP at the new easterly driveways
3. The driveway should be configured with a through-left-turn lane and a right-turn lane.
4. The driveway approaches at the intersection should be controlled by stop signs.
5. Pedestrian connections should be provided between the sidewalks on the UVP and the proposed apartment buildings

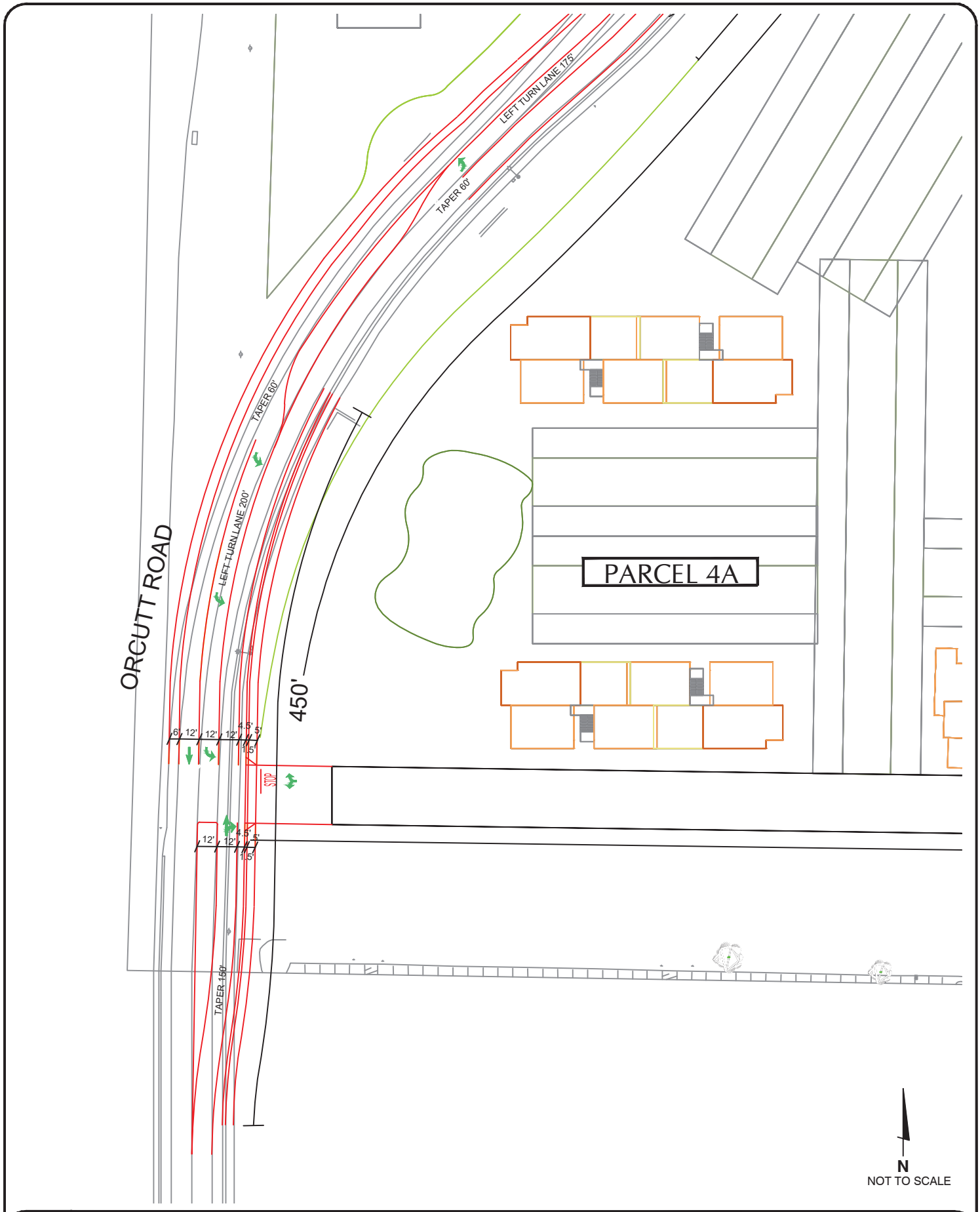
Orcutt Road

1. Orcutt Road should be widened north and south of the driveway to provide a southbound left-turn lane at the new roadway connection.
2. The new roadway approach should be controlled by stop signs.
3. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed apartment buildings.

Parcel 4B Access and Circulation

This parcel is located south of Parcel 4A and east of the Gloria Dei Lutheran Church on Orcutt Road. Parcel 4B would contain 95 townhome units. As shown on residential site plan (see Figure 2b) access to the site is proposed via a new east-west access road that would extend easterly from Orcutt Road between Parcels 4A and 4B. Secondary access would be provided through the internal road system in the adjacent Parcel 4A which provides access to the UVP. Figure 14 shows the access improvements that should be considered for Parcel 4B, which are reviewed below.

1. Orcutt Road should be widened north and south of the driveway to provide a southbound left-turn lane at the new roadway connection.
2. The new roadway approach should be controlled by stop signs.
3. Pedestrian connections should be provided between the sidewalks on Orcutt Road and the proposed apartment buildings.



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PARCEL 4A AND PARCEL 4B - ORCUTT ROAD DRIVEWAY

FIGURE 14

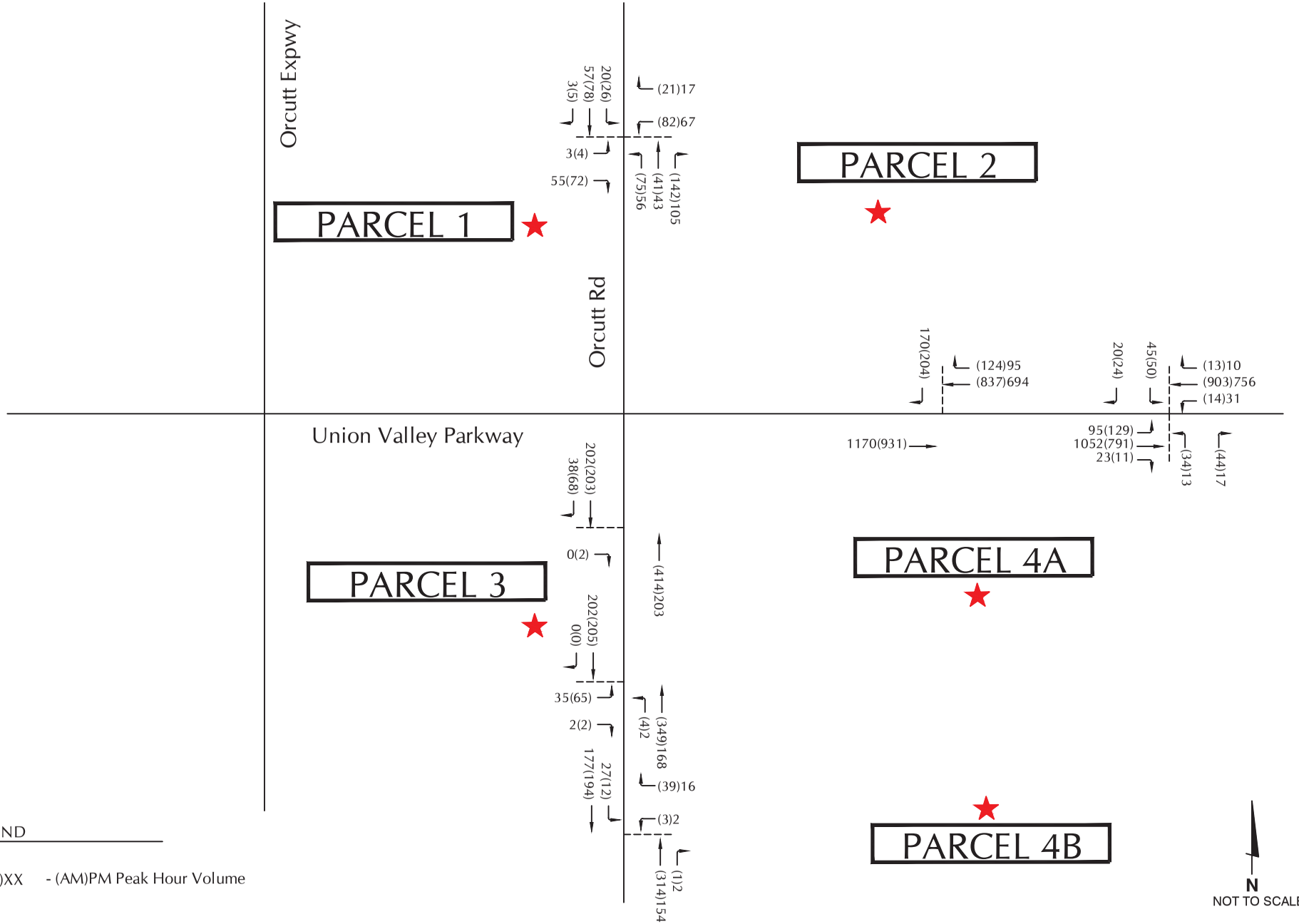
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Driveway Operations

Levels of service were calculated for the Project's driveways using the methodology outlined in the Highway Capacity Manual for 2-way stop-sign controlled intersections. Levels of service were calculated for the project driveways assuming the Cumulative + Project traffic volumes presented on Figure 15 (level of service calculations are contained in the Technical Appendix). Tables 12 and 13 present the Cumulative + Project levels of service for the project driveway intersections and identify locations that are forecast to exceed the City's LOS D standard and the County's LOS C – D standard.

Table 12
AM Peak Hour Project Driveway Operations - Cumulative + Project Conditions

Intersection	Delay / LOS Cumulative + Project	Consistent?
Orcutt Road/Parcel 1&2 Driveways		
EB Parcel 1 Driveway Left + Thru + Right	9.1 Sec/LOS A	Yes
WB Parcel 2 Driveway Left + Thru + Right	12.3 Sec./LOS B	
SB Orcutt Road Left	7.6 Sec./LOS A	
NB Orcutt Road Left	7.5 Sec./LOS A	
Average Weighted Delay	9.7 Sec./LOS A	
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways		
EB Union Valley Parkway Left	10.9 Sec./LOS B	Yes
WB Union Valley Parkway Left	9.5 Sec./LOS A	
SB Parcel 2 Easterly Driveway Left and Right	29.5 Sec./LOS D	
NB Parcel 4 Driveway Left and Right	23.1 Sec./LOS C	
Average Weighted Delay	18.7 Sec./LOS C	
Union Valley Parkway/Parcel 2 Westerly Driveway		Yes
SB Parcel 2 Westerly Driveway Right	14.5 Sec./ LOS B	
Orcutt Road/Parcel 3 Northerly Driveway		Yes
EB Parcel 3 Northerly Driveway Right	9.5 Sec./LOS A	
Orcutt Road/Parcel 3 Southerly Driveway		
EB Parcel 3 Southerly Driveway Left + Right	12.2 Sec./LOS B	Yes
NB Orcutt Road Left	7.7 Sec./LOS A	
Average Weighted Delay	11.2 Sec./LOS B	
Orcutt Road/Parcel 5 Driveway		
WB Parcel 5 Driveway Left + Right	10.4 Sec./LOS B	Yes
SB Orcutt Road Left	7.9 Sec./LOS A	
Average Weighted Delay	9.8 Sec./LOS A	



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PROJECT DRIVEWAY CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 15

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Table 13
PM Peak Hour Project Driveway Operations - Cumulative + Project Conditions

Intersection	Delay / LOS Cumulative + Project	Consistent?
Orcutt Road/Parcel 1&2 Driveways		
EB Parcel 1 Driveway Left + Thru + Right	8.9 Sec/LOS A	Yes
WB Parcel 2 Driveway Left + Thru + Right	11.2 Sec./LOS B	
SB Orcutt Road Left	7.6 Sec./LOS A	
NB Orcutt Road Left	7.4 Sec./LOS A	
Average Weighted Delay	9.3 Sec./LOS A	
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways		
EB Union Valley Parkway Left	9.9 Sec./LOS A	Yes
WB Union Valley Parkway Left	10.9 Sec./LOS B	
SB Parcel 2 Easterly Driveway Left and Right	26.7 Sec./LOS D	
NB Parcel 4 Driveway Left and Right	23.6 Sec./LOS C	
Average Weighted Delay	16.8 Sec./LOS C	
Union Valley Parkway/Parcel 2 Westerly Driveway		Yes
SB Parcel 2 Westerly Driveway Right	12.5 Sec./ LOS B	
Orcutt Road/Parcel 3 Northerly Driveway		Yes
EB Parcel 3 Northerly Driveway Right	9.4 Sec./LOS A	
Orcutt Road/Parcel 3 Southerly Driveway		
EB Parcel 3 Southerly Driveway Left + Right	10.6 Sec./LOS B	Yes
NB Orcutt Road Left	7.6 Sec./LOS A	
Average Weighted Delay	10.4 Sec./LOS B	
Orcutt Road/Parcel 5 Driveway		
WB Parcel 5 Driveway Left + Right	9.3 Sec./LOS A	Yes
SB Orcutt Road Left	7.6 Sec./LOS A	
Average Weighted Delay	8.3 Sec./LOS A	

As shown in Tables 12 and 13, the project driveway intersections are forecast to operate in the LOS A - C range under Cumulative + Project conditions during the AM and PM peak hours, which meet the City's LOS D standard and the County's LOS C – D standard.

City staff requested a queueing analysis for the Project driveways to determine the future vehicle queues. The analysis assumes the lane geometry shown in Figures 10 – 14. Tables 14 and 15 summarize the peak (95th) queue forecasts for the Project driveways.

Table 14
AM Peak Hour Driveway Queues - Cumulative + Project Conditions

Intersection	95th Queue Length Cumulative + Project
Orcutt Road/Parcel 1&2 Driveways	
EB Parcel 1 Driveway Left + Thru + Right	1 Vehicle
WB Parcel 2 Driveway Left + Thru + Right	1 Vehicle
SB Orcutt Road Left	1 Vehicle
NB Orcutt Road Left	1 Vehicle
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways	
EB Union Valley Parkway Left	1 Vehicle
WB Union Valley Parkway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Right	1 Vehicle
NB Parcel 4 Driveway Left	1 Vehicle
NB Parcel 4 Driveway Right	1 Vehicle
Union Valley Parkway/Parcel 2 Westerly Driveway	
SB Parcel 2 Westerly Driveway Right	2 Vehicles
Orcutt Road/Parcel 3 Northerly Driveway	
EB Parcel 3 Northerly Driveway Right	0 Vehicle
Orcutt Road/Parcel 3 Southerly Driveway	
EB Parcel 3 Southerly Driveway Left + Right	1 Vehicle
NB Orcutt Road Left	0 Vehicle
Orcutt Road/Parcel 5 Driveway	
WB Parcel 5 Driveway Left + Right	1 Vehicle
SB Orcutt Road Left	0 Vehicle

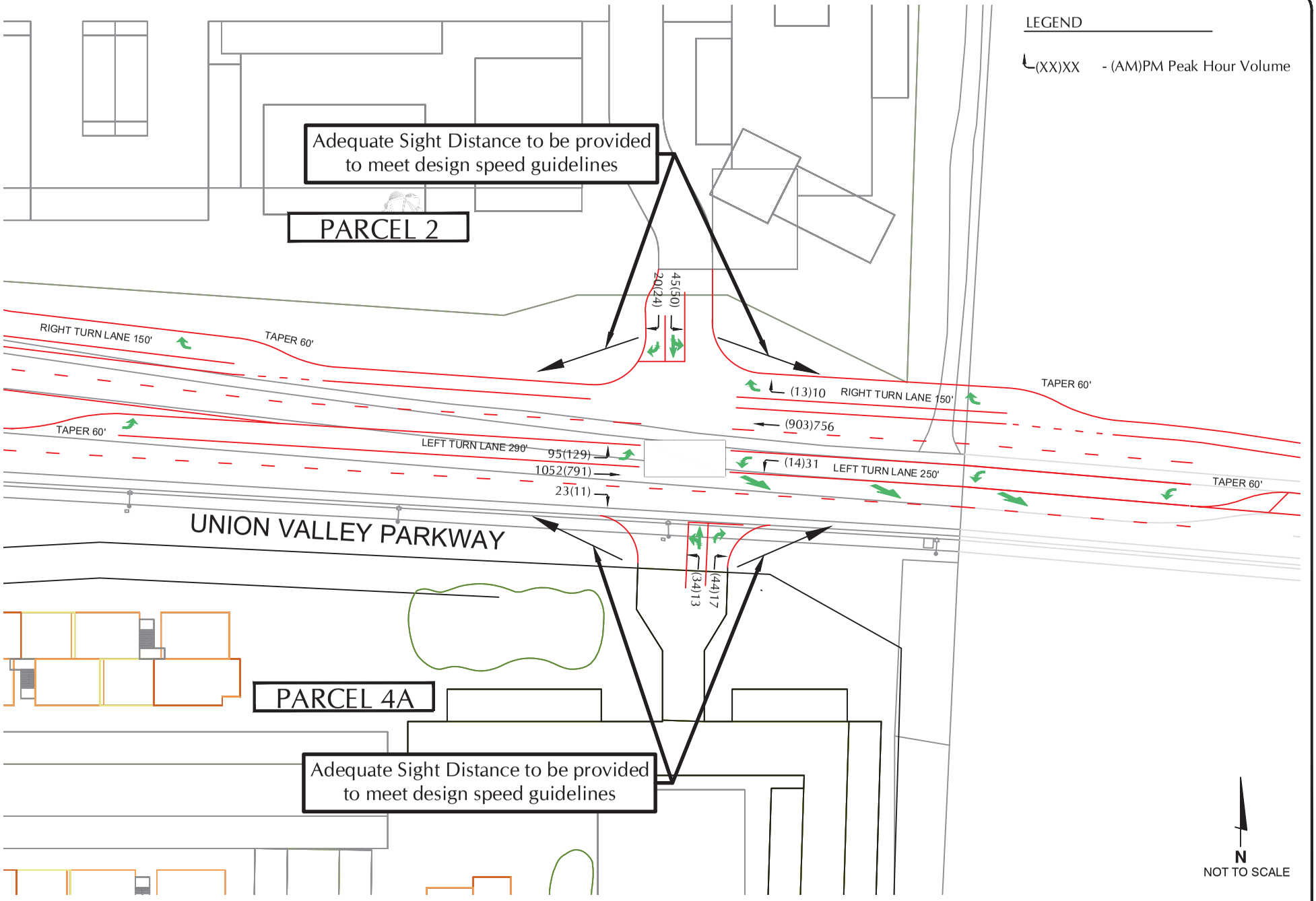
Table 15
PM Peak Hour Driveway Queues - Cumulative + Project Conditions

Intersection	95th Queue Length Cumulative + Project
Orcutt Road/Parcel 1&2 Driveways	
EB Parcel 1 Driveway Left + Thru + Right	1 Vehicle
WB Parcel 2 Driveway Left + Thru + Right	1 Vehicle
SB Orcutt Road Left	0 Vehicle
NB Orcutt Road Left	1 Vehicle
Union Valley Parkway/Parcel 2 Easterly & Parcel 4 Driveways	
EB Union Valley Parkway Left	1 Vehicle
WB Union Valley Parkway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Left	1 Vehicle
SB Parcel 2 Easterly Driveway Right	1 Vehicle
NB Parcel 4 Driveway Left	1 Vehicle
NB Parcel 4 Driveway Right	1 Vehicle
Union Valley Parkway/Parcel 2 Westerly Driveway	
SB Parcel 2 Westerly Driveway Right	1 Vehicles
Orcutt Road/Parcel 3 Northerly Driveway	
EB Parcel 3 Northerly Driveway Right	0 Vehicle
Orcutt Road/Parcel 3 Southerly Driveway	
EB Parcel 3 Southerly Driveway Left + Right	1 Vehicle
NB Orcutt Road Left	0 Vehicle
Orcutt Road/Parcel 5 Driveway	
WB Parcel 5 Driveway Left + Right	1 Vehicle
SB Orcutt Road Left	1 Vehicle

The data presented in Tables 14 and 15 show that all the approaching movements at the Project driveways are forecast to have less than 2 vehicles in queue.

UVP/Parcel 2 Easterly & Parcel 4 Driveways

As requested by City staff, the UVP/Parcel 2 Easterly & Parcel 4 Driveway intersection was analyzed. Figure 16 presents the storage length, Cumulative + Project traffic volumes, and LOS at this intersection. As shown, the driveways are forecast to operate in the LOS C range and there is adequate left-turn storage on UVP for the full access driveway. Sight distances at the driveways will be assessed in more detail during the development review stage of the Project to ensure that the minimum requirements meet the Caltrans minimum sight distance standard for the 50 MPH design speed on UVP (430 feet).



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STORAGE LENGTH, CUMULATIVE + PROJECT TRAFFIC VOLUMES, AND LOS AT UVP/PARCEL 2 EASTERLY & PARCEL 4 DRIVEWAYS

FIGURE 16

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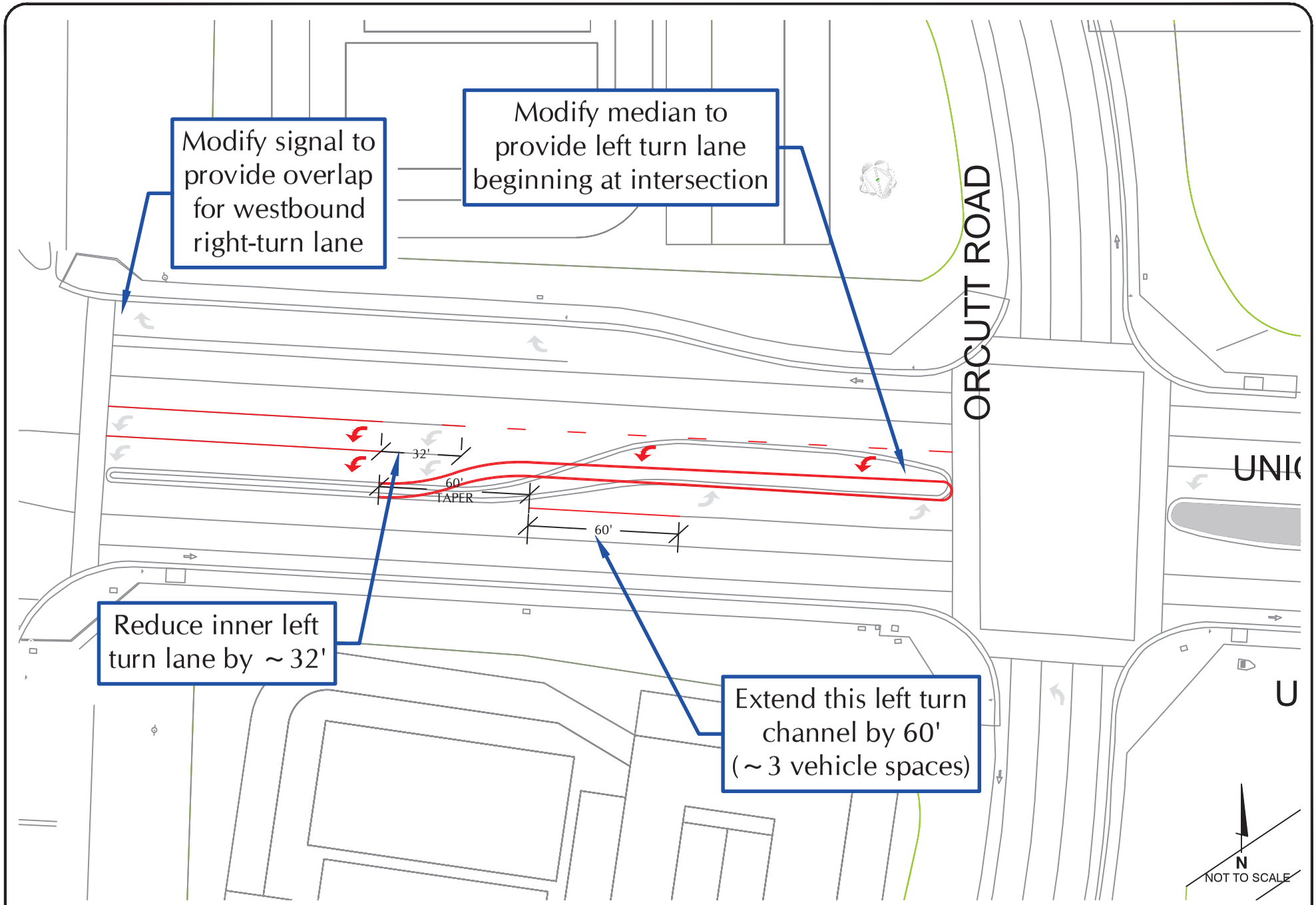
UVP QUEUING ANALYSIS

City staff and the peer review traffic consultant requested a queueing analysis for the UVP intersections adjacent to the Project site to determine if future vehicle queues will be accommodated in the available storage. The analysis assumes improvements to the median on UVP as shown in Figure 17. These median improvements increase the eastbound left-turn lane storage to 185 feet at the UVP/Orcutt Road intersection and the overall storage provided for the westbound dual left-turn lanes to 445 feet at the UVP/Orcutt Expressway intersection. The analysis also assumes a protected overlap westbound right-turn at the UVP/Orcutt Expressway intersection. The analysis reviews queue forecasts for the left-turn lanes and the adjacent through lanes under Cumulative + Project scenarios.

The queueing analysis was completed using the SYNCHRO software program. The SYNCHRO software implements the Highway Capacity Manual (HCM) operations methodology and predicts both "50th Percentile" and "95th Percentile" queue forecasts for the peak period. The 50th percentile queue forecasts represent the average queues during the peak period. The 95th percentile queue forecasts represent the peak queues during the peak period and are recommended for design purposes. Worksheets showing the queue forecasts are contained in the Technical Appendix. Tables 16 and 17 summarize the storage along with the average (50^{th}) and peak (95^{th}) queue forecasts for UVP intersections adjacent to the site.

Table 16
Cumulative + Project AM Peak Hour
Storage Length and Left-Turn Queues and Storage Requirements

Intersection	Storage Length	50^{TH} % Queue	95^{th} % Queue
UVP/Orcutt Expressway			
• WB Left-Turn #1	445 Feet	124 Feet	207 Feet
• WB Left-Turn #2		130 Feet	188 Feet
• WB Through #1	335 Feet	73 Feet	113 Feet
• WB Through #2	335 Feet	65 Feet	140 Feet
• SB Left-Turn #1	615 Feet	142 Feet	211 Feet
• SB Left-Turn #2	615 Feet	174 Feet	231 Feet
UVP/Orcutt Road			
• EB Left-Turn	185 Feet	90 Feet	114 Feet
• EB Through #1	390 Feet	105 Feet	155 Feet
• EB Through #2	390 Feet	184 Feet	289 Feet
• WB Left-Turn	270 Feet	49 Feet	109 Feet
• NB Left-Turn	245 Feet	102 Feet	156 Feet
• SB Left-Turn	175 Feet	24 Feet	60 Feet



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LEFT TURN CHANNELS AT UVP/ORCUTT ROAD AND ORCUTT EXPY

FIGURE 17

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Table 17
Cumulative + Project PM Peak Hour
Storage Length and Left-Turn Queues and Storage Requirements

Intersection	Storage Length	50TH % Queue	95th % Queue
UVP/Orcutt Expressway			
• WB Left-Turn #1	445 Feet	96 Feet	155 Feet
• WB Left-Turn #2		95 Feet	121 Feet
• WB Through #1	335 Feet	53 Feet	120 Feet
• WB Through #2	335 Feet	59 Feet	110 Feet
• SB Left-Turn #1	615 Feet	204 Feet	314 Feet
• SB Left-Turn #2	615 Feet	246 Feet	339 Feet
UVP/Orcutt Road			
• EB Left-Turn	185 Feet	104 Feet	135 Feet
• EB Through #1	390 Feet	209 Feet	369 Feet
• EB Through #2	390 Feet	253 Feet	384 Feet
• WB Left-Turn	270 Feet	39 Feet	56 Feet
• NB Left-Turn	245 Feet	77 Feet	118 Feet
• SB Left-Turn	175 Feet	27 Feet	66 Feet

The data presented in Tables 16 and 17 indicate that all of the storage lengths at the intersections meet the 50th and 95th percentile queue forecasts with the proposed improvements of the median and the protected overlap movement.

ACCIDENT ANALYSIS

An accident analysis was completed to evaluate the accident rates at the key intersections within the UVP corridor adjacent to the Project site, which include UVP/Foxenwood Lane, UVP/Orcutt Expressway, UVP/Orcutt Road, UVP/Hummel Drive, and UVP/Bradley Road. Accident data was obtained from the City of Santa Maria for the most current 3-year period of accident records available (copy of 2018-2020 accident data is attached).

It is important to note that accident data is used as a screening tool to identify potential safety problems. The rate of accidents was calculated for each intersection and then compared to California statewide averages for similar facilities to identify potential safety issues. By nature, accident rates experienced on a facility are often higher than the statewide average rate for similar facilities since the statewide averages are comprised of lower-than-average rates + higher-than-average rates (lower + higher = average).

If the accident rate experienced on a facility is higher than the statewide average, the Caltrans significance test is performed to determine if the number of accidents that occurred on the facility is statistically significant. If the number of accidents experienced is statistically significant, more detailed safety investigations are performed to determine if there are accident patterns that can be corrected by changing design features of the facility (e.g., widen traffic lanes, widen roadway shoulders, change roadway curvatures, add signs, install traffic signals, etc.).

Accident rates were calculated for the each of the UVP intersections adjacent to the Project stie using the 3-year accident histories. The "area of influence" for each intersection is defined as within 250 feet of the intersection. The rate of accidents was calculated and then compared to California statewide average for similar facilities. Table 18 lists the actual rate of accidents for the 3-year period and compares the rates to the California statewide averages for similar intersections (see attached accident rate calculations for more details).

Table 18
UVP Intersections - Accident Rates

Location	# Accidents	Accident Rate(a)	Statewide Average Rate(a)
UVP Foxenwood Lane	1 Accident	0.12 per mev	0.24 per mev
UVP/Orcutt Expressway	12 Accidents	0.35 per mev	0.42 per mev
UVP/Orcutt Road	9 Accidents	0.53 per mev	0.42 per mev
UVP/Hummel Drive	5 Accidents	0.31 per mev	0.24 per mev
UVP/Bradley Road	4 Accidents	0.15 per mev	0.42 per mev

(a) Accident rates per million entering vehicles (mev).

UVP/Foxenwood Lane. As shown in Table 18, there was 1 accident at this intersection within the 3-year period. The rate of accidents was 0.12 accidents per million entering vehicles and the California statewide average for similar intersections is 0.24 accidents per million entering vehicles. Thus, the rate of accidents is below the statewide average and further investigation is not required.

UVP/Orcutt Expressway. As shown in Table 18, there were 12 accidents at this intersection within the 3-year period. The rate of accidents was 0.35 accidents per million entering vehicles and the California statewide average for similar intersections is 0.42 accidents per million entering vehicles. Thus, the rate of accidents is below the statewide average and further investigation is not required.

UVP/Orcutt Road. As shown in Table 18, there were 9 accidents at this intersection within the 3-year period. The rate of accidents was 0.53 accidents per million entering vehicles and the California statewide average for similar intersections is 0.42 accidents per million entering vehicles. Thus, the rate of accidents is slightly higher that the statewide average. The Caltrans significance test was performed to determine if the number of accidents that occurred is statically significant (a worksheet showing the Caltrans formula and the significance test is included in the Technical Appendix). The results show that the number of accidents required to be statistically significant is 15 accidents within the 3-year period. The number of accidents that occurred during the 3-year period was 9, which is statistically insignificant. Thus, further investigation of the accident history is not warranted.

UVP/Hummel Drive. As shown in Table 18, there were 5 accidents at this intersection within the 3-year period. The rate of accidents was 0.31 accidents per million entering vehicles and the California statewide average for similar intersections is 0.24 accidents per million entering vehicles. Thus, the rate of accidents is slightly higher that the statewide average. The Caltrans significance test was performed to determine if the number of accidents that occurred is statically significant (a worksheet showing the Caltrans formula and the significance test is included in the Technical Appendix). The results show that the number of accidents required to be statistically significant is 10 accidents within the 3-year period. The number of accidents that occurred during the 3-year period was 5, which is statistically insignificant. Thus, further investigation of the accident history is not warranted.

UVP/Bradley Road. As shown in Table 18, there were 4 accidents at this intersection within the 3-year period. The rate of accidents was 0.15 accidents per million entering vehicles and the California statewide average for similar intersections is 0.42 accidents per million entering vehicles. Thus, the rate of accidents is below the statewide average and further investigation is not required.

SIGNAL WARRANT ANALYSIS

As requested by City Staff, a signal warrant analysis was conducted at the UVP/Hummel Drive intersection. The California Manual on Uniform Traffic Control Devices (CA MUTCD) warrants were applied using Cumulative + Project volumes. The posted speed limit on UVP is 50 MPH, therefore the rural warrants were utilized (traffic signal warrant worksheets contained in the Technical Appendix).

The UVP/Hummel Drive intersection is STOP-sign controlled on the Hummel Drive approaches and free flow on the UVP approaches. As noted above, the signal warrant analysis was completed using the Existing and Cumulative + Project volumes. Table 19 presents the results of the traffic signal warrant analysis.

Table 19
Signal Warrant Analysis Results – UVP/Hummel Drive

Scenario	Warrant #	Type	Warrant Satisfied?
Existing	3	Peak Hour Count and Cumulative Forecast	Yes
Cumulative + Project	3	Peak Hour Count and Cumulative Forecast	Yes

The data presented in Table 19 show that the existing volumes at the UVP/Hummel Drive intersection meet the Peak Hour warrant. It is also noted that the intersection currently operates at LOS D, which exceeds the County's LOS C policy. The data indicates that signals are required without the addition of the Project's traffic.

The data presented in Table 19 also show that the Cumulative + Project volumes at the intersection meet the Peak Hour warrant. The intersection is forecast to operate at LOS F under Cumulative + Project conditions further indicating that traffic signals should be considered for this location.

RECOMMENDED IMPROVEMENTS

The traffic analysis presented in Tables 8-11 found that the UVP/Hummel Drive intersection would operate in the LOS D - F range which exceeds the County's LOS C Standard. As noted previously, the intersection meets the Peak Hour warrant for the Existing and Cumulative + Project conditions. The following section review improvement measures that have been identified for the UVP/Hummel Drive intersection.

UVP/Hummel Drive Intersection

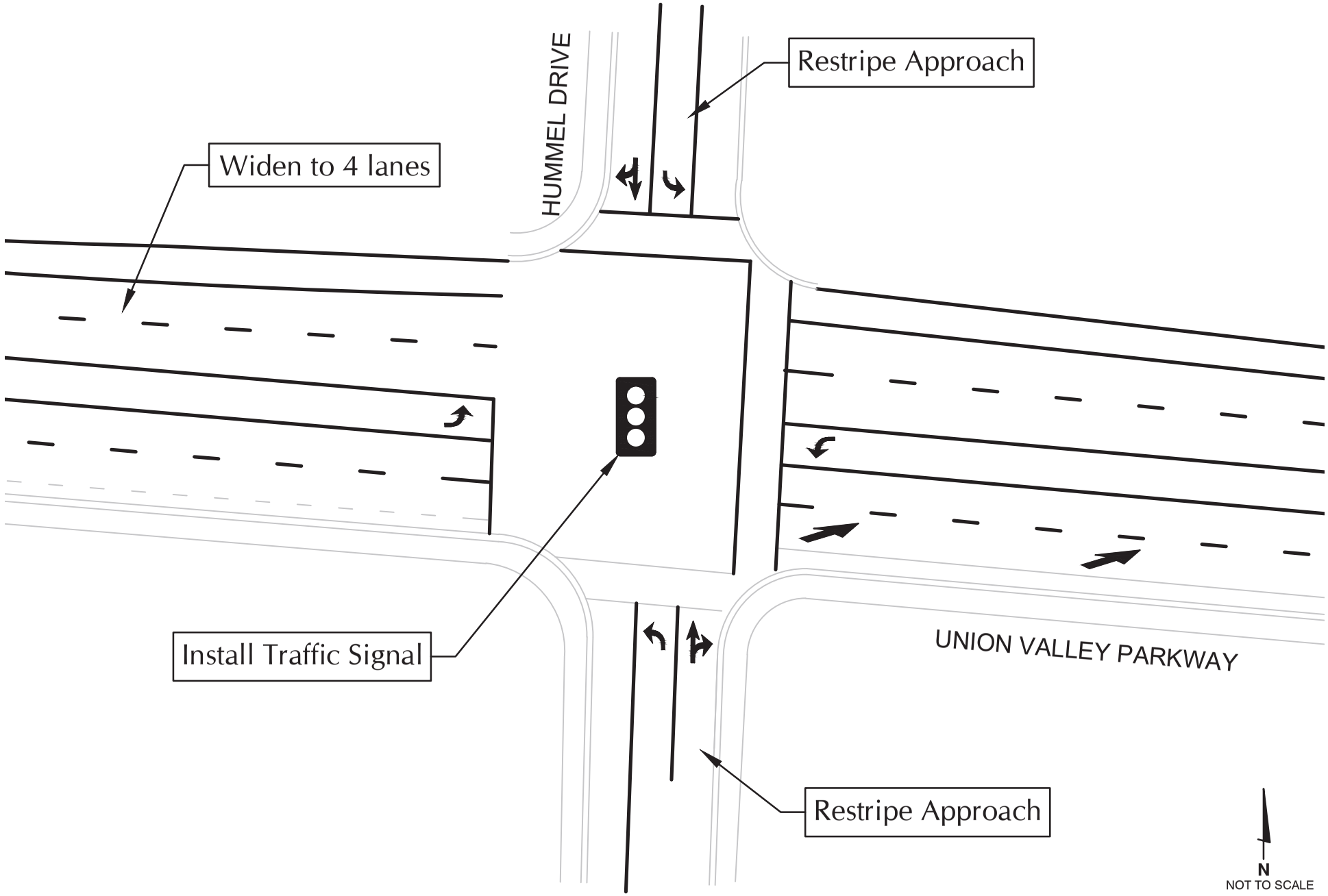
County staff have indicated that the ultimate plan for the UVP adjacent to the Hummel Drive intersection is to widen UVP from two lanes to four lanes with left-turn channelization. This widening will occur west of Hummel Drive to match the four lanes in front of the Project site. In addition, County staff indicated that traffic signals may be installed at the UVP/Hummel Drive intersection in the future. Figure 18 provides a schematic illustration of the future intersection design with the widening. Table 20 presents the Existing + Project and Cumulative + Project levels of service forecasts for the intersection assuming implementation of the improvements.

Table 20
Intersection Levels of Service With Improvements

Intersection	Existing + Project		Cumulative + Project	
	Existing Geometry	With Improvements	Existing Geometry	With Improvements
UVP/Hummel Drive AM(a)	> 50.0 sec. / LOS F	0.47 / LOS A	> 50.0 sec / LOS F	0.49 / LOS A
UVP/Hummel Drive PM(a)	> 50.0 sec. / LOS F	0.49 / LOS A	> 50.0 sec / LOS F	0.52 / LOS A

(a) Assumes UVP widening and traffic signal installation.

The data presented in Table 20 show that with the planned improvements, the UVP/Hummel Drive intersection will operate in the LOS A range.



ASSOCIATED TRANSPORTATION ENGINEERS

UNION VALLEY PARKWAY/HUMMEL DRIVE - FUTURE INTERSECTION DESIGN

FIGURE 18

GM- ATE#21069

VMT ANALYSIS

Per the State's Natural Resource Agency Updated Guidelines for the Implementation of the CEQA adopted in 2018, Vehicle Miles Traveled (VMT) has been designated as the most appropriate measure of transportation impacts. "Vehicle Miles Traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. For land use projects, vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact.

The Governor's Office of Planning and Research (OPR) published a Technical Advisory on Transportation that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures[5]. The Technical Advisory provides screening tools to determine when a project may have a significant VMT impacts. The City of Santa Maria's adopted Environmental Procedures and Guidelines manual contain thresholds and methodologies for assessing potential VMT impacts for Project located in the City.

Criteria For Mixed-Use Developments

The City's Environmental Procedures and Guidelines manual ("CEQA Guidelines") provides the following guidance for mixed-use projects:

> "For mixed use projects, the CEQA Guidelines recommend either analyzing each component of the proposed project separately or focusing on the predominant land use."

Given that the residential portion of the Project accounts for approximately 29% of the primary trips generated at the site, each component of the Project is analyzed separately.

VMT Analysis - Residential

The potential VMT impacts associated with the residential portion of the Project are reviewed below.

VMT Thresholds

Consistent with CEQA Guidelines Section 15064.7, Thresholds of Significance, the City of Santa Maria has adopted the countywide baseline average of home-based VMT per population for residential projects and thresholds set at 85% of these countywide baseline averages for determining whether a project's VMT will be significant. The thresholds will be periodically updated as necessary during normal updates of the model baseline (approximately every five years).

[5] Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

New residential projects (single family, multi-family, mobile home) are required to generate less than 6.17 VMT per person (one-way trip). Projects that exceed this threshold may have a significant effect on the environment and will require project revisions and/or mitigation measures may be implemented to reduce the impact to less than significant. Mitigation strategies would be specific to the particular project and could include introducing mixed-use components, alternative transportation opportunities, pedestrian and/or transit network improvements, and traffic calming measures.

VMT Analysis

City staff indicated that the City's VMT calculator was not available for the VMT analysis as the Project is currently located outside of the City limits. The City's CEQA Guidelines, however, contain screening maps to determine the VMT generation of residential projects located in different zones within the City and the adjacent County areas (screening map contained in the Technical Appendix). The screening map indicates that the residential portion of the Project would generate up to the countywide average home based VMT per population of 7.26. As discussed in the trip generation section of this report, there will be some internal trips that travel between the various parcels that comprise the site and would not generate new VMT. The internal capture trips include trip interactions between the residential uses and the adjacent commercial uses. The ITE mixed-use traffic model shows that up to 40% of the trips generated by the residential component of the Project would be internal to the site. To be conservative, the traffic study assumes that 25% of the Project-generated trips are internal. This 25% mixed-use factor was applied to the City's VMT screening map forecasts to determine if the Project would exceed the City's VMT impact thresholds. Table 21 presents the results of the analysis.

Table 21
Residential Component VMT Comparison to City Threshold

City of Santa Maria Screening Map VMT Estimate	VMT Estimate with Mixed-Use Reduction	City of Santa Maria VMT Threshold	Potential Impact?
7.26 VMT Per Population	5.45 VMT per Population	6.17 VMT Per Capita	NO

The data presented in Table 21 indicate that the residential component of the Project would generate 7.26 VMT per population (as shown on CEQA Guidelines screening map) which would exceed the City's threshold of 6.17 VMT per capita. With the mixed-use adjustments, the residential component VMT would be reduced to 5.45 VMT per population which would be below the City's impact threshold. This portion of the mixed-use project would therefore have a less than significant impact based on City thresholds.

VMT Analysis Mini-Storage

The potential VMT impacts associated with the mini-storage portion of the Project are reviewed below.

Screening Criteria

Consistent with the recommendations in the OPR Technical Advisory, Section 4.3.1 of the City of Santa Maria's CEQA Guidelines establishes screening criteria for certain projects that are exempt from performing a detailed VMT analysis and may be presumed to have a less than significant VMT impact. Section 4.3.1-A states that:

> "The following discretionary development projects are not subject to VMT analysis:
>
> 3. Small discretionary projects that would generate or attract fewer than 110 daily trips (per CEQA)."

VMT Analysis

The mini-storage component of the Project consists of approximately 25,000 SF of development that is forecast to generate 36 ADT, which is less than the 110 ADT screening criteria. This component of the Project therefore satisfies the screening criteria for small discretionary projects and may be presumed to result in less than significant VMT impacts in accordance with the City of Santa Maria CEQA Guidelines.

VMT Analysis – Retail

The potential VMT impacts associated with the retail portion of the Project are reviewed below.

Screening Criteria

Consistent with the recommendations in the OPR Technical Advisory, Section 4.3.1 of the City of Santa Maria's CEQA Guidelines establishes screening criteria for certain projects that are exempt from performing a detailed VMT analysis and may be presumed to have a less than significant VMT impact. Section 4.3.1-A states that:

> "The following discretionary development projects are not subject to VMT analysis:
>
> 1. A discretionary retail development project that is 50,000 square feet or less. Does not apply to regional shopping centers that predominately serve customers that live outside of the City limits.

The retail portion of the Project is greater than 50,000 SF thus a VMT analysis is required.

VMT Thresholds

The Governor's Office of Planning and Research (OPR) published a Technical Advisory on Transportation that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory provides the following guidance for analyzing mixed-use projects:

> **"**Mixed-Use Projects
>
> Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project's dominant use. In the analysis of each use, *a project should take credit for internal capture*. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment."

The City of Santa Maria has updated their Environmental Procedures and Guidelines manual to provide thresholds and methodologies for assessing potential VMT impacts for Project's located in the City. Pursuant to guidance set forth in CEQA Guidelines Section 15064.3, for retail development projects, redevelopment projects, medical development projects, and infrastructure projects that require a VMT analysis, the City has adopted "net change" in VMT as the applicable threshold for determining a significant impact (i.e., if the with-project VMT is greater than the without-project VMT).

VMT Modeling

DKS Associates was retained to prepare a VMT analysis for the retail portion of the Project using the SBCAG model. The SBCAG model is considered the most appropriate tool for the analysis given that the City of Santa Maria SB 743 thresholds were developed using the SBCAG 2010 baseline. The net VMT change associated with the retail portion of the Project was analyzed by comparing daily origin-destination VMT with and without the Project. It is noted that the baseline model was updated to include the residential portion of the Project in order to account for the internal capture of trips that would occur in the mixed-use development, as directed in the OPR Technical Advisory.

VMT Analysis Results

Table 22 presents the VMT results of the "Baseline" and "Baseline With Project" model runs and shows the net VMT change associated with the retail portion of the Project.

Table 22
Retail Component – Net Change in VMT

Geography	Baseline VMT	Baseline With Retail VMT	Net VMT
Countywide (a)	11,051,821 (b)	11,008,518	-43,303

(a) Includes trips to, from, and within Santa Barbara County.
(b) Includes residential portion of the proposed project.

The data presented in Table 22 show that the retail portion of the Project would result in a net decrease of 43,303 VMT. Based on the City of Santa Maria's VMT thresholds, retail projects that result in a negative change in VMT indicate no VMT impacts. The results of the model analysis confirm the qualitative analysis contained in the ATE traffic study which concluded that the retail portion of the Project would result in a reduction in VMT due to the lack of retail services in the area and the mixed-use nature of the Project.

■ ■ ■

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

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Glenn Manaois, Transportation Engineer I
Richard Pool, Principal Engineer
Jiho Ha, Transportation Engineer II

Persons Contacted

Mark Mueller, PE, City of Santa Maria
Dana Eady, City of Santa Maria

References

Santa Maria Airport Business Park Specific Plan Rezone Transportation Impact Study, Central Coast Transportation Consulting, October 2020.

Traffic Impact Study for the Ocrutt Community Plan General Plan Amendment Project, Psomas, May, 2020.

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Improving Intersection Performance with Left Turn Phase Reservice Strategies, Corey, Xin, Lao, Wang, 2012.

Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

TECHNICAL APPENDIX

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LEVEL OF SERVICE DEFINITIONS

TRAFFIC COUNT DATA

PROJECT TRIP GENERATION CALCULATION WORKSHEETS

CAR-WASH TRIP GENERATION CALCULATION WORKSHEETS

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COUNTY OF SANTA BARBARA APPROVED AND PENDING PROJECTS LIST

UVP QUEUE ANALYSIS WORKSHEETS

ACCIDENT DATA AND CALCULATION WORKSHEETS

SIGNAL WARRANT WORKSHEETS

VMT SCREENING MAP – RESIDENTIAL PROJECTS

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Orcutt Expressway/Lakeview Road
Reference 2 - Orcutt Expressway/Foster Road
Reference 3 - UVP/Foxenwood Lane
Reference 4 - UVP/Orcutt Expressway
Reference 5 - UVP/Orcutt Road
Reference 6 - UVP/Hummel Drive
Reference 7 - UVP/Bradley Road
Reference 8 - UVP/US 101 SB Ramps
Reference 9 - UVP/US 101 NB Ramps

PROJECT DRIVEWAYS - LEVEL OF SERVICE CALCULATION WORKSHEETS

LEVEL OF SERVICE DEFINITIONS

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Scott A. Schell

Signalized Intersection Level of Service Definitions

LOS	Delay (a)	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

(a) Average control delay per vehicle in seconds.

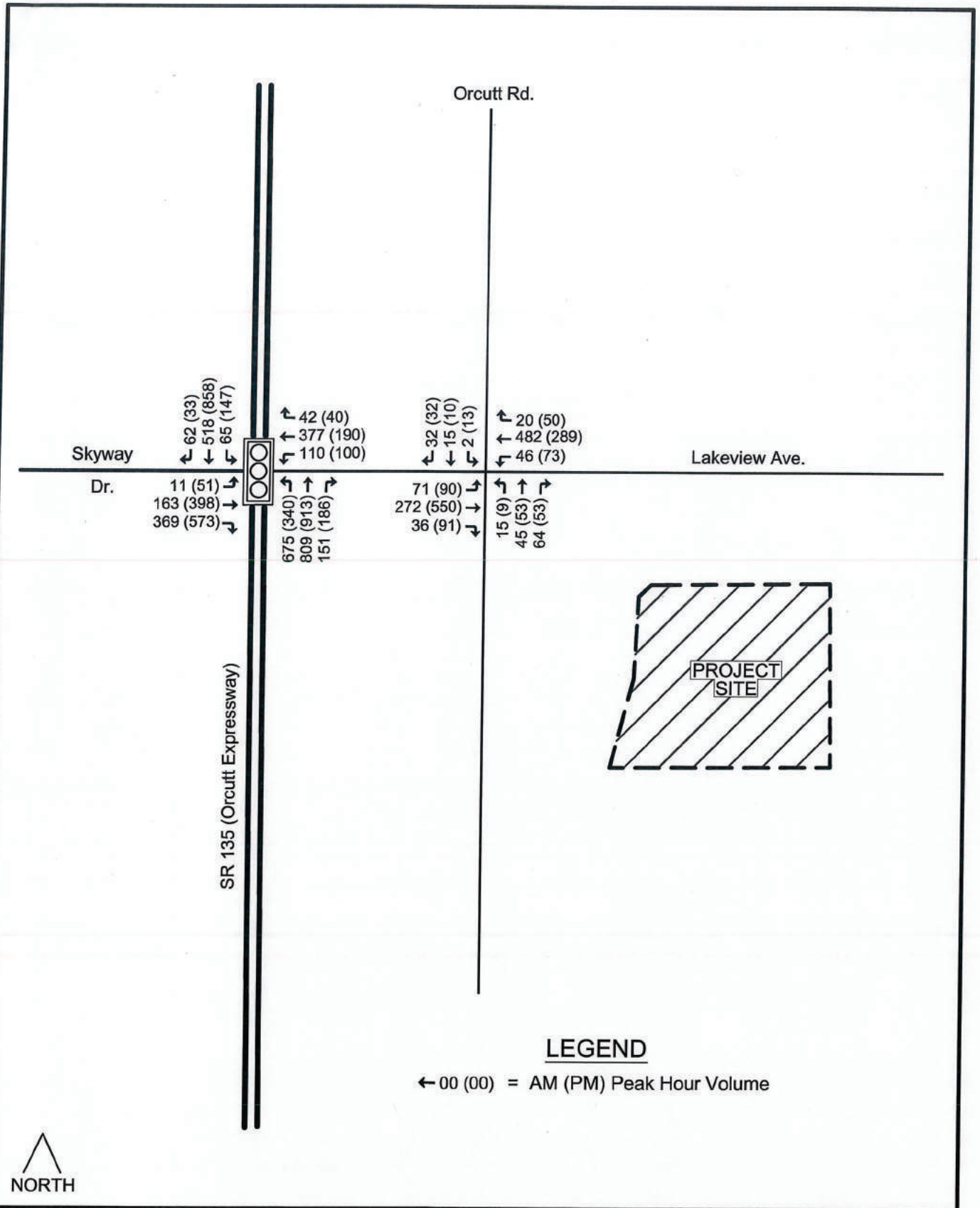
Unsignalized Intersection Level of Service Definitions

The HCM[1] uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

[1] Highway Capacity Manual, National Research Board, 2016.

TRAFFIC COUNT DATA



PINNACLE TRAFFIC ENGINEERING

Orcutt Gas Station
- Traffic and Circulation Study -

FIGURE 2B
EXISTING
TRAFFIC VOLUMES

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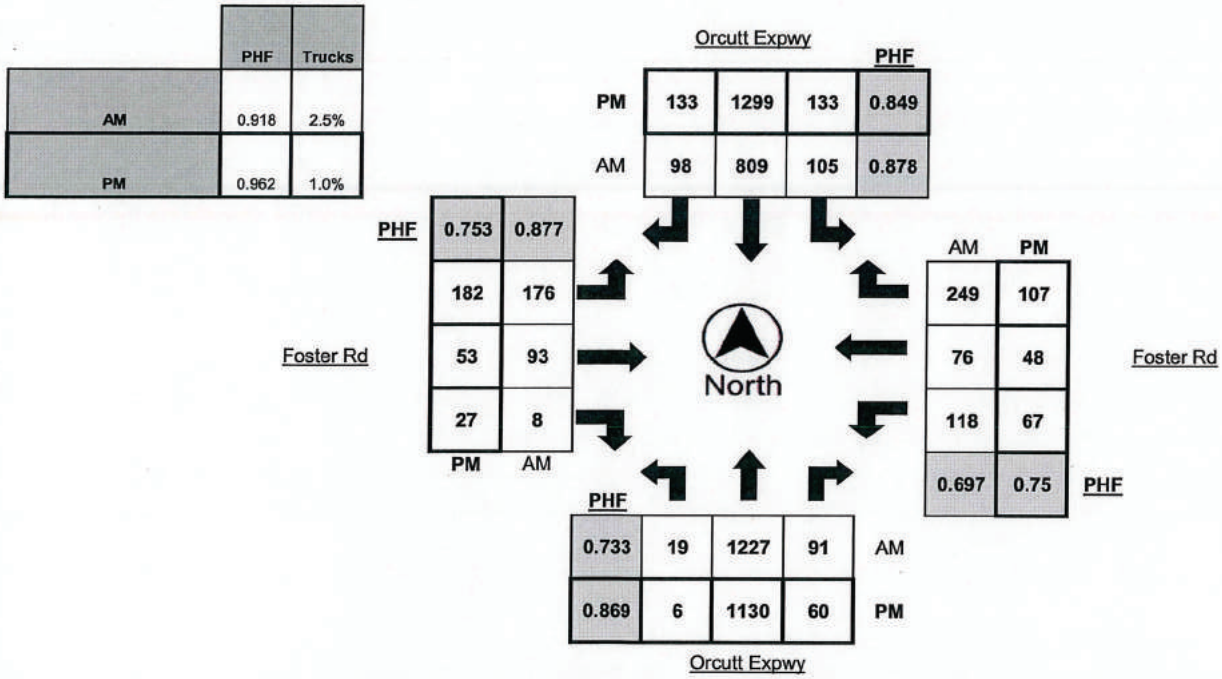
LOCATION Foster Rd @ Orcutt Expwy
LATITUDE 34.8831
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	2	164	20	8	39	171	13	9	22	26	0	3	24	13	48	5
7:15 AM - 7:30 AM	5	234	41	7	52	195	18	9	35	42	2	3	35	25	88	3
7:30 AM - 7:45 AM	2	290	15	5	21	248	19	11	40	21	1	2	47	27	85	2
7:45 AM - 8:00 AM	4	432	20	7	15	194	32	9	53	13	2	3	19	13	39	1
8:00 AM - 8:15 AM	8	271	15	3	17	172	29	8	48	17	3	2	17	11	37	1
8:15 AM - 8:30 AM	4	248	18	5	42	160	31	13	47	17	1	1	12	9	55	3
8:30 AM - 8:45 AM	5	223	14	6	16	152	22	9	18	4	2	3	25	12	37	2
8:45 AM - 9:00 AM	4	247	7	10	16	156	30	9	38	18	0	2	20	14	37	3
TOTAL	34	2109	150	51	218	1448	194	77	301	158	11	19	199	124	426	20

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	0	248	15	10	41	222	12	4	37	14	3	2	31	23	60	7
2:15 PM - 2:30 PM	1	217	6	12	25	217	29	6	27	7	3	1	12	15	30	3
2:30 PM - 2:45 PM	3	229	13	4	35	231	29	14	26	10	5	2	8	8	21	0
2:45 PM - 3:00 PM	0	232	18	11	53	243	30	6	26	20	9	3	10	13	24	2
3:00 PM - 3:15 PM	3	237	17	9	23	255	32	10	39	11	3	2	27	29	59	4
3:15 PM - 3:30 PM	2	280	21	9	28	233	30	7	31	17	5	1	22	14	32	2
3:30 PM - 3:45 PM	2	272	18	11	28	260	24	8	54	12	1	4	23	13	35	1
3:45 PM - 4:00 PM	3	315	19	7	35	275	42	5	34	21	4	1	13	12	32	2
4:00 PM - 4:15 PM	2	262	25	7	37	295	42	2	48	16	6	1	11	12	16	0
4:15 PM - 4:30 PM	3	297	14	7	33	301	35	4	31	11	3	1	16	7	30	2
4:30 PM - 4:45 PM	2	291	12	2	24	258	33	0	44	15	11	1	12	10	18	1
4:45 PM - 5:00 PM	2	323	19	5	35	319	36	6	38	12	5	0	12	15	22	0
5:00 PM - 5:15 PM	1	279	18	4	34	334	31	4	60	19	8	0	23	13	23	0
5:15 PM - 5:30 PM	1	237	11	3	40	388	33	6	40	7	3	0	20	10	44	1
5:30 PM - 5:45 PM	1	222	14	6	27	315	22	4	31	9	4	1	11	8	24	0
5:45 PM - 6:00 PM	1	209	15	4	27	239	35	3	26	18	3	0	10	9	24	1
TOTAL	27	4150	255	111	525	4385	495	89	592	219	76	20	261	211	494	26

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	19	1227	91	22	105	809	98	37	176	93	8	10	118	76	249	7
4:30 PM - 5:30 PM	6	1130	60	14	133	1299	133	16	182	53	27	1	67	48	107	2

	PHF	Trucks
AM	0.918	2.5%
PM	0.962	1.0%



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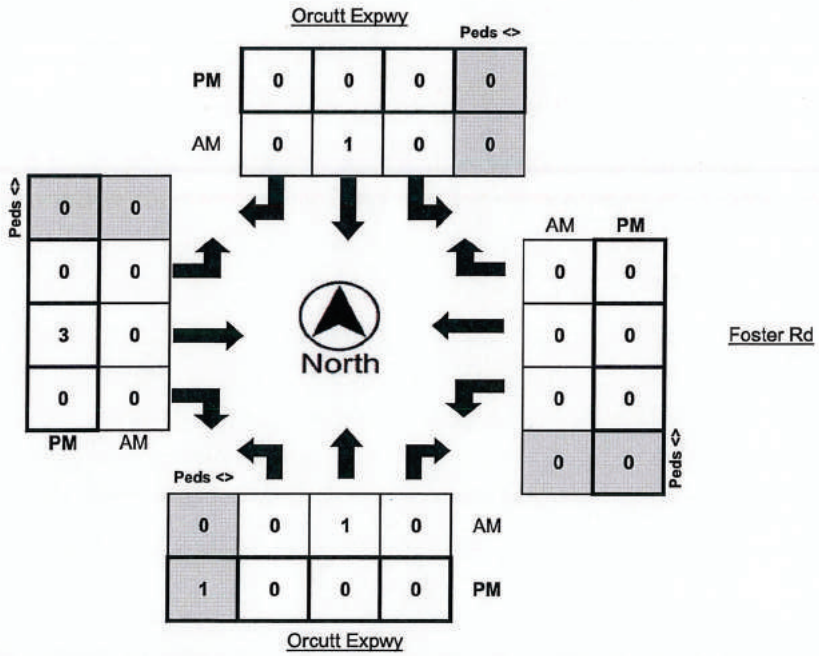
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	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	2	0	0	0	1	0	4	0	0	0	1	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	2	0
PM Peak Total	3	1



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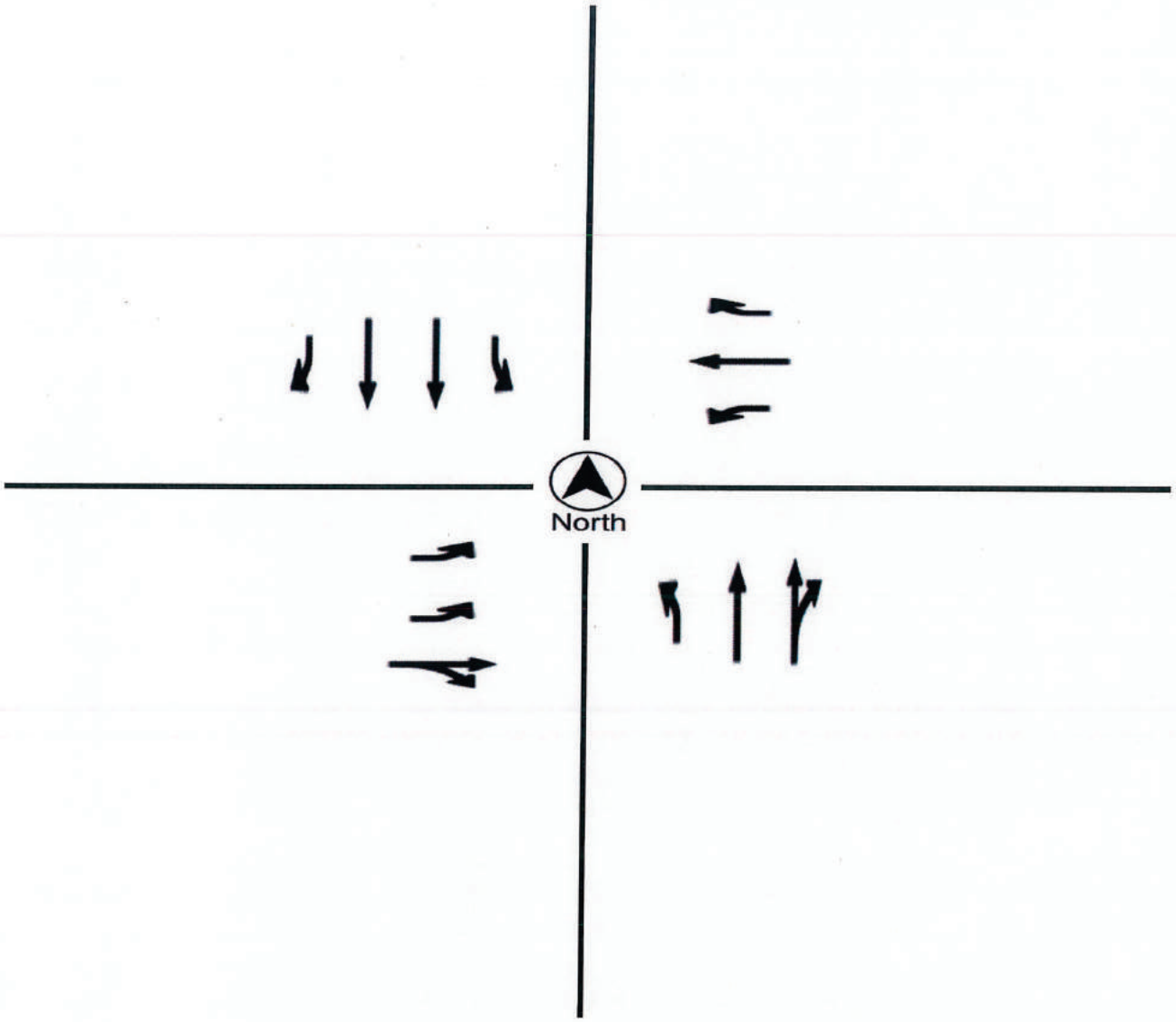
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Morro Bay, CA 93442

LOCATION	Foster Rd @ Orcutt Expwy	**N/S STREET**	Orcutt Expwy / Orcutt Expwy
COUNTY	Santa Barbara	**E/W STREET**	Foster Rd / Foster Rd
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	102 Seconds	**CONTROL TYPE**	Signal

COMMENTS All approaches have protected left turns.



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION Union Valley Pkwy @ Foxenwood Ln
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4388
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

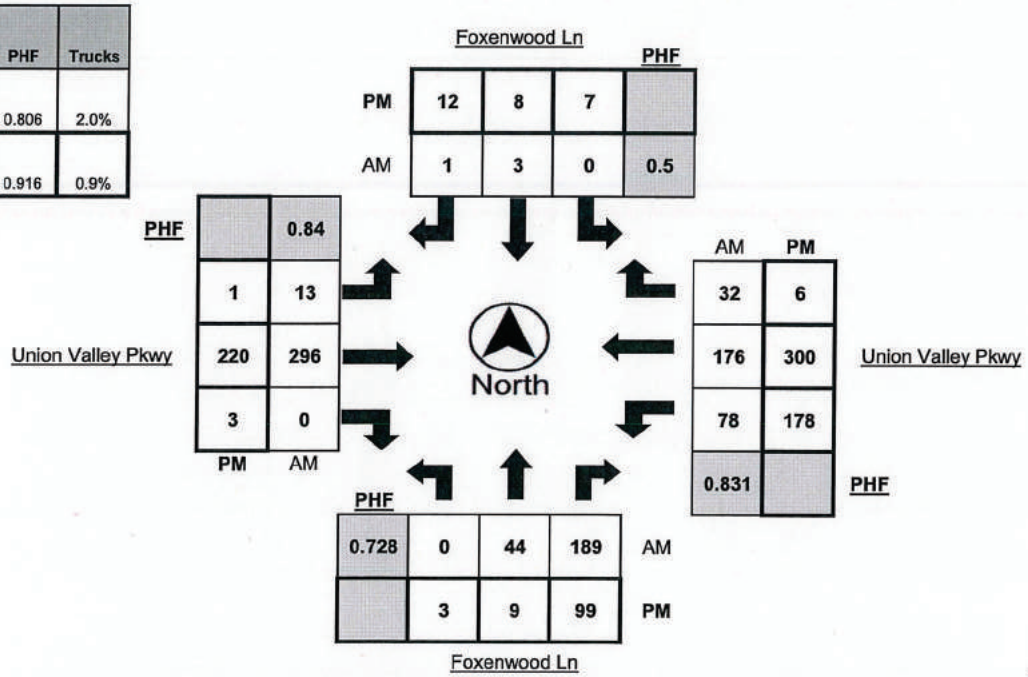
	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	7	42	0	0	0	0	0	2	49	0	0	8	27	2	1
7:15 AM - 7:30 AM	0	5	47	0	0	0	0	0	5	84	0	1	17	32	7	3
7:30 AM - 7:45 AM	0	12	45	2	0	2	0	0	3	76	0	2	17	39	6	0
7:45 AM - 8:00 AM	0	18	62	1	0	0	0	0	4	88	0	2	26	48	12	4
8:00 AM - 8:15 AM	0	9	35	0	0	1	1	0	1	48	0	1	18	57	7	1
8:15 AM - 8:30 AM	0	9	34	0	0	2	0	0	2	58	1	0	17	53	2	0
8:30 AM - 8:45 AM	0	2	35	0	0	1	0	0	1	44	0	2	22	55	3	1
8:45 AM - 9:00 AM	0	3	35	1	2	1	5	0	1	62	0	0	14	29	5	1
TOTAL	0	65	335	4	2	7	6	0	19	509	1	8	139	340	44	11

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	0	3	31	0	0	7	0	0	2	51	2	1	40	63	0	2
2:15 PM - 2:30 PM	0	2	21	0	0	3	2	0	1	64	1	0	37	50	0	2
2:30 PM - 2:45 PM	0	3	31	1	0	4	0	0	4	59	0	1	26	84	1	4
2:45 PM - 3:00 PM	0	3	29	0	0	5	1	0	2	47	0	1	35	67	1	2
3:00 PM - 3:15 PM	3	3	31	0	1	7	0	0	1	70	0	2	39	73	2	4
3:15 PM - 3:30 PM	0	4	37	0	0	7	3	0	3	45	0	1	35	77	3	1
3:30 PM - 3:45 PM	2	3	30	0	1	2	2	0	2	53	0	0	38	58	2	1
3:45 PM - 4:00 PM	0	2	22	0	1	3	2	0	0	57	1	1	30	68	0	1
4:00 PM - 4:15 PM	0	5	23	1	0	4	1	0	0	45	0	0	53	57	1	2
4:15 PM - 4:30 PM	0	2	21	0	0	2	2	0	0	62	0	0	37	76	0	1
4:30 PM - 4:45 PM	2	3	17	0	0	3	2	0	1	59	0	0	36	56	2	0
4:45 PM - 5:00 PM	0	2	33	1	1	2	1	0	0	48	0	0	38	77	1	2
5:00 PM - 5:15 PM	0	2	23	0	6	0	1	0	0	61	1	1	51	84	2	1
5:15 PM - 5:30 PM	1	2	26	1	0	3	8	0	0	52	2	1	53	83	1	1
5:30 PM - 5:45 PM	0	2	30	1	0	3	1	0	1	46	2	2	41	85	0	1
5:45 PM - 6:00 PM	0	1	25	0	5	2	0	0	2	42	2	0	39	57	1	2
TOTAL	8	42	430	5	15	57	26	0	19	861	11	11	628	1115	17	27

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	0	44	189	3	0	3	1	0	13	296	0	6	78	176	32	8
4:30 PM - 5:30 PM*	3	9	99	2	7	8	12	0	1	220	3	2	178	300	6	4

*Uniform peak hour

	PHF	Trucks
AM	0.806	2.0%
PM	0.916	0.9%



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Morro Bay, CA 93442

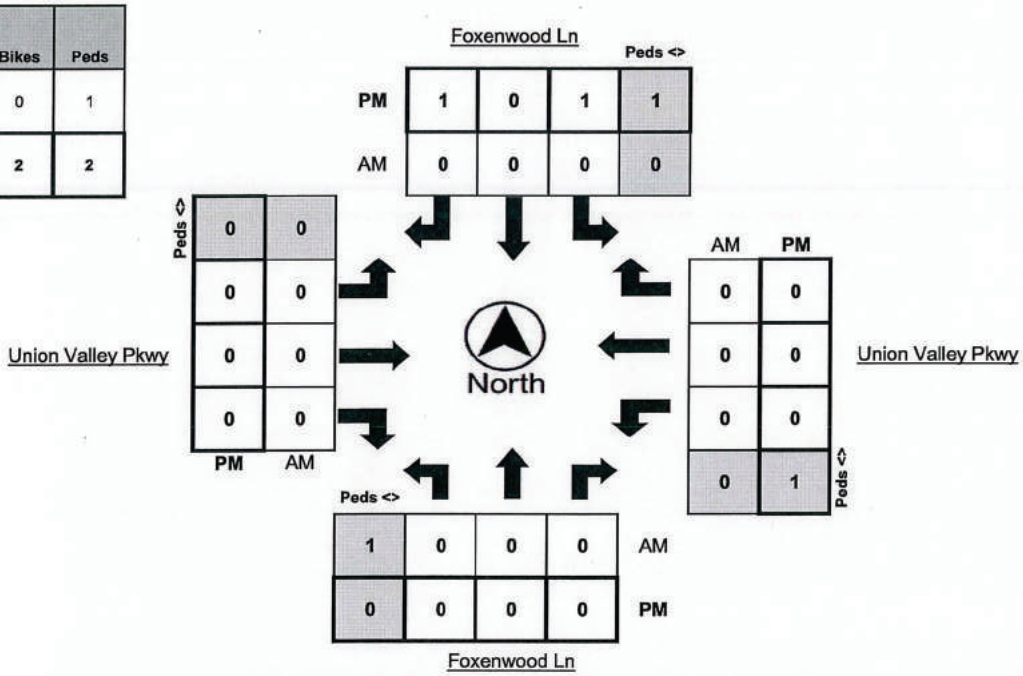
LOCATION Union Valley Pkwy @ Foxenwood Ln
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4388
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
TOTAL	0	0	0	0	0	0	1	2	0	0	0	0	0	0	1	1

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	1	2	3	2	4	1	0	0	1	0	0	0	2

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0

	Bikes	Peds
AM Peak Total	0	1
PM Peak Total	2	2



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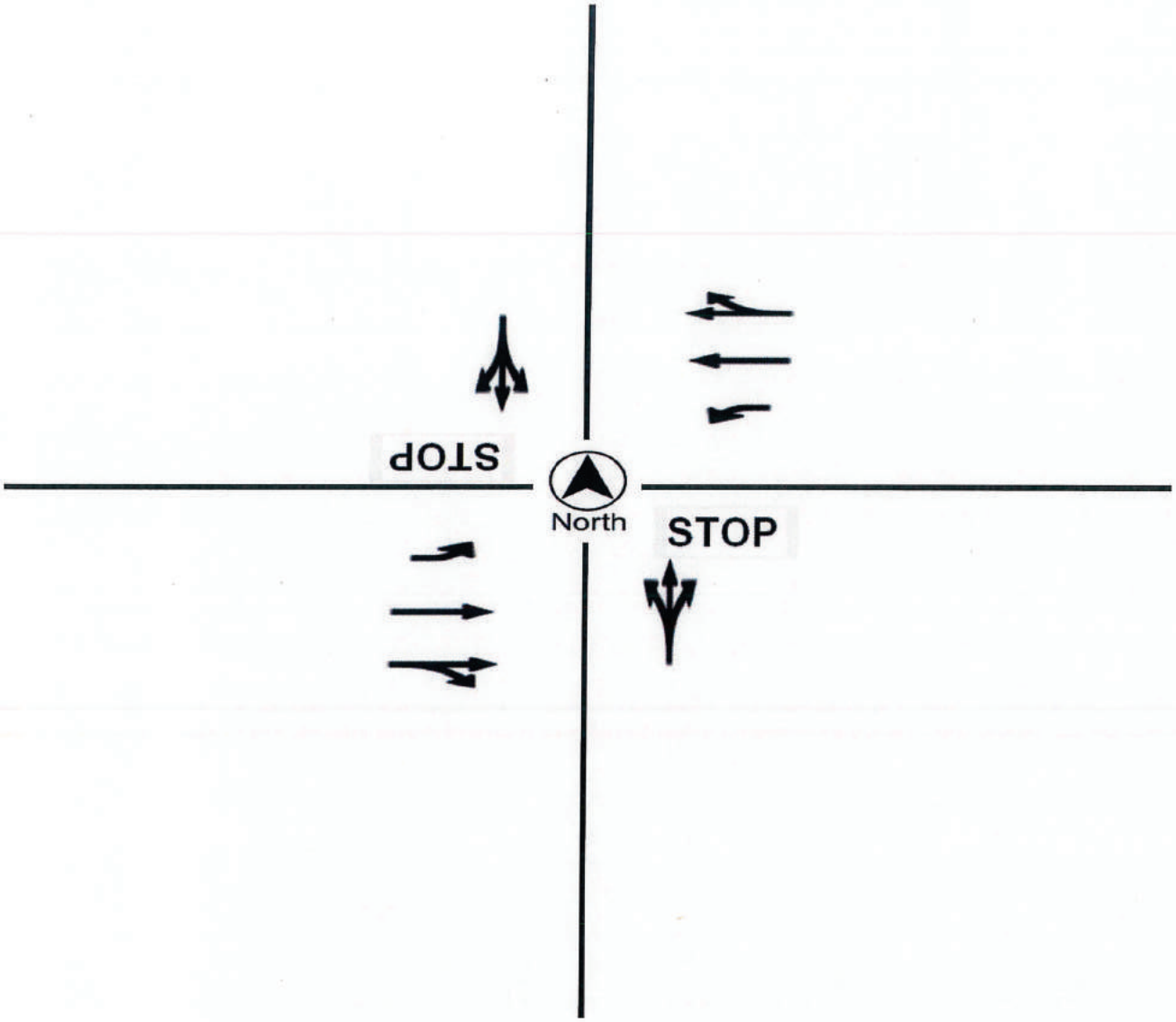
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www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	Union Valley Pkwy @ Foxenwood Ln	**N/S STREET**	Foxenwood Ln / Foxenwood Ln
COUNTY	Santa Barbara	**E/W STREET**	Union Valley Pkwy / Union Valley Pkwy
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	N/A	**CONTROL TYPE**	Two-Way Stop

COMMENTS



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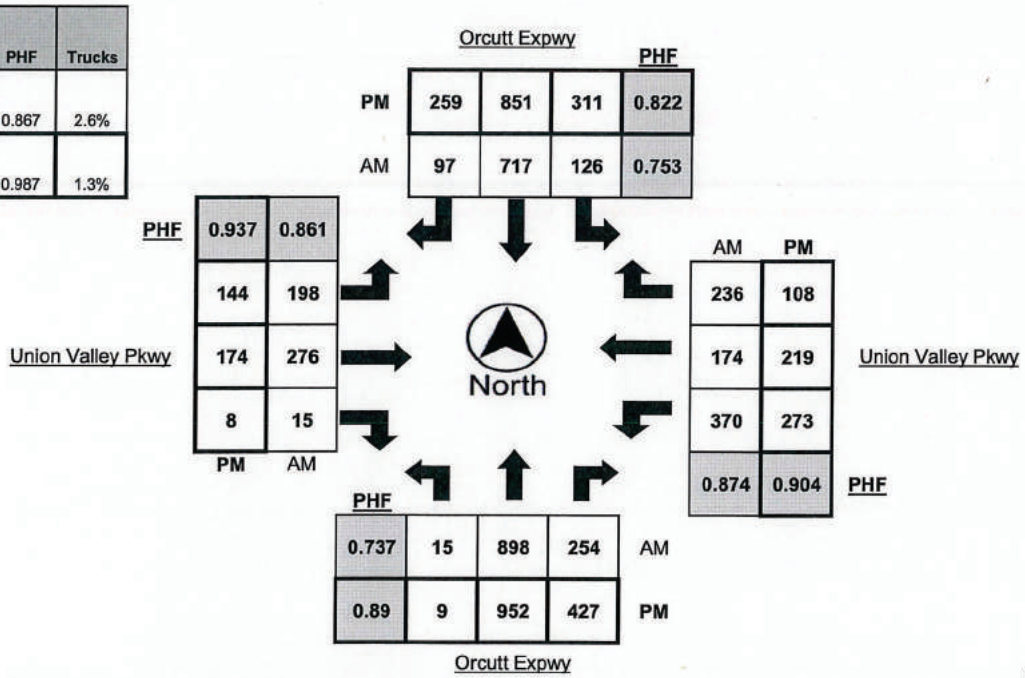
LOCATION Union Valley Pkwy @ Orcutt Expwy
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	1	125	44	9	13	166	16	6	44	44	1	0	98	21	33	3
7:15 AM - 7:30 AM	1	172	47	4	23	177	22	8	57	76	3	1	107	32	48	9
7:30 AM - 7:45 AM	4	225	78	3	39	251	22	11	36	77	5	3	113	37	59	4
7:45 AM - 8:00 AM	4	317	75	5	28	153	31	12	62	77	3	3	95	52	76	6
8:00 AM - 8:15 AM	6	184	54	4	36	136	22	7	43	46	4	1	55	53	53	6
8:15 AM - 8:30 AM	1	178	62	3	30	111	29	10	48	39	2	0	37	42	31	3
8:30 AM - 8:45 AM	4	161	35	8	31	109	32	8	44	40	3	2	57	42	42	6
8:45 AM - 9:00 AM	0	179	33	4	33	119	23	10	45	47	3	1	40	18	38	8
TOTAL	21	1541	428	40	233	1222	197	72	379	446	24	11	602	297	380	45

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	0	179	42	8	49	138	65	5	26	56	1	0	41	36	38	3
2:15 PM - 2:30 PM	0	177	56	8	67	132	39	7	37	37	2	2	50	46	35	6
2:30 PM - 2:45 PM	3	159	44	5	54	138	40	7	43	47	3	2	44	67	37	8
2:45 PM - 3:00 PM	3	174	59	6	44	172	54	5	43	37	0	0	51	49	30	7
3:00 PM - 3:15 PM	3	172	51	8	52	174	56	8	41	59	2	3	52	51	48	6
3:15 PM - 3:30 PM	1	205	80	7	31	170	55	7	42	44	2	0	60	62	45	7
3:30 PM - 3:45 PM	3	238	82	6	66	165	61	6	36	38	3	0	52	35	32	6
3:45 PM - 4:00 PM	1	261	97	10	57	186	45	5	48	31	0	1	63	49	29	7
4:00 PM - 4:15 PM	1	217	113	4	48	192	61	3	31	42	0	0	53	46	23	6
4:15 PM - 4:30 PM	3	255	101	9	72	191	61	4	35	47	0	2	69	53	27	4
4:30 PM - 4:45 PM	2	270	118	4	73	185	51	3	27	43	2	0	64	43	26	1
4:45 PM - 5:00 PM	2	257	128	6	64	190	60	5	46	34	3	0	74	46	39	4
5:00 PM - 5:15 PM	4	229	94	6	74	225	67	3	33	54	0	1	68	73	25	1
5:15 PM - 5:30 PM	1	196	87	4	100	251	81	6	38	43	3	2	67	57	18	3
5:30 PM - 5:45 PM	0	178	81	3	49	185	70	2	44	30	2	3	54	58	20	3
5:45 PM - 6:00 PM	4	152	65	4	49	153	54	3	36	24	1	0	60	44	29	1
TOTAL	31	3319	1298	98	949	2847	920	79	606	666	24	16	922	815	501	73

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	15	898	254	16	126	717	97	38	198	276	15	8	370	174	236	25
4:30 PM - 5:30 PM	9	952	427	20	311	851	259	17	144	174	8	3	273	219	108	9

	PHF	Trucks
AM	0.867	2.6%
PM	0.987	1.3%



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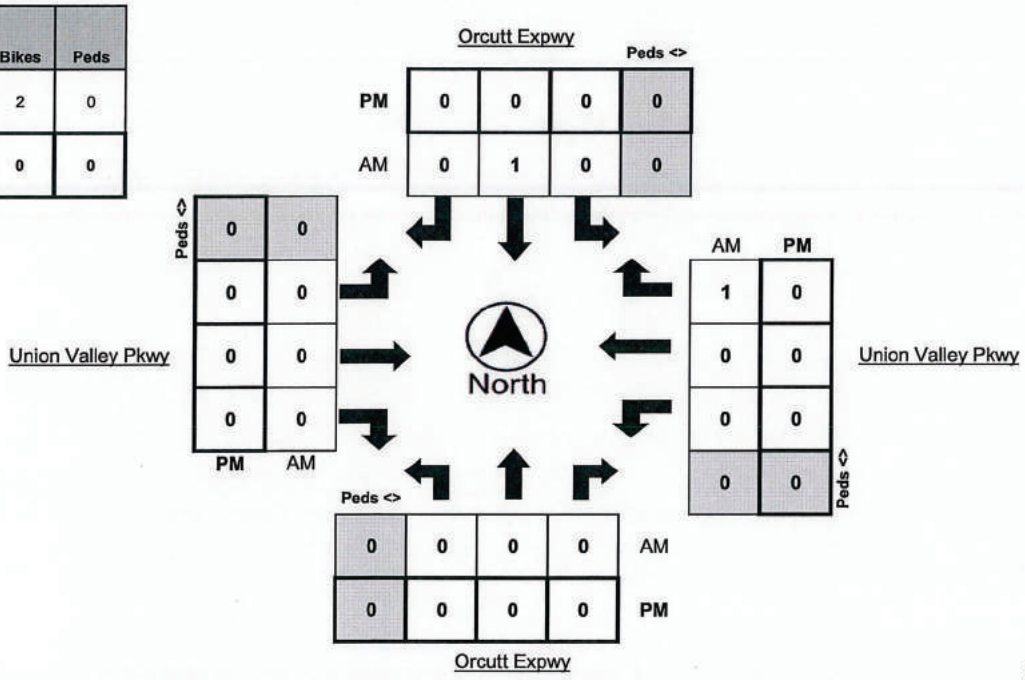
LOCATION Union Valley Pkwy @ Orcutt Expwy
LATITUDE 34.8796
COUNTY Santa Barbara
LONGITUDE -120.4366
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	0	0	0	0	3	0	0	0	2	0	0	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	2	0
PM Peak Total	0	0



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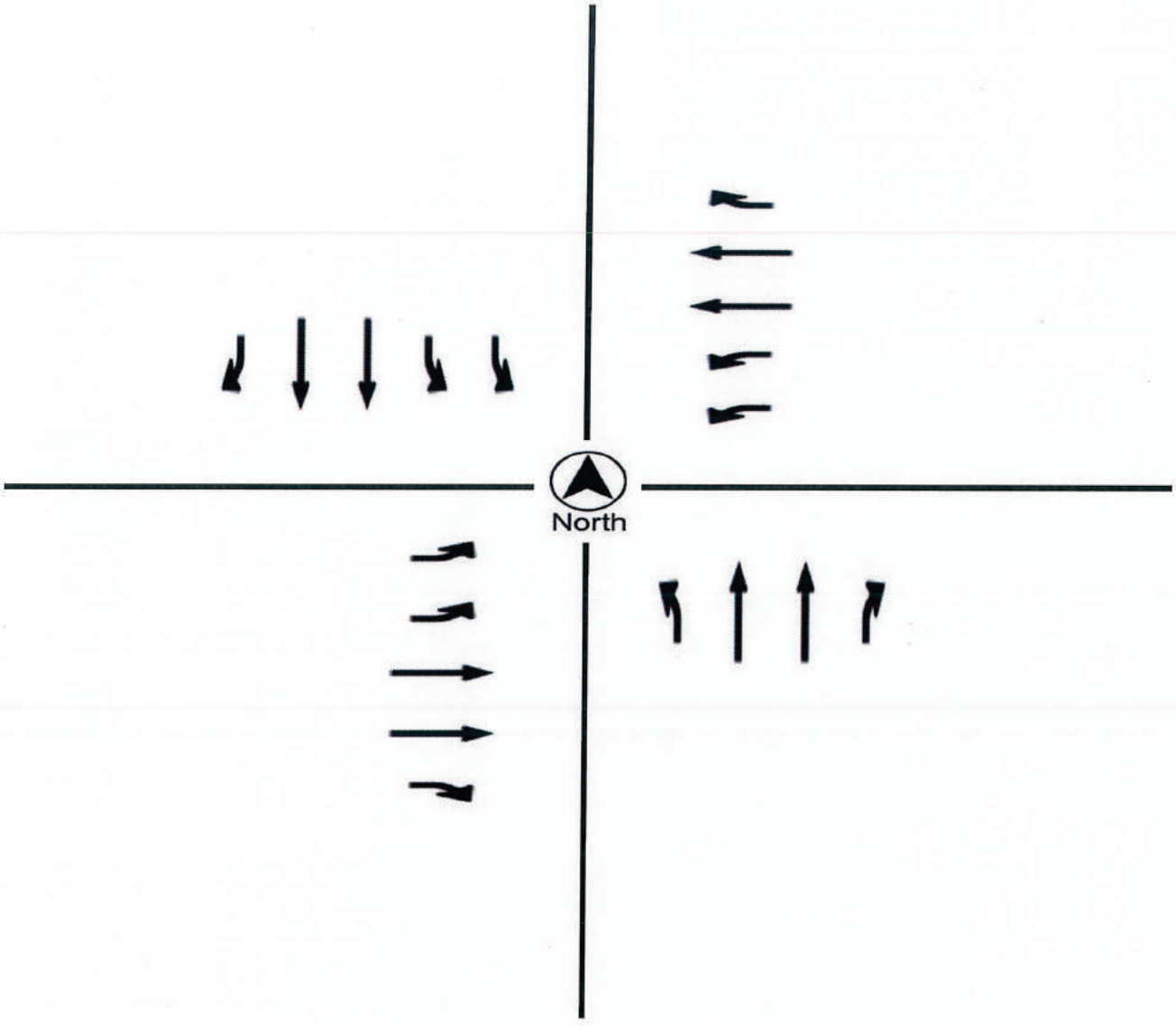
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Turning Movement Report

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Morro Bay, CA 93442

LOCATION	Union Valley Pkwy @ Orcutt Expwy	**N/S STREET**	Orcutt Expwy / Orcutt Expwy
COUNTY	Santa Barbara	**E/W STREET**	Union Valley Pkwy / Union Valley Pkwy
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	105 Seconds	**CONTROL TYPE**	Signal

COMMENTS All approaches have protected left turns.



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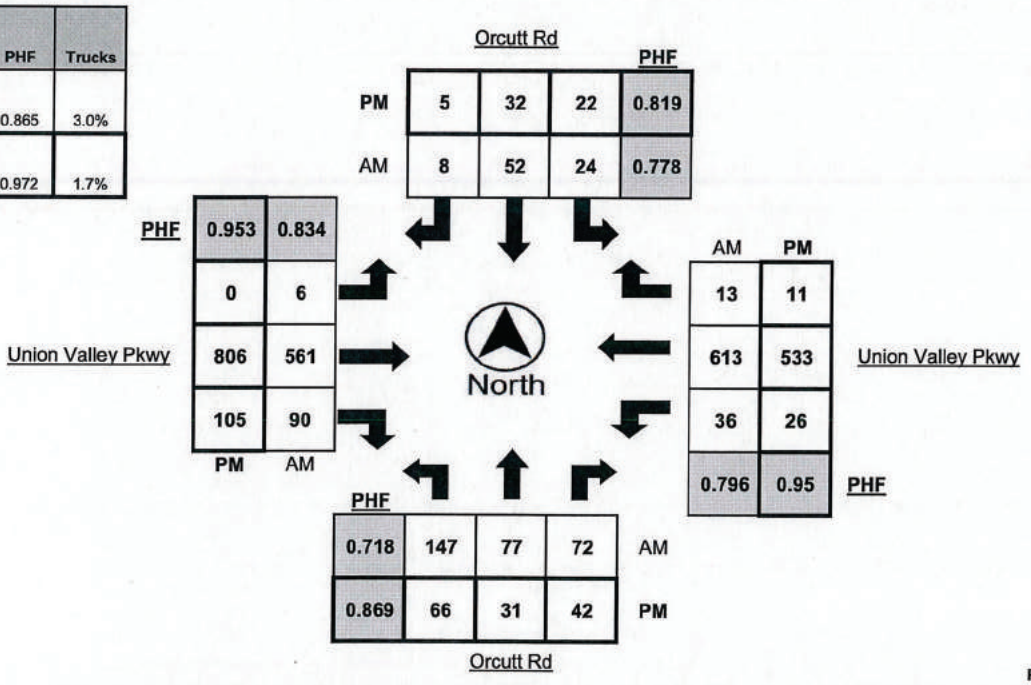
LOCATION Union Valley Pkwy @ Orcutt Rd
LATITUDE 34.8795
COUNTY Santa Barbara
LONGITUDE -120.4350
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	16	12	10	0	2	4	2	2	0	97	5	5	3	147	2	3
7:15 AM - 7:30 AM	26	12	16	3	6	11	1	1	1	127	10	4	8	145	4	6
7:30 AM - 7:45 AM	37	12	16	3	5	14	2	1	3	162	32	9	16	189	3	3
7:45 AM - 8:00 AM	49	33	21	1	6	19	2	0	0	152	31	3	10	156	4	7
8:00 AM - 8:15 AM	35	20	19	0	7	8	3	1	2	120	17	4	2	123	2	5
8:15 AM - 8:30 AM	13	14	10	0	3	6	4	1	1	121	11	4	7	103	3	4
8:30 AM - 8:45 AM	15	8	11	1	3	8	1	0	0	93	11	8	3	114	2	4
8:45 AM - 9:00 AM	16	9	4	0	10	8	1	0	0	101	16	2	7	82	5	9
TOTAL	207	120	107	8	42	78	16	6	7	973	133	39	56	1059	25	41

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
2:00 PM - 2:15 PM	16	6	10	0	9	15	1	2	0	105	31	3	12	96	2	4
2:15 PM - 2:30 PM	31	24	7	3	1	10	2	0	0	139	29	6	6	103	2	5
2:30 PM - 2:45 PM	24	10	19	3	4	5	0	0	0	129	10	6	1	123	2	5
2:45 PM - 3:00 PM	13	9	7	3	3	8	5	1	0	127	19	2	9	111	2	7
3:00 PM - 3:15 PM	33	12	23	3	4	8	3	1	0	145	19	6	14	127	3	6
3:15 PM - 3:30 PM	25	13	11	1	14	16	1	1	0	132	18	5	5	122	5	6
3:30 PM - 3:45 PM	17	12	12	1	2	9	0	0	0	161	29	4	10	106	4	5
3:45 PM - 4:00 PM	15	5	5	1	5	6	2	1	0	159	23	4	7	130	5	6
4:00 PM - 4:15 PM	15	12	3	0	8	11	4	1	0	193	16	2	14	103	6	5
4:15 PM - 4:30 PM	13	14	7	1	6	8	0	1	0	194	18	4	9	132	1	2
4:30 PM - 4:45 PM	13	6	12	0	2	8	1	0	0	222	17	2	9	123	1	2
4:45 PM - 5:00 PM	20	7	13	0	7	4	2	0	0	194	28	3	5	135	5	5
5:00 PM - 5:15 PM	22	6	8	1	7	9	1	0	0	190	28	5	5	134	3	1
5:15 PM - 5:30 PM	11	12	9	1	6	11	1	0	0	200	32	5	7	141	2	3
5:30 PM - 5:45 PM	9	7	12	1	5	11	1	1	0	153	18	3	10	136	3	2
5:45 PM - 6:00 PM	10	10	5	0	9	10	0	0	0	113	16	0	19	109	10	2
TOTAL	287	165	163	19	92	149	24	9	0	2556	351	60	142	1931	56	66

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	147	77	72	7	24	52	8	3	6	561	90	20	36	613	13	21
4:30 PM - 5:30 PM	66	31	42	2	22	32	5	0	0	806	105	15	26	533	11	11

	PHF	Trucks
AM	0.865	3.0%
PM	0.972	1.7%



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

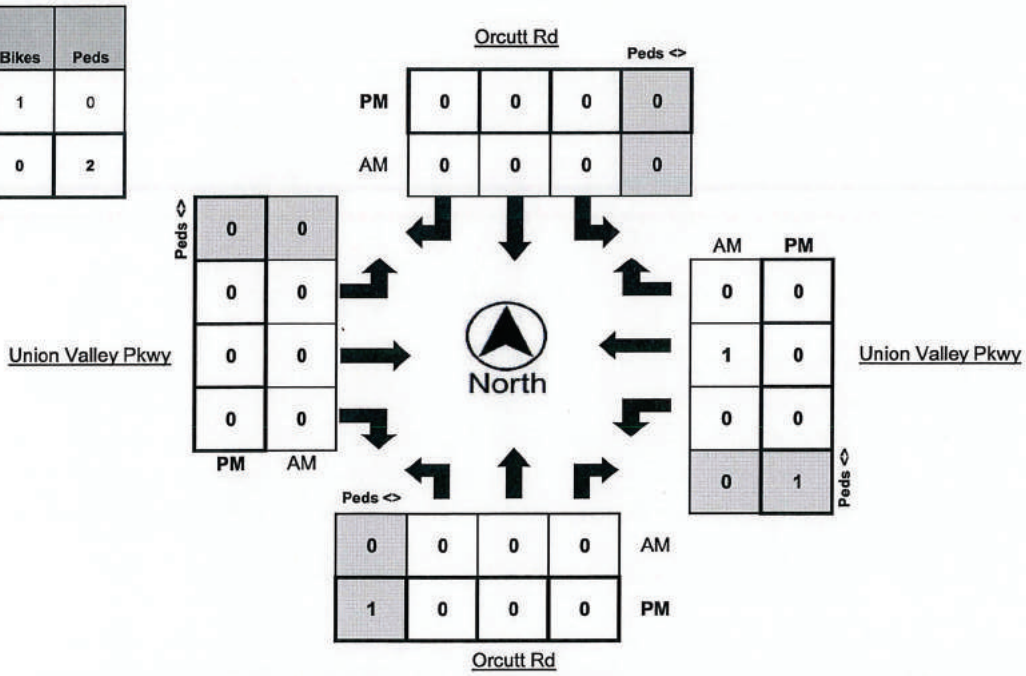
LOCATION Union Valley Pkwy @ Orcutt Rd
LATITUDE 34.8795
COUNTY Santa Barbara
LONGITUDE -120.4350
COLLECTION DATE Tuesday, December 17, 2019
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
3:30 PM - 3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0

	Bikes	Peds
AM Peak Total	1	0
PM Peak Total	0	2



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Hanford, CA 93230

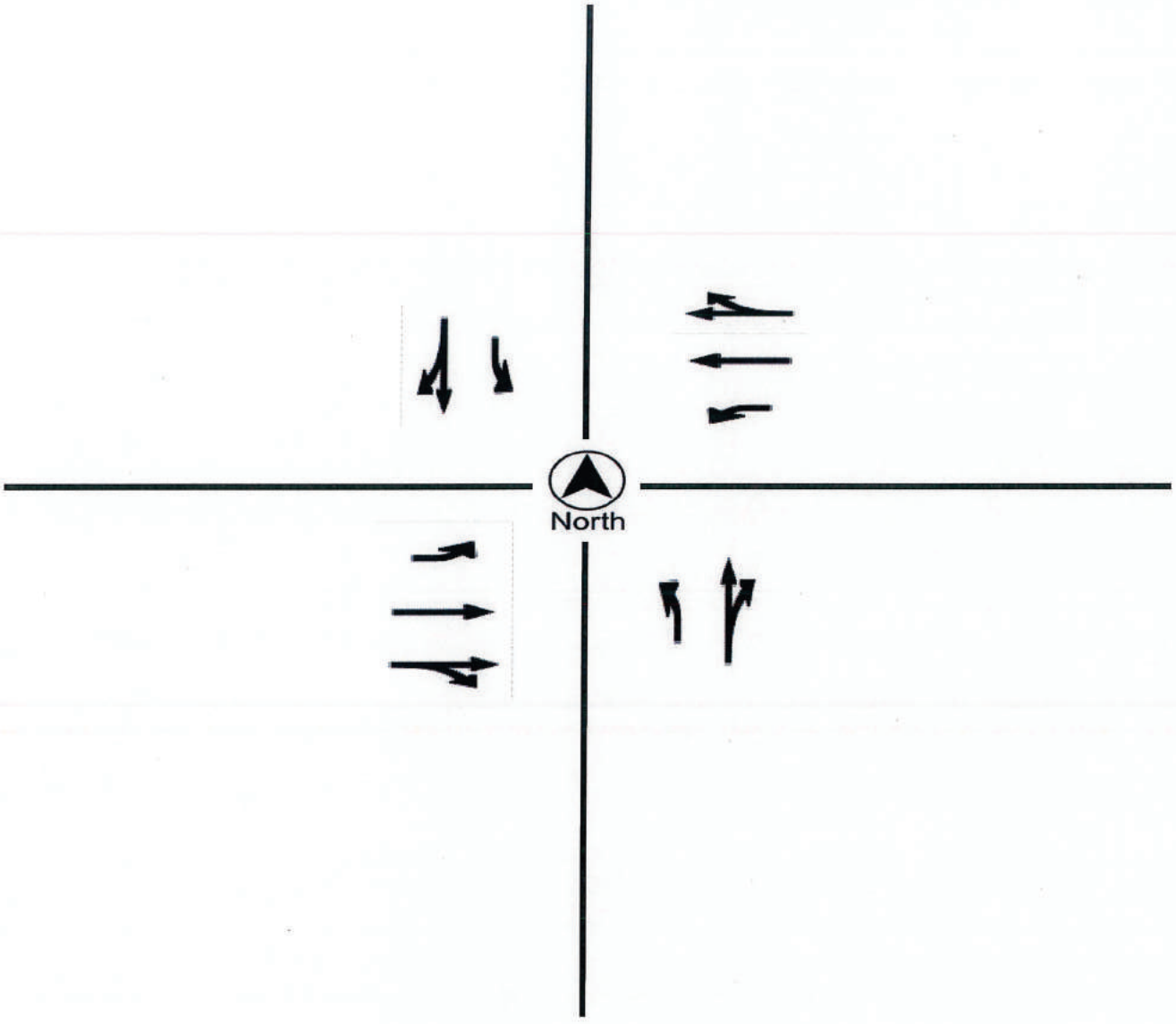
800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

LOCATION	Union Valley Pkwy @ Orcutt Rd	**N/S STREET**	Orcutt Rd / Orcutt Rd
COUNTY	Santa Barbara	**E/W STREET**	Union Valley Pkwy / Union Valley Pkwy
COLLECTION DATE	Tuesday, December 17, 2019	**WEATHER**	Clear
CYCLE TIME	89 Seconds	**CONTROL TYPE**	Signal

COMMENTS All approaches have protected left turns.



ASSOCIATED TRANSPORTATION ENGINEERS

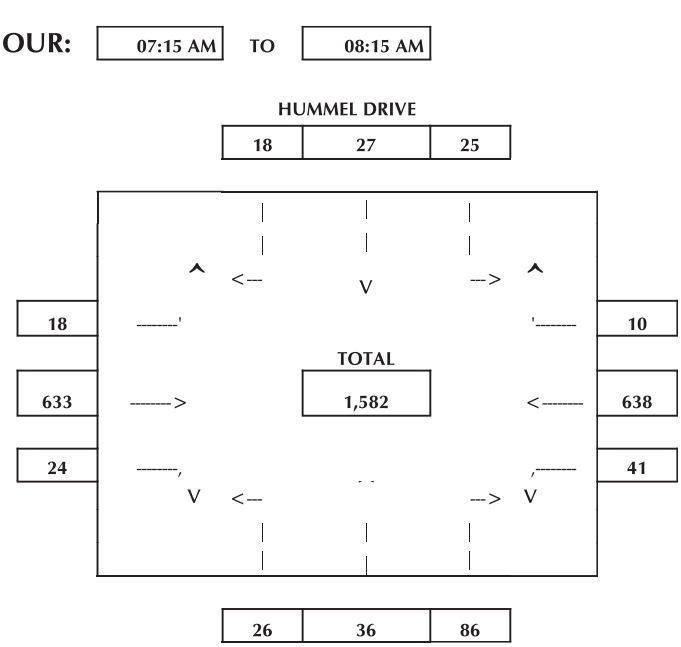
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT: RICHARDS RANCH | PROJECT #: 21069 | COUNT DATE: 4-27-22 | FILE NAME: 06_AM

N-S Approach: HUMMEL DRIVE | COUNT TIME: 07:00 AM TO 8:30

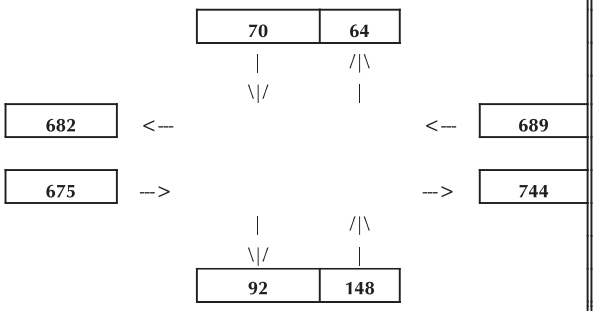
E-W Approach: UNION VALLEY PARKWAY | CITY: SANTA MARIA | WEATHER: SUNNY

PEAK HOUR: 07:15 AM TO 08:15 AM



CONTROL TYPE: NONE

ARRIVAL / DEPARTURE VOLUMES



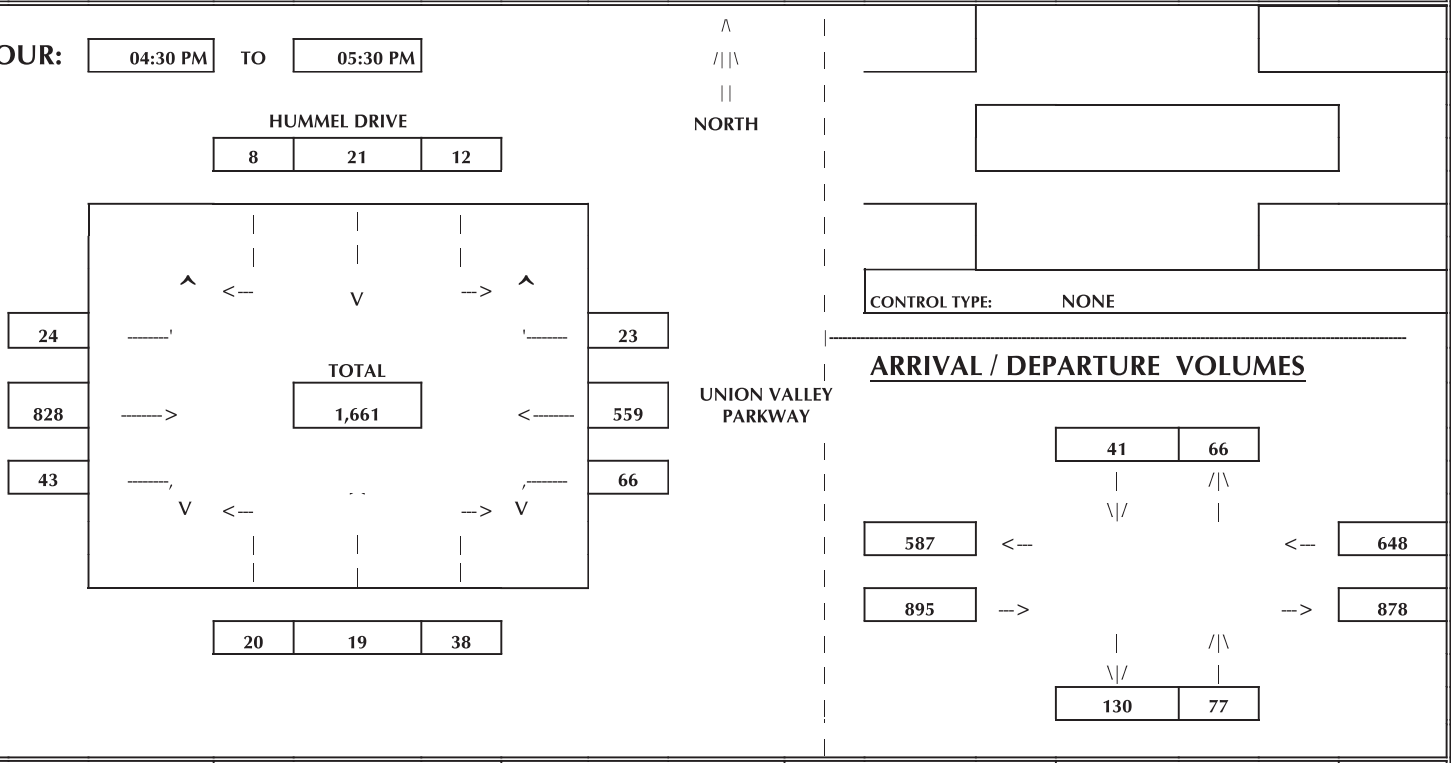
TIME PERIOD From	---	To	NORTHBOUND Left	Thru	Right	SOUTHBOUND Left	Thru	Right	EASTBOUND Left	Thru	Right	WESTBOUND Left	Thru	Right	TOTAL VOLUMES
COUNT DATA															
07:00 AM	---	07:15 AM	1	3	15	9	3	2	3	103	6	3	154	2	304
07:15 AM	---	07:30 AM	7	12	30	14	9	6	12	246	7	13	306	6	668
07:30 AM	---	07:45 AM	12	19	55	24	22	9	15	422	16	24	512	7	1137
07:45 AM	---	08:00 AM	20	30	83	28	26	15	17	595	25	39	673	8	1559
08:00 AM	---	08:15 AM	27	39	101	34	30	20	21	736	30	44	792	12	1886
08:15 AM	---	08:30 AM	29	43	119	36	34	21	27	863	35	50	905	14	2176
08:30 AM	---	08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	---	09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL BY PERIOD															
07:00 AM	---	07:15 AM	1	3	15	9	3	2	3	103	6	3	154	2	304
07:15 AM	---	07:30 AM	6	9	15	5	6	4	9	143	1	10	152	4	364
07:30 AM	---	07:45 AM	5	7	25	10	13	3	3	176	9	11	206	1	469
07:45 AM	---	08:00 AM	8	11	28	4	4	6	2	173	9	15	161	1	422
08:00 AM	---	08:15 AM	7	9	18	6	4	5	4	141	5	5	119	4	327
08:15 AM	---	08:30 AM	2	4	18	2	4	1	6	127	5	6	113	2	290
08:30 AM	---	08:45 AM	-29	-43	-119	-36	-34	-21	-27	-863	-35	-50	-905	-14	-2176
08:45 AM	---	09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTALS															
07:00 AM	---	08:00 AM	20	30	83	28	26	15	17	595	25	39	673	8	1559
07:15 AM	---	08:15 AM	26	36	86	25	27	18	18	633	24	41	638	10	1582
07:30 AM	---	08:30 AM	22	31	89	22	25	15	15	617	28	37	599	8	1508
07:45 AM	---	08:45 AM	-12	-19	-55	-24	-22	-9	-15	-422	-16	-24	-512	-7	-1137
08:00 AM	---	09:00 AM	-20	-30	-83	-28	-26	-15	-17	-595	-25	-39	-673	-8	-1559

ASSOCIATED TRANSPORTATION ENGINEERS

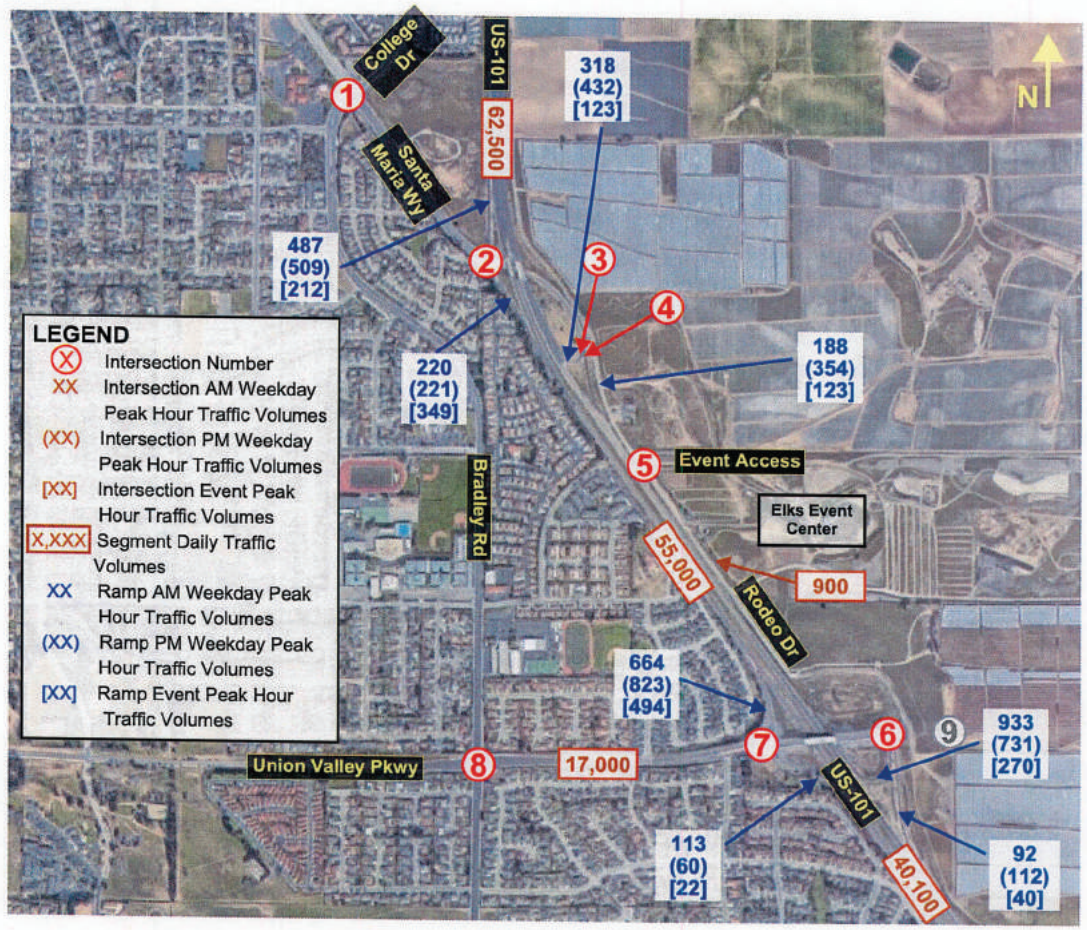
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	RICHARDS RANCH	PROJECT #: 21069	COUNT DATE: 4-28-22		FILE NAME: 06_PM
N-S Approach:	HUMMEL DRIVE		COUNT TIME:	04:00 PM TO 5:30	
E-W Approach:	UNION VALLEY PARKWAY		CITY: SANTA MARIA		WEATHER: SUNNY

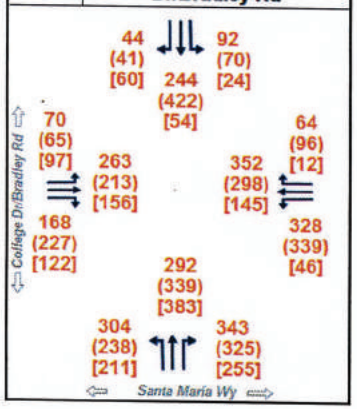
PEAK HOUR: 04:30 PM TO 05:30 PM



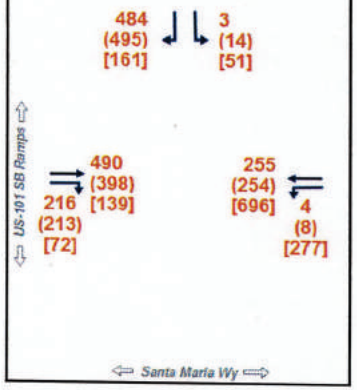
TIME PERIOD From	---	To	NORTHBOUND Left	Thru	Right	SOUTHBOUND Left	Thru	Right	EASTBOUND Left	Thru	Right	WESTBOUND Left	Thru	Right	TOTAL VOLUMES
COUNT DATA															
04:00 PM	---	04:15 PM	2	3	14	0	2	2	0	197	13	11	123	8	375
04:15 PM	---	04:30 PM	7	4	26	6	3	5	6	393	24	28	261	16	779
04:30 PM	---	04:45 PM	13	6	34	9	6	7	14	623	29	42	390	20	1193
04:45 PM	---	05:00 PM	22	12	41	12	8	10	21	822	43	58	527	26	1602
05:00 PM	---	05:15 PM	25	17	52	13	15	10	26	1019	52	76	670	34	2009
05:15 PM	---	05:30 PM	27	23	64	18	24	13	30	1221	67	94	820	39	2440
05:30 PM	---	05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	---	06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL BY PERIOD															
04:00 PM	---	04:15 PM	2	3	14	0	2	2	0	197	13	11	123	8	375
04:15 PM	---	04:30 PM	5	1	12	6	1	3	6	196	11	17	138	8	404
04:30 PM	---	04:45 PM	6	2	8	3	3	2	8	230	5	14	129	4	414
04:45 PM	---	05:00 PM	9	6	7	3	2	3	7	199	14	16	137	6	409
05:00 PM	---	05:15 PM	3	5	11	1	7	0	5	197	9	18	143	8	407
05:15 PM	---	05:30 PM	2	6	12	5	9	3	4	202	15	18	150	5	431
05:30 PM	---	05:45 PM	-27	-23	-64	-18	-24	-13	-30	-1,221	-67	-94	-820	-39	-2440
05:45 PM	---	06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY TOTALS															
04:00 PM	---	05:00 PM	22	12	41	12	8	10	21	822	43	58	527	26	1602
04:15 PM	---	05:15 PM	23	14	38	13	13	8	26	822	39	65	547	26	1634
04:30 PM	---	05:30 PM	20	19	38	12	21	8	24	828	43	66	559	23	1661
04:45 PM	---	05:45 PM	-13	-6	-34	-9	-6	-7	-14	-623	-29	-42	-390	-20	-1193
05:00 PM	---	06:00 PM	-22	-12	-41	-12	-8	-10	-21	-822	-43	-58	-527	-26	-1602



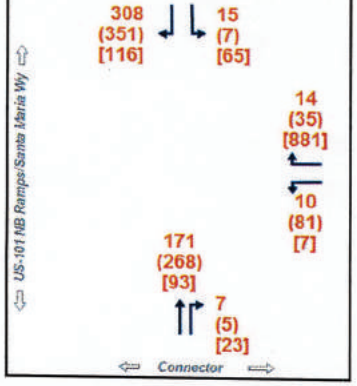
1 Santa Maria Wy/College Dr/Bradley Rd



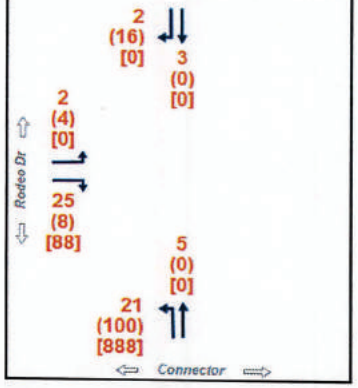
2 Santa Maria Wy/US-101 SB Ramps



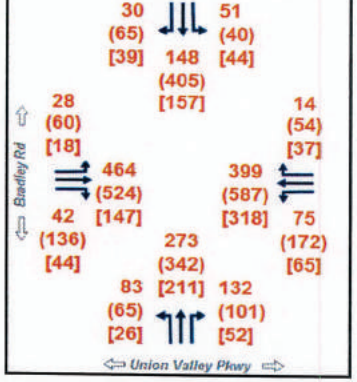
3 Connector/US-101 NB Ramps/Santa Maria Wy



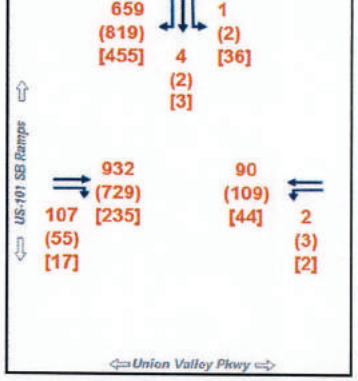
4 Connector/Rodeo Dr



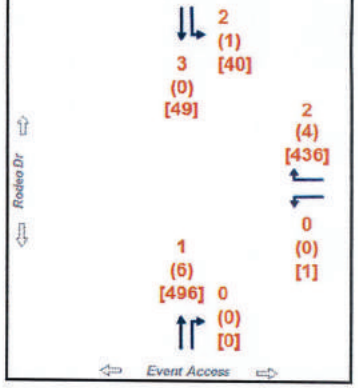
8 Union Valley Pkwy/Bradley Rd



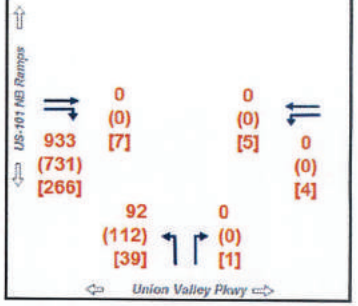
7 Union Valley Pkwy/US-101 SB Ramps



5 Event Access/Rodeo Dr



6 Union Valley Pkwy/US-101 NB Ramps



9 Union Valley Pkwy/Rodeo Drive



PROJECT TRIP GENERATION CALCULATION WORKSHEETS

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 1 WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Gas Station with Mart	10 Fueling Positions	1.00	200.80	2,008	16.06	161	50%	81	50%	80	18.42	184	50%	92	50%	92
Lube Station	3 Bays	1.00	40.00	120	3.00	9	67%	6	33%	3	4.85	15	56%	8	44%	7
Totals:	**13 SF**			**2,128**		**170**		**87**		**83**		**199**		**100**		**99**

(a) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(b) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2A WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Shopping Center(a)	55,000 SF	1.00	94.49	5,197	3.53	194	62%	120	38%	74	9.84	541	48%	260	52%	281
Restaurant - Shopping Center (b)	5,000 SF	1.00	107.20	536	9.57	48	55%	26	45%	22	9.05	45	61%	27	39%	18
Restaurant Pad 1 - Drive Thru (c)	3,750 SF	1.00	467.48	1,753	44.61	167	51%	85	49%	82	33.03	124	52%	64	48%	60
Restaurant Pad 2 - Drive Thru (c)	3,500 SF	1.00	467.48	1,636	44.61	156	51%	80	49%	76	33.03	116	52%	60	48%	56
Restaurant Pad 3 - No Drive Thru (	3,000 SF	1.00	97.14	291	1.43	4	50%	2	50%	2	12.55	38	55%	21	45%	17
Restaurant Pad 4 - No Drive Thru (	3,000 SF	1.00	97.14	291	1.43	4	50%	2	50%	2	12.55	38	55%	21	45%	17
Restaurant Pad 5 - Drive Thru (c)	2,500 SF	1.00	467.48	1,169	44.61	112	51%	57	49%	55	33.03	83	52%	43	48%	40
Restaurant Pad 6 - Drive Thru (c)	3,000 SF	1.00	467.48	1,402	44.61	134	51%	68	49%	66	33.03	99	52%	51	48%	48
Restaurant Pad 7 - Drive Thru (c)	2,500 SF	1.00	467.48	1,169	44.61	112	51%	57	49%	55	33.03	83	52%	43	48%	40
Totals:	**81,250 SF**			**13,444**		**931**		**497**		**434**		**1,167**		**590**		**577**

(a) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(b) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2B WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Mini Storage(c)	39,500 SF	1.00	1.45	57	0.09	4	59%	2	41%	2	0.15	6	47%	3	53%	3
Totals:	**39,500 SF**			**57**		**4**		**2**		**2**		**6**		**3**		**3**

(a) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 3 WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
Car Wash-Automated (a)	1 Tunnel	1.00	249.00	249	8.50	9	50%	5	50%	4	23.70	24	50%	12	50%	12
Restaurant Pad 8 - Drive Thru (c)	3,500 SF	1.00	467.48	1,636	44.61	156	51%	80	49%	76	33.03	116	52%	60	48%	56
Totals:	**3,501 SF**			**1,885**		**165**		**85**		**80**		**140**		**72**		**68**

(a) Trip generation for Car Wash-Automated derived from local studies.
(b) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4A WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																
Three Story Apartments(a)	400 DU	1.00	6.60	2,639	0.37	147	24%	35	76%	112	0.48	193	63%	122	37%	71
Totals:	**400 DU**			**2,639**		**147**		**35**		**112**		**193**		**122**		**71**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4B WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																
Two Story Townhomes(a)	95 DU	1.00	6.60	627	0.37	35	24%	8	76%	27	0.48	46	63%	29	37%	17
Totals:	**95 DU**			**627**		**35**		**8**		**27**		**46**		**29**		**17**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - WITH NO INTERNAL TRIP FACTOR

Use	Size	Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																
High Turnover Sit Down Restaurant (a)	5,000 SF	1.00	107.20	536	9.57	48	55%	26	45%	22	9.05	45	61%	27	39%	18
2 Restaurants without Drive Thru (b)	6,000 SF	1.00	97.14	583	1.43	9	50%	5	50%	4	12.55	75	55%	41	45%	34
6 Drive Thru Restaurants (c)	18,750 SF	1.00	467.48	8,765	44.61	836	51%	426	49%	410	33.03	619	52%	322	48%	297
Shopping Center (d)	55,000 SF	1.00	94.49	5,197	3.53	194	62%	120	38%	74	9.84	541	48%	260	52%	281
Gas Station with Mart (e)	10 Fueling Positions	1.00	200.80	2,008	16.06	161	50%	81	50%	80	18.42	184	50%	92	50%	92
Car Wash-Automated (f)	1 Tunnel	1.00	249.00	249	8.50	9	50%	5	50%	4	23.70	24	50%	12	50%	12
Lube Station (g)	3 Bays	1.00	40.00	120	3.00	9	67%	6	33%	3	4.85	15	56%	8	44%	7
Mini Storage (h)	39,500 SF	1.00	1.45	57	0.09	4	59%	2	41%	2	0.15	6	47%	3	53%	3
Subtotals:	**124,250 SF**			**17,515**		**1,270**		**671**		**599**		**1,509**		**765**		**744**
RESIDENTIAL																
Three Story Apartments (i)	400 DU	1.00	6.60	2,639	0.37	147	24%	35	76%	112	0.48	193	63%	122	37%	71
Two Story Townhomes (i)	95 DU	1.00	6.60	627	0.37	35	24%	8	76%	27	0.48	46	63%	29	37%	17
Subtotals:	**495 DU**			**3,266**		**182**		**43**		**139**		**239**		**151**		**88**
Totals:				**20,781**		**1,452**		**714**		**738**		**1,748**		**916**		**832**

(a) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(b) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(e) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(f) Trip generation for Car Wash-Automated derived from local studies.
(g) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.
(h) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).
(i) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

TRIP TYPE	ADT	AM PEAK	PM PEAK
Internal (30% ADT, 13% AM, 45% PM) (45% for Car Wash)	6,272	192	787
External (70% ADT, 87% AM, 55% PM) (45% for Car Wash)	14,509	1,260	961

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 1 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Gas Station with Mart	10 Fueling Positions	0.70	0.87	0.55	200.80	1,406	16.06	140	50%	70	50%	70	18.42	101	50%	51	50%	50
Lube Station	3 Bays	0.70	0.87	0.55	40.00	84	3.00	8	67%	5	33%	3	4.85	8	56%	4	44%	4
Totals:						**1,490**		**148**		**75**		**73**		**109**		**55**		**54**

(a) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(b) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.

GAS STATION PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Gas Station	1,406	140	70	70	101	51	50
75% Pass-By Trips - Applied to Gas Station	1,055	105	53	52	76	38	38
25% Primary Trips - Remainder Gas Station	352	35	17	18	25	13	12

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	352	35	17	18	25	13	12
Lube Station - External	84	8	5	3	8	4	4
Total External Trips	**436**	**43**	**22**	**21**	**33**	**17**	**16**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2A WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Shopping Center(a)	55,000 SF	0.70	0.87	0.55	94.49	3,638	3.53	169	62%	105	38%	64	9.84	298	48%	143	52%	155
Restaurant - Shopping Center (b)	5,000 SF	0.70	0.87	0.55	107.20	375	9.57	42	55%	23	45%	19	9.05	25	61%	15	39%	10
Restaurant Pad 1 - Drive Thru (c)	3,750 SF	0.70	0.87	0.55	467.48	1,227	44.61	146	51%	74	49%	72	33.03	68	52%	35	48%	33
Restaurant Pad 2 - Drive Thru (c)	3,500 SF	0.70	0.87	0.55	467.48	1,145	44.61	136	51%	69	49%	67	33.03	64	52%	33	48%	31
Restaurant Pad 3 - No Drive Thru (d)	3,000 SF	0.70	0.87	0.55	97.14	204	1.43	4	50%	2	50%	2	12.55	21	55%	12	45%	9
Restaurant Pad 4 - No Drive Thru (d)	3,000 SF	0.70	0.87	0.55	97.14	204	1.43	4	50%	2	50%	2	12.55	21	55%	12	45%	9
Restaurant Pad 5 - Drive Thru (c)	2,500 SF	0.70	0.87	0.55	467.48	818	44.61	97	51%	49	49%	48	33.03	45	52%	23	48%	22
Restaurant Pad 6 - Drive Thru (c)	3,000 SF	0.70	0.87	0.55	467.48	982	44.61	116	51%	59	49%	57	33.03	54	52%	28	48%	26
Restaurant Pad 7 - Drive Thru (c)	2,500 SF	0.70	0.87	0.55	467.48	818	44.61	97	51%	49	49%	48	33.03	45	52%	23	48%	22
Totals:	**81,250 SF**					**9,411**		**811**		**432**		**379**		**641**		**324**		**317**

(a) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(b) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Retail	3,638	169	105	64	298	143	155
40% Pass-By Trips - Applied to Retail	1,455	68	42	26	119	57	62
60% Primary Trips - Remainder Retail	2,183	101	63	38	179	86	93

SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	783	50	27	23	67	39	28
43% Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	337	21	11	10	29	16	13
57% Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	446	29	16	13	38	23	15

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Drive Thru	4,990	592	300	292	276	142	134
55% Pass-By Trips - Applied to Restaurant Drive Thru	2,745	326	165	161	152	78	74
45% Primary Trips - Remainder Restaurant Thru	2,246	266	135	131	124	64	60

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	4,875	397	214	183	341	173	168
Total External Trips	**4,875**	**397**	**214**	**183**	**341**	**173**	**168**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2B WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Mini Storage(c)	39,500 SF	0.70	0.87	0.55	1.45	40	0.09	3	59%	2	41%	1	0.15	3	47%	1	53%	2
Totals:	**39,500 SF**					**40**		**3**		**2**		**1**		**3**		**1**		**2**

(a) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 3 WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Car Wash-Automated (a)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Restaurant Pad 8 - Drive Thru (c)	3,500 SF	0.70	0.87	0.55	467.48	1,145	44.61	136	51%	69	49%	67	33.03	64	52%	33	48%	31
Totals:	**3,501 SF**					**1,282**		**141**		**72**		**69**		**77**		**40**		**37**

(a) Trip generation for Car Wash-Automated derived from local studies.
(b) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

CAR WASH PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Car Wash	137	5	3	2	13	7	6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	1
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Pads	1,145	136	69	67	64	33	31
55% Pass-By Trips - Applied to Restaurant Pads	630	75	38	37	35	18	17
45% Primary Trips - Remainder Restaurant Pads	515	61	31	30	29	15	14

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	625	65	33	32	39	20	19
Total External Trips	**625**	**65**	**33**	**32**	**39**	**20**	**19**

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4A WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																		
Three Story Apartments(a)	400 DU	0.70	0.87	0.55	6.60	1,847	0.37	128	24%	31	76%	97	0.48	106	63%	67	37%	39
Totals:	**400 DU**					**1,847**		**128**		**31**		**97**		**106**		**67**		**39**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4B WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL																		
Two Story Townhomes(a)	95 DU	0.70	0.87	0.55	6.60	439	0.37	30	24%	7	76%	23	0.48	25	63%	16	37%	9
Totals:	**95 DU**					**439**		**30**		**7**		**23**		**25**		**16**		**9**

(a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

Associated Transportation Engineers
Trip Generation Worksheet

RICHARDS RANCH - SANTA MARIA (#21069) - WITH INTERNAL TRIP FACTORS

Use	Size	ADT Internal Factor	AM Internal Factor	PM Internal Factor	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
High Turnover Sit Down Restaurant (a)	5,000 SF	0.70	0.87	0.55	107.20	375	9.57	42	55%	23	45%	19	9.05	25	61%	15	39%	10
2 Restaurants without Drive Thru (b)	6,000 SF	0.70	0.87	0.55	97.14	408	1.43	7	50%	4	50%	3	12.55	41	55%	23	45%	18
6 Drive Thru Restaurants (c)	18,750 SF	0.70	0.87	0.55	467.48	6,136	44.61	728	51%	371	49%	357	33.03	341	52%	177	48%	164
Shopping Center (d)	55,000 SF	0.70	0.87	0.55	94.49	3,638	3.53	169	62%	105	38%	64	9.84	298	48%	143	52%	155
Gas Station with Mart (e)	10 Fueling Positions	0.70	0.87	0.55	200.80	1,406	16.06	140	50%	70	50%	70	18.42	101	50%	51	50%	50
Car Wash-Automated (f)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Lube Station (g)	3 Bays	0.70	0.87	0.55	40.00	84	3.00	8	67%	5	33%	3	4.85	8	56%	4	44%	4
Mini Storage (h)	39,500 SF	0.70	0.87	0.55	1.45	40	0.09	3	59%	2	41%	1	0.15	3	47%	1	53%	2
Subtotals:	**124,250 SF**					**12,224**		**1,102**		**583**		**519**		**830**		**421**		**409**
RESIDENTIAL																		
Three Story Apartments (i)	400 DU	0.70	0.87	0.55	6.60	1,847	0.37	128	24%	31	76%	97	0.48	106	63%	67	37%	39
Two Story Townhomes (i)	95 DU	0.70	0.87	0.55	6.60	439	0.37	30	24%	7	76%	23	0.48	25	63%	16	37%	9
Subtotals:	**495 DU**					**2,286**		**158**		**38**		**120**		**131**		**83**		**48**
Totals:						**14,510**		**1,260**		**621**		**639**		**961**		**504**		**457**

(a) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
(b) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.
(c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.
(d) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour.
(e) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.
(f) Trip generation for Car Wash-Automated derived from local studies.
(g) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.
(h) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).
(i) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Retail	3,638	169	105	64	298	143	155
40% Pass-By Trips - Applied to Retail	1,455	68	42	26	119	57	62
60% Primary Trips - Remainder Retail	2,183	101	63	38	179	86	93

SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	783	49	27	22	66	38	28
43% Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	337	21	12	9	28	16	12
57% Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	446	28	15	13	38	22	16

FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Restaurant Pads	6,136	728	371	357	341	177	164
55% Pass-By Trips - Applied to Restaurant Pads	3,375	400	204	196	188	98	90
45% Primary Trips - Remainder Restaurant Pads	2,761	328	167	161	153	79	74

GAS STATION PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Gas Station	1,406	140	70	70	101	51	50
75% Pass-By Trips - Applied to Gas Station	1,055	105	53	52	76	38	38
25% Primary Trips - Remainder Gas Station	352	35	17	18	25	13	12

CAR WASH PASS-BY & PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External Trips - Car Wash	137	5	3	2	13	7	6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	1
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5

TOTAL PASS-BY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Shopping Center	1,455	68	42	26	119	57	62
Sit Down Restaurant and Fast Casual Restaurant	337	21	12	9	28	16	12
Fast Food Restaurant	3,375	400	204	196	188	98	90
Gas Station	1,055	105	53	52	76	38	38
Car Wash	27	1	1	0	3	2	1
Total Primary Trips	**6,249**	**595**	**312**	**283**	**414**	**211**	**203**

TOTAL EXTERNAL PRIMARY TRIPS	**ADT**	**AM Total**	**AM In**	**AM Out**	**PM Total**	**PM In**	**PM Out**
Commercial External	5,852	496	264	232	405	205	200
Lube Station - External	84	8	5	3	8	4	4
Mini Storage - External	40	3	2	1	3	1	2
Residential - External	2,286	158	38	120	131	83	48
Total External Trips	**8,262**	**665**	**309**	**356**	**547**	**293**	**254**

CAR-WASH TRIP GENERATION CALCULATION WORKSHEETS

TRIP GENERATION AT 2 LOCAL FUEL DEPOT SITES (Walnut & Mesa)

WALNUT CAR WASH

	Pay at Pump/Store	Pay at Pedestal	Pay TOTAL	Pay % Pump/Store	Pay % Pedestal
May-18	1,038	836	1,874	55%	45%
Jun-18	1,653	1,591	3,244	51%	49%
Jul-18	1,774	1,712	3,486	51%	49%
Aug-18	1,754	1,624	3,378	52%	48%
Sep-18	1,667	1,529	3,196	52%	48%
Oct-18	1,164	1,157	2,321	50%	50%
Nov-18	1,115	987	2,102	53%	47%
Dec-18	0	0	0		
Jan-19	392	319	711	55%	45%
Feb-19	227	185	412	55%	45%
Mar-19	409	313	722	57%	43%
Apr-19	1,271	1,105	2,376	53%	47%
May-19	848	718	1,566	54%	46%
Totals >	13,312	12,076	25,388	52%	48%

MESA CAR WASH

	Pay at Pump/Store	Pay at Pedestal	Pay TOTAL	Pay % Pump/Store	Pay % Pedestal
May-18	2,727	4,103	6,830	40%	60%
Jun-18	2,970	4,029	6,999	42%	58%
Jul-18	3,193	4,293	7,486	43%	57%
Aug-18	3,143	4,321	7,464	42%	58%
Sep-18	3,220	4,438	7,658	42%	58%
Oct-18	2,458	3,212	5,670	43%	57%
Nov-18	2,133	2,789	4,922	43%	57%
Dec-18	1,288	1,709	2,997	43%	57%
Jan-19	882	1,164	2,046	43%	57%
Feb-19	571	925	1,496	38%	62%
Mar-19	1,394	2,278	3,672	38%	62%
Apr-19	2,581	3,789	6,370	41%	59%
Totals >	26,560	37,050	63,610	42%	58%
TOTAL BOTH >	**39,872**	**49,126**	**88,998**	**45%**	**55%**

TRIP GENERATION RATES

Days in 2-Year Period > 716 (number of days data was collected)
Car Washes Per Day> 124.30 (88,998 washes / 716 days)

ADT = 249 (a)
AM Peak Hour = 8.5 (b)
PM Peak Hour = 23.7 (c)

(a) ADT rate based on local studies (124.3 cars per day x 2 = 249).
(b) AM peak hour rate based on local studies (3.4% of car washes occurred during the AM peak hour).
(c) PM peak hour rate based on local studies (9.5% of car washes occurred during the PM peak hour).

ITE MIXED – USE MODEL

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RICHARDS RANCH	**Organization:**	ATE
Project Location:	SANTA MARIA	**Performed By:**	GOM
Scenario Description:	WITHOUT PASS-BY	**Date:**	18-May-22
Analysis Year:		**Checked By:**	SAS
Analysis Period:	**AM Street Peak Hour**	**Date:**	18-May-22

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821/945/941	55,000	SF	205	118	87
Restaurant	930/932/934	29,750	SF	408	209	199
Cinema/Entertainment				0		
Residential	220	495	DU	182	43	139
Hotel				0		
All Other Land Uses[2]	151	39,500	SF	4	2	2
				799	372	427

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		11	0	1	0
Restaurant	0	9		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	28	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	799	372	427
Internal Capture Percentage	13%	14%	12%
External Vehicle-Trips[5]	695	320	375
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	14%
Restaurant	19%	6%
Cinema/Entertainment	N/A	N/A
Residential	7%	21%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	RICHARDS RANCH	**Organization:**	ATE
Project Location:	SANTA MARIA	**Performed By:**	GOM
Scenario Description:	WITHOUT PASS-BY	**Date:**	18-May-22
Analysis Year:		**Checked By:**	SAS
Analysis Period:	**PM Street Peak Hour**	**Date:**	18-May-22

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	821/945/941	55,000	SF	432	210	222
Restaurant	930/932/934	29,750	SF	347	184	163
Cinema/Entertainment				0		
Residential	220	495	DU	239	151	88
Hotel				0		
All Other Land Uses[2]	151	39,500	SF	6	3	3
				1,024	548	476

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		53	0	58	0
Restaurant	0	67		0	24	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	21	18	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,024	548	476
Internal Capture Percentage	47%	44%	51%
External Vehicle-Trips[5]	542	307	235
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	42%	50%
Restaurant	39%	56%
Cinema/Entertainment	N/A	N/A
Residential	54%	44%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

CITY OF SANTA MARIA APPROVED AND PENDING PROJECTS LIST

Associated Transportation Engineers
Pending and Approved Projects - Trip Generation Worksheet

RICHARDS RANCH PROJECT - CUMULATIVE CITY LIST (#21069)																	
Land-Use		Size		Multi-Trip	AM Peak						PM Peak						
					Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
18	BONITA PACKING EXPANSION (a)	173,270	SF	1.00	0.11	19	77%	15	23%	4	0.12	21	28%	6	72%	15
19	MAXCO BOX FACILITY (n)	167,850	SF	1.00	-	39	-	32	-	7	-	40	-	9	-	31
21	BLOSSER SOUTHEAST (b)	-	-	1.00	-	-19	-	-19	-	0	-	-202	-	-103	-	-99
23	VANDENBERG SENIOR RESIDENCES (c)	52	DU	1.00	0.20	10	34%	3	66%	7	0.25	13	56%	7	44%	6
24	SEASIDE PACKAGING WAREHOUSE (d)	40,854	SF	1.00	0.17	7	77%	5	23%	2	0.19	8	28%	2	72%	6
26	CENTENNIAL SQUARE APARTMENTS (e)	184	DU	1.00	0.36	66	29%	19	71%	47	0.46	85	59%	50	41%	35
27	BARCELLUS SENIOR APARTMENTS (c)	80	DU	1.00	0.20	16	34%	5	66%	11	0.25	20	56%	11	44%	9
28	WESTGATE MARKETPLACE (f)	68,000	SF	1.00	3.53	240	62%	149	38%	91	9.03	614	48%	295	52%	319
29	JOSHI COMMERCIAL (g)	3,200	SF	1.00	3.10	10	79%	8	21%	2	3.93	13	30%	4	70%	9
30	CENTENNIAL GARDENS (e)	160	DU	1.00	0.36	58	29%	17	71%	41	0.46	74	59%	44	41%	30
32	NEWLOVE EAST APARTMENTS (h)	16	DU	1.00	0.40	6	24%	1	76%	5	0.51	8	63%	5	37%	3
38	SERRAMONTE TOWNHOMES (h)	81	DU	1.00	0.40	32	24%	8	76%	24	0.51	41	63%	26	37%	15
39	BETTERAVIA PLAZA (i)	-	-	1.00	-	1,810	-	994	-	816	-	2,293	-	1,126	-	1,167
41	CELEBRATION I, II, III (j)	56	DU	1.00	0.70	39	26%	10	74%	29	0.94	53	63%	33	37%	20
41	CELEBRATION I, II, III (c)	33	DU	1.00	0.20	7	34%	2	66%	5	0.25	8	56%	4	44%	4
41	CELEBRATION I, II, III (k)	7,000	SF	1.00	1.67	12	82%	10	18%	2	2.16	15	34%	5	66%	10
42	ENOS RANCH WEST SHOPPING CENTER (f)	80,900	SF	1.00	3.53	286	62%	177	38%	109	9.03	731	48%	351	52%	380
45	TAVA CORP (l)	33,000	SF	1.00	1.52	50	88%	44	12%	6	1.44	48	17%	8	83%	40
49	2811 CENTER (m)	51,200	SF	1.00	-	60	-	52	-	8	-	60	-	10	-	50
50	PLATINO DEVELOPMENT (m)	48,717	SF	1.00	-	34	-	30	-	4	-	31	-	4	-	27
52	SANTA MARIA STUDIOS (e)	150	DU	1.00	0.36	54	29%	16	71%	38	0.46	69	59%	41	41%	28
53	PARK EDGE APARTMENTS (RESIDENTIAL) (h)	140	DU	1.00	0.40	56	24%	13	76%	43	0.51	71	63%	45	37%	26
53	PARK EDGE APARTMENTS (COMMERCIAL) (o)	5,435	SF	1.00	-	96	-	50	-	46	-	71	-	37	-	34
55	NORTHMAN RESIDENTIAL (m)	63	DU	1.00	-	47	-	12	-	35	-	62	-	39	-	23
56	PEOPLE'S SELF HELP HOUSING (q)	49	DU	1.00	-	36	-	9	-	27	-	49	-	31	-	18
58	LAKEVIEW MIXED USE (m)	164	DU	1.00	-	102	-	26	-	76	-	143	-	86	-	57
59	AIRPORT BUSINESS PARK SPECIFIC PLAN AMENDMENT (p	264,500	SF	1.00	-	574	-	373	-	201	-	505	-	217	-	288
60	DMV SANTA MARIA (r)	3,500	SF	1.00	-	53	-	31	-	22	-	52	-	20	-	32

(a) Trip generation based on ITE Code #157 (High-Cube Cold Storage Warehouse). AM/PM inbound/outbound splits from ITE Code #154 (High-Cube trasnload and Short-Term Storage Warehouse).

(b) Traffic and Circulation Study, ATE, June 2019

(c) Trip generation rate derived from ITE Trip Generation Manual - Senior Adult Housing - Multifamily (#252).

(d) Traffic and VMT Analysis, ATE, April 2021

(e) Trip generation rate derived from ITE Trip Generation Manual - Affordable Housing (#223).

(f) Trip generation rate derived from ITE Trip Generation Manual - Shopping Plaza (40-150k) (#821).

(g) Trip generation rate derived from ITE Trip Generation Manual - Medical-Dental Office Building (#720).

(h) Trip generation rate derived from ITE Trip Generation Manual - Multifamily Housing (Low-Rise) (#220).

(i) Traffic and Circulation Study, ATE, December 2014

(j) Trip generation rate derived from ITE Trip Generation Manual - Single-Family Detached Housing (#210).

(k) Trip generation rate derived from ITE Trip Generation Manual - Small Office Building (#712).

(l) Trip generation rate derived from ITE Trip Generation Manual - General Office Building (#710).

(m) Traffic Impact Study, PSOMAS, May 2020

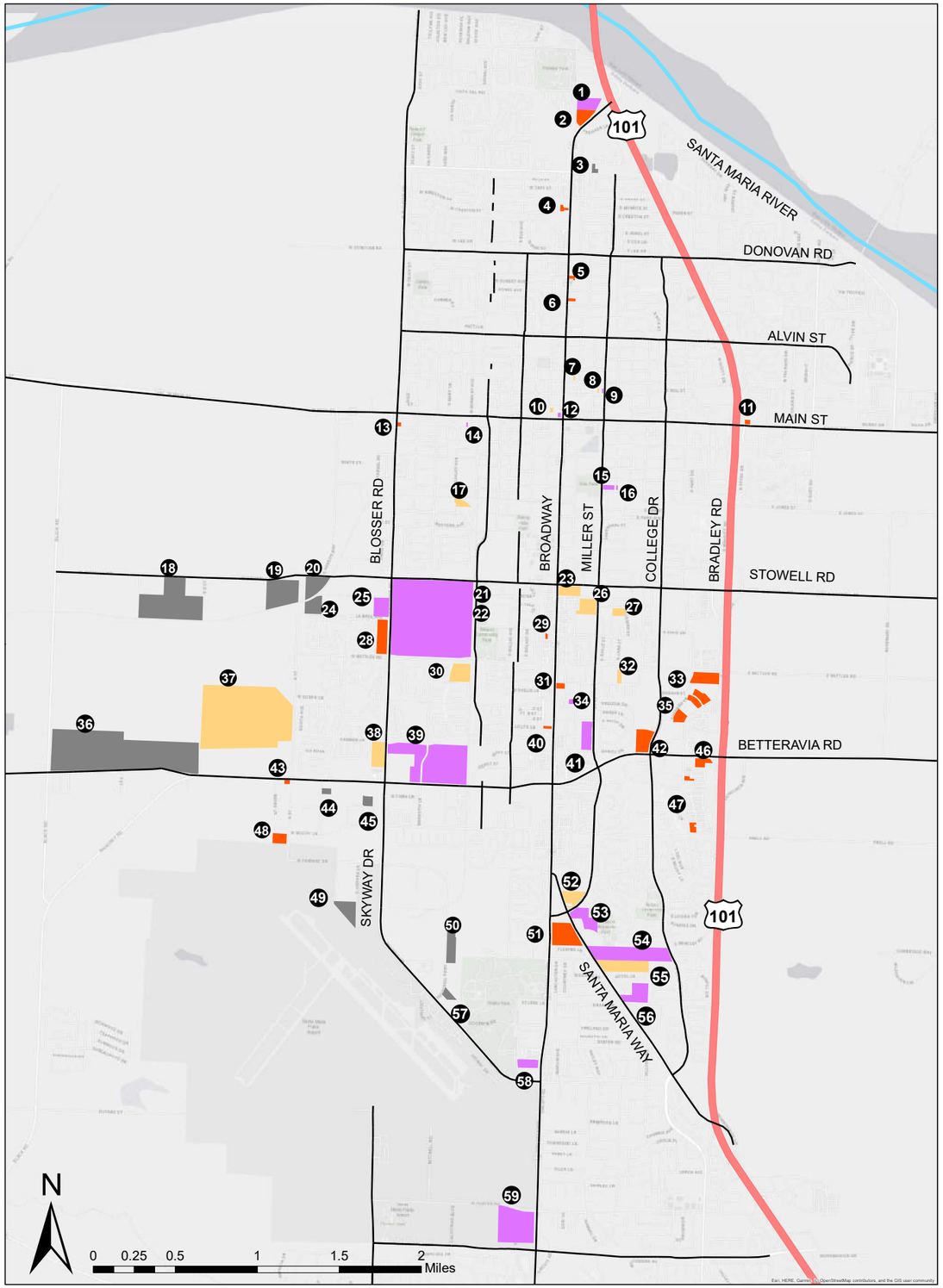
(n) Traffic and Circulation Study, ATE, January 2021

(o) Drive-Through Queue Study, ATE, January 2022

(p) Traffic Study, Central Coast Transportation Consulting, October 2020

(q) Traffic and Circulation Study, ATE, December 2020

(r) Traffic Study, LSA, October 2018



City of Santa Maria
MAJOR DEVELOPMENTS (JULY 2021)

RESIDENTIAL
COMMERCIAL
INDUSTRIAL
MIXED USE/OTHER

Residential

7 123 Fesler Apartments
123 E Fesler St
23 unit apartments

8 309 Mill Apartments
309 E Mill St
23 unit apartments

10 Vino Bella Apartments
120 W Chapel St
32 unit apartments

17 Oakley Court Apartments
600 Block S Oackley Ct
30 unit apartments

23 Vandenberg Senior
1314 S Broadway
52 unit senior apartment addition

26 Centennial Square
SW/c Miller St at Plaza Dr
164 unit affordable apartments

27 Barcellus Senior Apartments
502 E Barcellus Ave
80 unit senior apartments

30 Centennial Gardens
SW/c Battles Rd & Depot St
160 unit affordable apartments

32 Newlove East Apartments
575 E Newlove Dr
16 unit apartments

37 Workforce Dormitories
1900 Block of S A Street
Workforce housing dormitories

38 SerraMonte Townhomes
2065 S Blosser Rd
81 unit townhomes

52 Santa Maria Studios
2660 Santa Maria Way
Affordable units

55 Northman Residential
SM Way btw Sunrise Dr & E Dauphin St
63 single family residences

Commercial

2 Preisker Commercial Center
N Broadway at Preisker Ln
108 rm hotel, drive thru rest, retail

4 North Broadway Shell Building
1700 block of N Broadway
4,473 sq ft commercial space

5 Orchard Street Corner Market
1334 N Broadway
1,043 sq ft addition

6 Superior Sound Systems
1108 N Broadway
1,800 sq ft building

11 Starbucks Drive-Thru
1201 E Main St Ste 1
Coffe shop & drive-thru

13 Blosser Coin Laundry
122 S Blosser Rd
4,410 sq ft coin laundry facility

28 Westgate Marketplace
S Blosser Rd & W Battles Rd
68,000 sq ft commercial center

29 Joshi Commercial
116 W Enos Dr
3,200 sq ft retail

31 McDonald's
1710 S Broadway Ave
4,554 sq ft drive thru restaurant

33 Enos Auto Center North
Lots 2-7 of Enos Ranchos
Design/layout of auto center

33 Lot 5 Auto
Lot 5 Enos Ranchos
29,000 sq ft auto dealership

33 Home Motors
1004 E Battles Rd
52,000 sq ft auto dealership

35 Enos Auto Center South
Lots 8-11 Enos Ranchos
Design/layout of auto center

35 Lot 11 Auto
Lot 11 Enos Ranchos
28,000 sq ft auto dealership

35 Splash N Dash
Lot 8 Enos Ranchos
8,200 sq ft car wash

40 Smile Santa Maria Dental
1925 S Broadway
7,750 sq ft dental office

42 Enos Ranch West Shopping Center
NW/c E Betteravia Rd at S College Dr
80,900 sq ft shopping center

43 A Street Deli
W Betteravia Rd at A St
4,420 sq ft retail bldg

46 Santa Maria Freeway Center
1000 E Betteravia Rd
23,455 sq ft retail center

47 Crossroads Expansion Pads
2100-2300 S Bradley Rd
27,700 sq ft retail on 3 pads

48 VTC Enterprises (Phase 2)
2445 A St
6,187 sq ft vocational training bldg

51 U-Haul
2875 Santa Maria Way
Ministorage and Office

Industrial

3 SMOOTH Bus Wash
240 E Roemer Wy
1,134 sq ft bus wash building

18 Bonita Packing Expansion
1850 W Stowell Rd
173,270 sq ft cooler addition

19 Maxco Box Facility
1550 W Stowell Rd
60,000 sq ft & outdoor storage

20 Central Coast Truck Center
W Stowell & Hanson Way
37,300 sq ft sales & repair facility

24 Seaside Warehouse
La Brea Avenue
40, 854 sq ft facility

36 Windset Farms Greenhouse
1650 Black Rd
4.3 mil sq ft greenhouse & 93k bldg

44 DMS Electric
2224 S Westgate Rd
10,000 sq ft bldg

45 Tava Corp
2329 Thompson Way
33,000 sq ft mult-tenant complex

49 2811 Center
2811 Airpark Dr
51,200 sq ft of office in 2 bldgs

50 Platino Development
2900 block Industrial Pkwy
48,717 sq ft in 4 bldgs on 4 lots

57 The Gas Company
3138 Industrial Pkwy
Natural gas fueling station

Mixed Use/Other

1 Carpenter's Union Training
2210 N Preisker Ln
30,000 sq ft vocational training

9 Bathia Mixed Use
311 N Miller St
1,533 sq ft comm. & 6 res. units

12 Gateway Mixed Use
101 N Broadway
33,700 sq ft 4 story mixed use bldg

14 D&J Sober Living Facility
819 W Church, 113 S Benwiley
mixed-use w/trans housing & off

15 Miller & Boone Mixed Use
501 E Boone St
33,600 sq ft mixed use building

16 Boone Street Market
501 E Boone St
2,280 sq ft add & 2 units

21 Blosser Southeast
NE/c Blosser Rd & W Battles Rd
Amen. to Specific Plan

22 Aquistapace Tentative Map
Blosser SE (Area 5A) SP
16 lots (res, comm, pf & os)

25 Manriquez Commercial
NW/c S Blosser Rd & La Brea Ave
Gen. Plan Amen. & Zone Change

34 Crucified Life Church
NW/c S McClelland Street
11,700 sq ft church bldg

39 Betteravia Plaza
W Betteravia Rd at SMVRR
272 apts & 381,250 sq ft retail/off

41 Celebration I, II, III
S Miller St at E Inger Dr
56 homes/33 senior/7,000 sqft comm

53 Park Edge Apartments
SE/c Santa Maria Way & S Miller St
140 apt units & 5,435 sq ft comm.

54 First Baptist Church Master Plan
2970 Santa Maria Way
Site Master Plan

56 People's Self Help Housing Land Use Map/Zone Change
3170 Santa Maria Way
Gen. Plan Amen. & Zone Change

58 Lakeview Mixed Use
NW/c S Broadway & Skyway Dr
164 apts & 11,000 sq ft comm

59 Airport Business Park Specific Plan
NWC of Orcutt Expressway & Union Pkwy
Specific Plan w/ multiple land uses

City of Santa Maria

MAJOR DEVELOPMENTS (JULY 2021)

1	*Project*	**Carpenter's Union Training Center**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	30,000 sq. ft. vocational training center	*Acreage*	6.2	**PD2018-0010**	**10/17/2018**	Building permits approved. Planning permit expiration on 10/17/2021.
	Location	2210 N. Preisker Ln	*District*	PD/C-2	**GPZ2018-0002**	**12/4/2018**	
	APN(s)	128-002-035	*Planner*	Dana Eady	**TR2018-0001**	**10/17/2018**	
	Contact	Christopher Horstman, Architect, 805-544-4334 x104					
2	*Project*	**Preisker Commercial Center**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	108 rm hotel, 15,000 sq. ft. drive thru, rest., retail	*Acreage*	5	**PD2015-0011**	**5/18/2016**	Under construction.
	Location	NW/c N. Broadway and Preisker Ln	*District*	PD-f/C-2	**TR2016-0001**	**9/7/2016**	
	APN(s)	128-002-048, -049 & -050	*Planner*	Carol Ziesenhenne	**A2019-0004**	**2/18/2019**	
	Contact	Jody Walker Belsick, Applicant, 702-786-1829					
3	*Project*	**SMOOTH Bus Wash**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	1,134 sq. ft. bus wash building	*Acreage*	1.2	**PD2017-0023**	**5/16/2018**	Planning permit expiration on 5/16/2023
	Location	240 E. Roemer Way	*District*	PD/C-2	**A2021-0004**		
	APN(s)	128-003-046	*Planner*	Dana Eady			
	Contact	Tom Martinez, Architect, 805-934-5737					
4	*Project*	**North Broadway Shell Building**	*Category*	**Commercial**	**PD2007-014**	**7/2/2008**	*Status*
	Description	4,473 commercial space	*Acreage*	3	**TR5996-0001**	**9/3/2014**	Under construction.
	Location	1700 block of N. Broadway	*District*	PD/C-2	**A2015-0031**	**11/6/2015**	
	APN(s)	117-040-038, 039, and 040	*Planner*	Cody Graybehl			
	Contact	Ellen Goodwin, Architect					
5	*Project*	**Orchard Street Corner Market**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	1,043 sq ft addition to existing corner market	*Acreage*	0.45	**PD2019-0005**	**10/2/2019**	Planning permit expiration on 10/2/2022.
	Location	1334 N. Broadway	*District*	PD/C-2			
	APN(s)	121-031-004	*Planner*	Cody Graybehl			
	Contact	Rami Zakour, Applicant					
6	*Project*	**Superior Sound Systems**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	1,800 sq. ft. building	*Acreage*	0.5	**PD2018-0015**	**5/15/2019**	Planning permit expiration on 5/15/2022.
	Location	1108 N. Broadway	*District*	PD/C-2			
	APN(s)	121-051-002	*Planner*	Carol Ziesenhenne			
	Contact	Paul Knutson, Engineer, 805-922-4777					
7	*Project*	**123 Fesler Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct a 23 unit, 9750 sq. ft. apartment building	*Acreage*	0.2	**DT2020-0016**	**Pending**	Planning permits under review.
	Location	123 E Fesler St	*District*	DTSP - Bungalow District			
	APN(s)	121-152-014	*Planner*	Frank Albro			
	Contact	Jason Heyward, Consultant, 805-928-8948					

8	*Project*	**309 Mill Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct a 23 unit, 9750 sq. ft. apartment building	*Acreage*	0.2	**DT2020-0015**	**Pending**	Planning permits under review.
	Location	309 E Mill St	*District*	DTSP - Bungalow District			
	APN(s)	121-193-011	*Planner*	Frank Albro			
	Contact	Jason Heyward, Consultant, 805-928-8948					
9	*Project*	**Bathia Mixed Use**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	1,533 sq. ft. commercial & 6 residential units	*Acreage*	0.2	**DT2017-0088**	**1/30/2018**	Building permits submitted. Planning permit expiration on 7/30/2021
	Location	311 N. Miller St	*District*	Downtown SP	**A2019-0027**	**7/30/2019**	
	APN(s)	121-193-008	*Planner*	Frank Albro			
	Contact	Chris Thomas Pasco, Consultant, 805-703-0380					
10	*Project*	**Vino Bella Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct a 32 unit, 3-story apartment building	*Acreage*	0.3	**DT2020-0017**	**12/16/2020**	Planning permit expiration on 12/16/2023.
	Location	120 W Chapel St	*District*	DTSP - Bungalow District			
	APN(s)	119-276-015	*Planner*	Frank Albro			
	Contact	Ben Nikfarjam, Applicant, 310-215-4882					
11	*Project*	**Starbucks Drive-Thru**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Coffee shop and drive-thru	*Acreage*	0.56	**PD2021-0001**	**Pending**	Planning permits under review.
	Location	1201 E Main St Ste 1	*District*	PD/HC	**U2021-0003**		
	APN(s)	128-120-004	*Planner*	Carol Ziesenhenne			
	Contact	Joey Ly, Applicant, 714-560-8673					
12	*Project*	**Gateway Mixed Use**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	33,700 sq. ft., four-story mixed use development	*Acreage*	0.3	**DT2017-0033**	**1/16/2018**	Building permits submitted. Planning permit expiration on 7/16/2020.
	Location	101 N. Broadway	*District*	Downtown SP	**A2019-0032**	**9/4/2019**	
	APN(s)	119-276-019	*Planner*	Dana Eady			
	Contact	Ben Nikfarjam, Developer, 310-251-4882					
13	*Project*	**Blosser Coin Laundry**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	4,410 sq. ft. coin laundry facility	*Acreage*	0.4	**PD2017-0018**	**8/15/2018**	Under construction
	Location	122 S. Blosser Rd	*District*	PD/C-2			
	APN(s)	123-011-023	*Planner*	Carol Ziesenhenne			
	Contact	Irina Tudorache, Applicant, 213-388-5807					
14	*Project*	**D&J's Sober Living Facility**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Mixed-use facility w/transitional housing and offices	*Acreage*	0.4	**PD2017-0011**	**11/1/2017**	123-024-007 parcel has been built. Building permits submitted for 123-024-008.
	Location	819 W. Church St, 113 S. Benwiley Ave	*District*	PD/C-2	**A2018-0010**	**9/19/2018**	
	APN(s)	123-024-008, 007	*Planner*	Frank Albro			
	Contact	Jeff Jeffery, Applicant, 619-301-1846					
15	*Project*	**Miller & Boone Mixed Use**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	Construct a 33,600 sq. ft. mixed use building	*Acreage*	1.19	**DT2020-0013**	**Pending**	Planning permits under review.
	Location	417 E Boone St	*District*	DTSP- Bungalow District			
	APN(s)	125-112-011	*Planner*	Cody Graybehl			
	Contact	Rami Zakour, Applicant, 805-403-2195					

16	*Project*	**Boone Street Market**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	2,280 sq. ft. addition to market, and 2 new units	*Acreage*	0.2	**GPZ2016-0004**	**5/2/2017**	Planning permit expiration on 3/20/2022.
	Location	501 E. Boone St	*District*	Downtown SP	**SPZ2016-0003**	**5/2/2017**	
	APN(s)	125-114-015	*Planner*	Carol Ziesenhenne	**DT2016-0040**	**8/21/2017**	
	Contact	Brian Schwartz, Consultant, 805-934-5760			**A2019-0006**	**3/4/2019**	
					A2020-0012	**6/8/2020**	
17	*Project*	**Oakley Court Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	30 apartment units with on-site manager's unit	*Acreage*	2.1	**GPZ2019-0001**	**10/1/2019**	Planning permit expiration on 7/17/2022
	Location	600 Block S. Oakley Ct	*District*	PD/R-3	**PD2019-0002**	**7/17/2019**	
	APN(s)	123-140-036	*Planner*	Frank Albro			
	Contact	Lupe & Gustavo, Applicant, 805-937-1108					
18	*Project*	**Bonita Packing Expansion**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	173,270 sq. ft. cooler addition in 4 phases	*Acreage*	45.4	**PD2012-0007**	**5/1/2013**	Phase 1 (45,935 sq. ft.) is completed.
	Location	1850 W. Stowell Rd	*District*	PD/CM			
	APN(s)	117-820-028	*Planner*	Dana Eady			
	Contact	John Smith, Engineer, 805-466-5660					
19	*Project*	**Maxco Box Facility**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	Construct a new 60,000 sq. ft. box facility and outdoor storage yard	*Acreage*	19.8	**PD2020-0003**	**Pending**	Planning permits under review.
	Location	1550 W Stowell Rd	*District*	PD/CM-AG			
	APN(s)	117-820-015	*Planner*	Cody Graybehl			
	Contact	Steve Rigor, Applicant, (503) 477-8328 x 112					
20	*Project*	**Central Coast Truck Center**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	37,300 sq ft building for the sales and repair of semi-trucks	*Acreage*	8.3	**U2019-0010**	**12/18/2019**	Under construction.
	Location	W. Stowell Rd & Hanson Way	*District*	M-2			
	APN(s)	117-240-021	*Planner*	Frank Albro			
	Contact	RRM Design, Consultant, 805-543-1794					
21	*Project*	**Blosser Southeast**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Amendment to Blosser Southeast Specific Plan	*Acreage*	155.5	**GPZ2016-0003**	**10/20/2020**	Planning permits aproved.
	Location	NE/c of S. Blosser Rd and W. Battles Rd	*District*	Blosser SE SP	**SPZ2016-0002**	**10/20/2020**	
	APN(s)	117-240-028	*Planner*	Dana Eady	**TR2019-0003**	**10/20/2020**	
	Contact	Laurie Tamura, Consultant, 805-934-5760					
22	*Project*	**Aquistapace Tentitive Map**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	16 lots (residential, commercial, public facility, open space)	*Acreage*	146.5	**TR2019-0003**	**Pending**	Planning permit under review.
	Location	Blosser Southeast (Area 5A) Specific Plan	*District*	Blosser Southeast SP			
	APN(s)	117-240-028	*Planner*	Dana Eady			
	Contact	Jason Tamura , 805-934-5737					
23	*Project*	**Vandenberg Senior Residences**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	52 unit senior apartment addition	*Acreage*	4.9	**PD2017-0002**	**7/18/2018**	Building permit submitted. Planning permit expiration on 7/18/2021.Time extension under review.
	Location	1314 S. Broadway	*District*	PD/C-1	**A2021-0008**	**Pending**	
	APN(s)	128-065-008	*Planner*	Carol Ziesenhenne			
	Contact	Barry Williams, Architect, 805-459-7353					

24	*Project*	**Seaside Packaging Warehouse**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	40, 854 square-foot packaging warehouse	*Acreage*	6.18	**U2021-0002**	**Pending**	Planning permit under review.
	Location	La Brea Avenue	*District*	M-2			
	APN(s)	117-240-034	*Planner*	Cody Graybehl			
	Contact	Suzanne D. Winslow, Applicant, (805) 544-9700					
25	*Project*	**Manriquez Commercial Land Use Map/Zone Change**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	Revise the land use and zone designations from GI, M-2 to CC, PD/C-2	*Acreage*	6.74	**GPZ2020-0002**	**Pending**	Planning permits under review.
	Location	NW/c S. Blosser Rd and La Brea Ave.	*District*	M-2			
	APN(s)	117-240-024	*Planner*	Cody Graybehl			
	Contact	Manriquez Commercial Real Estate, Applicant					
26	*Project*	**Centennial Square Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	184 affordable apartments	*Acreage*	6.35	**PD2020-0009**	**8/4/2021**	Planning permit expiration on 8/4/2024.
	Location	SW/c Miller St and Plaza Dr	*District*	PD/R-3			
	APN(s)	128-066-003	*Planner*	Carol Ziesenhenne			
	Contact	Brian Schwartz, Consultant, 805-934-5760					
27	*Project*	**Barcellus Senior Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	80 unit senior apartments	*Acreage*	2.3	**GPZ2016-0002**	**12/7/2016**	Planning permit expiration on 6/6/2023.
	Location	502 E. Barcellus Ave	*District*	CPO	**PD2016-0005**	**12/7/2016**	
	APN(s)	128-067-032, -033, -034	*Planner*	Cody Graybehl	**A2018-0005**	**7/18/2018**	
	Contact	Brian Schwartz, Consultant, 805-934-5760			**A2019-0037**	**11/6/2019**	
					A2021-0005	**6/2/2021**	
28	*Project*	**Westgate Marketplace**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	68,000 sq. ft. commercial center	*Acreage*	7.6	**PD2007-012**	**7/2/2008**	Planning permit expiration on 12/15/2021.
	Location	NW/c S. Blosser Rd and W. Battles Rd	*District*	PD/CC	**A2016-0011**	**6/15/2016**	
	APN(s)	117-240-046, -045	*Planner*	Dana Eady	**A2017-0029**	**2/7/2018**	
	Contact	Craig Minus, Developer, 805-962-2121			**A2018-0023**	**1/16/2019**	
					A2020-0003	**5/20/2020**	
29	*Project*	**Joshi Commercial**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	3,200 sq. ft. of retail	*Acreage*	0.3	**PD2016-0015**	**6/7/2017**	Planning permit expiration on 12/7/2021.
	Location	116 W. Enos Dr	*District*	PD/C-1	**A2018-0024**	**2/6/2019**	
	APN(s)	117-300-084	*Planner*	Frank Albro	**A2020-0001**	**5/6/2020**	
	Contact	Tom Martinez, Architect, 805-934-5737					
30	*Project*	**Centennial Gardens**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Construct 160 affordable apartment units	*Acreage*	8.36	**PD2020-0006**	**11/18/2020**	Building permits submitted. Planning permit expiration 11/18/2023
	Location	SW/c Battles and Depot	*District*	PD/R-3			
	APN(s)	118-010-058	*Planner*	Frank Albro			
	Contact	Templeton Santa Barbara, LLC, Applicant, 805-598-1825					
31	*Project*	**McDonald's**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	4,554 sq ft drive thru restaurant	*Acreage*	0.8	**PD2019-0006**	**11/6/2019**	Building permits submitted. Planning permit expiration 11/6/2022.
	Location	1710 S. Broadway Ave	*District*	PD/C-2,R-2			
	APN(s)	128-075-001	*Planner*	Carol Ziesenhenne			
	Contact	Robert Preece, Consultant, 909-821-6703					

32	*Project*	**Newlove East Apartments**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	16 apartment units	*Acreage*	1.4	**U2016-0016**	**2/21/2018**	Building permits submitted. Planning permit expiration on 5/6/2023.
	Location	575 E. Newlove Dr	*District*	R-2	**A2019-0044**	**5/6/2020**	
	APN(s)	128-073-016	*Planner*	Frank Albro			
	Contact	Tom Martinez, Architect, 805-934-5737					
33	*Project*	**Enos Auto Center North Campus**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Overall site design and layout of an auto center	*Acreage*	17.7	**PD2018-0006**	**5/16/2018**	Under construction.
	Location	Lots 2-7 of Enos Ranchos Specific Plan	*District*	Enos Ranchos SP	**TU2019-0153**	**6/17/2020**	
	APN(s)	128-189-002, 003, 004, 005, 006, 007	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
33(a)	*Project*	**Lot 5 Auto**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	A 29,000 sq. ft. auto dealership	*Acreage*	2	**PD2017-0020**	**5/16/2018**	Under construction.
	Location	Lot 5 & 6	*District*	Enos Ranchos SP			
	APN(s)	128-189-005	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
33(b)	*Project*	**Home Motors**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	52,000 sq. ft. auto dealership	*Acreage*	7.2	**PD2018-0004**	**5/16/2018**	Under construction.
	Location	1004 E. Battles Rd	*District*	Enos Ranchos SP			
	APN(s)	128-189-002	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
34	*Project*	**Crucified Life Church**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	11,700 sq. ft. building	*Acreage*	0.6	**PD2017-0017**	**2/21/2018**	Building permits submitted. Planning permit expiration on 2/21/2023.
	Location	NW/c S. McClelland St	*District*	PD/C-2	**A2019-0041**	**12/18/2019**	
	APN(s)	128-114-069	*Planner*	Frank Albro	**A2020-0017**	**2/3/2021**	
	Contact	Cordelia Raymond, Architect, 805-786-4391					
35	*Project*	**Enos Auto Center South Campus**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Overall site design and layout of an auto center	*Acreage*	15.2	**PD2018-0007**	**5/16/2018**	Under construction.
	Location	Lots 8-11 of the Enos Ranch Specific Plan	*District*	Enos Ranchos SP			
	APN(s)	128-189-008, 009, 010, 011	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
35(a)	*Project*	**Lot 11 Auto**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	A 28,000 sq. ft. auto dealership	*Acreage*	3	**PD2017-0021**	**7/18/2018**	Under construction.
	Location	Lot 11	*District*	Enos Ranchos SP			
	APN(s)	128-189-011	*Planner*	Carol Ziesenhenne			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					
35(b)	*Project*	**Splash N Dash**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	8,200 sq ft carwash	*Acreage*	1.6	**PD2018-0005**	**9/4/2019**	Grading permits submitted. Planning permit expiration on 9/4/2022.
	Location	Lot 8	*District*	Enos Ranchos SP			
	APN(s)	128-189-008	*Planner*	Dana Eady			
	Contact	Jacob Weintraub, Consultant, 805-441-0332					

36	*Project*	**Windset Farms Greenhouses 7-9**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	4.3 mil sq. ft. greenhouse and 93,000 sq. ft. bldg.	*Acreage*	49	**PD2017-0009**	**Pending**	Planning permit under review.
	Location	1650 Black Rd	*District*	Area 9 SP			
	APN(s)	117-310-004 thru -010	*Planner*	Dana Eady			
	Contact	Brian Schwartz, Consultant, 805-934-5760					
37	*Project*	**Workforce Dormitories**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	Workforce Housing Dormitories	*Acreage*	127.96	**PD2019-0011**	**Pending**	Planning permit under review.
	Location	1900 Block of S. A Street	*District*	Area 9 Specific Plan	**SPZ2020-0001**		
	APN(s)	128-003-019	*Planner*	Frank Albro			
	Contact	Dan Blough, Applicant, 805-4937-1108					
38	*Project*	**SerraMonte Townhomes**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	81 townhome units	*Acreage*	6.5	**GPZ2018-0003**	**6/4/2019**	Planning permit expiration on 3/20/2022.
	Location	2065 S. Blosser Rd	*District*	PD/R-3	**PD2018-0012**	**3/20/2019**	
	APN(s)	117-770-016, -017, -018, -047	*Planner*	Dana Eady	**TR2018-0002**	**3/20/2019**	
	Contact	Laurie Tamura, Consultant, 805-934-5760					
39	*Project*	**Betteravia Plaza**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Up to 272 apts. and 381,250 sq. ft. of retail/office	*Acreage*	55.2	**GPZ2015-0002**	**2/2/2016**	Tentative map expiration on
	Location	NW/c of W. Betteravia Rd & SMVRR tracks	*District*	Multiple	**DA2015-0001**	**2/2/2016**	8/3/2021. Master PD approved.
	APN(s)	117-330-082	*Planner*	Dana Eady	**TR2018-0002**	**11/21/2018**	Grading permit approved.
	Contact				**PD2015-0006**	**2/3/2016**	Final map under review.
40	*Project*	**Smile Santa Maria Dental**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	7,750 sq. ft. dental office building	*Acreage*	0.9	**PD2018-0016**	**9/19/2018**	Building permits submitted. Planning permit expiration 9/19/2021.
	Location	1925 S. Broadway	*District*	PD/C-2			
	APN(s)	117-500-029	*Planner*	Carol Ziesenhenne			
	Contact	Cordelia Raymond, Architect, 805-786-4391					
41	*Project*	**Celebration I, II, III**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	56 single family units, 33 unit senior apt,	*Acreage*	6.8	**Tract 5893, 5921**	**Recorded**	Phase III (rooftop gardens) building
		7,000 sq. ft. office bldg, 1 mixed use bldg	*District*	PD/R-2	**PD2005-023**	**12/21/2005**	permits submitted and planning
	Location	NW/c S. Miller St and E. Inger Dr	*Planner*	Cody Graybehl	**PD2006-019**	**9/20/2006**	permits expiration on 8/15/2021.
	APN(s)	128-177 (all) and 128-178 (all)			**PD2013-0010**	**7/1/2014**	
	Contact	Frances Romero, Agent, 805-469-9510			**Tract 5993**	**7/1/2014**	
					PD2018-0001	**8/15/2018**	
42	*Project*	**Enos Ranch West Shopping Center**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	80,900 sq. ft. shopping center in 6 buildings	*Acreage*	7.8	**PD2011-005**	**8/1/2012**	Building permits submitted. Planning permit expiration 8/19/2023.
	Location	NW/c E. Betteravia Rd and S. College Dr	*District*	Enos Ranchos SP	**A2016-0006**	**3/30/2016**	
	APN(s)	128-078-010	*Planner*	Carol Ziesenhenne	**A2017-0008**	**3/7/2018**	
	Contact	Clifford Rhea, Consultant, 805-260-4154			**A2019-0013**	**6/19/2019**	
					PD2020-0004	**8/19/2020**	
43	*Project*	**A Street Deli**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	4,420 sq. ft. retail building	*Acreage*	0.5	**GPZ2015-0005**	**9/20/2016**	Building permits issued. Planning permit expiration 6/28/2020.
	Location	SW/c Betteravia Rd and A St	*District*	PD/M-1	**PD2015-0019**	**9/21/2016**	
	APN(s)	111-040-006	*Planner*	Dana Eady	**A2018-0002**	**3/21/2018**	
	Contact	Gil Rodriguez, Applicant, 805-478-1674			**A2019-0025**	**9/4/2019**	

44	*Project*	**DMS Electric**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	10,000 sq. ft. new construction	*Acreage*	1.26	**PD96-17**	**1/22/1997**	Phase 1 (5,000 sq. ft.) is complete, no building permit submittal for Phase 2 (5,000 sq. ft.)
	Location	2224 S. Westgate Rd	*District*	PD/CM			
	APN(s)	111-400-050	*Planner*	Dana Eady			
	Contact	David Shahrabani, Owner, 805-922-6033 *					
45	*Project*	**Tava Corp**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	33,000 sq. ft. multi-tenant complex	*Acreage*	3	**PD2016-0012**	**8/16/2017**	Under construction.
	Location	2329 Thompson Way	*District*	PD/M-1			
	APN(s)	111-400-018	*Planner*	Frank Albro			
	Contact	Kevin Moore, Architect, 805-455-0574					
46	*Project*	**Santa Maria Freeway Center**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	23,455 sq. ft. retail on five pads	*Acreage*	4.7	**PD2002-020**	**6/4/2003**	1,898 sq. ft. gas station and Popeye's restaurant complete.
	Location	1000 E. Betteravia Rd	*District*	Entrada Este SP	**A2014-0012**	**12/5/2015**	
	APN(s)	128-136-043, -056	*Planner*	Frank Albro	**A2016-0019**	**11/23/2016**	
	Contact	Jim Lichacz, Consultant, 323-874-3370			**A2019-0021**	**8/5/2019**	
47	*Project*	**Crossroads Expansion Pads**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	27,700 sq. ft. on three new pads	*Acreage*	47.8	**PD2012-0001**	**8/1/2012**	Under construction, two of the three pads completed.
	Location	2100 - 2300 S. Bradley Rd	*District*	Entrada Este SP	**Tract 5997**	**Recorded**	
	APN(s)	128-136-050, -053, 128-137-060	*Planner*	Cody Graybehl	**A2014-0008**	**9/17/2014**	
	Contact	Ryan Best, Developer, 714-241-0400			**A2018-0020**	**12/10/2018**	
48	*Project*	**VTC Enterprises (Phase 2)**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	6,187 sq. ft. vocational training buildings	*Acreage*	3.3	**U2008-004 (PR)**	**7/2/2008**	Classroom building built (12,023 sq. ft.). Building permits submitted for phase 2.
	Location	2445 A St	*TAZ*	30091			
	APN(s)	111-040-043, -044	*District*	PF			
	Contact	Gil Palacios, Architect, 805-928-8008	*Planner*	Cody Graybehl			
49	*Project*	**2811 Center**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	51,200 sq. ft. of office in 2 buildings	*Acreage*	7	**PD2017-0003**	**6/7/2017**	One 25,600 sq. ft. building constructed. Under construction.
	Location	2811 Airpark Dr	*District*	PD/M-1	**TR2017-0002**	**3/21/2018**	
	APN(s)	111-231-003	*Planner*	Carol Ziesenhenne			
	Contact	Steve Simoulis, Developer, 805-541-9004					
50	*Project*	**Platino Development**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	48,717 sq. ft. in 4 buildings on 4 lots	*Acreage*	5.1	**PD2010-006**	**2/16/2011**	Planning permit under review
	Location	2900 block Industrial Parkway	*District*	PD/M-1	**A2015-0032**	**9/2/2015**	
	APN(s)	111-291-035, -036, -038, -039	*Planner*	Dana Eady	**A2016-0034**	**Closed**	
	Contact	Chris Mathys, Developer, 559-438-9999 ext. 11			**A2019-0016**	**Pending**	
51	*Project*	**U-Haul Ministorage and Office**	*Category*	**Commercial**	*File #s*	*Approved*	*Status*
	Description	Exterior improvements to the building and interior remodel to include mini-storage	*Acreage*	13	**U2019-0008**	**6/19/2019**	Building permits submitted. Planning permits expiration on 6/17/2023.
	Location	2875 Santa Maria Way	*District*	PD/C-2	**U2019-0021**	**6/17/2020**	
	APN(s)	109-010-008	*Planner*	Cody Graybehl	**PD2020-0002**	**6/17/2020**	
	Contact	Tom Martinez, Architect, 805-934-5737					

52	*Project*	**Santa Maria Studios**	*Category*	**Residential**	*Files #s*	*Approved*	*Status*
	Description	Affordable Housing Project	*Acreage*	5.5	**PD2020-0001**	**N/A**	Building permits submitted.
	Location	2660 Santa Maria Way, Santa Maria, CA	*District*	PD/C-2			
	APN(s)	128-090-011	*Planner*	Dana Eady			
	Contact	AMG & Associates, LLC, 818-380-2600					
53	*Project*	**Park Edge Apartments**	*Category*	**Mixed Use/Other**	**PD2020-0008**	**Pending**	Planning permits under review.
	Description	140 apt units, clubhouse and 5,435 sq. ft. multi-tenant commercial	*Acreage*	7.45	**U2020-0012**	**Pending**	
	Location	SE/corner of Santa Maria Way & Miller Street	*District*	PD/C-2 & PD/R-3	**SUB2021-0001**	**Pending**	
	APN(s)	128-090-022, -023 & 109-010-039	*Planner*	Cody Graybehl			
	Contact	Brian Schwartz, Consultant, 805-934-5760					
54	*Project*	**First Baptist Church Master Plan**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	Site Master Plan	*Acreage*	25.5	**U2019-0005**	**Pending**	Planning permits under review.
	Location	2970 Santa Maria Way	*District*	PD/R-1			
	APN(s)	109-010-019	*Planner*	Carol Ziesenhenne			
	Contact	John Kemlo, Applicant, 805-937-8405					
55	*Project*	**Northman Residential**	*Category*	**Residential**	*File #s*	*Approved*	*Status*
	Description	63 single family residences	*Acreage*	13.2	**GPZ2018-0004**	**8/6/2019**	Building permits submitted. Planning permit expiration 6/19/2022.
	Location	Santa Maria Wy btw Sunrise Dr & E Dauphin St	*District*	PD/R-1	**TR2018-0003**	**7/16/2019**	
	APN(s)	109-010-005, -006	*Planner*	Dana Eady	**PD2018-0013**	**6/19/2019**	
	Contact	Brian Schwartz, Consultant					
56	*Project*	**People's Self Help Housing Land Use Map/Zone Change**	*Category*	**Mixed Use/Other**	*File #s*	*Approved*	*Status*
	Description	From CC, PD/C-2 to LMDR-8, PD/R-1	*Acreage*	8.89	**GPZ2021-0001**	**Pending**	Planning permits under review.
	Location	3170 Santa Maria Way	*District*	PD/C-2			
	APN(s)	109-010-012	*Planner*	Frank Albro			
	Contact	Sheryl Flores, Applicant, 805-540-2465					
57	*Project*	**The Gas Company**	*Category*	**Industrial**	*File #s*	*Approved*	*Status*
	Description	A natural gas fueling station	*Acreage*	1.9	**U2017-0013**	**3/7/2018**	Building permits submitted. Planning permit expiration on 9/7/2019.
	Location	3138 Industrial Parkway	*District*	PD/M-1	**U2019-0004**	**9/23/2019**	
	APN(s)	111-291-020	*Planner*	Dana Eady	**A2019-0033**	**Pending**	
	Contact	Steven Ly, Applicant, 213-244-3175					
58	*Project*	**Lakeview Mixed Use**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	164 unit apartments and 11,000 sq. ft. commercial	*Acreage*	4	**PD2018-0008**	**4/2/2019**	Building permits submitted. Planning permit expiration on 4/2/2022.
	Location	NW/corner of S. Broadway and Skyway Dr.	*District*	PD/R-3 + PD/C-2			
	APN(s)	111-100-008	*Planner*	Frank Albro			
	Contact	Laurie Tamura, Consultant, 805-934-5760					
59	*Project*	**Airport Business Park Specific Plan Amendment**	*Category*	**Mixed/Other**	*File #s*	*Approved*	*Status*
	Description	Specific Plan with multiple land uses	*Acreage*	19.3	**SPZ2019-0001**	**Pending**	Planning permits under review.
	Location	NWC of Orcutt Expressway (Highway 135) and Union Valley Parkway	*District*	Airport Specific Plan	**GPZ2019-0002**	**Pending**	
	APN(s)	111-231-011	*Planner*	Frank Albro			
	Contact	Erik P Justesen, (805) 543-1794					

COUNTY OF SANTA BARBARA APPROVED AND PENDING PROJECTS LIST

Associated Transportation Engineers
Trip Generation Worksheet - With In/Out Splits

RICHARDS RANCH PROJECT (#21069) - CUMULATIVE COUNTY PROJECTS

	Land-Use	Size	Units	Mixed-Use	ADT		AM PEAK HOUR						PM PEAK HOUR					
					Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
1	ADDAMO WINERY/DIAMANTE - RANCH HOMES (a)	5	SFD	1.00	9.43	47	0.70	4	26%	1	74%	3	0.94	5	63%	3	37%	2
	ADDAMO WINERY/DIAMANTE - WINERY (b)	33,210	SF	1.00	-	110	-	15	50%	8	50%	7	-	15	50%	8	50%	7
2	OUSD SENIOR HOUSING PROJECT (KEY SITE #17 - ATE #20051)	-	-	1.00	-	672	-	55	-	31	-	24	-	60	-	27	-	33
3	MULTI-FAMILY RESDENTIAL (KEY SITE #3) (d)	160	UNITS	1.00	6.74	1,078	0.40	64	24%	15	76%	49	0.51	82	63%	52	37%	30
4	MESA NEIGHBORHOOD (KEY SITE #3) (a)	125	SFD	1.00	9.43	1,179	0.70	88	26%	23	74%	65	0.94	118	63%	74	37%	44
5	KEY SITE #30 (ATE #11084)	69	UNITS	1.00	-	837	-	75	-	24	-	51	-	86	-	52	-	34
6	MR O APARTMENTS (KEY SITE #30) (d)	214	UNITS	1.00	6.74	1,442	0.40	86	24%	21	76%	65	0.51	109	63%	69	37%	40
7	KEY SITE #21-NEIGHBORHOOD WILLOW CREEK/HIDDEN CANYON (a)	146	UNITS	1.00	9.43	1,377	0.70	102	26%	27	74%	75	0.94	137	63%	86	37%	51
8	NORTH COUNTY JAIL (ATE #07114)	-	-	1.00	-	2,772	-	232	-	125	-	107	-	232	-	125	-	107
9	OASIS COMMUNITY CENTER PROJECT (ATE #18106)	15,333	SF	1.00	28.82	442	1.76	27	67%	18	33%	9	2.31	35	45%	16	55%	19
10	VINTAGE RANCH TRACT MAP (a)	41	UNITS	1.00	9.43	387	0.70	29	26%	8	74%	21	0.94	39	63%	25	37%	14
11	ORCUTT GATEWAY RETAIL CENTER (KEY SITE #2) (f)	-	-	1.00	-	3,350	-	47	-	29	-	18	-	190	-	91	-	99
12	ORCUTT UNION PLAZA PHASE II - APTS (d)	19	UNITS	1.00	6.74	128	0.40	8	24%	2	76%	6	0.51	10	63%	6	37%	4
13	ORCUTT UNION PLAZA PHASE II (c)	16,880	SF	1.00	54.45	919	2.36	40	60%	24	40%	16	6.59	111	50%	56	50%	55
14	ORCUTT GAS STATION (g)	8	Fueling Positions	1.00	257.13	2,057	16.06	128	50%	64	50%	64	18.42	147	50%	74	50%	73
15	GUY TENATIVE PARCEL MAP (a)	2	SFD	1.00	9.43	19	0.70	1	26%	0	74%	1	0.94	2	63%	1	37%	1
16	TERRACE VILLAS (a)	16	SFD	1.00	9.43	151	0.70	11	26%	3	74%	8	0.94	15	63%	9	37%	6
17	CLARK AVENUE COMMERCIAL (KEY SITE #4) (f)	4,000	SF	1.00	-	-	-	3	-	2	-	1	-	10	-	5	-	5
18	ORCUTT PUBLIC MARKETPLACE (KEY SITE #1) (f)	252	SFD	1.00	-	-	-	187	-	47	-	140	-	249	-	157	-	92
18	ORCUTT PUBLIC MARKETPLACE (KEY SITE #1) (f)	211,264	SF	1.00	-	-	-	111	-	76	-	35	-	506	-	239	-	267
19	SKYWAY OFFICE BUILDING (f)	19,800	SF	1.00	-	-	-	23	-	20	-	3	-	23	-	4	-	19
20	AGRICULTURAL EDUCATION AND CAREER TECHNICAL CENTER (f)	198	Students	1.00	-	-	-	103	-	69	-	34	-	27	-	13	-	14

(a) Trip generation based on ITE code for Single Family Dwelling (#210)
(b) Addamo Winery, Diamonte Estates Tract Map, General Plan Amendment & Rezone, Proposed Final Draft Negative Declaration, County of Santa Barbara, April 2005.
(c) Trip generation based on ITE code for Strip Retail Plaza (#822)
(d) Trip generation based on ITE code for Multifamily Low-Rise Housing (#220)
(e) Trip generation based on ITE code for Convenience Store/Gas Station (Land-Use #945 - GFA > 4-5.5 SF)
(f) Traffic Impact Study, PSOMAS, May 2020
(g) Trip generation based on ITE code for Convenience Store/Gas Station (#945)

UVP QUEUE ANALYSIS WORKSHEETS

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	90	134	129	121	88	219	195	110	109	197	110	233
Average Queue (ft)	53	72	71	79	33	124	130	73	65	153	96	196
95th Queue (ft)	95	134	129	136	79	207	188	113	140	197	137	244
Link Distance (ft)			552	552				390	390			758
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270	270			150	223	223			210	315	
Storage Blk Time (%)						0				0		
Queuing Penalty (veh)						0				0		

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	R
Maximum Queue (ft)	185	149	183	207	211	153	45
Average Queue (ft)	168	122	142	174	148	128	28
95th Queue (ft)	189	149	211	231	215	158	47
Link Distance (ft)	758				826	826	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		315	615	615			380
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 5: Orcutt Rd & Union Valley Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	116	156	290	118	333	252	162	96	53	210
Average Queue (ft)	90	105	184	49	251	184	102	75	24	121
95th Queue (ft)	114	155	289	109	336	277	156	97	60	219
Link Distance (ft)		390	390		1431	1431		462		405
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	185			270			245		175	
Storage Blk Time (%)					6					2
Queuing Penalty (veh)					7					1

Zone Summary

Zone wide Queuing Penalty: 8

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	69	88	89	108	62	153	110	110	105	190	339	365
Average Queue (ft)	43	61	61	74	22	96	95	53	59	122	180	307
95th Queue (ft)	71	96	103	109	56	155	121	120	110	204	396	399
Link Distance (ft)			552	552				390	390			758
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	270	270			150	223	223			210	315	
Storage Blk Time (%)												6
Queuing Penalty (veh)												6

Intersection: 4: Orcutt Expressway & Union Valley Parkway

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	R
Maximum Queue (ft)	304	232	285	326	268	191	46
Average Queue (ft)	256	163	204	246	211	171	35
95th Queue (ft)	320	242	314	339	277	223	54
Link Distance (ft)	758				826	826	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		315	615	615			380
Storage Blk Time (%)	0						
Queuing Penalty (veh)	1						

Intersection: 5: Orcutt Rd & Union Valley Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	133	333	338	53	245	214	116	94	53	94
Average Queue (ft)	104	209	253	39	177	172	77	56	27	62
95th Queue (ft)	135	369	384	56	238	230	118	91	66	89
Link Distance (ft)		390	390		1431	1431		462		405
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	185			270			245		175	
Storage Blk Time (%)		8								
Queuing Penalty (veh)		10								

Zone Summary

Zone wide Queuing Penalty: 16

ACCIDENT DATA AND CALCULATION WORKSHEETS

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Foxenwood Lane
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 846
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 1

Million Entering Vehicle Miles: 8.6 million entering vehicle miles (mevm)

Accident Rate: **.12 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.24

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Orcutt Expressway
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 3735
Peak Hour Factor: 9
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 12

Million Entering Vehicle Miles: 34.19 million entering vehicle miles (mevm)

Accident Rate: **.35 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.42

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Orcutt Road
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 1679
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 9

Million Entering Vehicle Miles: 17.08 million entering vehicle miles (mevm)

Accident Rate: **.53 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.42

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Hummel Drive
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 1596
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 5

Million Entering Vehicle Miles: 16.23 million entering vehicle miles (mevm)

Accident Rate: **.31 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.24

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

Project: Richards Ranch
Project #: 021069
Analyst: GOM
Date: 1/17/2022

File Name: Accident Rate Worksheet 3 Year

N/S Street: Bradley Road
E/W Street: Union Valley Parkway
Weekday:
PM Peak Hour Entering Volume: 2551
Peak Hour Factor: 10
----------OR----------
Total Approach ADT: N/A
Weekend:
PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 4

Million Entering Vehicle Miles: 25.94 million entering vehicle miles (mevm)

Accident Rate: **.15 accidents per million entering vehicle miles (mevm)**

Intersection Rate Group: I09
California State Average Collision Rate: 0.42

DEFINITIONS

$$\text{Number Expected} = \frac{\text{ADT} \times \text{Time} \times \text{Rate Expected} \times \text{Length}}{1000000}$$

$$\text{Number Significant} = \text{Number Expected} + (2.576 \times (\text{Number Expected})^{1/2}) + 1.329$$

NOTES: Number Significant using 99.5% confidence level.

For intersections, use annual number of entering vehicles in place of ADT and delete length. The NR is the same as for roadway segments.

CALCULATIONS - ORCUTT ROAD/UVP INTERSECTION (Three Year Period)

$$\text{Number Expected} = \frac{5{,}693{,}333 \times 3 \times 0.42 \times 1}{1000000} = 7.1736$$

$$\text{Number Significant} = 15.40205$$

DEFINITIONS

$$\text{Number Expected} = \frac{\text{ADT} \times \text{Time} \times \text{Rate Expected} \times \text{Length}}{1000000}$$

$$\text{Number Significant} = \text{Number Expected} + (2.576 \times (\text{Number Expected})^{1/2}) + 1.329$$

NOTES: Number Significant using 99.5% confidence level.

For intersections, use annual number of entering vehicles in place of ADT and delete length. The NR is the same as for roadway segments.

CALCULATIONS - HUMMEL DRIVE/UVP INTERSECTION (Three Year Period)

$$\text{Number Expected} = \frac{5{,}410{,}000 \times 3 \times 0.24 \times 1}{1000000} = 3.8952$$

$$\text{Number Significant} = 10.30826$$

SIGNAL WARRANT WORKSHEETS

EXISTING TRAFFIC VOLUMES

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 4/27/22

DIST ____ CO ____ RTE ____ PM ____

CALC GOM DATE 10/3/22

CHK SAS DATE 10/3/22

Major St: Union Valley Parkway — Critical Approach Speed 50 mph

Minor St: Hummel Drive — Critical Approach Speed 35 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒
or
In built up area of isolated community of < 10,000 population..... ☐ **RURAL (R)**

☐ **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED YES ☐ NO ☐**
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED YES ☐ NO ☐**
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)						
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)						

Condition B - Interruption of Continuous Traffic **100% SATISFIED YES ☐ NO ☐**
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)						
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)						

Combination of Conditions A & B **SATISFIED YES ☐ NO ☐**

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☐
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

EXISTING TRAFFIC VOLUMES

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☒ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☐

PART B **SATISFIED YES ☒ NO ☐**

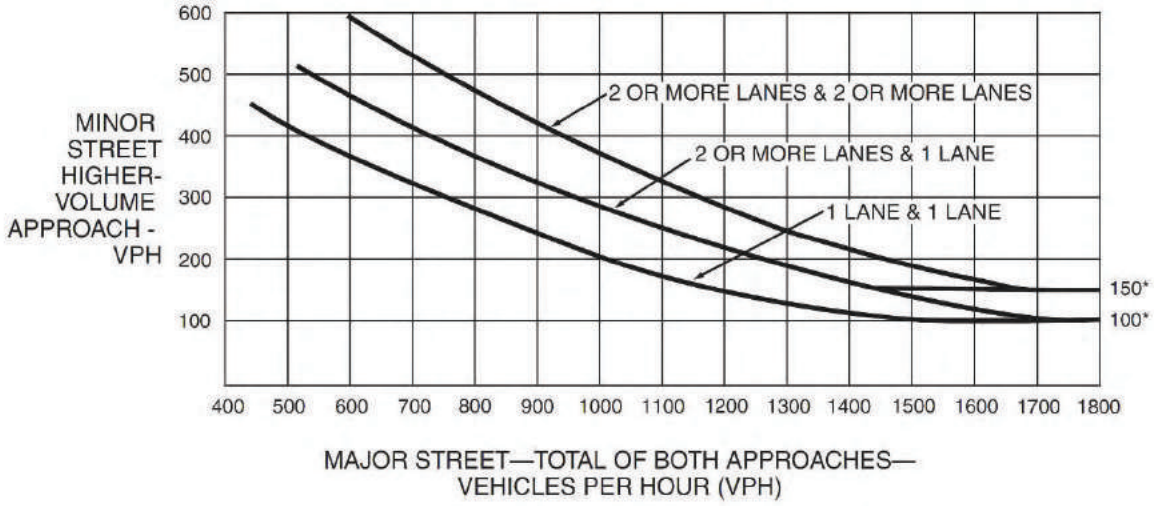
APPROACH LANES	One	2 or More	7:15 AM	Hour
Both Approaches - Major Street		X	1364	
Higher Approach - Minor Street		X	148	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☒ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

EXISTING TRAFFIC VOLUMES

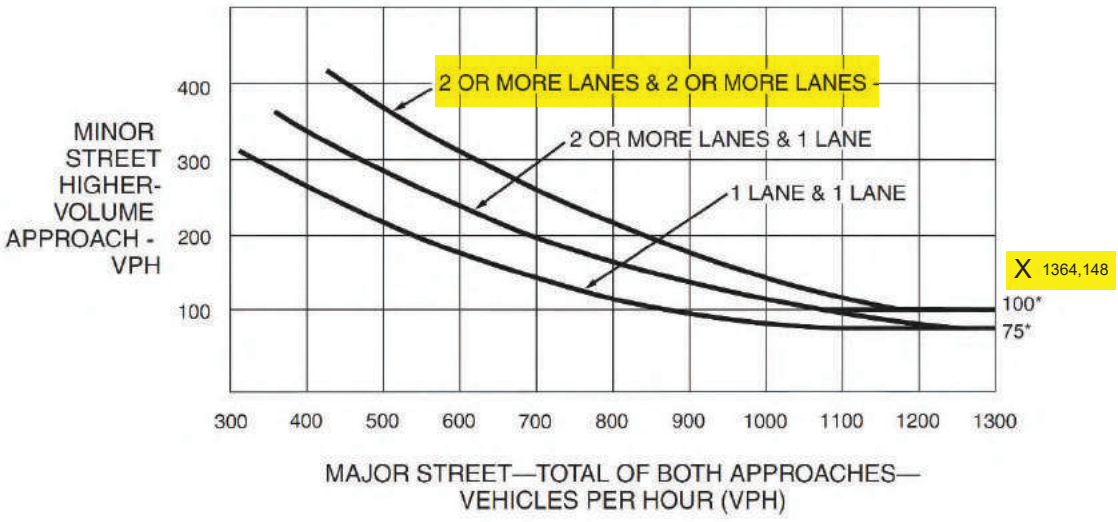
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

CUMULATIVE + PROJECT

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 4/27/22

DIST ____ CO ____ RTE ____ PM ____

CALC GOM DATE 10/3/22

CHK SAS DATE 10/3/22

Major St: Union Valley Parkway — Critical Approach Speed 50 mph

Minor St: Hummel Drive — Critical Approach Speed 35 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒
or
In built up area of isolated community of < 10,000 population..... ☐ } RURAL (R)

☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☐
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES ☐ NO ☐
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)						
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)						

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES ☐ NO ☐
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)									
	U	R	U	R						Hour
APPROACH LANES	1		2 or More							
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)						
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)						

Combination of Conditions A & B SATISFIED YES ☐ NO ☐

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☐
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

CUMULATIVE + PROJECT

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☒ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☐

PART B **SATISFIED YES ☒ NO ☐**

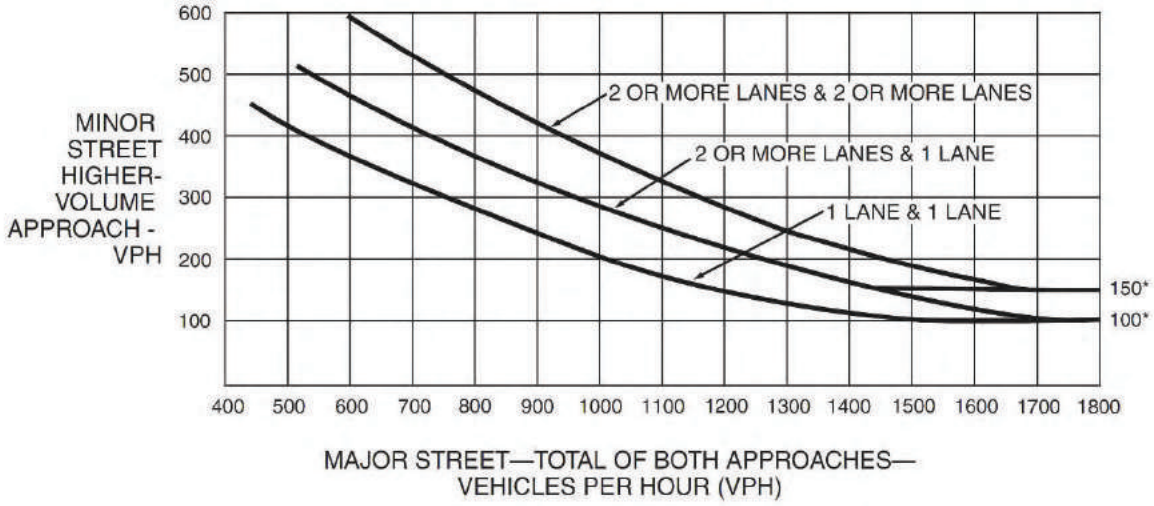
APPROACH LANES	One	2 or More	7:15 AM	Hour
Both Approaches - Major Street		X	1796	
Higher Approach - Minor Street		X	162	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☒ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

CUMULATIVE + PROJECT

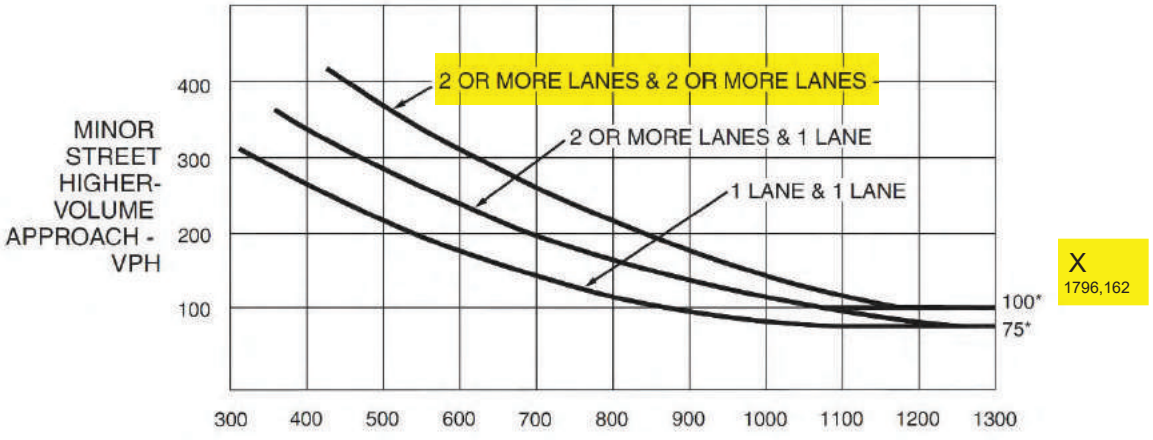
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



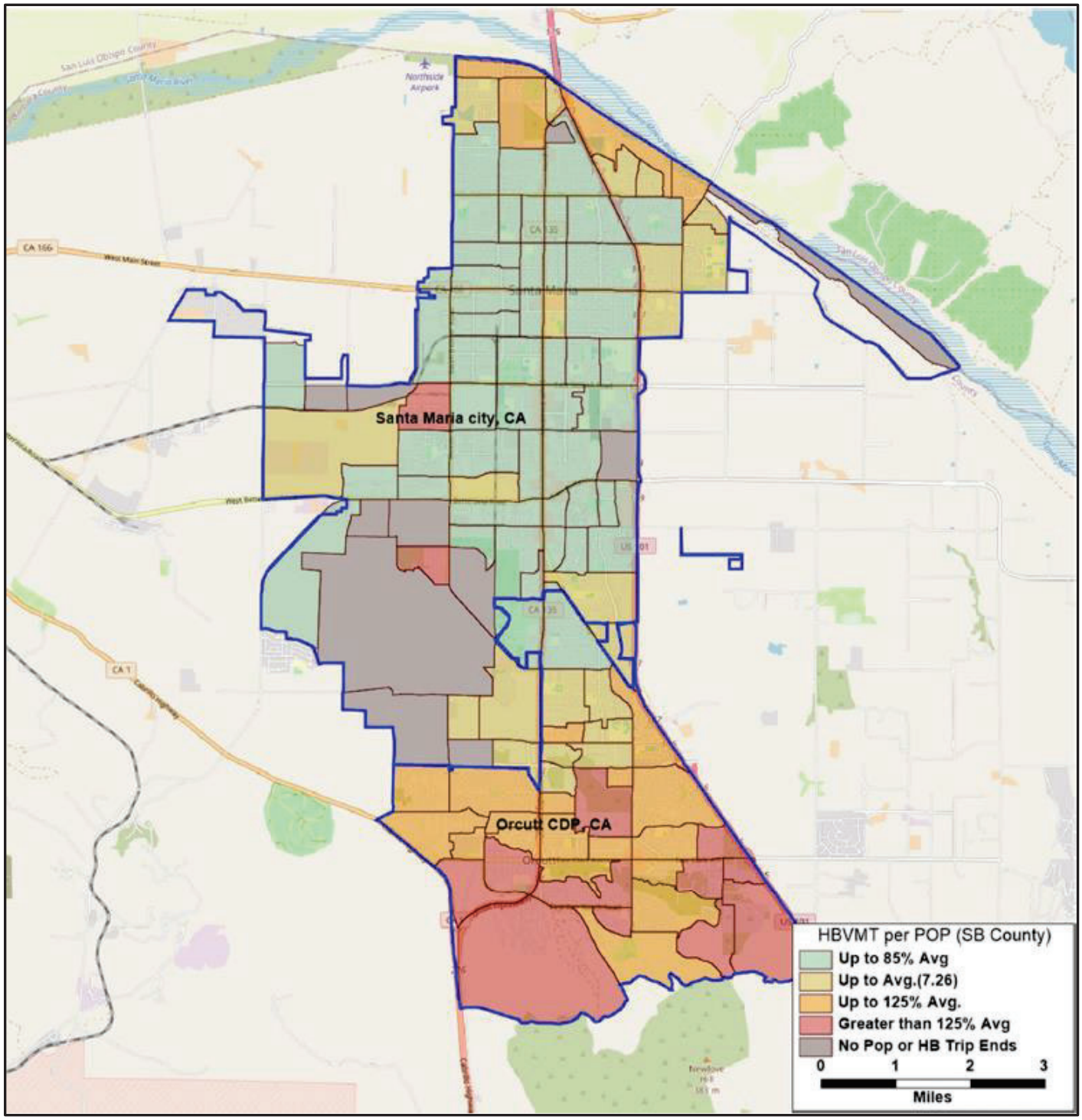
X
1796,162

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

VMT SCREENING MAP – RESIDENTIAL PROJECTS

Appendix B

Countywide Average: Home-Based VMT per Population (Residential Land Uses)



INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - Orcutt Expressway/Lakeview Road
Reference 2 - Orcutt Expressway/Foster Road
Reference 3 - UVP/Foxenwood Lane
Reference 4 - UVP/Orcutt Expressway
Reference 5 - UVP/Orcutt Road
Reference 6 - UVP/Hummel Drive
Reference 7 - UVP/Bradley Road
Reference 8 - UVP/US 101 SB Ramps
Reference 9 - UVP/US 101 NB Ramps

#21069 - RICHARDS RANCH PROJECT REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *8/1/2016*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *SKYWAY DRIVE-LAKEVIEW ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	675	809	151	65	518	62	11	163	369	110	377	42
(B)	PROJECT-ADDED:	18	66	10	0	45	0	0	0	16	9	0	0
(C)	CUMULATIVE:	714	969	175	84	742	62	11	187	432	133	391	62

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LL TT R	SOUTH BOUND L TT R	EAST BOUND L TT R	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3200	675	693	714	732	0.211 *	0.217 *	0.223 *	0.229 *
NBT	2	3200	809	875	969	1035	0.253	0.273	0.303	0.323
NBR (a)	1	1600	107	114	124	131	0.067	0.071	0.078	0.082
SBL	1	1600	65	65	84	84	0.041	0.041	0.053	0.053
SBT	2	3200	518	563	742	787	0.162 *	0.176 *	0.232 *	0.246 *
SBR (b)	1	1600	39	39	39	39	0.024	0.024	0.024	0.024
EBL	1	1600	11	11	11	11	0.007 *	0.007 *	0.007 *	0.007
EBT	2	3200	163	163	187	187	0.051	0.051	0.058	0.058 *
EBR (c)	1	1600	162	169	190	197	0.101	0.106	0.119	0.123
WBL	1	1600	110	119	133	142	0.069	0.074	0.083	0.089 *
WBT	2	3200	377	377	391	391	0.128 *	0.128 *	0.137 *	0.137
WBR (d)	0	0	33	33	48	48	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.608**	**0.628**	**0.699**	**0.722**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**C**

NOTES:

RTOR: *(a) 29%*
(b) 37%
(c) 56%. Not critical due to overlap arrow.
(d) 22%

Printed: 05/24/22

#21069 - RICHARDS RANCH PROJECT **REF:** 01 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *8/1/2016*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *SKYWAY DRIVE-LAKEVIEW ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	340	913	186	147	858	33	51	398	573	100	190	40
(B)	PROJECT-ADDED:	12	40	7	0	52	0	0	0	15	8	0	0
(C)	CUMULATIVE:	400	1141	216	157	1140	33	51	421	663	117	214	53

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL TT R	L TT R	L TT R	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	2	3200	340	352	400	412	0.106	0.110 *	0.125 *	0.129 *
NBT	2	3200	913	953	1141	1181	0.285 *	0.298	0.357	0.369
NBR (a)	1	1600	132	137	153	158	0.083	0.086	0.096	0.099
SBL	1	1600	147	147	157	157	0.092 *	0.092	0.098	0.098
SBT	2	3200	858	910	1140	1192	0.268	0.284 *	0.356 *	0.373 *
SBR (b)	1	1600	18	18	18	18	0.011	0.011	0.011	0.011
EBL	1	1600	51	51	51	51	0.032	0.032	0.032	0.032
EBT	2	3200	398	398	421	421	0.124 *	0.124 *	0.132 *	0.132 *
EBR (c)	1	1600	281	288	325	332	0.176	0.180	0.203	0.208
WBL	1	1600	100	108	117	125	0.063 *	0.068 *	0.073 *	0.078 *
WBT	2	3200	190	190	214	214	0.068	0.068	0.078	0.078
WBR (d)	0	0	26	26	34	34	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.664**	**0.686**	**0.786**	**0.812**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**C**	**D**

NOTES:

RTOR: *(a) 29%*
(b) 44%
(c) 51%. Not critical due to overlap arrow.
(d) 36%

Printed: 05/24/22

#21069 - RICHARDS RANCH PROJECT REF: 02 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *FOSTER ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	19	1227	91	105	809	98	176	93	8	118	76	249
(B)	PROJECT-ADDED:	7	94	0	0	70	0	0	0	5	0	0	0
(C)	CUMULATIVE:	47	1304	91	106	871	275	321	117	45	118	121	250

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L T TR	SOUTH BOUND L TT R	EAST BOUND LL TR	WEST BOUND L T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	19	26	47	54	0.012	0.016	0.029	0.034
NBT	2	3200	1227	1321	1304	1398	0.405 *	0.435 *	0.429 *	0.459 *
NBR (a)	0	0	70	70	70	70	-	-	-	-
SBL	1	1600	105	105	106	106	0.066 *	0.066 *	0.066 *	0.066 *
SBT	2	3200	809	879	871	941	0.253	0.275	0.272	0.294
SBR (b)	1	1600	68	68	190	190	0.043	0.043	0.119	0.119
EBL	2	3200	176	176	321	321	0.055 *	0.055 *	0.100 *	0.100 *
EBT	1	1600	93	93	117	117	0.061	0.063	0.089	0.091
EBR (c)	0	0	5	8	26	29	-	-	-	-
WBL	1	1600	118	118	118	118	0.074	0.074	0.074	0.074
WBT	1	1600	76	76	121	121	0.048	0.048	0.076	0.076
WBR (d)	1	1600	132	132	133	133	0.083 *	0.083 *	0.083 *	0.083 *
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.709**	**0.739**	**0.778**	**0.808**
					SCENARIO LEVEL OF SERVICE:		C	C	C	D

NOTES:

RTOR: *(a) 23%*
(b) 31%
(c) 42%
(d) 47%

Printed: 05/24/22

#21069 - RICHARDS RANCH PROJECT REF: 02 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *FOSTER ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	6	1130	60	133	1299	133	182	53	27	67	48	107
(B)	PROJECT-ADDED:	5	59	0	0	75	0	0	0	6	0	0	0
(C)	CUMULATIVE:	31	1266	60	135	1464	263	362	88	71	67	74	109

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T TR	L TT R	LL TR	L T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	6	11	31	36	0.004	0.007	0.019	0.023
NBT	2	3200	1130	1189	1266	1325	0.368 *	0.386 *	0.410 *	0.428 *
NBR (a)	0	0	46	46	46	46	-	-	-	-
SBL	1	1600	133	133	135	135	0.083 *	0.083 *	0.084 *	0.084 *
SBT	2	3200	1299	1374	1464	1539	0.406	0.429	0.458	0.481
SBR (b)	1	1600	94	94	187	187	0.059	0.059	0.117	0.117
EBL	2	3200	182	182	362	362	0.057	0.057	0.113 *	0.113 *
EBT	1	1600	53	53	88	88	0.046 *	0.048 *	0.088	0.090
EBR (c)	0	0	20	24	52	56	-	-	-	-
WBL	1	1600	67	67	67	67	0.042 *	0.042 *	0.042	0.042
WBT	1	1600	48	48	74	74	0.030	0.030	0.046 *	0.046 *
WBR (d)	1	1600	43	43	44	44	0.027	0.027	0.028	0.028
						LOST TIME:	0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.639**	**0.659**	**0.753**	**0.771**
						SCENARIO LEVEL OF SERVICE:	**B**	**B**	**C**	**C**

NOTES:

RTOR: *(a) 23%*
(b) 29%
(c) 27%
(d) 60%

Printed: 05/24/22

HCS Two-Way Stop-Control Report

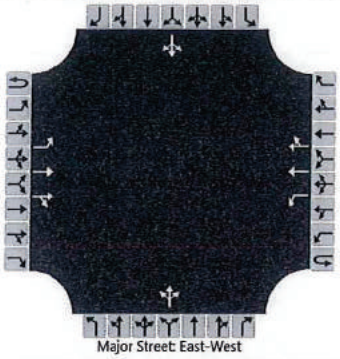
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDTIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	13	296	0	0	78	176	32		0	44	189		0	3	1
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								2						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				96					288				5	
Capacity, c (veh/h)		1298				1183					593				333	
v/c Ratio		0.01				0.08					0.49				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.6				0.0	
Control Delay (s/veh)		7.8				8.3					16.7				16.0	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				2.3				16.7				16.0			
Approach LOS	A				A				C				C			

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AWD = 14.3 SEC = LOS B

HCS Two-Way Stop-Control Report

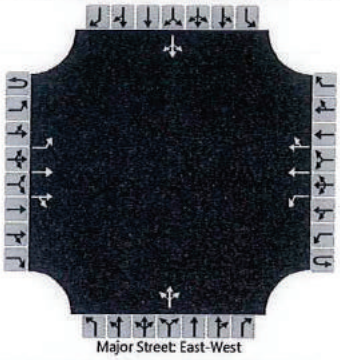
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	13	325	0	0	88	206	32		0	44	198		0	3	1
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								2						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				109					299				5	
Capacity, c (veh/h)		1257				1147					554				290	
v/c Ratio		0.01				0.09					0.54				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.3					3.2				0.1	
Control Delay (s/veh)		7.9				8.5					18.8				17.6	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				2.3				18.8				17.6			
Approach LOS	A				A				C				C			

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AWD = 15.8 SEC = LOS C

#21069 - RICHARDS RANCH PROJECT REF: 03 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *FOXENWOOD LANE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL CUMULATIVE IMPROVEMENT*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	0	44	189	0	3	1	13	296	0	78	176	32
(B)	PROJECT-ADDED:	0	0	9	0	0	0	0	29	0	10	30	0
(C)	CUMULATIVE:	0	51	189	132	7	23	58	296	0	78	176	140

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	0	0	0	0	0.000	0.000	0.000	0.000
NBT	1	1600	44	44	51	51	0.146 *	0.151 *	0.150 *	0.156 *
NBR (a)		0	189	198	189	198	-	-	-	-
SBL	1	1600	0	0	132	132	0.000 *	0.000 *	0.083 *	0.083 *
SBT	1	1600	3	3	7	7	0.003	0.003	0.019	0.019
SBR (b)	0	0	1	1	23	23	-	-	-	-
EBL	1	1600	13	13	58	58	0.008	0.008	0.036	0.036
EBT	2	3200	296	325	296	325	0.093 *	0.102 *	0.093 *	0.102 *
EBR (c)		0	0	0	0	0	-	-	-	-
WBL	1	1600	78	88	78	88	0.049 *	0.055 *	0.049 *	0.055 *
WBT	2	3200	176	206	176	206	0.062	0.072	0.087	0.096
WBR (d)		0	23	23	102	102	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.388**	**0.408**	**0.475**	**0.496**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/25/22

HCS Two-Way Stop-Control Report

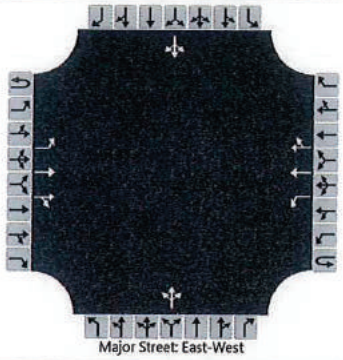
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	1	220	3	0	178	300	6		3	9	99		7	8	12
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				193					121				29	
Capacity, c (veh/h)		1216				1314					695				361	
v/c Ratio		0.00				0.15					0.17				0.08	
95% Queue Length, Q_{95} (veh)		0.0				0.5					0.6				0.3	
Control Delay (s/veh)		8.0				8.2					11.3				15.9	
Level of Service (LOS)		A				A					B				C	
Approach Delay (s/veh)	0.0				3.0				11.3				15.9			
Approach LOS	A				A				B				C			

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AWD = 9.9 SEC = LOS A

HCS Two-Way Stop-Control Report

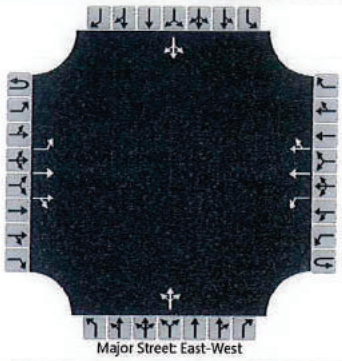
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/FOXENWOOD LANE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	FOXENWOOD LANE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	1	245	3	0	185	324	6		3	9	107		7	8	12
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage	Left Only									2						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				201					129				29	
Capacity, c (veh/h)		1189				1284					676				333	
v/c Ratio		0.00				0.16					0.19				0.09	
95% Queue Length, Q_{95} (veh)		0.0				0.6					0.7				0.3	
Control Delay (s/veh)		8.0				8.3					11.6				16.9	
Level of Service (LOS)		A				A					B				C	
Approach Delay (s/veh)	0.0				3.0				11.6				16.9			
Approach LOS	A				A				B				C			

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AWD = 10.2 SEC = LOS B

#21069 - RICHARDS RANCH PROJECT REF: 03 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *FOXENWOOD LANE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL CUMULATIVE IMPROVEMENT*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	3	9	99	7	8	12	1	220	3	178	300	6
(B)	PROJECT-ADDED:	0	0	8	0	0	0	0	25	0	7	24	0
(C)	CUMULATIVE:	3	13	99	159	14	47	27	220	3	178	300	81

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	3	3	3	3	0.002	0.002	0.002	0.002
NBT	1	1600	9	9	13	13	0.068 *	0.073 *	0.070 *	0.075 *
NBR (a)		0	99	107	99	107	-	-	-	-
SBL	1	1600	7	7	159	159	0.004 *	0.004 *	0.099 *	0.099 *
SBT	1	1600	8	8	14	14	0.013	0.013	0.038	0.038
SBR (b)	0	0	12	12	47	47	-	-	-	-
EBL	1	1600	1	1	27	27	0.001	0.001	0.017	0.017
EBT	2	3200	220	245	220	245	0.070 *	0.078 *	0.070 *	0.078 *
EBR (c)		0	3	3	3	3	-	-	-	-
WBL	1	1600	178	185	178	185	0.111 *	0.116 *	0.111 *	0.116 *
WBT	2	3200	300	324	300	324	0.095	0.103	0.112	0.120
WBR (d)		0	4	4	59	59	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.353**	**0.371**	**0.450**	**0.468**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/25/22

#21069 - RICHARDS RANCH PROJECT REF: 04 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/7/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	15	898	254	126	717	97	198	276	15	370	174	236
(B)	PROJECT-ADDED:	0	-94	125	169	-94	0	0	38	0	122	40	186
(C)	CUMULATIVE:	102	953	254	153	741	155	219	310	92	370	260	265

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TT R	SOUTH BOUND LL TT R	EAST BOUND LL TT R	WEST BOUND LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	15	15	102	102	0.009	0.009	0.064	0.064
NBT	2	3200	898	804	953	859	0.281 *	0.251 *	0.298 *	0.268 *
NBR (a)	1	1600	254	379	254	379	0.159	0.237	0.159	0.237
SBL	2	3200	126	295	153	322	0.039 *	0.092 *	0.048 *	0.101 *
SBT	2	3200	717	623	741	647	0.224	0.195	0.232	0.202
SBR (b)	1	1600	97	97	155	155	0.061	0.061	0.097	0.097
EBL	2	3200	198	198	219	219	0.062	0.062	0.068	0.068
EBT	2	3200	276	314	310	348	0.086 *	0.098 *	0.097 *	0.109 *
EBR (c)	1	1600	15	15	92	92	0.009	0.009	0.058	0.058
WBL	2	3200	370	492	370	492	0.116 *	0.154 *	0.116 *	0.154 *
WBT	2	3200	174	214	260	300	0.054	0.067	0.081	0.094
WBR (d)	1	1600	172	308	193	329	0.108	0.193	0.121	0.206
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.622**	**0.695**	**0.659**	**0.732**
					SCENARIO LEVEL OF SERVICE:		**B**	**B**	**B**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d) 27% RTOR (OVERLAP WITH SB LEFT)

Printed: 05/25/22

#21069 - RICHARDS RANCH PROJECT REF: 04 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *ORCUTT EXPRESSWAY (SR 135)*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	9	952	427	311	851	259	144	174	8	273	219	108
(B)	PROJECT-ADDED:	0	-64	93	145	-64	0	0	33	0	89	31	127
(C)	CUMULATIVE:	87	1057	427	372	959	302	165	223	90	273	269	143

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TT R	SOUTH BOUND LL TT R	EAST BOUND LL TT R	WEST BOUND LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	9	9	87	87	0.006	0.006	0.054	0.054
NBT	2	3200	952	888	1057	993	0.298 *	0.278 *	0.330 *	0.310
NBR (a)	1	1600	427	520	427	520	0.267	0.325	0.267	0.325 *
SBL	2	3200	311	456	372	517	0.097 *	0.143 *	0.116 *	0.162 *
SBT	2	3200	851	787	959	895	0.266	0.246	0.300	0.280
SBR (b)	1	1600	259	259	302	302	0.162	0.162	0.189	0.189
EBL	2	3200	144	144	165	165	0.045	0.045	0.052	0.052
EBT	2	3200	174	207	223	256	0.054 *	0.065 *	0.070 *	0.080 *
EBR (c)	1	1600	8	8	90	90	0.005	0.005	0.056	0.056
WBL	2	3200	273	362	273	362	0.085 *	0.113 *	0.085 *	0.113 *
WBT	2	3200	219	250	269	300	0.068	0.078	0.084	0.094
WBR (d)	1	1600	54	118	72	135	0.034	0.074	0.045	0.084
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:	**0.634**	**0.699**	**0.701**	**0.780**
						SCENARIO LEVEL OF SERVICE:	**B**	**B**	**B**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d) 50% RTOR (OVERLAP WITH SB LEFT)

Printed: 05/26/22

#21069 - RICHARDS RANCH PROJECT REF: 05 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *ORCUTT ROAD*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	147	77	72	24	52	8	6	561	90	36	613	13
(B)	PROJECT-ADDED:	78	12	24	15	8	125	174	104	54	81	155	23
(C)	CUMULATIVE:	147	81	72	26	56	8	6	622	90	36	728	15

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	147	225	147	225	0.092 *	0.141 *	0.092 *	0.141 *
NBT	1	1600	77	89	81	93	0.093	0.116	0.096	0.118
NBR (a)	0	0	72	96	72	96	-	-	-	-
SBL	1	1600	24	39	26	41	0.015	0.024	0.016	0.026
SBT	1	1600	52	60	56	64	0.038 *	0.121 *	0.040 *	0.123 *
SBR (b)	0	0	8	133	8	133	-	-	-	-
EBL	1	1600	6	180	6	180	0.004	0.113 *	0.004	0.113 *
EBT	2	3200	561	665	622	726	0.203 *	0.253	0.223 *	0.272
EBR (c)	0	0	90	144	90	144	-	-	-	-
WBL	1	1600	36	117	36	117	0.023 *	0.073	0.023 *	0.073
WBT	2	3200	613	768	728	883	0.196	0.251 *	0.232	0.288 *
WBR (d)	0	0	13	36	15	38	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.456**	**0.726**	**0.478**	**0.765**
					SCENARIO LEVEL OF SERVICE:		**A**	**C**	**A**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 09/27/22

#21069 - RICHARDS RANCH PROJECT REF: 05 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***ORCUTT ROAD***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	**66**	**31**	**42**	**22**	**32**	**5**	**0**	**806**	**105**	**26**	**533**	**11**
(B)	PROJECT-ADDED:	**37**	**8**	**15**	**11**	**7**	**100**	**130**	**93**	**48**	**64**	**118**	**17**
(C)	CUMULATIVE:	**66**	**35**	**42**	**24**	**36**	**5**	**0**	**916**	**105**	**26**	**618**	**13**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	66	103	66	103	0.041 *	0.064 *	0.041 *	0.064 *
NBT	1	1600	31	39	35	43	0.046	0.060	0.048	0.063
NBR (a)	0	0	42	57	42	57	-	-	-	-
SBL	1	1600	22	33	24	35	0.014	0.021	0.015	0.022
SBT	1	1600	32	39	36	43	0.023 *	0.090 *	0.026 *	0.093 *
SBR (b)	0	0	5	105	5	105	-	-	-	-
EBL	1	1600	0	130	0	130	0.000	0.081	0.000	0.081
EBT	2	3200	806	899	916	1009	0.285 *	0.329 *	0.319 *	0.363 *
EBR (c)	0	0	105	153	105	153	-	-	-	-
WBL	1	1600	26	90	26	90	0.016 *	0.056 *	0.016 *	0.056 *
WBT	2	3200	533	651	618	736	0.170	0.212	0.197	0.239
WBR (d)	0	0	11	28	13	30	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.465**	**0.639**	**0.502**	**0.676**
					SCENARIO LEVEL OF SERVICE:		**A**	**B**	**A**	**B**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 09/27/22

HCS Two-Way Stop-Control Report

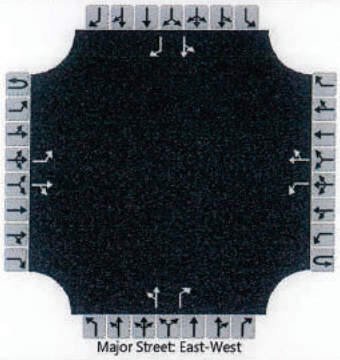
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		18	633	24		41	638	10		26	36	86		25	27	18
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20				45				67		93		57		20
Capacity, c (veh/h)		889				881				124		437		110		438
v/c Ratio		0.02				0.05				0.54		0.21		0.51		0.04
95% Queue Length, Q_{95} (veh)		0.1				0.2				2.6		0.8		2.3		0.1
Control Delay (s/veh)		9.1				9.3				64.0		15.5		67.9		13.6
Level of Service (LOS)		A				A				F		C		F		B
Approach Delay (s/veh)	0.2				0.6				35.8				54.0			
Approach LOS	A				A				E				F			

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AWD= 34.7 SEC = LOS D

HCS Two-Way Stop-Control Report

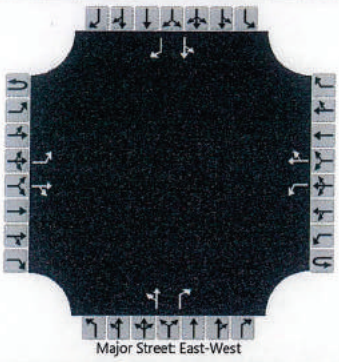
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		32	753	38		41	742	10		40	36	86		25	27	32
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		35				45				83		93		57		35
Capacity, c (veh/h)		806				777				80		364		58		377
v/c Ratio		0.04				0.06				1.03		0.26		0.98		0.09
95% Queue Length, Q_{95} (veh)		0.1				0.2				5.7		1.0		4.5		0.3
Control Delay (s/veh)		9.7				9.9				201.0		18.3		229.5		15.5
Level of Service (LOS)		A				A				F		C		F		C
Approach Delay (s/veh)	0.4				0.5				104.0				148.0			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

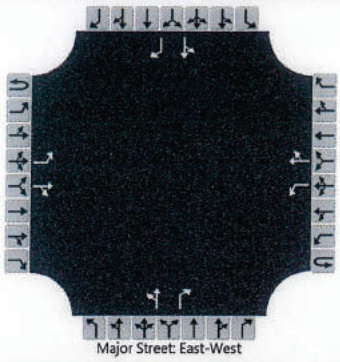
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		18	696	24		41	755	10		26	36	86		25	27	18
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage																
	Left Only									1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		20				45				67		93		57		20
Capacity, c (veh/h)		797				831				93		399		78		370
v/c Ratio		0.02				0.05				0.72		0.23		0.72		0.05
95% Queue Length, Q_{95} (veh)		0.1				0.2				3.7		0.9		3.4		0.2
Control Delay (s/veh)		9.6				9.6				109.6		16.8		125.9		15.3
Level of Service (LOS)		A				A				F		C		F		C
Approach Delay (s/veh)	0.2				0.5				55.7				97.4			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

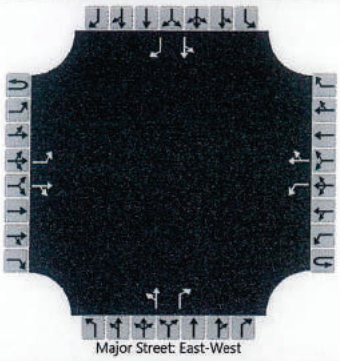
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		32	816	38		41	859	10		40	36	86		25	27	32
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		35				45				83		93		57		35
Capacity, c (veh/h)		722				733				52		332		12		319
v/c Ratio		0.05				0.06				1.58		0.28		4.58		0.11
95% Queue Length, Q_{95} (veh)		0.2				0.2				7.8		1.1		8.1		0.4
Control Delay (s/veh)		10.2				10.2				462.6		20.0		2218.7		17.7
Level of Service (LOS)		B				B				F		C		F		C
Approach Delay (s/veh)	0.4				0.5				227.6				1380.2			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

#21069 - RICHARDS RANCH PROJECT REF: 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *HUMMEL DRIVE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL - WITH RECOMMENDED IMPROVEMENTS*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	26	36	86	25	27	18	18	633	23	41	638	10
(B)	PROJECT-ADDED:	14	0	0	0	0	14	14	120	14	0	104	0
(C)	CUMULATIVE:	26	36	86	25	27	18	18	696	24	41	755	10

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	26	40	26	40	0.016	0.025	0.016	0.025
NBT	1	1600	36	36	36	36	0.076 *	0.076 *	0.076 *	0.076 *
NBR (a)	0	0	86	86	86	86	-	-	-	-
SBL	1	1600	25	25	25	25	0.016 *	0.016 *	0.016 *	0.016 *
SBT	1	1600	27	27	27	27	0.028	0.037	0.028	0.037
SBR (b)	0	0	18	32	18	32	-	-	-	-
EBL	1	1600	18	32	18	32	0.011	0.020	0.011	0.020
EBT	2	3200	633	753	696	816	0.205 *	0.247 *	0.225 *	0.267 *
EBR (c)	0	0	23	37	24	38	-	-	-	-
WBL	1	1600	41	41	41	41	0.026 *	0.026 *	0.026 *	0.026 *
WBT	2	3200	638	742	755	859	0.203	0.235	0.239	0.272
WBR (d)	0	0	10	10	10	10	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.423**	**0.465**	**0.443**	**0.485**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/26/22

HCS Two-Way Stop-Control Report

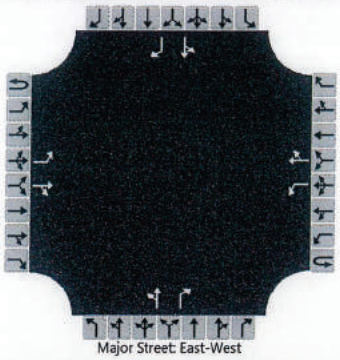
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		24	828	43		66	559	23		20	19	38		12	21	8
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		26				72				42		41		36		9
Capacity, c (veh/h)		945				721				96		325		79		486
v/c Ratio		0.03				0.10				0.44		0.13		0.45		0.02
95% Queue Length, Q_{95} (veh)		0.1				0.3				1.9		0.4		1.8		0.1
Control Delay (s/veh)		8.9				10.5				69.5		17.7		83.5		12.5
Level of Service (LOS)		A				B				F		C		F		B
Approach Delay (s/veh)	0.2				1.1				43.9				69.7			
Approach LOS	A				A				E				F			

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AWD = 34.3 SEC = LOS D

HCS Two-Way Stop-Control Report

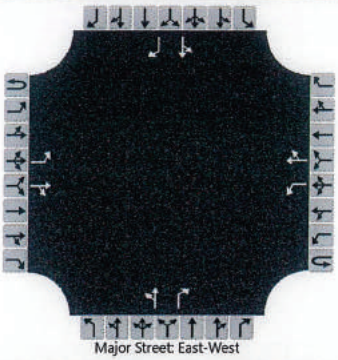
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		35	913	54		66	658	23		32	19	38		12	21	19
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		38				72				55		41		36		21
Capacity, c (veh/h)		862				658				68		285		50		422
v/c Ratio		0.04				0.11				0.81		0.14		0.71		0.05
95% Queue Length, Q_{95} (veh)		0.1				0.4				3.8		0.5		2.9		0.2
Control Delay (s/veh)		9.4				11.1				160.8		19.7		176.8		14.0
Level of Service (LOS)		A				B				F		C		F		B
Approach Delay (s/veh)	0.3				1.0				100.6				117.3			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

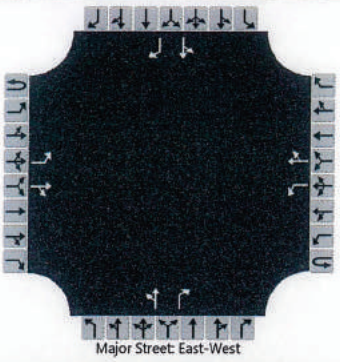
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		24	940	43		66	646	23		20	19	38		12	21	8
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		26				72				42		41		36		9
Capacity, c (veh/h)		872				648				69		277		53		429
v/c Ratio		0.03				0.11				0.61		0.15		0.68		0.02
95% Queue Length, Q_{95} (veh)		0.1				0.4				2.7		0.5		2.8		0.1
Control Delay (s/veh)		9.3				11.2				118.1		20.3		163.9		13.6
Level of Service (LOS)		A				B				F		C		F		B
Approach Delay (s/veh)	0.2				1.0				69.8				134.6			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

HCS Two-Way Stop-Control Report

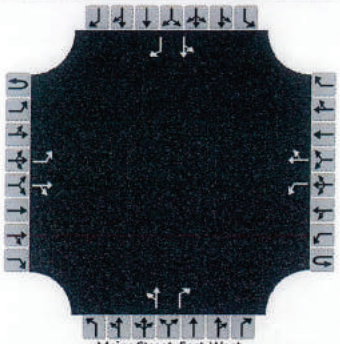
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/HUMMEL DRIVE
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	HUMMEL DRIVE
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		0	1	1
Configuration		L		TR		L		TR		LT		R		LT		R
Volume (veh/h)		35	1025	54		66	745	23		32	19	38		12	21	19
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized										No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		38				72				55		41		36		21
Capacity, c (veh/h)		794				592				41		242		14		372
v/c Ratio		0.05				0.12				1.35		0.17		2.53		0.06
95% Queue Length, Q_{95} (veh)		0.2				0.4				5.5		0.6		5.3		0.2
Control Delay (s/veh)		9.8				11.9				414.3		22.9		1241.2		15.2
Level of Service (LOS)		A				B				F		C		F		C
Approach Delay (s/veh)	0.3				0.9				247.2				793.3			
Approach LOS	A				A				F				F			

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AWD = > 50 SEC = LOS F

#21069 - RICHARDS RANCH PROJECT REF: 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *12/17/2019*

TIME PERIOD: *PM PEAK HOUR*

N/S STREET: *HUMMEL DRIVE*

E/W STREET: *UVP*

CONTROL TYPE: *SIGNAL - WITH RECOMMENDED IMPROVEMENTS*

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	20	19	38	12	21	8	24	828	43	66	559	23
(B)	PROJECT-ADDED:	12	0	0	0	0	11	11	85	11	0	99	0
(C)	CUMULATIVE:	20	19	38	12	21	8	24	940	43	66	646	23

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	20	32	20	32	0.013	0.020 *	0.013	0.020 *
NBT	1	1600	19	19	19	19	0.036 *	0.036	0.036 *	0.036
NBR (a)	0	0	38	38	38	38	-	-	-	-
SBL	1	1600	12	12	12	12	0.008 *	0.008	0.008 *	0.008
SBT	1	1600	21	21	21	21	0.018	0.025 *	0.018	0.025 *
SBR (b)	0	0	8	19	8	19	-	-	-	-
EBL	1	1600	24	35	24	35	0.015	0.022	0.015	0.022
EBT	2	3200	828	913	940	1025	0.272 *	0.302 *	0.307 *	0.337 *
EBR (c)	0	0	43	54	43	54	-	-	-	-
WBL	1	1600	66	66	66	66	0.041 *	0.041 *	0.041 *	0.041 *
WBT	2	3200	559	658	646	745	0.182	0.213	0.209	0.240
WBR (d)	0	0	23	23	23	23	-	-	-	-
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.457**	**0.488**	**0.492**	**0.523**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/26/22

#21069 - RICHARDS RANCH PROJECT REF: 07 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *7/23/2019*

TIME PERIOD: ***AM PEAK HOUR***

N/S STREET: ***BRADLEY ROAD***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	83	273	132	51	148	30	28	464	42	75	399	14
(B)	PROJECT-ADDED:	27	0	0	0	0	20	19	79	22	0	57	0
(C)	CUMULATIVE:	112	324	144	51	184	30	29	510	57	80	485	15

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TT R	L T TR	LL TT R	LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	83	110	112	139	0.052	0.069 *	0.070 *	0.087 *
NBT	2	3200	273	273	324	324	0.085 *	0.085	0.101	0.101
NBR (a)	1	1600	132	132	144	144	0.083	0.083	0.090	0.090
SBL	1	1600	51	51	51	51	0.032 *	0.032	0.032	0.032
SBT	2	3200	148	148	184	184	0.056	0.062 *	0.067 *	0.073 *
SBR (b)	0	0	30	50	30	50	-	-	-	-
EBL	2	3200	28	47	29	48	0.009	0.015	0.009	0.015
EBT	2	3200	464	543	510	589	0.145 *	0.170 *	0.159 *	0.184 *
EBR (c)	1	1600	42	64	57	79	0.026	0.040	0.036	0.049
WBL	2	3200	75	75	80	80	0.023 *	0.023 *	0.025 *	0.025 *
WBT	2	3200	399	456	485	542	0.125	0.143	0.152	0.169
WBR (d)	1	1600	14	14	15	15	0.009	0.009	0.009	0.009
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.385**	**0.424**	**0.421**	**0.469**
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

NOTES:

RTOR: (a)
(b)
(c)
(d)

Printed: 05/26/22

#21069 - RICHARDS RANCH PROJECT REF: 07 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *7/23/2019*

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***BRADLEY ROAD***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A)	EXISTING:	65	342	101	40	405	65	60	524	136	172	587	54
(B)	PROJECT-ADDED:	22	0	0	0	0	17	16	51	18	0	60	0
(C)	CUMULATIVE:	100	398	108	40	474	65	61	590	180	184	638	54

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TT R	SOUTH BOUND L T TR	EAST BOUND LL TT R	WEST BOUND LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	65	87	100	122	0.041 *	0.054 *	0.063 *	0.076 *
NBT	2	3200	342	342	398	398	0.107	0.107	0.124	0.124
NBR (a)	1	1600	101	101	108	108	0.063	0.063	0.068	0.068
SBL	1	1600	40	40	40	40	0.025	0.025	0.025	0.025
SBT	2	3200	405	405	474	474	0.147 *	0.152 *	0.168 *	0.174 *
SBR (b)	0	0	65	82	65	82	-	-	-	-
EBL	2	3200	60	76	61	77	0.019	0.024	0.019	0.024
EBT	2	3200	524	575	590	641	0.164 *	0.180 *	0.184 *	0.200 *
EBR (c)	1	1600	136	154	180	198	0.085	0.096	0.113	0.124
WBL	2	3200	172	172	184	184	0.054 *	0.054 *	0.058 *	0.058 *
WBT	2	3200	587	647	638	698	0.183	0.202	0.199	0.218
WBR (d)	1	1600	54	54	54	54	0.034	0.034	0.034	0.034
					LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
					TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.506**	**0.540**	**0.573**	**0.608**
					SCENARIO LEVEL OF SERVICE:		A	A	A	B

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 05/26/22

HCS Two-Way Stop-Control Report

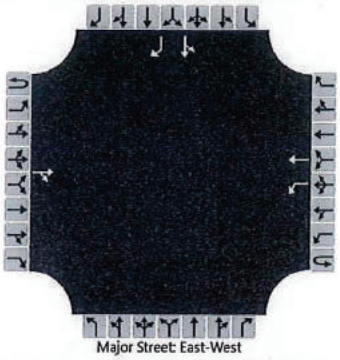
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			932	107		2	90							1	4	428
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		465
Capacity, c (veh/h)						615								189		955
v/c Ratio						0.00								0.03		0.49
95% Queue Length, Q_{95} (veh)						0.0								0.1		2.7
Control Delay (s/veh)						10.9								24.6		12.3
Level of Service (LOS)						B								C		B
Approach Delay (s/veh)					0.2								12.4			
Approach LOS					A								B			

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AWD = 12.4 SEC = LOS B

HCS Two-Way Stop-Control Report

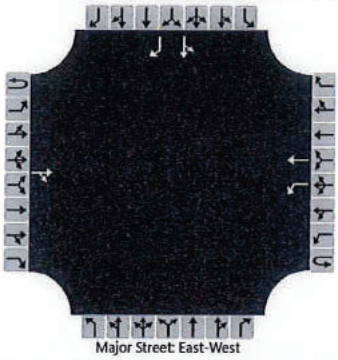
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			980	131		2	108							1	4	451
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		490
Capacity, c (veh/h)						574								166		932
v/c Ratio						0.00								0.03		0.53
95% Queue Length, Q_{95} (veh)						0.0								0.1		3.1
Control Delay (s/veh)						11.3								27.4		13.1
Level of Service (LOS)						B								D		B
Approach Delay (s/veh)					0.2								13.2			
Approach LOS					A								B			

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AWD = 13.2 SEC = LOS B

HCS Two-Way Stop-Control Report

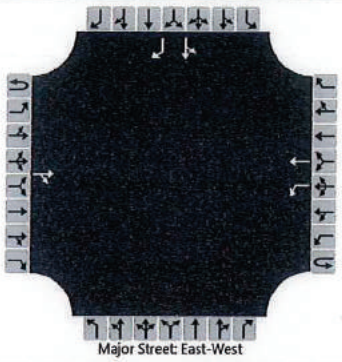
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			976	121		2	116							1	4	471
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		512
Capacity, c (veh/h)						582								168		922
v/c Ratio						0.00								0.03		0.56
95% Queue Length, Q_{95} (veh)						0.0								0.1		3.5
Control Delay (s/veh)						11.2								27.2		13.7
Level of Service (LOS)						B								D		B
Approach Delay (s/veh)					0.2								13.8			
Approach LOS					A								B			

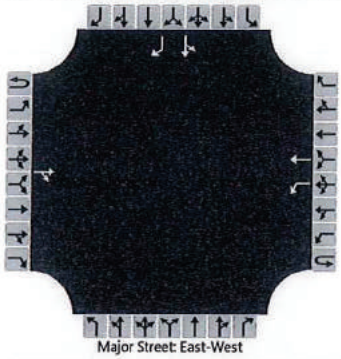
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AWD = 13.8 SEC = LOS B

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SAS	Intersection	UVP/US 101 SB RAMPS
Agency/Co.	ATE	Jurisdiction	SANTA MARIA
Date Performed	1/5/2022	East/West Street	UVP
Analysis Year	2019	North/South Street	US 101 SB RAMPS
Time Analyzed	AM PEAK HOUR	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	CUMULATIVE + PROJECT CONDITIONS		

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			1024	145		2	134							1	4	493
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2								5		536
Capacity, c (veh/h)						543								148		899
v/c Ratio						0.00								0.04		0.60
95% Queue Length, Q_{95} (veh)						0.0								0.1		4.1
Control Delay (s/veh)						11.7								30.3		14.7
Level of Service (LOS)						B								D		B
Approach Delay (s/veh)					0.2								14.9			
Approach LOS					A								B			

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AWD = 14.8 SEC = LOS B

HCS Two-Way Stop-Control Report

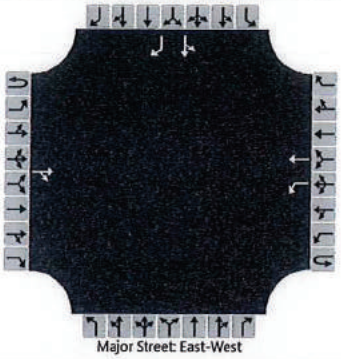
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			729	55		3	109							2	2	532
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		578
Capacity, c (veh/h)						782								292		931
v/c Ratio						0.00								0.01		0.62
95% Queue Length, Q_{95} (veh)						0.0								0.0		4.5
Control Delay (s/veh)						9.6								17.5		15.0
Level of Service (LOS)						A								C		B
Approach Delay (s/veh)					0.3								15.0			
Approach LOS					A								C			

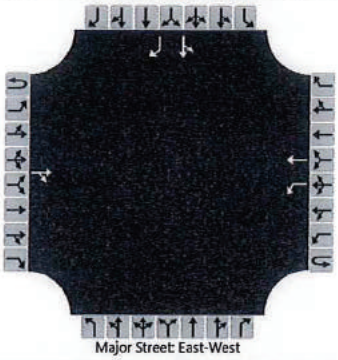
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AWD = 15.0 SEC = LOS B

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SAS	Intersection	UVP/US 101 SB RAMPS
Agency/Co.	ATE	Jurisdiction	SANTA MARIA
Date Performed	1/5/2022	East/West Street	UVP
Analysis Year	2019	North/South Street	US 101 SB RAMPS
Time Analyzed	PM PEAK HOUR	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	EXISTING + PROJECT CONDITIONS		

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			759	70		3	128							2	2	557
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		605
Capacity, c (veh/h)						750								271		906
v/c Ratio						0.00								0.02		0.67
95% Queue Length, Q_{95} (veh)						0.0								0.0		5.3
Control Delay (s/veh)						9.8								18.5		16.6
Level of Service (LOS)						A								C		C
Approach Delay (s/veh)					0.2								16.6			
Approach LOS					A								C			

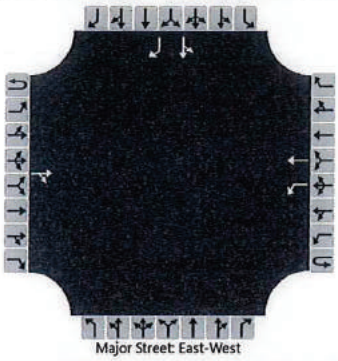
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AWD = 16.6 SEC = LOS C

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SAS	Intersection	UVP/US 101 SB RAMPS
Agency/Co.	ATE	Jurisdiction	SANTA MARIA
Date Performed	1/5/2022	East/West Street	UVP
Analysis Year	2019	North/South Street	US 101 SB RAMPS
Time Analyzed	PM PEAK HOUR	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	CUMULATIVE CONDITIONS		

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			782	75		3	124							2	2	563
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		612
Capacity, c (veh/h)						730								262		911
v/c Ratio						0.00								0.02		0.67
95% Queue Length, Q_{95} (veh)						0.0								0.1		5.4
Control Delay (s/veh)						10.0								19.0		16.6
Level of Service (LOS)						A								C		C
Approach Delay (s/veh)					0.2								16.6			
Approach LOS					A								C			

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AWD = 16.6 SEC = LOS C

HCS Two-Way Stop-Control Report

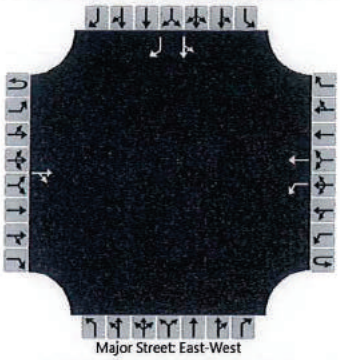
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 SB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 SB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Only used 65% of SB right-turn volume

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	1	1
Configuration				TR		L	T							LT		R
Volume (veh/h)			812	90		3	143							2	2	588
Percent Heavy Vehicles (%)						3								3	3	3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1								7.1	6.5	6.2
Critical Headway (sec)						4.13								7.13	6.53	6.23
Base Follow-Up Headway (sec)						2.2								3.5	4.0	3.3
Follow-Up Headway (sec)						2.23								3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3								4		639
Capacity, c (veh/h)						700								243		888
v/c Ratio						0.00								0.02		0.72
95% Queue Length, Q_{95} (veh)						0.0								0.1		6.4
Control Delay (s/veh)						10.2								20.1		18.7
Level of Service (LOS)						B								C		C
Approach Delay (s/veh)					0.2								18.7			
Approach LOS					A								C			

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AWD = 18.7 SEC = LOS C

HCS Two-Way Stop-Control Report

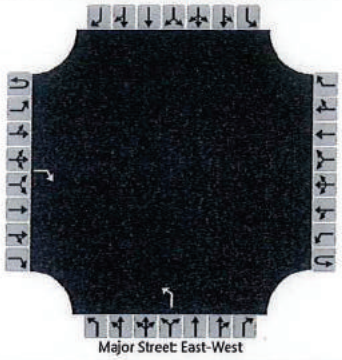
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				933						92						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										100						
Capacity, c (veh/h)										940						
v/c Ratio										0.11						
95% Queue Length, Q_{95} (veh)										0.4						
Control Delay (s/veh)										9.3						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.3						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

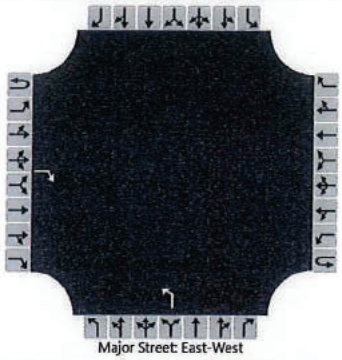
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				981						110						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										120						
Capacity, c (veh/h)										940						
v/c Ratio										0.13						
95% Queue Length, Q_{95} (veh)										0.4						
Control Delay (s/veh)										9.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.4						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

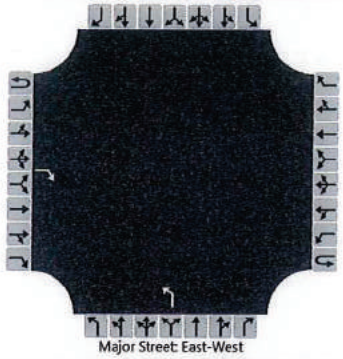
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				977						118						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										128						
Capacity, c (veh/h)										940						
v/c Ratio										0.14						
95% Queue Length, Q_{95} (veh)										0.5						
Control Delay (s/veh)										9.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.4						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

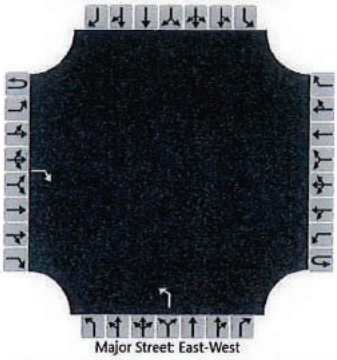
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				1025						136						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										148						
Capacity, c (veh/h)										940						
v/c Ratio										0.16						
95% Queue Length, Q_{95} (veh)										0.6						
Control Delay (s/veh)										9.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.5						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

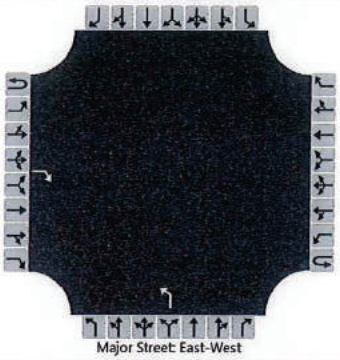
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				731						112						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										122						
Capacity, c (veh/h)										940						
v/c Ratio										0.13						
95% Queue Length, Q_{95} (veh)										0.4						
Control Delay (s/veh)										9.4						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.4						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

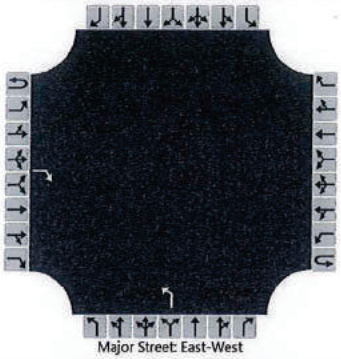
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	EXISTING + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				761						131						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										142						
Capacity, c (veh/h)										940						
v/c Ratio										0.15						
95% Queue Length, Q_{95} (veh)										0.5						
Control Delay (s/veh)										9.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.5						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

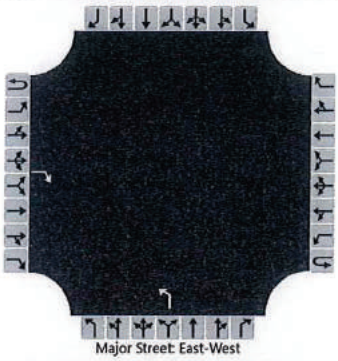
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				784						127						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										138						
Capacity, c (veh/h)										940						
v/c Ratio										0.15						
95% Queue Length, Q_{95} (veh)										0.5						
Control Delay (s/veh)										9.5						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.5						
Approach LOS										A						

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HCS Two-Way Stop-Control Report

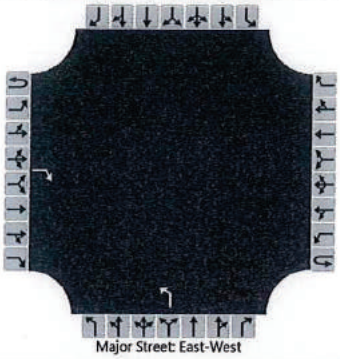
General Information

Analyst	SAS
Agency/Co.	ATE
Date Performed	1/5/2022
Analysis Year	2019
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDITIONS

Site Information

Intersection	UVP/US 101 NB RAMPS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	US 101 NB RAMPS
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	0	1	0	0	0	0		1	0	0		0	0	0
Configuration				R						L						
Volume (veh/h)				814						146						
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No													
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)										6.4						
Critical Headway (sec)										5.76						
Base Follow-Up Headway (sec)										3.8						
Follow-Up Headway (sec)										3.83						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										159						
Capacity, c (veh/h)										940						
v/c Ratio										0.17						
95% Queue Length, Q_{95} (veh)										0.6						
Control Delay (s/veh)										9.6						
Level of Service (LOS)										A						
Approach Delay (s/veh)										9.6						
Approach LOS										A						

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PROJECT DRIVEWAYS - LEVEL OF SERVICE CALCULATION WORKSHEETS

HCS Two-Way Stop-Control Report

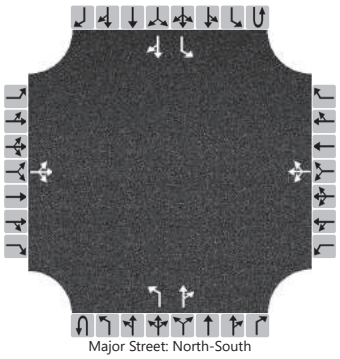
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 1&2 DRIVEWAYS
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 1&2 DRIVEWAYS
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		4	0	72		82	0	21		75	41	142		26	78	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			76				103			75				26		
Capacity, c (veh/h)			947				598			1508				1386		
v/c Ratio			0.08				0.17			0.05				0.02		
95% Queue Length, Q_{95} (veh)			0.3				0.6			0.2				0.1		
Control Delay (s/veh)			9.1				12.3			7.5				7.6		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.1				12.3				2.2				1.8		
Approach LOS		A				B				A				A		

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AWD = 9.7 sec. (LOS A)

HCS Two-Way Stop-Control Report

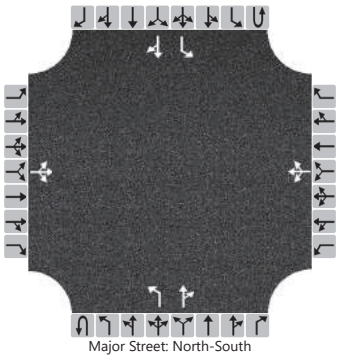
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 1&2 DRIVEWAYS
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 1&2 DRIVEWAYS
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		3	0	55		67	0	17		56	43	105		20	57	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58				84			56				20		
Capacity, c (veh/h)			979				666			1537				1427		
v/c Ratio			0.06				0.13			0.04				0.01		
95% Queue Length, Q_{95} (veh)			0.2				0.4			0.1				0.0		
Control Delay (s/veh)			8.9				11.2			7.4				7.6		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		8.9				11.2				2.0				1.9		
Approach LOS		A				B				A				A		

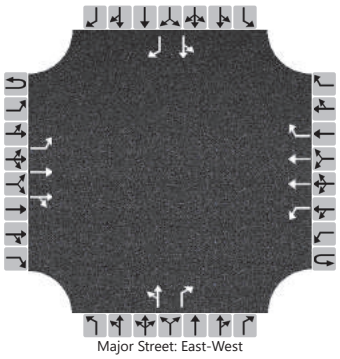
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AWD = 9.3 sec. (LOS A)

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	GOM	Intersection	UVP/PARCEL 2 EASTERLY & PARCEL 4 DWYS
Agency/Co.	ATE	Jurisdiction	SANTA MARIA
Date Performed	8/31/22	East/West Street	UVP
Analysis Year	2022	North/South Street	PARCEL 2 EASTERLY & PARCEL 4 DRIVEWAYS
Time Analyzed	AM PEAK HOUR	Peak Hour Factor	1.00
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	CUMULATIVE + PROJECT CONDTIONS		

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	1		0	1	1
Configuration		L	T	TR		L	T	R		LT		R		LT		R
Volume (veh/h)	0	129	791	11	0	14	903	13		34	0	44		50	0	24
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized						No				No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		129				14				34		44		50		24
Capacity, c (veh/h)		734				811				142		596		158		552
v/c Ratio		0.18				0.02				0.24		0.07		0.32		0.04
95% Queue Length, Q_{95} (veh)		0.6				0.1				0.9		0.2		1.3		0.1
Control Delay (s/veh)		10.9				9.5				38.1		11.5		37.9		11.8
Level of Service (LOS)		B				A				E		B		E		B
Approach Delay (s/veh)	1.5				0.1				23.1				29.5			
Approach LOS	A				A				C				D			

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AWD = 18.7 sec. (LOS C)

HCS Two-Way Stop-Control Report

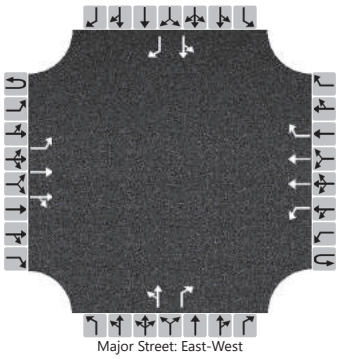
General Information

Analyst	GOM
Agency/Co.	ATE
Date Performed	8/31/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 EASTERLY & PARCEL 4 DWYS
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 EASTERLY & PARCEL 4 DRIVEWAYS
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	1		0	1	1
Configuration		L	T	TR		L	T	R		LT		R		LT		R
Volume (veh/h)	0	95	1052	23	0	31	756	10		13	0	17		45	0	20
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized						No				No				No		
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		95				31				13		17		45		20
Capacity, c (veh/h)		837				638				123		485		170		617
v/c Ratio		0.11				0.05				0.11		0.04		0.27		0.03
95% Queue Length, Q_{95} (veh)		0.4				0.2				0.3		0.1		1.0		0.1
Control Delay (s/veh)		9.9				10.9				37.8		12.7		33.7		11.0
Level of Service (LOS)		A				B				E		B		D		B
Approach Delay (s/veh)		0.8				0.4				23.6				26.7		
Approach LOS		A				A				C				D		

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AWD = 16.8 sec. (LOS C)

HCS Two-Way Stop-Control Report

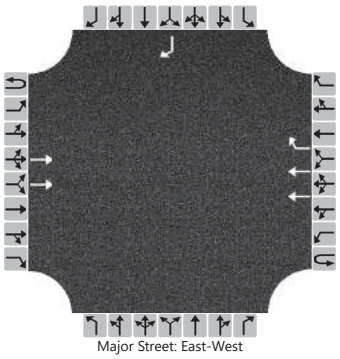
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 WESTERLY DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 WESTERLY DRIVEWAY
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	1		0	0	0		0	0	1
Configuration			T				T	R								R
Volume (veh/h)			931				837	124								204
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized							Yes						No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																204
Capacity, c (veh/h)																581
v/c Ratio																0.35
95% Queue Length, Q_{95} (veh)																1.6
Control Delay (s/veh)																14.5
Level of Service (LOS)																B
Approach Delay (s/veh)													14.5			
Approach LOS													B			

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HCS Two-Way Stop-Control Report

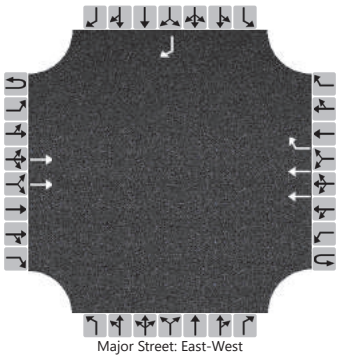
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	East-West
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	UVP/PARCEL 2 WESTERLY DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	UVP
North/South Street	PARCEL 2 WESTERLY DRIVEWAY
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	1		0	0	0		0	0	1
Configuration			T				T	R								R
Volume (veh/h)			1170				694	95								170
Percent Heavy Vehicles (%)																3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized							Yes							No		
Median Type | Storage							Undivided									

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.96
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																170
Capacity, c (veh/h)																646
v/c Ratio																0.26
95% Queue Length, Q_{95} (veh)																1.1
Control Delay (s/veh)																12.5
Level of Service (LOS)																B
Approach Delay (s/veh)														12.5		
Approach LOS														B		

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HCS Two-Way Stop-Control Report

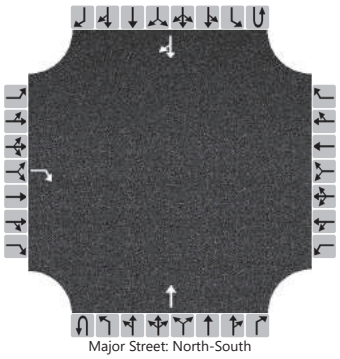
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 NORTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 NORTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T					TR
Volume (veh/h)				2							414				203	68
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.23												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				2												
Capacity, c (veh/h)				800												
v/c Ratio				0.00												
95% Queue Length, Q_{95} (veh)				0.0												
Control Delay (s/veh)				9.5												
Level of Service (LOS)				A												
Approach Delay (s/veh)	9.5															
Approach LOS	A															

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HCS Two-Way Stop-Control Report

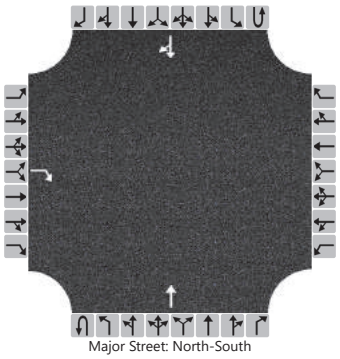
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 NORTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 NORTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T					TR
Volume (veh/h)				0							203				202	38
Percent Heavy Vehicles (%)				3												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.23												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.33												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				0												
Capacity, c (veh/h)				816												
v/c Ratio				0.00												
95% Queue Length, Q_{95} (veh)				0.0												
Control Delay (s/veh)				9.4												
Level of Service (LOS)				A												
Approach Delay (s/veh)																
Approach LOS																

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HCS Two-Way Stop-Control Report

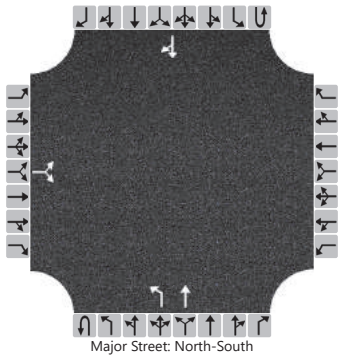
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 3 SOUTH DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 3 SOUTH DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		65		2						4	349				205	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			67							4						
Capacity, c (veh/h)			570							1360						
v/c Ratio			0.12							0.00						
95% Queue Length, Q_{95} (veh)			0.4							0.0						
Control Delay (s/veh)			12.2							7.7						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)		12.2								0.1						
Approach LOS		B								A						

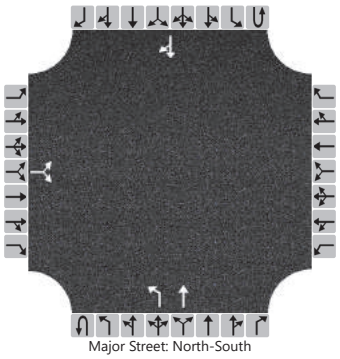
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AWD = 11.2 sec. (LOS B)

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	JH	Intersection	ORCUTT/PARCEL 3 SOUTH DRIVEWAY
Agency/Co.	ATE	Jurisdiction	SANTA MARIA
Date Performed	9/27/22	East/West Street	PARCEL 3 SOUTH DRIVEWAY
Analysis Year	2022	North/South Street	ORCUTT ROAD
Time Analyzed	PM PEAK HOUR	Peak Hour Factor	1.00
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	CUMULATIVE + PROJECT CONDTIONS		

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		35		2						2	168				202	0
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37							2						
Capacity, c (veh/h)			676							1364						
v/c Ratio			0.05							0.00						
95% Queue Length, Q_{95} (veh)			0.2							0.0						
Control Delay (s/veh)			10.6							7.6						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.6								0.1							
Approach LOS	B								A							

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AWD = 10.4 sec. (LOS B)

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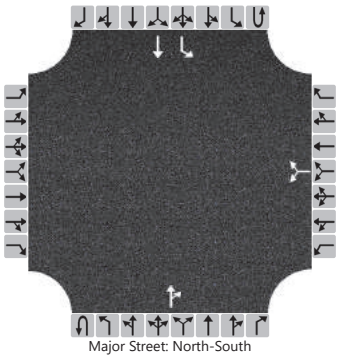
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	AM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 5 DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 5 DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						3		39			314	1		12	194	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							42							12		
Capacity, c (veh/h)							711							1240		
v/c Ratio							0.06							0.01		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
Control Delay (s/veh)							10.4							7.9		
Level of Service (LOS)							B							A		
Approach Delay (s/veh)					10.4								0.5			
Approach LOS					B								A			

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AWD = 9.8 sec. (LOS A)

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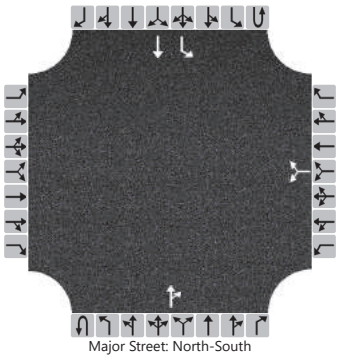
General Information

Analyst	JH
Agency/Co.	ATE
Date Performed	9/27/22
Analysis Year	2022
Time Analyzed	PM PEAK HOUR
Intersection Orientation	North-South
Project Description	CUMULATIVE + PROJECT CONDTIONS

Site Information

Intersection	ORCUTT/PARCEL 5 DRIVEWAY
Jurisdiction	SANTA MARIA
East/West Street	PARCEL 5 DRIVEWAY
North/South Street	ORCUTT ROAD
Peak Hour Factor	1.00
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						2		16			154	2		27	177	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							18							27		
Capacity, c (veh/h)							854							1418		
v/c Ratio							0.02							0.02		
95% Queue Length, Q_{95} (veh)							0.1							0.1		
Control Delay (s/veh)							9.3							7.6		
Level of Service (LOS)							A							A		
Approach Delay (s/veh)						9.3							1.0			
Approach LOS						A							A			

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AWD = 8.3 sec. (LOS A)

APPENDIX D

Supplemental Traffic Mitigation Analysis for the Union Valley Parkway and Hummel Drive Intersection

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805)687-4418 • main@atesb.com

Since 1978

Richard L. Pool, P.E.
Scott A. Schell

December 1, 2022 21069L02

Richards Ranch, LLC
Re: Michael Stoltey, Managing Member
San Luis Obispo, CA

SUPPLEMENTAL TRAFFIC MITIGATION ANALYSIS FOR THE RICHARDS RANCH PROJECT, CITY OF SANTA MARIA

Associated Transportation Engineers (ATE) has prepared the following supplemental traffic mitigation analysis for the Richards Ranch Project (the "Project"). The supplemental analysis provides additional information on the improvements identified for the UVP/Hummel Drive intersection.

INTRODUCTION

The traffic study completed by ATE for the Richards Ranch Project[1] contained an analysis of the future long-term improvements at the UVP/Hummel Drive intersection that included widening of the UVP to its ultimate 4-lane configuration and installation of traffic signals. City staff requested that this analysis be expanded to include an evaluation of the interim improvement plan which includes installation of traffic signals and no widening of the UVP.

UVP/HUMMEL DRIVE INTERSECTION

Interim Improvements

The interim improvement plan for the UVP/Hummel Drive intersection would include installation of traffic signals at the existing intersection with no widening of the UVP at the intersection. Figure 1 (attached) provides a schematic illustration of the interim intersection design without the UVP widening. Table 1 presents the Existing + Project and Cumulative + Project levels of service forecasts for the intersection assuming implementation of the interim improvements (LOS calculations attached).

[1] Updated Traffic and Circulation Study for the Richards Ranch Project, ATE, October 7, 2022.

Table 1
Intersection Levels of Service With Interim Improvements

Intersection	Existing + Project		Cumulative + Project	
	Existing Geometry	With Improvements	Existing Geometry	With Improvements
UVP/Hummel Drive AM(a)	> 50.0 sec. / LOS F	0.71 / LOS C	> 50.0 sec / LOS F	0.75 / LOS C
UVP/Hummel Drive PM(a)	> 50.0 sec. / LOS F	0.79 / LOS C	> 50.0 sec / LOS F	0.86 / LOS D

(a) Assumes traffic signal installation and no UVP widening.

The data presented in Table 1 show that with the interim improvements, the UVP/Hummel Drive intersection will operate in the LOS C range with Existing + Project volumes. Under Cumulative conditions, the intersection operations would degrade to LOS D during the PM peak hour indicating that the long-term improvements would be required as cumulative buildout occurs in the area.

Long-Term Plan

County staff have indicated that the ultimate plan for the UVP adjacent to the Hummel Drive intersection is to widen UVP from two lanes to four lanes with left-turn channelization. This widening will occur west of Hummel Drive to match the four lanes in front of the Project site. In addition, County staff indicated that traffic signals would be installed at the UVP/Hummel Drive intersection in the future. Figure 2 provides a schematic illustration of the future intersection design with the widening. Table 2 presents the Existing + Project and Cumulative + Project levels of service forecasts for the intersection assuming implementation of the long-term improvements (LOS calculations attached).

Table 2
Intersection Levels of Service With Long-Term Improvements

Intersection	Existing + Project		Cumulative + Project	
	Existing Geometry	With Improvements	Existing Geometry	With Improvements
UVP/Hummel Drive AM(a)	> 50.0 sec. / LOS F	0.47 / LOS A	> 50.0 sec / LOS F	0.49 / LOS A
UVP/Hummel Drive PM(a)	> 50.0 sec. / LOS F	0.49 / LOS A	> 50.0 sec / LOS F	0.52 / LOS A

(b) Assumes UVP widening and traffic signal installation.

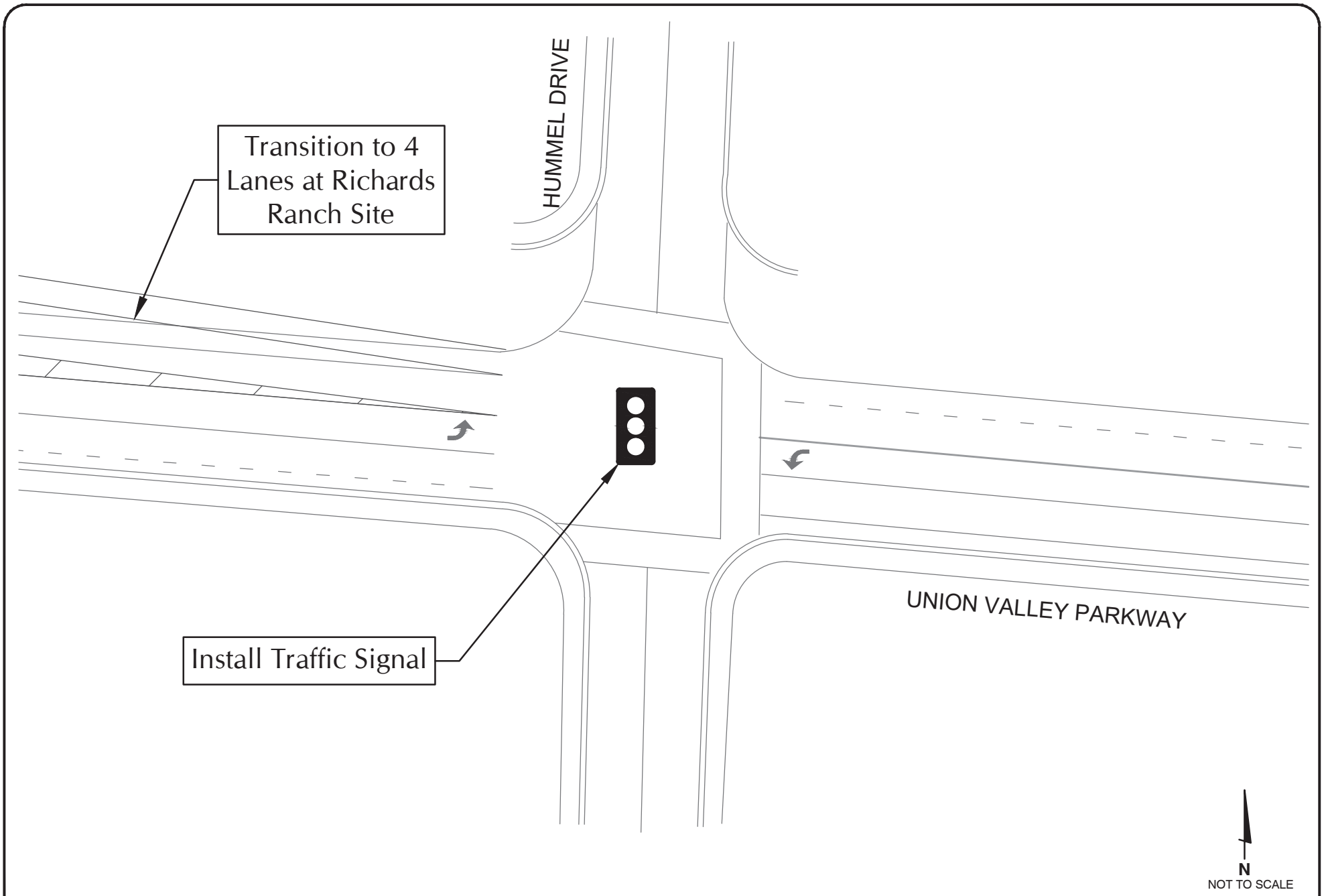
The data presented in Table 2 show that with the long-term improvements, the UVP/Hummel Drive intersection will operate in the LOS A range.

This concludes ATE's supplemental Traffic Mitigation analysis for the Richards Ranch Project.

Associated Transportation Engineers

By: Scott A. Schell
Principal Transportation Planner

Attachments

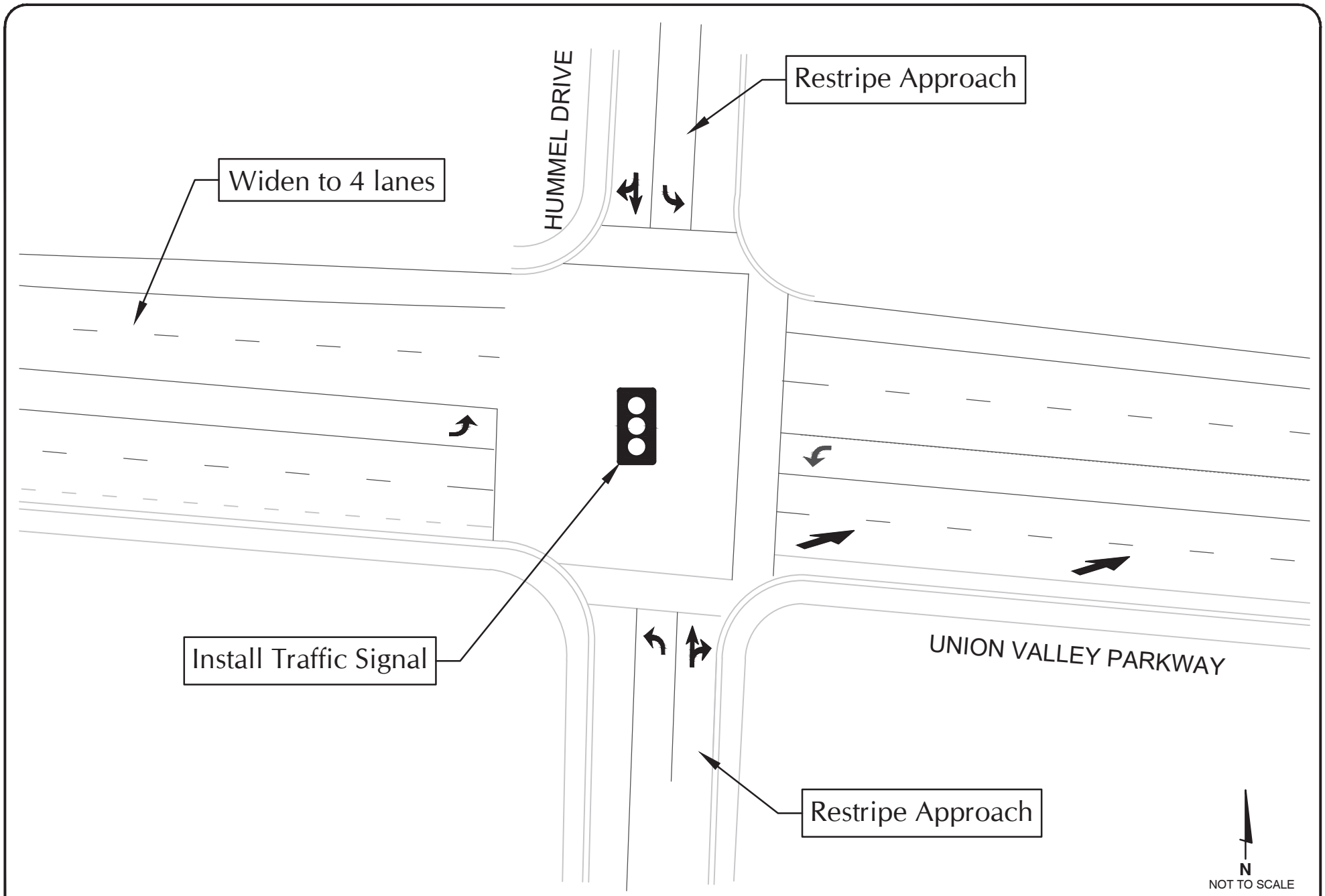


ASSOCIATED TRANSPORTATION ENGINEERS

UNION VALLEY PARKWAY/HUMMEL DRIVE - INTERIM INTERSECTION DESIGN

FIGURE 1

GM- ATE#21069



ASSOCIATED TRANSPORTATION ENGINEERS

UNION VALLEY PARKWAY/HUMMEL DRIVE - FUTURE INTERSECTION DESIGN

FIGURE 2

GM- ATE#21069

#21069 - RICHARDS RANCH PROJECT **REF:** 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/27/2022***

TIME PERIOD: ***AM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH INTERIM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**633**	**23**	**41**	**638**	**10**
(B)	PROJECT-ADDED:	**14**	**0**	**0**	**0**	**0**	**14**	**14**	**120**	**14**	**0**	**104**	**0**
(C)	CUMULATIVE:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**696**	**24**	**41**	**755**	**10**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L TR	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	26	40	26	40	0.016	0.025	0.016	0.025
NBT		1	1600	36	36	36	36	0.076 *	0.076 *	0.076 *	0.076 *
NBR	*(a)*	0	0	86	86	86	86	-	-	-	-
SBL		1	1600	25	25	25	25	0.016 *	0.016 *	0.016 *	0.016 *
SBT		1	1600	27	27	27	27	0.028	0.037	0.028	0.037
SBR	*(b)*	0	0	18	32	18	32	-	-	-	-
EBL		1	1600	18	32	18	32	0.011	0.020	0.011	0.020
EBT		1	1600	633	753	696	816	0.410 *	0.494 *	0.450 *	0.534 *
EBR	*(c)*	0	0	23	37	24	38	-	-	-	-
WBL		1	1600	41	41	41	41	0.026 *	0.026 *	0.026 *	0.026 *
WBT		1	1600	638	742	755	859	0.405	0.470	0.478	0.543
WBR	*(d)*	0	0	10	10	10	10	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.628**	**0.712**	**0.668**	**0.752**
						SCENARIO LEVEL OF SERVICE:		**B**	**C**	**B**	**C**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

#21069 - RICHARDS RANCH PROJECT **REF:** 06 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/27/202***

TIME PERIOD: ***AM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH LONG-TERM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**633**	**23**	**41**	**638**	**10**
(B)	PROJECT-ADDED:	**14**	**0**	**0**	**0**	**0**	**14**	**14**	**120**	**14**	**0**	**104**	**0**
(C)	CUMULATIVE:	**26**	**36**	**86**	**25**	**27**	**18**	**18**	**696**	**24**	**41**	**755**	**10**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	26	40	26	40	0.016	0.025	0.016	0.025
NBT		1	1600	36	36	36	36	0.076 *	0.076 *	0.076 *	0.076 *
NBR	*(a)*	0	0	86	86	86	86	-	-	-	-
SBL		1	1600	25	25	25	25	0.016 *	0.016 *	0.016 *	0.016 *
SBT		1	1600	27	27	27	27	0.028	0.037	0.028	0.037
SBR	*(b)*	0	0	18	32	18	32	-	-	-	-
EBL		1	1600	18	32	18	32	0.011	0.020	0.011	0.020
EBT		2	3200	633	753	696	816	0.205 *	0.247 *	0.225 *	0.267 *
EBR	*(c)*	0	0	23	37	24	38	-	-	-	-
WBL		1	1600	41	41	41	41	0.026 *	0.026 *	0.026 *	0.026 *
WBT		2	3200	638	742	755	859	0.203	0.235	0.239	0.272
WBR	*(d)*	0	0	10	10	10	10	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.423**	**0.465**	**0.443**	**0.485**
						SCENARIO LEVEL OF SERVICE:		**A**	**A**	**A**	**A**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

#21069 - RICHARDS RANCH PROJECT **REF:** 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/28/2022***

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH INTERIM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

VOLUMES		NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A)	EXISTING:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**828**	**43**	**66**	**559**	**23**
(B)	PROJECT-ADDED:	**12**	**0**	**0**	**0**	**0**	**11**	**11**	**85**	**11**	**0**	**99**	**0**
(C)	CUMULATIVE:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**940**	**43**	**66**	**646**	**23**

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L TR	EAST BOUND L TR	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVEMENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	20	32	20	32	0.013	0.020 *	0.013	0.020 *
NBT		1	1600	19	19	19	19	0.036 *	0.036	0.036 *	0.036
NBR	*(a)*	0	0	38	38	38	38	-	-	-	-
SBL		1	1600	12	12	12	12	0.008 *	0.008	0.008 *	0.008
SBT		1	1600	21	21	21	21	0.018	0.025 *	0.018	0.025 *
SBR	*(b)*	0	0	8	19	8	19	-	-	-	-
EBL		1	1600	24	35	24	35	0.015	0.022	0.015	0.022
EBT		1	1600	828	913	940	1025	0.544 *	0.604 *	0.614 *	0.674 *
EBR	*(c)*	0	0	43	54	43	54	-	-	-	-
WBL		1	1600	66	66	66	66	0.041 *	0.041 *	0.041 *	0.041 *
WBT		1	1600	559	658	646	745	0.364	0.426	0.418	0.480
WBR	*(d)*	0	0	23	23	23	23	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.729**	**0.790**	**0.799**	**0.860**
						SCENARIO LEVEL OF SERVICE:		**C**	**C**	**C**	**D**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

#21069 - RICHARDS RANCH PROJECT **REF:** 06 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***04/28/2022***

TIME PERIOD: ***PM PEAK HOUR***

N/S STREET: ***HUMMEL DRIVE***

E/W STREET: ***UVP***

CONTROL TYPE: ***SIGNAL - WITH LONG-TERM IMPROVEMENTS***

TRAFFIC VOLUME SUMMARY

		NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
VOLUMES		L	T	R	L	T	R	L	T	R	L	T	R
(A)	EXISTING:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**828**	**43**	**66**	**559**	**23**
(B)	PROJECT-ADDED:	**12**	**0**	**0**	**0**	**0**	**11**	**11**	**85**	**11**	**0**	**99**	**0**
(C)	CUMULATIVE:	**20**	**19**	**38**	**12**	**21**	**8**	**24**	**940**	**43**	**66**	**646**	**23**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
LANE GEOMETRICS	L TR	L TR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)
SCENARIO 3 = SHORT-TERM CUMULATIVE (C)
SCENARIO 4 = SHORT-TERM CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS		# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL		1	1600	20	32	20	32	0.013	0.020 *	0.013	0.020 *
NBT		1	1600	19	19	19	19	0.036 *	0.036	0.036 *	0.036
NBR	*(a)*	0	0	38	38	38	38	-	-	-	-
SBL		1	1600	12	12	12	12	0.008 *	0.008	0.008 *	0.008
SBT		1	1600	21	21	21	21	0.018	0.025 *	0.018	0.025 *
SBR	*(b)*	0	0	8	19	8	19	-	-	-	-
EBL		1	1600	24	35	24	35	0.015	0.022	0.015	0.022
EBT		2	3200	828	913	940	1025	0.272 *	0.302 *	0.307 *	0.337 *
EBR	*(c)*	0	0	43	54	43	54	-	-	-	-
WBL		1	1600	66	66	66	66	0.041 *	0.041 *	0.041 *	0.041 *
WBT		2	3200	559	658	646	745	0.182	0.213	0.209	0.240
WBR	*(d)*	0	0	23	23	23	23	-	-	-	-
						LOST TIME:		0.100 *	0.100 *	0.100 *	0.100 *
						TOTAL INTERSECTION CAPACITY UTILIZATION:		**0.457**	**0.488**	**0.492**	**0.523**
						SCENARIO LEVEL OF SERVICE:		**A**	**A**	**A**	**A**

NOTES:

RTOR: *(a)*
(b)
(c)
(d)

Printed: 12/01/22

APPENDIX E

Air Quality and Greenhouse Gas Impact Assessment

AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

FOR THE PROPOSED

RICHARDS RANCH PROJECT

SANTA MARIA, CA

SEPTEMBER 2022

PREPARED FOR:
SWCA ENVIRONMENTAL CONSULTANTS, INC.
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APPENDICES

Appendix A: Emissions Modeling

LIST OF COMMON TERMS & ACRONYMS

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACM	Asbestos-Containing Material
APS	Alternative Planning Strategy
AQAP	Air Quality Attainment Plan
ARB	California Air Resources Board
C_2F_6	Perfluoroethane
C_4F_{10}	Perfluorobutane
C_4F_8	Perfluorocyclobutane
C_5F_{12}	Perfluoropentane
C_6F1_4	Perfluorohexane
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CF_4	Perfluoromethane
CH_4	Methane
CMP	Congestion Management Program
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DPM	Diesel-Exhaust Particulate Matter or Diesel-Exhaust PM
EIR	Environmental Impact Report
EV	Electric Vehicle
FCAA	Federal Clean Air Act
GHG	Greenhouse Gases
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
HFC	Hydrofluorocarbons
ITE	Institute of Transportation Engineers
LNG	Liquefied Natural Gas
LOS	Level of Service
MMT	Million Metric Tons
MPO	Metropolitan Planning Organization
$MTCO_2e$	Million Metric Tons of Carbon Dioxide
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NESHAPs	National Emission Standards for HAPs
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NO_2	Nitrogen Dioxide
NOA	Naturally-Occurring Asbestos
NO_x	Oxides of Nitrogen
O_3	Ozone

OAP	Odor Abatement Plan
Pb	Lead
PFC	Perfluorocarbons
PM	Particulate Matter
PM_{10}	Particulate Matter (less than 10 µm)
$PM_{2.5}$	Particulate Matter (less than 2.5 µm)
ppb	Parts per Billion
ppm	Parts per Million
PV	Photovoltaic
ROC	Reactive Organic Compounds
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SCCAB	South Central Coast Air Basin
SCS	Sustainable Communities Strategy
SF_6	Sulfur Hexafluoride
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-lived Climate Pollutant
SLOAPCD	San Luis Obispo County Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	Sulfur Dioxide
SP	Service Population
TAC	Toxic Air Contaminant
TCM	Transportation Control Measures
U.S. EPA	United State Environmental Protection Agency
VMT	Vehicle Miles Traveled
$\mu g/m^3$	Micrograms per cubic meter
µm	Micrometer

INTRODUCTION

This report provides an analysis of air quality and greenhouse gas impacts associated with the proposed Richards Ranch Annexation Project. This report also provides a summary of existing conditions in the project area and the applicable regulatory framework pertaining to air quality and climate change.

PROJECT DESCRIPTION

The proposed Richards Ranch Annexation Project would include the annexation, pre-zoning, and a conceptual development plan for approximately 43.75 acres of property located in unincorporated Santa Barbara County (County) by the City of Santa Maria (City). This is a mixed commercial/residential project which includes a total of 495 residential units, including 400 apartments and 95 townhomes and an approximate buildout of 130,000 square feet of commercial uses. As identified in the Santa Barbara County Orcutt Community Plan, the current land use designation is Mixed Commercial/Residential, which provides for general commercial, office, and professional, and residential uses. All four parcels have a zoning designation of Retail Commercial (C-2). The proposed project's site plan is depicted in Figure AQ-1 and Figure AQ-2.

AIR QUALITY

Existing Setting

The project is located in unincorporated Santa Barbara county by the city of Santa Maria, which is within the South Central Coast Air Basin (SCCAB) and jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). Air quality in the SCCAB is influenced by a variety of factors, including topography and meteorology.

Nearby Land Uses

Land uses located near the project site include a mix of agricultural and residential land uses. The nearest agricultural land uses are located approximately 175 feet to the west. The nearest residential land uses include single-family residences located approximately 35-45 feet to the north, east, south, and west (refer to Figure AQ-2).

Topography

The city of Santa Maria is located in the northern portion of Santa Barbara county. The Santa Maria Valley, a roughly east-west trending valley, is in northern Santa Barbara County. The Valley is bound by the Nipomo Mesa and Sierra Madre Mountains on the north and east, by the Solomon Hills and Casmalia Hills on the south, and by the Guadalupe Dunes and Pacific Ocean on the west. In combination with the Solomon Hills, the Casmalia Hills form the highly visible southern boundary of the Santa Maria Valley.

Meteorology

The air quality in Santa Barbara county is influenced by both local topography and meteorological conditions. Surface and upper-level wind flow vary both seasonally and geographically in the county and inversion conditions common to the area can affect the vertical mixing and dispersion of pollutants. The prevailing wind flow patterns in the county are not necessarily those that cause high ozone values. High ozone values are often associated with atypical wind flow patterns. Meteorological and topographical influences are important to air quality in Santa Barbara County. Semi-permanent high pressure that lies off the Pacific Coast leads to limited rainfall (around 18 inches per year), with warm, dry summers and relatively damp winters. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast and in the high 80s to 90s inland. During winter, average minimum temperatures range from the 40s along the coast to the 30s inland. Additionally, cool, humid, marine air causes frequent fog and low clouds along the coast,

generally during the night and morning hours in the late spring and early summer. The fog and low clouds can persist for several days until broken up by a change in the weather pattern (SBCAPCD 2001).

In the northern portion of the county (north of the ridgeline of the Santa Ynez Mountains), the sea breeze (from sea to land) is typically northwesterly throughout the year while the prevailing sea breeze in the southern portion of the county is from the southwest. During summer, these winds are stronger and persist later into the night. At night, the sea breeze weakens and is replaced by light land breezes (from land to sea). The alternation of the land-sea breeze cycle can sometimes produce a "sloshing" effect, where pollutants are swept offshore at night and subsequently carried back onshore during the day. This effect is exacerbated during periods when wind speeds are low (SBCAPCD 2001).

The terrain around Point Conception, combined with the change in orientation of the coastline from north-south to east-west can cause counterclockwise circulation (eddies) to form east of the Point. These eddies fluctuate temporally and spatially, often leading to highly variable winds along the southern coastal strip. Point Conception also marks the change in the prevailing surface winds from northwesterly to southwesterly (SBCAPCD 2001).

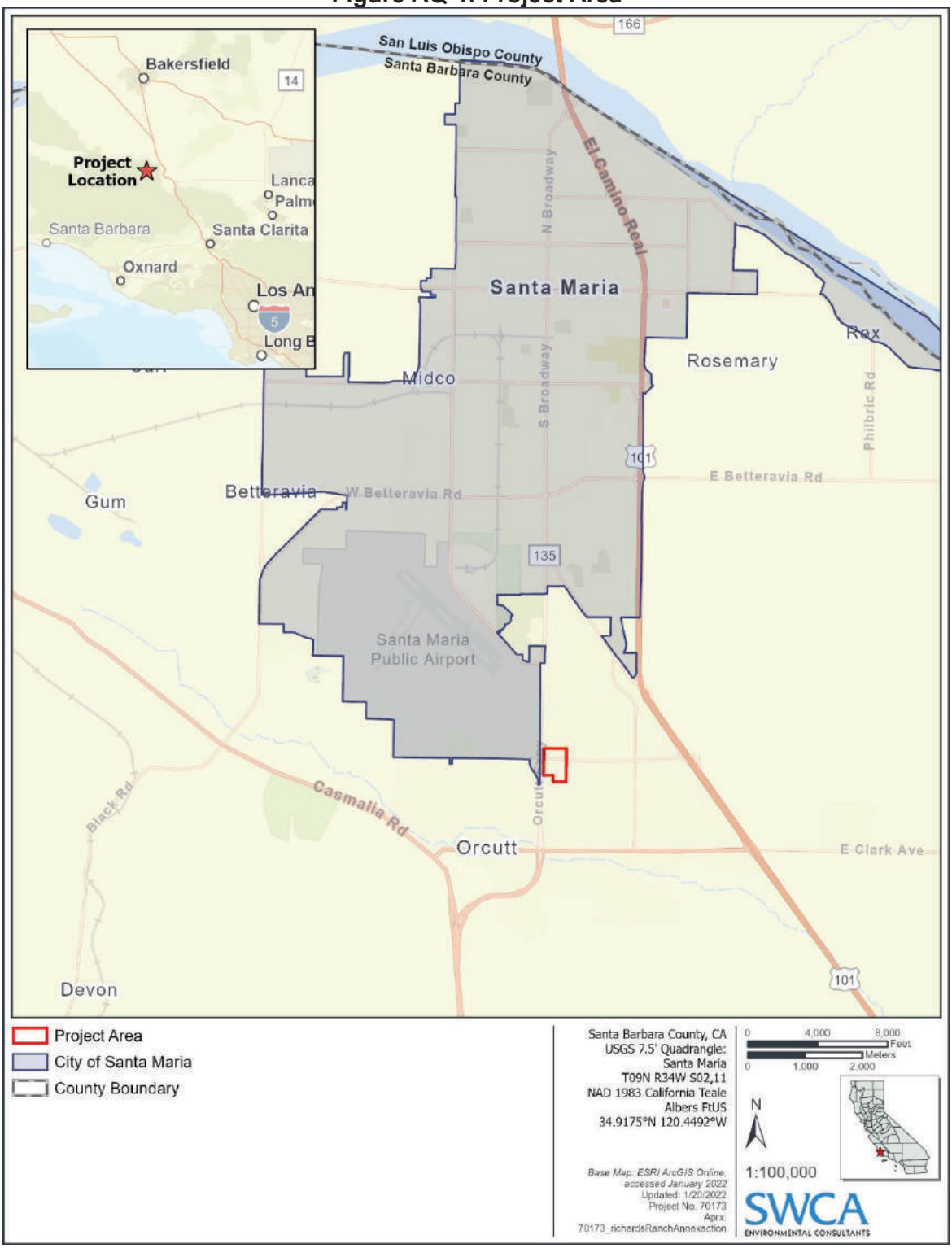
Santa Ana winds are northeasterly winds that occur primarily during fall and winter, but occasionally in spring. These are warm, dry winds blown from the high inland desert that descend down the slopes of a mountain range. Wind speeds associated with Santa Ana's are generally 15-20 mph, though they can sometimes reach speeds in excess of 60 mph. During Santa Ana conditions, pollutants emitted in Santa Barbara county, Ventura county, and the South Coast Air Basin (the Los Angeles region) are moved out to sea. These pollutants can then be moved back onshore into Santa Barbara County in what is called a "post-Santa Ana condition." The effects of the post-Santa Ana condition can be experienced throughout the county. Not all post-Santa Ana conditions, however, lead to high pollutant concentrations in Santa Barbara county (SBCAPCD 2001).

Upper-level winds (measured at Vandenberg Air Force Base once each morning and afternoon) are generally from the north or northwest throughout the year, but occurrences of southerly and easterly winds do occur in winter, especially during the morning. Upper-level winds from the south and east are infrequent during the summer. When they do occur during summer, they are usually associated with periods of high ozone levels. Surface and upper-level winds can move pollutants that originate in other areas into the county (SBCAPCD 2001).

Surface temperature inversions (0-500 ft) are most frequent during the winter, and subsidence inversions (1000-2000 ft) are most frequent during the summer. Inversions are an increase in temperature with height and are directly related to the stability of the atmosphere. Inversions act as a cap to the pollutants that are emitted below or within them and ozone concentrations are often higher directly below the base of elevated inversions than they are at the earth's surface. For this reason, elevated monitoring sites will occasionally record higher ozone concentrations than sites at lower elevations. Generally, the lower the inversion base height and the greater the rate of temperature increase from the base to the top, the more pronounced effect the inversion will have on inhibiting vertical dispersion. The subsidence inversion is very common during summer along the California coast and is one of the principal causes of air stagnation (SBCAPCD 2001).

Poor air quality is usually associated with "air stagnation" (high stability/restricted air movement). Therefore, it is reasonable to expect a higher frequency of pollution events in the southern portion of the county where light winds are frequently observed, as opposed to the northern part of the county where the prevailing winds are usually strong and persistent (SBCAPCD 2001).

Figure AQ-1. Project Area



(SWCA 2022)

Figure AQ-2. Project Site Plan



(SWCA 2022)

Atmospheric Stability and Dispersion

Air pollutant concentrations are primarily determined by the amount of pollutant emissions in an area and the degree to which these pollutants are dispersed into the atmosphere. The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions.

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating.

Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low-lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses. During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating.

In contrast, in the summertime, the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1000 to 2500 feet above sea level. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion (SLOAPCD 2001).

Criteria Air Pollutants

For the protection of public health and welfare, the Federal Clean Air Act (FCAA) required that the United States Environmental Protection Agency (U.S. EPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the U.S. EPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air without harm to the public's health. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as one hour, eight hours, 24 hours, or one year. The different averaging times and concentrations are meant to protect against different exposure effects. The FCAA allows states to adopt additional or more health-protective standards. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

Human Health & Welfare Effects

Common air pollutants and associated adverse health and welfare effects are summarized in Table AQ-1. Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone (O_3), particulate matter (PM), and carbon monoxide (CO). As depicted in Table AQ-1, exposure to increased pollutant concentrations of O_3, PM, and CO can result in various heart and lung ailments, cardiovascular and nervous system impairment, and death.

Odors

Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e., irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SBCAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to SBCAPCD Rule 303, Nuisance. Any actions related to odors would be based on citizen complaints to local governments and the SBCAPCD. The SBCAPCD recommends that odor impacts be addressed in a qualitative manner. Such analysis shall determine if the project results in excessive nuisance odors, as defined under the California Code of Regulations, Health & Safety Code Section 41700, air quality public nuisance.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered "criteria pollutants" under either the Federal Clean Air Act (FCAA) or the California Clean Air Act (CCAA) and are thus not subject to National or State Ambient Air Quality Standards (AAQS). TACs are not considered criteria pollutants in that the FCAA and CCAA do not address them specifically through the setting of National or State AAQS. Instead, the U.S. EPA and California Air Resources Board (ARB) regulate Hazardous Air Pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with District rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national level, the U.S. EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of HAPs.

The exposure to TACs can lead to acute health problems shortly after exposure from minor effects such as watery eyes, or more serious life threats such as respiratory damage. Other health problems may not appear until many months or years after a person's first exposure to the toxic air pollutant. Cancer is one example of a delayed health problem. (EPA 1991)

At the local level, air districts have authority over stationary or industrial sources. For SBCAPCD, if a project may emit TACs, or if toxic contaminants may already be present at the project site, and there are sensitive receptors nearby, a screening health risk assessment using worst-case scenario assumptions may be warranted.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

The Tanner Act also sets forth a formal procedure for ARB to designate substances as TACs. The following provides a summary of the primary TACs of concern within the State of California and related health effects:

Table AQ-1. State and Federal Criteria Air Pollutant Effects and Sources

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Ozone (O_3)	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NOx) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.
Respirable Particulate Matter (PM_{10})	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic and other aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke & vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.
Fine Particulate Matter ($PM_{2.5}$)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the $PM_{2.5}$ size range. Many toxic and other aerosol and solid compounds are part of $PM_{2.5}$.	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NOx, sulfur oxides (SOx), ammonia, and ROG.
Carbon Monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Nitrogen Dioxide (NO_2)	Irritating to eyes and respiratory tract. Color's atmosphere reddish-brown. Contributes to acid rain & nitrate contamination of stormwater. Part of the "NOx" group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.
Sulfur Dioxide (SO_2)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limit's visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.
Lead (Pb)	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also, a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.
Visibility-Reducing Particles (VRP)	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.
Sulfate	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.
Hydrogen Sulfide (H_2S)	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
Vinyl Chloride	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes.

Source: CAPCOA 2021

Diesel Particulate Matter (DPM) was identified as a TAC by the ARB in August 1998. DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 40% of the statewide total, with an additional 57 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources, contributing about 3 percent of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations. Emissions from these sources are from diesel-fueled internal combustion engines. Stationary sources that report DPM emissions also include heavy construction, manufacturers of asphalt paving materials and blocks, and diesel-fueled electrical generation facilities (ARB 2013).

In October 2000, the ARB issued a report entitled: "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles", which is commonly referred to as the Diesel Risk Reduction Plan (DRRP). The DRRP provides a mechanism for combating the DPM problem. The goal of the DRRP is to reduce concentrations of DPM by 85 percent by the year 2020, in comparison to year 2000 baseline emissions. The key elements of the DRRP are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, and to lower the sulfur content of diesel fuel to protect new, and very effective, advanced technology emission control devices on diesel engines. When fully implemented, the DRPP will significantly reduce emissions from both old and new diesel fueled motor vehicles and from stationary sources that burn diesel fuel. In addition to these strategies, the ARB continues to promote the use of alternative fuels and electrification. As a result of these actions, DPM concentrations and associated health risks in future years are projected to decline (ARB 2013, ARB 2000).

Exposure to DPM can have immediate health effects. DPM can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, DPM has been identified as a carcinogen.

Acetaldehyde is a federal hazardous air pollutant. The ARB identified acetaldehyde as a TAC in April 1993. Acetaldehyde is both directly emitted into the atmosphere and formed in the atmosphere as a result of photochemical oxidation. Sources of acetaldehyde include emissions from combustion processes such as exhaust from mobile sources and fuel combustion from stationary internal combustion engines, boilers, and process heaters. A majority of the statewide acetaldehyde emissions can be attributed to mobile sources, including on-road motor vehicles, construction and mining equipment, aircraft, recreational boats, and agricultural equipment. Area sources of emissions include the burning of wood in residential fireplaces and wood stoves. The primary stationary sources of acetaldehyde are from fuel combustion from the petroleum industry (ARB 2013).

Acute exposure to acetaldehyde results in effects including irritation of the eyes, skin, and respiratory tract. Symptoms of chronic intoxication of acetaldehyde resemble those of alcoholism. The U.S. EPA has classified acetaldehyde as a probable human carcinogen. In California, acetaldehyde was classified on April 1, 1988, as a chemical known to the state to cause cancer (U.S. EPA 2014; ARB 2013).

Benzene is highly carcinogenic and occurs throughout California. The ARB identified benzene as a TAC in January 1985. A majority of benzene emitted in California (roughly 88 percent) comes from motor vehicles, including evaporative leakage and unburned fuel exhaust. These sources include on-road motor vehicles, recreational boats, off-road recreational vehicles, and lawn and garden equipment. Benzene is also formed as a partial combustion product of larger aromatic fuel components. To a lesser extent, industry-related stationary sources are also sources of benzene emissions. The primary stationary sources of reported benzene emissions are crude petroleum and natural gas mining, petroleum refining, and electric generation that involves the use of petroleum products. The primary area sources include residential combustion of various types such as cooking and water heating (ARB 2013).

Acute inhalation exposure of humans to benzene may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic

anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidences of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene. The U.S. EPA has classified benzene as known human carcinogen for all routes of exposure (U.S. EPA 2014).

1,3-butadiene was identified by the ARB as a TAC in 1992. Most of the emissions of 1,3-butadiene are from incomplete combustion of gasoline and diesel fuels. Mobile sources account for a majority of the total statewide emissions. Additional sources include agricultural waste burning, open burning associated with forest management, petroleum refining, manufacturing of synthetics and man-made materials, and oil and gas extraction. The primary natural sources of 1,3-butadiene emissions are wildfires (ARB 2013).

Acute exposure to 1,3-butadiene by inhalation in humans results in irritation of the eyes, nasal passages, throat, and lungs. Epidemiological studies have reported a possible association between 1,3-butadiene exposure and cardiovascular diseases. Epidemiological studies of workers in rubber plants have shown an association between 1,3-butadiene exposure and increased incidence of leukemia. Animal studies have reported tumors at various sites from 1,3-butadiene exposure. In California, 1,3-butadiene has been identified as a carcinogen.

Carbon Tetrachloride was identified by the ARB as a TAC in 1987 under California's TAC program (ARB 2013). The primary stationary sources reporting emissions of carbon tetrachloride include chemical and allied product manufacturers and petroleum refineries. In the past, carbon tetrachloride was used for dry cleaning and as a grain-fumigant. Usage for these purposes is no longer allowed in the United States. Carbon tetrachloride has not been registered for pesticidal use in California since 1987. Also, the use of carbon tetrachloride in products to be used indoors has been discontinued in the United States. The statewide emissions of carbon tetrachloride are small (about 1.96 tons per year), and background concentrations account for most of the health risk (ARB 2013).

The primary effects of carbon tetrachloride in humans are on the liver, kidneys, and central nervous system. Human symptoms of acute inhalation and oral exposures to carbon tetrachloride include headache, weakness, lethargy, nausea, and vomiting. Acute exposures to higher levels and chronic (long-term) inhalation or oral exposure to carbon tetrachloride produces liver and kidney damage in humans. Human data on the carcinogenic effects of carbon tetrachloride are limited. Studies in animals have shown that ingestion of carbon tetrachloride increases the risk of liver cancer. In California, carbon tetrachloride has been identified as a carcinogen.

Hexavalent chromium was identified as a TAC in 1986. Sources of Hexavalent chromium include industrial metal finishing processes, such as chrome plating and chromic acid anodizing, and firebrick lining of glass furnaces. Other sources include mobile sources, including gasoline motor vehicles, trains, and ships (ARB 2013).

The respiratory tract is the major target organ for hexavalent chromium toxicity, for acute and chronic inhalation exposures. Shortness of breath, coughing, and wheezing were reported from a case of acute exposure to hexavalent chromium, while perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, and other respiratory effects have been noted from chronic exposure. Human studies have clearly established that inhaled hexavalent chromium is a human carcinogen, resulting in an increased risk of lung cancer. In California, hexavalent chromium has been identified as a carcinogen.

Para-Dichlorobenzene was identified by the ARB as a TAC in April 1993. The primary area-wide sources that have reported emissions of para-dichlorobenzene include consumer products such as non-aerosol insect repellants and solid/gel air fresheners. These sources contribute nearly all of the statewide para-dichlorobenzene emissions (ARB 2013).

Acute exposure to paradichlorobenzene via inhalation results in irritation to the eyes, skin, and throat in humans. In addition, long-term inhalation exposure may affect the liver, skin, and central nervous system in humans. The U.S. EPA has classified para-dichlorobenzene as a possible human carcinogen.

Formaldehyde was identified by the ARB as a TAC in 1992. Formaldehyde is both directly emitted into the atmosphere and formed in the atmosphere as a result of photochemical oxidation. Photochemical oxidation is the largest source of formaldehyde concentrations in California ambient air. Directly emitted formaldehyde

is a product of incomplete combustion. One of the primary sources of directly-emitted formaldehyde is vehicular exhaust. Formaldehyde is also used in resins, can be found in many consumer products as an antimicrobial agent, and is also used in fumigants and soil disinfectants. The primary area sources of formaldehyde emissions include wood burning in residential fireplaces and wood stoves (ARB 2013).

Exposure to formaldehyde may occur by breathing contaminated indoor air, tobacco smoke, or ambient urban air. Acute and chronic inhalation exposure to formaldehyde in humans can result in respiratory symptoms, and eye, nose, and throat irritation. Limited human studies have reported an association between formaldehyde exposure and lung and nasopharyngeal cancer. Animal inhalation studies have reported an increased incidence of nasal squamous cell cancer. Formaldehyde is classified as a probable human carcinogen.

Methylene Chloride was identified by the ARB as a TAC in 1987. Methylene chloride is used as a solvent, a blowing and cleaning agent in the manufacture of polyurethane foam and plastic fabrication, and as a solvent in paint stripping operations. Paint removers account for the largest use of methylene chloride in California, where methylene chloride is the main ingredient in many paint stripping formulations. Plastic product manufacturers, manufacturers of synthetics, and aircraft and parts manufacturers are stationary sources reporting emissions of methylene chloride (ARB 2013).

The acute effects of methylene chloride inhalation in humans consist mainly of nervous system effects including decreased visual, auditory, and motor functions, but these effects are reversible once exposure ceases. The effects of chronic exposure to methylene chloride suggest that the central nervous system is a potential target in humans and animals. Human data are inconclusive regarding methylene chloride and cancer. Animal studies have shown increases in liver and lung cancer and benign mammary gland tumors following the inhalation of methylene chloride. In California, methylene chloride has been identified as a carcinogen.

Perchloroethylene was identified by the ARB as a TAC in 1991. Perchloroethylene is used as a solvent, primarily in dry cleaning operations. Perchloroethylene is also used in degreasing operations, paints and coatings, adhesives, aerosols, specialty chemical production, printing inks, silicones, rug shampoos, and laboratory solvents. In California, the stationary sources that have reported emissions of perchloroethylene are dry cleaning plants, aircraft part and equipment manufacturers, and fabricated metal product manufacturers. The primary area sources include consumer products such as automotive brake cleaners and tire sealants and inflators (ARB 2013).

Acute inhalation exposure to perchloroethylene vapors can result in irritation of the upper respiratory tract and eyes, kidney dysfunction, and at lower concentrations, neurological effects, such as reversible mood and behavioral changes, impairment of coordination, dizziness, headaches sleepiness, and unconsciousness. Chronic inhalation exposure can result in neurological effects, including sensory symptoms such as headaches, impairments in cognitive and motor neurobehavioral functioning, and color vision decrements. Cardiac arrhythmia, liver damage, and possible kidney damage may also occur. In California, perchloroethylene has been identified as a carcinogen.

Asbestos

Asbestos is the common name for a group of naturally-occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally-occurring asbestos (NOA), which was identified as a TAC in 1986 by ARB, is located in many parts of California and is commonly associated with ultramafic rock. Asbestos-containing material (ACM) may be present in existing structures. The demolition of existing structures may be subject to regulatory requirements for the control of ACM.

SBCAPCD states that if a residential building with more than four units or a commercial building is to be demolished or renovated, or the structure is considered a "regulated structure" (e.g., bridges, caissons, etc.), the project proponent must complete SBCAPCD Form ENF-28: Notification for Renovation and Demolition or APCD Form ENF-28e: EXEMPTION from Notification for Renovation and Demolition and the SBCAPCD must be notified even if the building does not contain any asbestos. However, if the project is only a renovation, no notification is required unless the renovation involves disturbing a threshold amount of regulated asbestos materials (SBCAPCD 2021b).

Ambient Air Quality

Air pollutant concentrations are measured at several monitoring stations in the SCCAB. The Santa Maria-906 S Broadway Monitoring Station is the closest representative monitoring station with sufficient data to meet U.S. EPA and/or ARB criteria for quality assurance. The monitoring stations record ambient concentrations of O_3, nitrogen dioxide (NO_2), particulate matter less than 2.5 micrometers (µm) ($PM_{2.5}$), and particulate matter less than 10 µm (PM_{10}). Ambient monitoring data was obtained for the last three years of available measurement data (i.e., 2018 through 2020) and is summarized in Table AQ-2. As depicted, the federal $PM_{2.5}$ standards were exceeded for one day in 2018 and 9 days in 2020. The state PM_{10} standards exceeded for 13 days in 2018, and 15 days in 2019, and 32 days in 2020. Measured 1-hour O_3, 8-hour O_3, and NO_2 concentrations did not exceed the state and federal ambient air quality standards in the last three years of monitoring.

Table AQ-2. Summary of Ambient Air Quality Monitoring Data

Pollutant	Monitoring Year		
	2018	2019	2020
Ozone (O_3)			
Maximum concentration (1-hour/8-hour average; ppm)	0.052/0.048	0.059/0.052	0.063/0.059
Number of days state/national 1-hour standard exceeded	0/0	0/0	0/0
Number of days state/national 8-hour standard exceeded	0/0	0/0	0/0
Nitrogen Dioxide (NO_2)			
Maximum concentration (1-hour average; ppb)	40.3	33.7	36.4
Annual average (ppb)	NA	5	5
Number of days state/national standard exceeded	0/0	0/0	0/0
Suspended Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour concentration (national/state; µg/m^3)	40.4/40.4	14.7/14.7	88.4/88.4
Annual average national/state (µg/m^3)	6.9/7.0	4.8/4.9	7.9/7.9
Number of days national standard exceeded (estimated/measured)[1]	1/1	0/0	9/9
Suspended Particulate Matter (PM_{10})			
Maximum concentration (national/state; µg/m^3)	62.3/61.9	132.5/139.5	113.3/116.4
Number of days state standard exceeded (estimated/measured)[1]	13.6/13	15.7/15	32.2/32
Number of days national standard exceeded (estimated/measured)[1]	0.0/0	0.0/0	0.0/0

ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; NA = Not available

All data based on ambient concentrations were obtained from the Santa Maria-906 S Broadway Monitoring Station.

1. Estimated days are days that measurement would have exceeded the standard had measurements been collected every day. Measured days are those days that an actual measurement was greater than the standard.

Source: ARB 2022a

Air Quality Index

The health effects of ambient air pollutant concentrations can be evaluated and presented in various ways. The most common method is the use of the Air Quality Index (AQI). The U.S. EPA developed the AQI as an easy-to-understand measure of health impacts based on measured ambient air quality in comparison to established ambient air quality standards. Tables AQ-3 and AQ-4 present a summary of the health impacts for ozone and fine particulate matter ($PM_{2.5}$), respectively, based on the U.S. EPA's AQI.

A summary of the annual air quality index for the project area, based on monitoring data obtained from the Santa Maria monitoring station for the last three years of available data, is provided in Table AQ-5. As depicted in Table AQ-5, the project area typically experiences "good" air quality with the total number of days ranging from 273 to 300 days per year. Days classified as "moderate" AQI ranged from 64 to 80 days per year. Over the last three years of available data, the area has experience a total of ten days classified as "Unhealthy for Sensitive Groups" and four days classified as "Unhealthy". Over the past three years, the area has not experienced air quality conditions within the "Very Unhealthy" or "Hazardous" range (U.S. EPA 2022).

Table AQ-3. Air Quality Index Summary for Ozone & Related Health Effects

Air Quality Index / 8-hour Ozone Concentration	Health Effects Description
AQI 51-100: Moderate Ambient Ozone Concentrations: 55-70 ppb	**Sensitive Groups**: Children and people with asthma are the groups at most risk. **Health Effects Statements**: Unusually sensitive individuals may experience respiratory symptoms. **Cautionary Statements**: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI 101-150: Unhealthy for Sensitive Groups Ambient Ozone Concentrations: 71-85 ppb	**Sensitive Groups**: Children and people with asthma are the groups at most risk. **Health Effects Statements**: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma. **Cautionary Statements**: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI 151–200: Unhealthy Ambient Ozone Concentrations: 86-105 ppb	**Sensitive Groups**: Children and people with asthma are the groups at most risk. **Health Effects Statements**: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population. **Cautionary Statements**: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI 201-300: Very Unhealthy Ambient Ozone Concentrations: 106-200 ppb	**Sensitive Groups**: Children and people with asthma are the groups at most risk. **Health Effects Statements**: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population **Cautionary Statements**: Active children and adults, and people with respiratory disease, such as asthma, should avoid outdoor exertion; everyone else, especially children, should limit outdoor exertion.
An AQI of 50 and below is categorized as "Good" and air quality is satisfactory, and poses little or no risk. An AQI of 301 or higher is categorized as "Hazardous" having a health warning of emergency conditions: everyone is more likely to be affected. Outdoor activities should be avoided for all individuals. Source: U.S. EPA 2022	

Table AQ-4. Air Quality Index Summary for Fine Particulate Matter & Related Health Effects

Air Quality Index / 8-hour Ozone Concentration	Health Effects Description
AQI 51-100: Moderate Ambient Concentrations: 12.1-35.4 µg/m^3	**Sensitive Groups**: Some people who may be unusually sensitive to particulate **Health Effects Statements**: Unusually sensitive people should consider reducing prolonged or heavy exertion. **Cautionary Statements**: Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.
AQI 101-150: Unhealthy for Sensitive Groups Ambient Concentrations: 35.5-55.4 µg/m^3	**Sensitive Groups**: People with heart or lung disease, older adults, children, and teenagers. **Health Effects Statements**: Increasing likelihood of respiratory symptoms for sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly. **Cautionary Statements**: If you have heart disease: Symptoms such as palpations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact a health care provider.
AQI 151–200: Unhealthy Ambient Concentrations: 55.5-150.4 µg/m^3	**Sensitive Groups**: Everyone. **Health Effects Statements**: Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly; increased respiratory effects in general population. **Cautionary Statements**: Sensitive groups: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling. Everyone else: Reduce prolonged or heavy exertion. Take more breaks during outdoor activities.
AQI 201-300: Very Unhealthy Ambient Concentrations: 150.5-250.4 µg/m^3	**Sensitive Groups**: Everyone. **Health Effects Statements**: Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly; significant increase in respiratory effects in general population. **Cautionary Statements**: Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better. Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or reschedule to a time when air quality is better.
An AQI of 50 and below is categorized as "Good" and air quality is satisfactory, and poses little or no risk. An AQI of 301 or higher is categorized as "Hazardous" having a health warning of emergency conditions: everyone is more likely to be affected. Outdoor activities should be avoided for all individuals. Source: U.S. EPA 2022	

Table AQ-5. Air Quality Index Annual Historical Summary

	Air Quality Index (AQI) - Number of Days					
Year	Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	Hazardous
2021	300	64	1	0	0	0
2020	273	80	9	4	0	0
2019	286	78	0	0	0	0

Based on monitoring for the Santa Maria monitoring station. Represents overall air quality taking into account all criteria pollutants measured.
Source: U.S, EPA 2022

Regulatory Framework

Air quality within the SCCAB is regulated by several jurisdictions including the U.S. EPA, ARB, and the SBCAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation.

Federal

U.S. Environmental Protection Agency

At the federal level, the U.S. EPA has been charged with implementing national air quality programs. The U.S. EPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

Federal Clean Air Act

The FCAA required the U.S. EPA to establish NAAQS, and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in Table AQ-6.

State

California Air Resources Board

The ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA of 1988. Other ARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts, establishing California Ambient Air Quality Standards (CAAQS), which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The CAAQS are summarized in Table AQ-6. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel, and engine used.

California Clean Air Act

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for O_3, CO, sulfur dioxide (SO_2), and NO_2 by the earliest practicable date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a five percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for the implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

Assembly Bills 1807 & 2588 - Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

Table AQ-6. Ambient Air Quality Standards & Santa Barbara County Attainment/Nonattainment Classification Summary

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 hour	0.070 ppm	A	0.070 ppm	U/A
	1 hour	0.09 ppm (180 µg/m³)	A	—	—
Carbon Monoxide	8 hour	9.0 ppm (10 mg/m³)	A	9.0 ppm (10 µg/m³)	A
	1 hour	20.0 ppm (23 mg/m³)	A	35.0 ppm (40 µg/m³)	A
Nitrogen Dioxide	annual average	0.030 ppm (56 µg/m³)	A	53 ppb	U/A
	1 hour	0.18 ppm (338 µg/m³)	A	100 ppb	U/A
Sulfur Dioxide	annual average	—	—	Revoked	—
	24 hour	0.04 ppm (105 µg/m³)	A	Revoked	—
	1 hour	0.25 ppm (655 µg/m³)	A	75 ppb	*
Particulate Matter (PM_{10})	annual arithmetic mean	20 µg/m³	N	Revoked	A
	24 hour	50 µg/m³	N	150 µg/m³	A
Particulate Matter – Fine ($PM_{2.5}$)	annual arithmetic mean	12µg/m³	U	12.0 µg/m³	U/A
	24 hour	—	—	35 µg/m³	U/A
Sulfates	24 hour	25 µg/m³	A	—	—
Lead	calendar quarter	—	—	1.5 µg/m³	A
	30 day average	1.5 µg/m³	A	—	—
	Rolling 3-month Average	—	—	0.15 µg/m³	U
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m³)	A	—	—
Vinyl Chloride (chloroethene)	24 hour	0.010 ppm (26 µg/m³)		—	—
Visibility Reducing Particles	8 hour (1000 to 1800 PST)		A	—	—

A = Attainment; N = Nonattainment; U = Unclassified; U/A = Unclassifiable/Attainment; — = No Standard;
mg/m³ = milligrams per cubic meter; µg/m³ = micrograms per cubic meter; ppm = parts per million;
ppb = parts per billion; * = EPA has not yet made final designations on attainment status
Source: SBCAPCD 2021a

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, the ARB adopted a regulation to reduce DPM and oxides of nitrogen (NO_x) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation applies to self-propelled diesel-fueled vehicles that cannot be registered and licensed to drive on-road, as well as two-engine vehicles that drive on road, with the limited exception of two-engine sweepers. Examples include loaders, crawler tractors, skid steers, backhoes, forklifts, airport ground support equipment, water well drilling rigs, and two-engine cranes. Such vehicles are used in construction, mining, and industrial operations. The regulation does not apply to stationary equipment or portable equipment such as generators. The off-road vehicle regulation establishes emissions performance requirements, reporting, disclosure, and labeling requirements for off-road vehicles, and limits unnecessary idling.

California Building Code

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building

Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

Green Building Standards

In essence, green buildings standards are indistinguishable from any other building standards. Both standards are contained in the CBC and regulate the construction of new buildings and improvements. The only practical distinction between the two is that whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

The green buildings standards are updated every three years and were most recently updated in May 2018. Referred to as the 2019 Building Energy Efficiency Standards, these most recent updates focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. The ventilation measures improve indoor air quality, protecting homeowners from air pollution originating from outdoor and indoor sources. Under the newly adopted standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

The recently updated 2022 Building Energy Efficiency Standards (2022 Standards), which were approved in December 2021, encourages efficient electric heat pumps, establishes electric-ready requirements when natural gas is installed and to support the future installation of battery storage, and further expands solar photovoltaic and battery storage standards. The 2022 Standards extend solar PV system requirements, as well as battery storage capabilities for select land uses, including high-rise multi-family and non-residential land uses, such as office buildings, schools, restaurants, warehouses, theaters, grocery stores, and more. Depending on the land use and other factors, solar systems should be sized to meet targets of up to 60 percent of the structure's loads. These new solar requirements will become effective January 1, 2023 and contribute to California's goal of reaching net-zero carbon footprint by 2045 (CEC 2022).

Local

Santa Barbara County Air Pollution Control District

The SBCAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the region are maintained. Responsibilities of the SBCAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting, and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

Impact Analysis

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, air quality impacts associated with the proposed project would be considered significant if it would:

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

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

c) Expose sensitive receptors to substantial pollutant concentrations.

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

To assist in the evaluation of air quality impacts, the SBCAPCD has developed recommended significance thresholds, which are contained in the SBCAPCD Scope and Content of Air Quality Sections in Environmental Documents (SBCAPCD 2017). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following SBCAPCD recommended thresholds are exceeded:

Construction Impacts

The SBCAPCD recommends 25 tons per year for reactive organic compounds (ROC) or NO_X as a guideline for determining the significance of construction impacts. In addition, the SBCAPCD recommends incorporation of standard mitigation measures to minimize localized air quality impacts commonly associated with construction activities and to ensure consistency with air quality attainment and maintenance efforts.

Operational Impacts

A proposed project will have a significant impact on air quality, either individually or cumulatively, if operational emissions would:

- exceed 240 pounds/day for ROC or NO_x; and 80 lbs/day for PM_{10}.
- exceed 25 pounds/day of NO_x or ROC from motor vehicle trips only.
- would cause or contribute to a violation of any CAAQS or NAAQS (except O_3)
- would exceed the SBCAPCD health risk public notification thresholds adopted by the SBCAPCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than one (1.0) for non-cancer risk).
- would be inconsistent with the latest adopted federal and state air quality plans for Santa Barbara County.

Methodology

Emissions associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0, computer program. Project construction is anticipated to occur over an approximately 36-month period beginning in 2024. According to project specific plan no existing structures would be demolished. Additional construction information, such as construction activities, construction schedules, equipment use, and worker vehicle trips were not available and were based on default parameters contained in CalEEMod. Construction of proposed land uses was assumed to require grubbing (removal of brush/trees), site preparation, grading, building construction, paving, and application of architectural coatings. Building construction for planned land uses was based on anticipated project development schedules provided. Modeling assumptions and output files are included in Appendix C of this report.

Long-term operational GHG emissions were calculated using the CalEEMod, version 2020.4.0 based on the proposed land uses identified for the project (refer to Table AQ-7). Electricity intensity factors were adjusted

to reflect compliance with the State's Renewables Portfolio Standards. Mobile-source emissions were calculated based on vehicle trip-generation rates derived from the traffic analysis prepared for this project (ATE 2022). The fleet mix for non-residential land uses was based on CalEEMod defaults for northern Santa Barbara County. The fleet mix for residential land uses was adjusted based on San Joaquin Valley Air Pollution Control District's recommended residential fleet mix for emissions modeling purposes (SJVAPCD 2022). Vehicle trip generation rates were derived from the Traffic and Circulation Study (ATE 2022) prepared for this project. Vehicle trip distances were based on CalEEMod defaults for northern Santa Barbara County. Emission modeling files are provided in Appendix C.

Table AQ-7. Planned Land Uses

Use	Size
Commercial	
Fast Food With Drive-Thru	18,750 sf
Fast Casual	6,000 sf
Sit Down Restaurant	5,000 sf
Car Wash	3,596 sf
Gas Station	3,000 sf
Lube Station	2,400 sf
Shopping Center	55,000 sf
Mini Storage	39,500 sf
Total	**133,246 sf**
Residential	
Townhomes	95 Units
Apartments	400 Units
Total	**495 Units**
sf = square feet	

Project Impacts and Mitigation Measures

Impact AQ-A. Conflict with or obstruct implementation of the applicable air quality plan.

SBCAPCD 2019 Ozone Plan

As part of the CCAA, the SBCAPCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The SBCAPCD's 2019 Ozone Plan (previously known as the Clean Air Plan) addresses the attainment and maintenance of state and federal ambient air quality standards. The Ozone Plan was adopted by SBCAPCD on December 19, 2019 (SBCAPCD 2019).

The Ozone Plan outlines the SBCAPCD strategies to reduce ozone-precursor pollutants (i.e., ROC and NO_X) from a wide variety of sources. The Ozone Plan includes a stationary-source control program, which includes control measures for permitted stationary sources; as well as, transportation and land use management strategies to reduce motor vehicle emissions. The stationary-source control program is administered by SBCAPCD. Transportation and land use control measures are implemented at the local or regional level, by promoting and facilitating the use of alternative transportation options, increased pedestrian access and accessibility to community services and local destinations, reductions in vehicle miles traveled, and promotion of congestion management efforts. In addition, local jurisdictions also prepare population forecasts, which are used by SBCAPCD to forecast population-related emissions and air quality attainment, including those contained in the Ozone Plan. Projects that result in population growth above the amount forecasted for that jurisdiction or subregion would be considered inconsistent with the Ozone Plan and may have a significant impact on air quality.

The proposed project would allow for the future development of a mix of land uses, including multi-family residential apartments and townhomes and commercial land uses. In total, the project is expected to result in an increase of approximately 1,346 residents in the City of Santa Maria. The projected number of employees for the commercial land uses would be 456. The SBCAG Regional Growth Forecast 2050 Santa Barbara County indicates that the population of the city of Santa Maria in 2017 was approximately 108,500 (SBCAG 2019). The city's forecasted population is estimated to total approximately 121,900 in 2025 and

133,300 in 2035. The proposed project would not result in near-term increases in population that would exceed year 2025 population projections or exceed year 2035 projections. In addition, the project would improve the City's jobs and housing balance by providing additional employment opportunities in the City. Therefore, the project would be overall consistent with the growth assumptions in the Plan. In addition, the proposed land uses would not include large industrial stationary sources of air pollutant emissions that would be subject to SBCAPCD permitting requirements. As a result, the proposed land uses would not conflict with the SBCAPCD's stationary source emissions inventory.

The Ozone Plan also includes multiple transportation control measures (TCMs) intended to reduce emissions through reductions in trip generation and vehicle miles traveled (VMT). The proposed project includes a mix of land uses and various design features that would increase on-site capture of vehicle trips and reduce the project's overall trip generation. Implementation of the proposed project would not conflict with regional VMT-reduction targets, including those identified in the Regional Transportation Plan/Sustainable Communities Strategy, as require by SB 375. As a result, the proposed project would be considered consistent with the County's Ozone Plan to reduce mobile-source emissions.

For these reasons noted above, the proposed project would be considered consistent with regional air quality planning efforts, including SBCAPCD's 2019 Ozone Plan and the County's Regional Transportation Plan/Sustainable Communities Strategy. However, the proposed project would result in short-term increases in emissions associated with construction of the proposed land uses. To be consistent with the standard dust mitigation measures in Section 6.1 of the SBCAPCD Scope and Content of Air Quality Sections in Environmental Documents (based on policies adopted in the 1979 Air Quality Attainment Plan [AQAP]), all projects involving earthmoving activities must implement the standard dust control measures. Given that the proposed project would involve earthmoving activities, this impact would be considered **potentially significant**.

Standard dust control measures would be required as stated in Impact AQ-B and detailed in Mitigation Measure AQ-1. With implementation of Mitigation Measure AQ-1 this impact would be considered **less than significant.** (refer to Impact AQ-B for additional discussion of short-term air quality impacts.)

Impact AQ-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.

Short-term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. Construction of the proposed project would result in the temporary generation of emissions associated with site grading, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., reactive organic gases (ROG) and NO_X) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Estimated maximum annual emissions associated with construction of the proposed project are presented in Table AQ-8. As depicted in Table AQ-8, the maximum annual unmitigated construction-generated emissions would total approximately 2.19 tons/year of ROG and 5.13 tons/year of NO_X.

Construction emissions would be largely a result of mobile-source emissions associated with construction vehicle and equipment operations anticipated to occur during the building construction phase. As noted in Table AQ-8, maximum annual construction emissions would not exceed the threshold of 25 tons/year. However, since Santa Barbara County violates the state standard for PM_{10}, dust control measures are required for all projects involved in earthmoving activities regardless of the significance of the fugitive dust

impacts. As previously discussed, emissions of PM_{10} can result in the irritation of eyes and respiratory tract (refer to Table AQ-1). For these reasons, construction-generated emissions would be considered to have a **potentially significant impact**.

Mitigation Measures

AQ-1: The following construction mitigation measures shall be implemented to minimize short-term construction emissions. All measures shall be shown on grading and building plans.

AQ-1.1: Construction-Generated Fugitive Dust

a. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 miles per hour. Reclaimed water should be used whenever reasonably available. However, reclaimed water should not be used in or around crops for human consumption.
b. Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
c. If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
d. Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
e. After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
f. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SBCAPCD prior to grading/building permit issuance and/or map clearance.

Table AQ-8. Annual Construction Emissions without Mitigation

Year	ROG	NO_x	CO	SO_2	FUG PM_{10}	EXH PM_{10}	TOT PM_{10}	FUG $PM_{2.5}$	EXH $PM_{2.5}$	TOT $PM_{2.5}$
	tons per year									
2024	1.37	5.13	5.99	0.01	0.98	0.21	1.19	0.38	0.19	0.57
2025	2.19	4.48	6.44	0.01	0.60	0.16	0.76	0.16	0.15	0.31
2026	1.15	1.82	2.73	0.01	0.26	0.07	0.33	0.07	0.06	0.13
Maximum	2.19	5.13	6.44	0.01	0.98	0.21	1.19	0.38	0.19	0.57
SBCAPCD Significance Thresholds	25	25	-	-	-	-	-	-	-	-
Exceeds Significance Thresholds?	No	No	-	-	-	-	-	-	-	-

FUG = Fugitive; EXH = Exhaust; TOT = Total

Refer to Appendix A for modeling assumptions and results.

Table AQ-9. Annual Construction Emissions with Mitigation

Year	ROG	NO_x	CO	SO_2	FUG PM_{10}	EXH PM_{10}	TOT PM_{10}	FUG $PM_{2.5}$	EXH $PM_{2.5}$	TOT $PM_{2.5}$
	tons per year									
2024	0.93	1.28	6.48	0.01	0.63	0.02	0.62	0.22	0.02	0.23
2025	1.88	1.48	6.83	0.01	0.60	0.02	0.62	0.16	0.02	0.18
2026	1.02	0.56	2.92	0.01	0.26	0.01	0.81	0.07	0.01	0.08
Maximum	1.88	1.48	6.83	0.01	0.63	0.02	0.62	0.22	0.02	0.23
SBCAPCD Significance Thresholds	25	25	-	-	-	-	-	-	-	-
Exceeds Significance Thresholds?	No	No	-	-	-	-	-	-	-	-

FUG = Fugitive; EXH = Exhaust; TOT = Total

Includes reductions from mobile-source emissions and particulate matter emission measures.

Refer to Appendix A for modeling assumptions and results.

AQ-1.2: Mobile-Source Construction Emissions

The following measures shall be implemented to reduce mobile-source emissions:

a. All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program or shall obtain an SBCAPCD permit.
b. Fleet owners of mobile construction equipment are subject to the ARB Regulation for In-Use Off-Road Diesel Vehicles (Title 13, California Code of Regulations (CCR), §2449), the purpose of which is to reduce NO_x, DPM, and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation.
c. Fleet owners of mobile construction equipment are subject to the ARB Regulation for In-Use (On-Road) Heavy-Duty Diesel-Fueled Vehicles (Title 13, CCR, §2025), the purpose of which is to reduce DPM, NO_x and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. On-road heavy-duty trucks shall comply with the State On-Road Regulation.
d. All commercial off-road and on-road diesel vehicles are subject, respectively, to Title 13, CCR, §2449(d)(3) and §2485, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever locally available.
e. Diesel equipment meeting the ARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines shall be used to the extent locally available.
f. On-road heavy-duty equipment with model year 2010 engines or newer shall be used to the extent locally available.
g. Diesel powered equipment shall be replaced by electric equipment whenever available.
h. Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, shall be used on-site where locally available.
i. Catalytic converters shall be installed on gasoline-powered equipment, if available, and in accordance with manufacturer's recommendations.
j. All construction equipment shall be maintained in tune per the manufacturer's specifications.
k. The engine size of construction equipment shall be the minimum practical size.
l. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
m. Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

Significance After Mitigation

Mitigation Measure AQ-1 would include measures to further reduce air pollutant emissions from construction and would be consistent with applicable air quality plans. Implementation of PM emission measures would reduce emissions of fugitive dust. Emissions of fugitive dust would be reduced by roughly 50 percent, or more. Additional measures have also been included to reduce emissions from motor vehicles and equipment, including emissions of mobile PM. Mitigated construction-generated emissions are summarized in Table AQ-9. As depicted, mitigated emissions would not exceed SBCAPCD's significance thresholds. With mitigation, this impact would be considered **less than significant**.

Long-term Operational Emissions

Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources. To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as, use of electricity and natural gas would also contribute to increased operational emissions.

Unmitigated operational emissions are depicted in Table AQ-10. As depicted in Table AQ-10, daily operational-generated emissions would total approximately 41.54 pounds/day of ROG, 27.05 pounds/day of NO_x, and 31.72 pounds/day of PM_{10}.

Table AQ-10. Daily Operational Emissions Without Mitigation

Category	ROG	NO_x	CO	SO_2	FUG PM_{10}	EXH PM_{10}	TOT PM_{10}	FUG $PM_{2.5}$	EXH $PM_{2.5}$	TOT $PM_{2.5}$
	pounds per day									
Area	16.42	0.47	40.83	0.00	0.00	0.23	0.23	0.00	0.23	0.23
Energy	0.36	3.17	2.08	0.02	0.00	0.25	0.25	0.00	0.25	0.25
Mobile	24.76	23.41	171.70	0.27	31.02	0.71	31.25	8.28	0.21	8.49
Total	41.54	27.05	214.60	0.29	31.02	1.19	31.72	8.28	0.68	8.96
SBCAPCD Significance Thresholds (All Sources)	240	240	-	-	-	-	80	-	-	-
Exceeds Significance Thresholds?	No	No	-	-	-	-	No	-	-	-
SBCAPCD Significance Thresholds (Mobile Sources)	25	25	-	-	-	-	-	-	-	-
Exceeds Significance Thresholds?	No	No	-	-	-	-	-	-	-	-

FUG = Fugitive; EXH = Exhaust; TOT = Total; N/A = Not applicable

Refer to Appendix A for modeling assumptions and results.

Estimated daily operational emissions from all sources of ROG, NO_X, and PM_{10} would not exceed the SBCAPCD operational thresholds of 240 pounds/day for ROG or NO_x; 25 pounds per day of ROG or NO_X from mobile sources; or 80 pounds/day for PM_{10}. It is important to note that Mitigation Measure GHG-1 would include measures that would further reduce long-term operational emissions. As a result, this impact would be considered **less than significant**.

Health Effects of Project-Generated Regional Emissions

Project-generated emissions are evaluated based on the pollutants potential to affect local or regional air quality. As noted earlier in this report, regional pollutants of concern typically include ozone and particulate matter. Whereas, for development project, localized pollutants of primary concern often include carbon monoxide, toxic air contaminants, as well as, airborne particulates. The health effects of these pollutants are discussed earlier in this report and summarized in Table AQ-1.

For localized pollutants, health impacts can be evaluated using screening criteria or through dispersion modeling. However, for regional pollutants such as ozone, the change in health effects associated with an individual project is a secondary pollutant created by NOX and ROG (also commonly referred to as VOCs). As previously discussed earlier in this report, ozone is not a directly emitted pollutant. NO_X and ROG are not criteria air pollutants but, when in the presence of sunlight, they can form ozone and also contribute to the formation of secondary $PM_{2.5}$. Because ozone is not a directly emitted pollutant and is created under specific meteorological conditions over a wide transport area, ozone concentrations are typically evaluated at a regional level using complex photochemical models. These models are capable of predicting concentrations that take into account variations amounts of precursor emissions (e.g., ROG, NO_X), temperature, inversions, sunlight, hourly variations, ambient conditions, and wind flow over long distances (e.g., miles). At the project level of analysis, evaluation of ozone concentrations is "not practicable and not likely [to] yield valid information" (SJVAPCD 2015).

Of the criteria pollutants identified, ozone and $PM_{2.5}$ have the most critical health effects. As a result, concentrations of these pollutants are typically relied upon for determining public health effects. In comparison to modeled regional emissions, the emissions associated with most individual projects would be negligible and too small to produce a measurable change in regional ozone or $PM_{2.5}$ concentrations or associated public health effects. In addition, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has recently conducted regional emissions modeling analyses using a chemical transport model to evaluate changes in emissions and associated health effects associated with an individual project. The modeling was based on very conservative assumptions representative of the largest projects, which assumed up to approximately eight times the threshold of significance (up to 656 lbs/day) of NO_X, ROG and PM. This level of emissions would be more representative of large community plan projects. Based on the modeling conducted by SMAQMD, even these large projects would have "low overall health effects" (SMAQMD 2020).

It is important to reiterate that the health effects of criteria air pollutants are taken into consideration when the U.S, EPA establishes the NAAQS for individual pollutants. The health effects of a particular pollutant are analyzed on a regional basis based on the area's attainment of the NAAQS. As previously discussed in this report, the AQI is one common method of evaluating public health impacts for criteria air pollutants of primary concern. Local air districts establish significance thresholds that are based on evaluation of an individual project's contribution to reginal air quality conditions and associated health effects. Based on the above discussion and given that project-generated criteria pollutants would not exceed applicable significance thresholds, project-generated emissions of regional criteria pollutants (e.g., ROG, NO_X, PM) would have a minimal effect on public health. In addition, refer to Impact AQ-C for a discussion of localized air quality impacts.

Impact AQ-C. Expose sensitive receptors to substantial pollutant concentrations.

Naturally-Occurring Asbestos

The ARB identifies NOA as a TAC. In accordance with ARB Air Toxics Control Measure, prior to any grading activities, a geologic evaluation should be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request form, along with a copy of the geologic report, must be filed with the local air district. If NOA is found at the site, the applicant must comply with all

requirements outlined in the Asbestos Air Toxics Control Measure. The project site is not located within an area identified as having a potential for naturally-occurring ultramafic rock and serpentine soils. As a result, this impact would be considered **less than significant**.

Asbestos-Containing Materials

Demolition activities can have potential negative air quality impacts, including issues surrounding the proper handling, demolition, and disposal of ACM. ACM could be encountered during the demolition of existing buildings, particularly older structures constructed prior to 1970. Asbestos can also be found in various building products, including (but not limited to) utility pipes/pipelines (transit pipes or insulation on pipes). The proposed project would not demolish any existing structures or buildings. This impact is considered **less than significant**.

Lead-Coated Materials

Demolition of structures coated with lead-based paint can have potential negative air quality impacts and may adversely affect the health of nearby individuals. Improper demolition can result in the release of lead-containing particles from the site. The proposed project would not demolish any existing structures or buildings. This impact is considered **less than significant**.

Localized Carbon Monoxide Concentrations

Localized concentrations of CO are of primary concern in areas located near congested roadway intersections. Of particular concern are signalized intersections that are projected to operate at unacceptable levels of service (LOS) (LOS E or LOS F). Signalized intersections primarily affected by the proposed project would operate at LOS D or better (ATE 2022). As a result, implementation of the proposed project is not anticipated to contribute to localized CO concentrations that would exceed applicable ambient air quality standards. This impact is considered **less than significant**.

Toxic Air Contaminants

Based on the information currently available, the proposed project would not include the installation of major stationary sources of toxic air contaminants (TACs) and no major sources of TACs have been identified in the project area. In the event that major stationary sources, such as emergency power generators, are proposed for installation in the future, a permit to operate from the SBCAPCD would be required. A health risk assessment will be required as part of the permit process and emission control measures or other operational restrictions would be required, to the extent necessary, to ensure that operational emissions would not exceed SBCAPCD significance thresholds. For these reasons, this impact would be considered **less than significant**.

Localized Particulate Matter Concentrations

Fugitive dust emissions would be primarily associated with site preparation, grading, and vehicle travel on unpaved and paved surfaces. Uncontrolled emissions of fugitive dust may also contribute to potential increases in nuisance impacts to nearby receptors. On-site off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM (DPM), which could contribute to elevated localized concentration at nearby receptors. Localized concentrations of DPM would be short-term occurring over an approximate three year period and would constitute less than five percent of the exposure period upon which health-related risks are typically calculated (i.e., 70 years). For this reason, short-term increases of DPM would not be anticipated to exceed SBCAPCD significance thresholds. However, short-term emissions of DPM could contribute to localized increases of particulate matter that may result in short-term nuisance impacts to nearby sensitive receptors. Short-term exposure to airborne particulates can result in irritation of eyes and the respiratory system and may affect sensitive individuals, including those suffering from asthma and other medical conditions. As a result, this impact would be considered **potentially significant**.

Mitigation Measures

Implement Mitigation Measures AQ-1.

Significance After Mitigation

Mitigation Measure AQ-1 would include measures to further reduce air pollutant emissions from construction activities. Emissions of fugitive dust would be reduced by roughly 50 percent, or more. Additional measures have also been included to reduce emissions from motor vehicles, including emissions of mobile-source PM. With mitigation, this impact would be considered **less than significant**.

Impact AQ-D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. However, construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition, pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the source. In addition, the project would be required to comply with SBCAPCD Rule 303 that prohibits the discharge of air contaminants or other material that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions. For these reasons, potential exposure of sensitive receptors to odorous emissions would be considered **less than significant**.

GREENHOUSE GASES AND CLIMATE CHANGE

Existing Setting

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the greenhouse gases (GHGs) that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Primary GHGs attributed to global climate change, are discussed, as follows:

- **Carbon Dioxide**. Carbon dioxide (CO_2) is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere (U.S. EPA 2018).

- **Methane**. Methane (CH_4) is a colorless, odorless gas that is not flammable under most circumstances. CH_4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years (U.S. EPA 2018).

- **Nitrous Oxide**. Nitrous oxide (N_2O) is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 114 years (U.S. EPA 2018).

- **Hydrofluorocarbons.** Hydrofluorocarbons (HFCs) are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 270 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (U.S. EPA 2018).

- **Perfluorocarbons.** Perfluorocarbons (PFCs) are colorless, highly dense, chemically inert, and non-toxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F_{14}). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for PFCs ranges from 2,600 to 50,000 years (U.S. EPA 2018).

- **Nitrogen Trifluoride**. Nitrogen trifluoride (NF_3) is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. NF_3 is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin-film solar cells. It has a global warming potential of 16,100 carbon dioxide equivalents (CO_2e). While NF_3 may have a lower global warming potential than other chemical etchants, it is still a potent GHG. In 2009, NF_3 was listed by California as a high global warming potential GHG to be listed and regulated under AB 32 (Section 38505 Health and Safety Code).

- **Sulfur Hexafluoride**. Sulfur hexafluoride (SF_6) is an inorganic compound that is colorless, odorless, non-toxic, and generally non-flammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Leaks of SF_6 occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years (U.S. EPA 2018).

- **Black Carbon**. Black carbon is the strongest light-absorbing component of PM emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (locomotives, marine vessels, tractors, excavators, dozers, etc.), on-road vehicles (cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed burning (planned burns of forest or wildlands) (CCAC 2018, U.S. EPA 2018).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in CO_2e, which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. Table GHG-1 provides a summary of the GWP for GHG emissions of typical concern with regard to community development projects, based on a 100-year time horizon. As indicated, CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs roughly 298 times more heat per molecule than CO_2. Additional GHG with high GWP includes NF_3, SF_6, PFCs, and black carbon.

Table GHG-1. Global Warming Potential for Greenhouse Gases

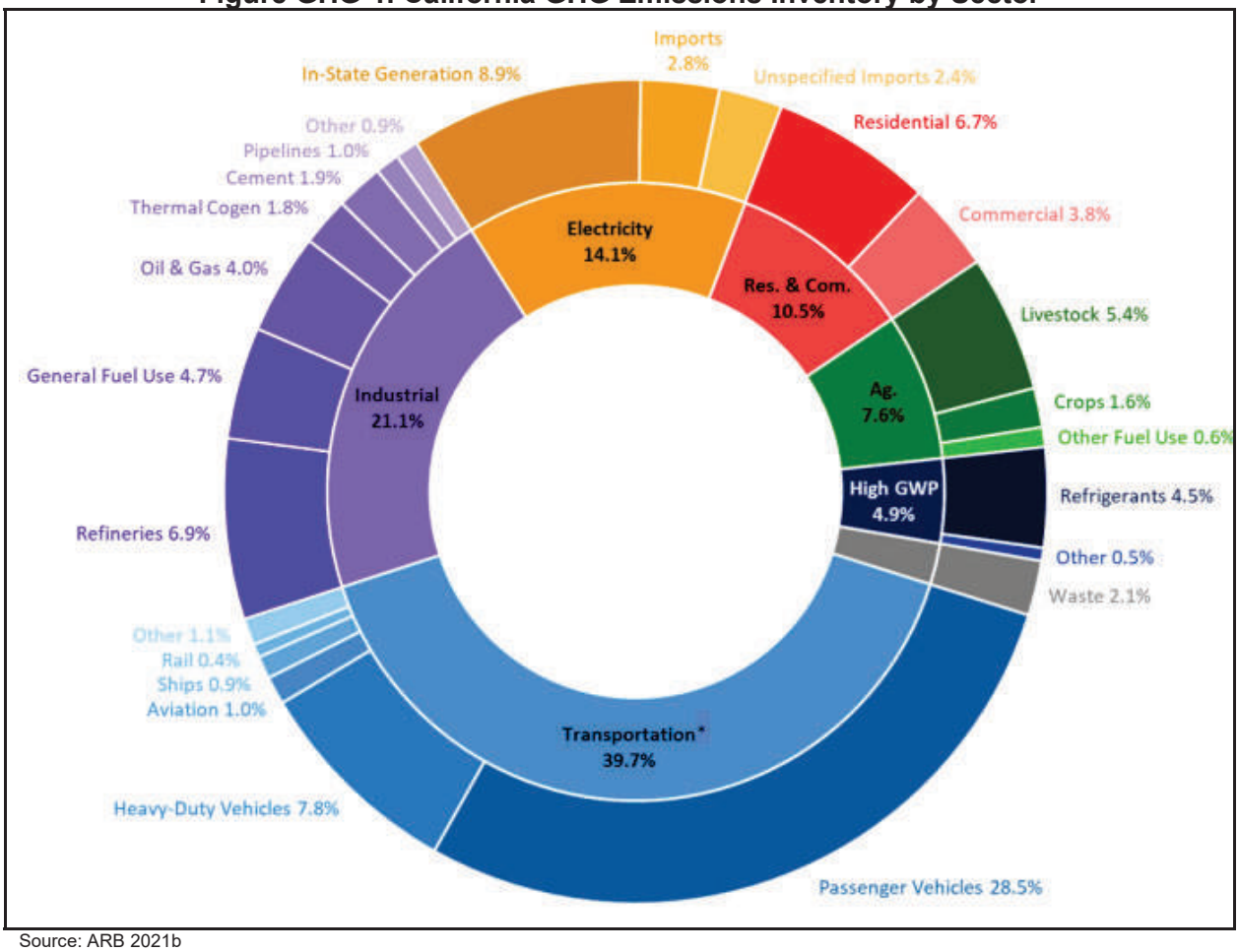
Greenhouse Gas	Global Warming Potential (100-year)
Carbon Dioxide (CO_2)	1
Methane (CH_4)	25
Nitrous Dioxide (N_2O)	298
Based on IPCC GWP values for 100-year time horizon. Source: IPCC 2007	

Sources if GHG Emissions

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. Worldwide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions (U.S. EPA 2018).

In 2019, GHG emissions within California totaled 418.2 million metric tons (MMT) of CO_2e. GHG emissions, by sector, are summarized in Figure 3. Within California, the transportation sector is the largest contributor, accounting for approximately 40 percent of the total state-wide GHG emissions. Emissions associated with industrial uses are the second largest contributor, totaling roughly 21 percent. Electricity generation totaled roughly 14 percent (ARB 2021a).

Figure GHG-1. California GHG Emissions Inventory by Sector



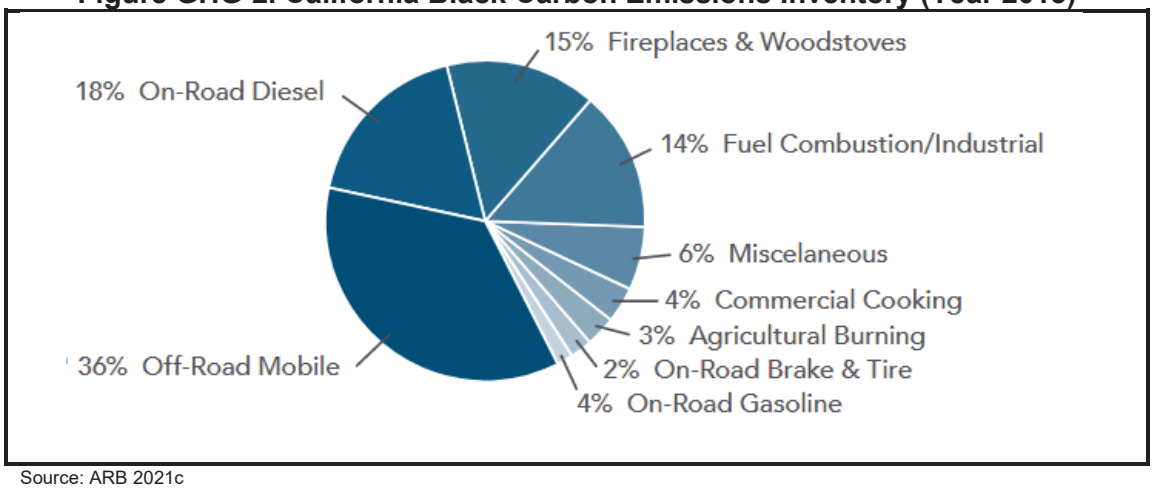
Source: ARB 2021b

Short-Lived Climate Pollutants

Short-lived climate pollutants (SLCPs), such as black carbon, fluorinated gases, and CH_4 also have a dramatic effect on climate change. Though short-lived, these pollutants create a warming influence on the climate that is many times more potent than that of carbon dioxide.

As part of the ARB's efforts to address SLCPs, the ARB has developed a statewide emission inventory for black carbon. The black carbon inventory will help support the implementation of the SLCP Strategy, but it is not part of the State's GHG Inventory that tracks progress towards the State's climate targets. The most recent inventory for year 2013 conditions is depicted in Figure GHG-2. As depicted, off-road mobile sources account for a majority of black carbon emissions totaling roughly 36 percent of the inventory. Other major anthropogenic sources of black carbon include on-road transportation, residential wood burning, fuel combustion, and industrial processes (ARB 2021c).

Figure GHG-2. California Black Carbon Emissions Inventory (Year 2013)



Source: ARB 2021c

Effects of Global Climate Change

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea-level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, increased air pollution episodes, and the consequence of these effects on the economy.

GHG emissions, and their associated contribution to climate change and resultant impacts, are inherently cumulative. Within California, climate changes would likely alter the ecological characteristics of many ecosystems throughout the state. Such alterations would likely include increases in surface temperatures and changes in the form, timing, and intensity of the precipitation. For instance, historical records are depicting an increasing trend toward earlier snowmelt in the Sierra Nevada. This snowpack is a principal supply of water for the state, providing roughly 50 percent of the state's annual runoff. If this trend continues, some areas of the state may experience an increased danger of floods during the winter months and possible exhaustion of the snowpack during spring and summer months. Earlier snowmelt would also impact the State's energy resources. Currently, approximately 20 percent of California's electricity comes from hydropower. Early exhaustion of the Sierra snowpack may force electricity producers to switch to more costly or non-renewable forms of electricity generation during the spring and summer months. A changing climate may also impact agricultural crop yields, coastal structures, and biodiversity. As a result, resultant changes in climate will likely have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry.

Regulatory Framework

Federal

Executive Order 13514

Executive Order 13514 is focused on reducing GHGs internally in federal agency missions, programs, and operations. In addition, the executive order directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

On April 2, 2007, in Massachusetts v. U.S. EPA, 549 U.S. 497, the Supreme Court found that GHGs are air pollutants covered by the FCAA and that the U.S. EPA has the authority to regulate GHG. The Court held that the U.S. EPA Administrator must determine whether or not emissions of GHGs from new motor vehicles cause

or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator found that the current and projected concentrations of the six key well-mixed GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the U.S. EPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles, which was published on September 15, 2009. On May 7, 2010, the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards were published in the Federal Register.

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations. These steps were outlined by President Obama in a Presidential Memorandum on May 21, 2010.

The final combined U.S. EPA and NHTSA standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile (the equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements). Together, these standards will cut GHG emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). On August 28, 2012, U.S. EPA and NHTSA issued their joint rule to extend this national program of coordinated GHG and fuel economy standards to model years 2017 through 2025 passenger vehicles.

U.S. EPA Strategic Plan

The EPA's *Fiscal Year (FY) 2022-2026 Strategic Plan (Strategic Plan)* provides a roadmap to achieve EPA's and the Biden-Harris Administration's environmental priorities over the next four years. The *Strategic Plan* furthers the agency's commitment to protecting human health and the environment for all people, with an emphasis on historically overburdened and underserved communities. For the first time, EPA's *Strategic Plan* includes a strategic goal focused exclusively on addressing climate change, with three primary objectives: 1) Reduce Emissions that Cause Climate Change; 2) Accelerate Resilience and Adaptation to Climate Change Impacts; and 3) Advance International and Subnational Climate Efforts.

State

Assembly Bill 1493

AB 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the ARB to develop and adopt the nation's first GHG emission standards for automobiles. These standards are also known as Pavley I. The California Legislature declared in AB 1493 that global warming is a matter of increasing concern for public health and the environment. It cites several risks that California faces from climate change, including a reduction in the state's water supply; an increase in air pollution caused by higher temperatures; harm to agriculture; an increase in wildfires; damage to the coastline; and economic losses caused by higher food, water, energy, and insurance prices. The bill also states that technological solutions to reduce GHG emissions would stimulate California's economy and provide jobs. In 2004, the State of California submitted a request for a waiver from federal clean air regulations, as the State is authorized to do under the FCAA, to allow the State to require reduced tailpipe emissions of CO_2. In late 2007, the U.S. EPA denied California's

waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the State brought suit against the U.S. EPA related to this denial.

In January 2009, President Obama instructed the U.S. EPA to reconsider the Bush Administration's denial of California's and 13 other states' requests to implement global warming pollution standards for cars and trucks. In June 2009, the U.S. EPA granted California's waiver request, enabling the State to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

In 2009, President Obama announced a national policy aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the US. The new standards would cover model years 2012 to 2016 and would raise passenger vehicle fuel economy to a fleet average of 35.5 miles per gallon by 2016. When the national program takes effect, California has committed to allowing automakers who show compliance with the national program to also be deemed in compliance with state requirements. California is committed to further strengthening these standards beginning in 2017 to obtain a 45 percent GHG reduction from the 2020 model year vehicles.

Executive Order S-3-05

Executive Order S-3-05 (State of California) proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the secretary of CalEPA created a Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government, and community actions, as well as through state incentive and regulatory programs.

Executive Order B-30-15

In 2015, Governor Brown signed Executive Order B-30-15, which establishes a California GHG reduction target of 40 percent below 1990 levels by 2030.

Executive Order B-55-18

In 2018, Governor Brown signed Executive Order B-55-18, which set a target of statewide carbon neutrality by 2045. ARB has not yet proposed regulations to implement this order. However, the ARB is working on new advanced car regulations to set GHG emission standards for vehicle model years after 2025, with a goal of meeting the 2045 carbon neutrality target. In addition, the Draft 2022 California Climate Change Scoping Plan Update, which assesses progress toward the statutory 2030 target, also lays out a path for achieving carbon neutrality no later than 2045. The draft Scoping Plan is anticipated to be approved in the fall of 2022.

Executive Order No. N-19-19

Executive Order N-19-19 (State of California) calls for actions from multiple state agencies to reduce greenhouse gas (GHG) emissions and mitigate the impacts of climate change. This includes a direct acknowledgment of the role the transportation sector must play in tackling climate change.

This executive order empowers the California State Transportation Agency (CalSTA) to leverage more than $5 billion in discretionary state transportation funds to reduce GHG emissions in the transportation sector and adapt to climate change. Accordingly, CalSTA will work to align transportation spending with the state's Climate Change Scoping Plan where feasible; direct investments to strategically support smart growth to increase infill housing production; reduce congestion through strategies that encourage a reduction in

driving and invest further in walking, biking, and transit; and ensure that overall transportation costs for low income Californians do not increase as a result of these policies.

Executive Order N-79-20

In 2020, Governor Newsom signed Executive Order N-79-20, which calls for elimination of new internal combustion passenger vehicles by 2035. It would end sales of internal combustion passenger vehicles by 2035. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own.

Climate Change Scoping Plan

In October 2008, ARB published its Climate Change Proposed Scoping Plan, which is the State's plan to achieve GHG reductions in California required by AB 32. This initial Scoping Plan contained the main strategies to be implemented in order to achieve the target emission levels identified in AB 32. The Scoping Plan included ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reduction recommendations were associated with improving emissions standards for light-duty vehicles, implementing the Low Carbon Fuel Standard program, implementation of energy efficiency measures in buildings and appliances, and the widespread development of combined heat and power systems, and developing a renewable portfolio standard for electricity production.

The Scoping Plan states that land use planning and urban growth decisions will play important roles in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors. With regard to land use planning, the Scoping Plan expects approximately 5.0 MMT CO_2e will be achieved associated with the implementation of Senate Bill (SB) 375, which is discussed further below.

The initial Scoping Plan was first approved by ARB on December 11, 2008 and is updated every five years. The first update of the Scoping Plan was approved by the ARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030-2035) on the road to reaching the 2050 goals., The most recent update released by ARB is the 2017 Climate Change Scoping Plan, which was released in November 2017. The 2017 Climate Change Scoping Plan incorporates strategies for achieving the 2030 GHG-reduction target established in SB 32 and Executive Order B-30-15. Most notably, the 2017 Climate Change Scoping Plan encourages zero net increases in GHG emissions. However, the 2017 Climate Change Scoping Plan recognizes that achieving net zero increases in GHG emissions may not be feasible or appropriate for all projects and that the inability of a project to mitigate its GHG emissions to zero would not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

The ARB has recently released its Draft 2022 Climate Change Scoping Plan Update. The draft Scoping Plan assesses the State's progress towards meeting its target of reducing statewide GHG emissions to 40 percent below the 1990 levels by 2030, and also lays out a path for achieving carbon neutrality no later than 2045. The draft Scoping Plan is anticipated to be approved in the fall of 2022.

Mandatory Reporting of GHG Emissions

The California Global Warming Solutions Act (AB 32, 2006) requires the reporting of GHGs by major sources to the ARB. Major sources required to report GHG emissions include industrial facilities, suppliers of transportation fuels, natural gas, natural gas liquids, liquefied petroleum gas, and carbon dioxide, operators of petroleum and natural gas systems, and electricity retail providers and marketers.

Cap-and-Trade Regulation

The cap-and-trade regulation is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013 and apply to large electric power plants and large industrial plants. In 2015, fuel

distributors, including distributors of heating and transportation fuels, also became subject to the cap-and-trade rules. At that stage, the program will encompass around 360 businesses throughout California and nearly 85 percent of the state's total GHG emissions.

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions and are free to buy and sell allowances on the open market. California held its first auction of GHG allowances on November 14, 2012. California's GHG cap-and-trade system is projected to reduce GHG emissions to 1990 levels by the year 2020 and would achieve an approximate 80 percent reduction from 1990 levels by 2050.

Senate Bill 32

SB 32 was signed by Governor Brown on September 8, 2016. SB 32 effectively extends California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40 percent below 1990 levels by 2030 is intended to promote further GHG-reductions in support of the State's ultimate goal of reducing GHG emissions by 80 percent below 1990 levels by 2050. SB 32 also directs the ARB to update the Climate Change Scoping Plan to address this interim 2030 emission-reduction target.

Senate Bill 97

SB 97 was enacted in 2007. SB 97 required the Office of Planning and Research to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects and must reach a conclusion regarding the significance of those emissions.
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions.
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change.
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria.
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply and ways to reduce energy demand, including through the use of efficient transportation alternatives.

As part of the administrative rulemaking process, the California Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010.

Senate Bill 100

SB 100 was signed by Governor Jerry Brown on September 10, 2018. SB 100 sets a goal of phasing out all fossil fuels from the state's electricity sector by 2045. SB 100 increases to 60 percent, from 50 percent, how much of California's electricity portfolio must come from renewables by 2030. It establishes a further goal to have an electric grid that is entirely powered by clean energy by 2045, which could include other carbon-free sources, like nuclear power, that are not renewable.

Senate Bill 375

SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will address land-use allocation in that MPOs regional transportation plan. ARB, in consultation with MPOs, establishes regional reduction targets for GHGs emitted by passenger cars and light trucks for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, funding for transportation projects may be withheld. In 2018, ARB adopted updated SB 375 targets.

California Building Code

The CBC contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the BSC. In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

Green Building Standards

In essence, green buildings standards are indistinguishable from any other building standards, are contained in the CBC, and regulate the construction of new buildings and improvements. Whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

The 2019 Building Energy Efficiency Standards (2019 Standards), adopted in May 2018, addressed four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and non-residential lighting requirements. The 2019 Standards required new residential and non-residential construction; as well as major alterations to existing structures, to include electric vehicle (EV)-capable parking spaces which have electrical panel capacity and conduit to accommodate future installation. In addition, the 2019 Standards also required the installation of solar photovoltaic (PV) systems for low-rise residential dwellings, defined as single-family dwellings and multi-family dwellings up to three-stories in height. These requirements are based on various factors, including the floor area of the home, sun exposure, and climate zone. Under the 2019 standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

The recently updated 2022 Building Energy Efficiency Standards (2022 Standards), which were approved in December 2021, encourages efficient electric heat pumps, establishes electric-ready requirements when natural gas is installed and to support the future installation of battery storage, and further expands solar photovoltaic and battery storage standards. The 2022 Standards extend solar PV system requirements, as well as battery storage capabilities for select land uses, including high-rise multi-family and non-residential land uses, such as office buildings, schools, restaurants, warehouses, theaters, grocery stores, and more. Depending on the land use and other factors, solar systems should be sized to meet targets of up to 60 percent of the structure's loads. These new solar requirements will become effective January 1, 2023, and contribute to California's goal of reaching net-zero carbon footprint by 2045 (CEC 2022).

Short-Lived Climate Pollutant Reduction Strategy

In March 2017, the ARB adopted the Short-Lived Climate Pollutant Reduction Strategy (SLCP Strategy) establishing a path to decrease GHG emissions and displace fossil-based natural gas use. Strategies include avoiding landfill methane emissions by reducing the disposal of organics through edible food recovery, composting, in-vessel digestion, and other processes; and recovering methane from wastewater treatment facilities, and manure methane at dairies, and using the methane as a renewable source of natural gas to fuel vehicles or generate electricity. The SLCP Strategy also identifies steps to reduce natural gas leaks from oil and gas wells, pipelines, valves, and pumps to improve safety, avoid energy losses, and reduce methane emissions associated with natural gas use. Lastly, the SLCP Strategy also identifies measures that can reduce HFC emissions at national and international levels, in addition to State-level action that includes an incentive program to encourage the use of low-GWP refrigerants, and limitations on the use of high-GWP refrigerants in new refrigeration and air-conditioning equipment (ARB 2021c).

Local

Santa Barbara County Air Pollution Control District

The SBCAPCD is a local public agency with the primary mission of realizing and preserving clean air for all county residents and businesses. Responsibilities of the SBCAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations

concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by federal and state regulatory requirements.

County of Santa Barbara Planning and Development

The County of Santa Barbara does not currently have an applicable Climate Action Plan (CAP) and is currently in the process of developing a CAP that addresses the State's 2030 GHG-reduction targets. The County of Santa Barbara Planning and Development Department has released interim thresholds and guidelines in order to determine the significance of a proposed projects impacts on the environment until the CAP 2030 is adopted. For GHG emissions the board adopted a screening threshold of 300 $MTCO_2e$/year for non-industrial stationary sources. Projects that meet or exceed the screening threshold must compare their GHG emissions against an efficiency-based significance threshold. Based on emission reduction targets in the County of Santa Barbara an efficiency-based significance threshold of 3.8 $MTCO_2e$/SP/year is currently recommended. These recommended interim thresholds apply to unincorporated areas of the County (Santa Barbara County 2020).

City of Santa Maria

The City of Santa Maria has not adopted a qualified greenhouse gas reduction plan. The City is currently in the process of preparing an update to the City's General Plan. The updated General Plan Update will include goals and policies to address climate adaptation and resilience, as well as, to help reduce GHGs associated with transportation and non-transportation emission sources (City of Santa Maria 2022).

Impact Analysis

In accordance with Appendix G of the State CEQA Guidelines, increased GHG emissions associated with the implementation of the project would be considered significant if may:

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.

Threshold of Significance

The City of Santa Maria has not adopted a qualified greenhouse gas reduction plan pursuant to CEQA Guidelines Section 15183.5(b)(1). Therefore, this analysis does not utilize the tiering and streamlining provisions of CEQA Guidelines Section 15183.5(b)(2) in evaluating the significance of the project's impacts related to GHG emissions.

As previously noted, Santa Barbara County has established a 300 $MTCO_2e$/year screening threshold and a 3.8 $MTCO_2e$/service population (SP)/year efficiency threshold. These thresholds apply to unincorporated areas of the County.

For purposes of this analysis, project-generated GHG emissions that would exceed the calculated efficiency threshold of 3.4 $MTCO_2e$/SP/year would be considered to have a potentially significant impact on the environment that could conflict with GHG-reduction planning efforts.

The efficiency threshold used for this analysis is based on SB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in ARB's Scoping Plan. The efficiency threshold was calculated based on ARB's GHG emissions inventory identified in the 2017 Climate Change Scoping Plan Update. Emissions sectors that do not apply to the proposed project (i.e., agriculture) were excluded from the calculation to create a locally-appropriate emissions target for the City of Santa Maria. To be conservative, amortized construction-generated GHG emissions were included in the annual operational GHG emissions estimates. The total GHG emissions target for the land use sectors applicable to the proposed

project were then divided by the projected service population (SP) (i.e., sum of the population and employment in California) for future year 2030 conditions. The service population was calculated based on the most current population and employment projections derived from the California Department of Finance Demographic Research Unit and 2017 Climate Change Scoping Plan, respectively (DOF 2020, ARB 2017). Table GHG-2 displays how the locally-appropriate emissions sectors were determined. Table GHG-3 provides a summary of the data used for calculation of the project-specific efficiency threshold. It is important to note that this threshold is more conservative than the efficiency threshold currently recommended by the County for the unincorporated areas of the County.

Table GHG-2. SB 32 Estimated GHG Emissions by Sector

GHG Emissions Sector[1]	2030 Scoping Plan Emission Targets (MMTCO2e)	Locally Appropriate[2]	Project Specific
Agriculture	24	No	No
Residential and Commercial	38	Yes	Yes
Electrical Power	53	Yes	Yes
High GWP	11	Yes	Yes
Industrial	83	No	No
Recycling and Waste	8	Yes	Yes
Transportation	103	Yes	Yes
Sub Total	320		
Cap-and-Trade Program	-60		
Total	260		
Total Locally Appropriate[3]:	213		

1. California Air Resources Board. California 1990 Greenhouse Gas Emissions Level and 2020 Limit by Sector and Activity (Land Use-driven sectors only) MMTCO2e - (based upon IPCC Fourth Assessment Report Global Warming Potentials.
2. Locally Appropriate is characterized as an emissions sector being directly impacted by the proposed land uses.
3. *Excludes Agriculture & Industrial Sector Land Uses not considered locally appropriate.*

Table GHG-3. Project-Level GHG Efficiency Threshold Calculation

	Year 2030
Land Use Sectors GHG Emissions Target (CO_2e) [1]	213,000,000
Population	41,860,549
Employment	20,729,820
Service Population (SP)	62,590,369
Locally-Appropriate GHG Efficiency Threshold ($MTCO_2e$/SP/yr)	3.4

GHG = Greenhouse gas; CO_2e = Carbon dioxide equivalent; SP = Service population;

$MTCO_2e$ = Metric tons of carbon dioxide equivalent; yr = Year

1. Based on ARB 2017 Climate Scoping Plan Update/SB 32 Scoping Plan Emissions Sector targets. Excludes the industrial or agriculture sector and cap-and-trade program to represent a locally-appropriate target.

Methodology

Short-term Construction Impacts

Short-term emissions were quantified using the CalEEMod, version 2020.4.0, based on estimated acreages and building square footage for the proposed project. Other modeling assumptions, including construction equipment requirements, hours of use, worker, and vendor vehicle trips, trip distances, and fleet mix were based on model defaults for the County. To be conservative, amortized construction-generated GHG emissions were included in the annual operational GHG emissions estimates. Neither the SBCAPCD nor the City of Santa Maria has provided guidance on what the amortization period for individual projects should be. The South Coast Air Quality Management District (SCAQMD) recommends a period of 30 years (SCAQMD 2008). In contrast, the San Luis Obispo County Air Pollution Control District (SLOAPCD) recommends a 50-year period for residential projects and a 25-year period for non-residential or commercial projects (SLOAPCD 2012). To be conservative, the SLOAPCD 25-year amortization period is utilized in this analysis.

Long-term Operational Air Quality Impacts

Long-term operational GHG emissions were calculated using the CalEEMod, version 2020.4.0. Emissions modeling included quantification of emissions associated with area sources, energy use, and mobile sources. Trip-generation rates for the proposed land uses were derived from the traffic analysis prepared for this project (ATE 2022). The fleet mix for residential land uses was based on the recommended fleet mix for residential projects derived from the SJVAPCD. Specific fleet-mix data for the commercial land use was not available and, therefore, were based on the default fleet mix identified in CalEEMod. Intensity factors for PG&E were updated to reflect the Renewable Portfolio Standards (RPS) program requirement for the use of renewable sources. To be conservative, electricity use associated with the installation of solar photovoltaic systems was not included. The project's service population was calculated to total 1,802 (i.e., 1,346 residents and 456 employees). The estimated number of residents was derived from CalEEMod. The estimated number of project employees was based on information derived from the Institute of Transportation Engineers (ITE, 2022).

Emission modeling files are provided in Appendix A.

Project Impacts and Mitigation Measures

Impact GHG-A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and,

Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 from mobile sources. To a lesser extent, other GHG pollutants, such as CH_4 and N_2O, would also be generated. Short-term and long-term GHG emissions associated with the development of the proposed project are discussed in greater detail, as follows:

Short-term Construction GHG Emissions

Estimated increases in GHG emissions associated with the construction of the proposed project are summarized in Table GHG-4. Based on the modeling conducted, construction-related GHG emissions would total approximately 3,153.8. $MTCO_2e$. Amortized GHG emissions, when averaged over the conservative assumption of 25-year life of the project, would total approximately 126.2 $MTCO_2e$/year. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted. Amortized construction-generated GHG emissions are included in the operational GHG emissions impact discussion provided below.

Table GHG-4. Construction-Generated GHG Emissions without Mitigation

Construction Year	GHG Emissions ($MTCO_2e$/Year)
2024	1,235.6
2025	1,356.6
2026	561.6
Construction Total:	3,153.8
Amortized Construction Emissions:	126.2

$MTCO_2e$ = Metric tons of carbon dioxide equivalent

Amortized emissions are quantified based on a 25-year project life.

Long-term Operational GHG Emissions

Estimated long-term increases in GHG emissions associated with the proposed project are summarized in Table GHG-5. As depicted, operational GHG emissions for the proposed project, with the inclusion of amortized construction GHGs, would total approximately 6,079.3 $MTCO_2e$/year for 2027. Under 2030 operating conditions GHG emissions would total approximately 5,751 $MTCO_2e$/year. A majority of the operational GHG emissions would be associated with energy use and the operation of motor vehicles. To a lesser extent, GHG emissions would also be associated with solid waste generation and water use. Project-

generated GHG emissions are projected to decrease in future years due largely to improvements in energy-efficiency and vehicle fleet emissions.

Based on an estimated service population of 1,802, the calculated GHG efficiency for the proposed project, without mitigation, would be 3.37 $MTCO_2e$/SP/yr in 2027 and 3.19 $MTCO_2e$/SP/yr in 2030. Project-generated GHG emissions would not exceed the 2030 efficiency threshold of 3.4 $MTCO_2e$/SP/yr. As a result, the proposed project would not be considered to generate GHG emission, either directly or indirectly, that would have a significant impact on the environment. Implementation of the proposed project would not result in a cumulatively considerable contribution to impacts related to GHG emissions or climate change. This impact would be considered **less than significant**.

Table GHG-5. Operational GHG Emissions without Mitigation

Emission Source	Emissions ($MTCO_2e$/Year) Residential & Commercial	
	2027	2030
Area	6.2	6.2
Energy	920.4	875.2
Mobile	4,817.8	4,538.5
Waste	158.7	158.7
Water	50.0	46.3
Total Operational Emissions:	5,953.1	5,624.8
Amortized Construction Emissions:	126.2	126.2
Total with Amortized Construction Emissions:	6,079.3	5,751
Service Population (SP):	1,802	1,802
$MTCO_2e$/SP:	3.37	3.19
Locally-Appropriate GHG Efficiency Significance Threshold:		3.4
Exceeds Threshold?		**No**

GHG = Greenhouse gas; SP = Service population; $MTCO_2e$ = Metric tons of carbon dioxide equivalent

Service population was quantified based on employment and population estimates obtained from CalEEMod and ITE.

Impact GHG-B Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City of Santa Maria has not adopted a Climate Action Plan or other GHG reduction plan. As noted in Table GHG-5, operational GHG emissions attributable to the proposed project would be primarily associated with mobile sources and energy use. Applicable GHG-reduction plans related to reducing operational GHG emissions include the SBCAG *2050 Regional Transportation Plan and Sustainable Communities Strategies* (2050 RTP/SCS) and the ARB's *2017 Climate Change Scoping Plan*. The project's consistency with these plans is discussed in greater detail, as follows:

SBCAG 2050 Regional Transportation Plan and Sustainable Communities Strategies

SBCAG's 2050 RTP and SCS provide land use and transportation strategies to reduce regional GHG emissions. The project's consistency with applicable goals and objectives from the 2050 RTP/SCS are discussed in Table GHG-6 (SBCAG 2021). As noted in Table GHG-6, the proposed project would not result in increased VMT and therefore would not exceed the City's thresholds. However, additional measures would be required to ensure consistency with objectives related to the promotion of alternative forms of transportation. As a result, this impact would be considered **potentially significant**.

Table GHG-6. Project Consistency with SBCAG 2050 RTP and SCS, Goals and Objectives

Objectives	Consistency
E1: Reduce GHG emissions in compliance with ARB Regional Targets.	**Consistent**. The proposed project would allow for the future development of a mix of land uses, including residential and commercial uses. Consistent with CEQA Guidelines Sections 15064.3 and 15064.7, Thresholds of Significance, the City of Santa Maria has adopted VMT screening criteria and thresholds for determining whether a project's VMT would be considered significant. Based on the traffic analysis prepared for this project, the proposed mixed-use project would not result in increased VMT that would exceed the City's thresholds. Specifically, VMT associated with residential component of the project (with reductions for mixed use development) would not exceed the City's VMT threshold of 6.17 VMT per capita and the proposed retail component of the project is estimated to result in a net decrease of 43,303 VMT (ATE 2022). Net reductions in VMT would be anticipated to result in overall reductions in mobile-source emissions. As a result, the project would not be considered to result in a significant increase in VMT that would conflict with regional VMT reduction targets. Therefore, the project would be consistent with objectives E1, E2, E3, & E5.
E2: Reduce criteria pollutant emissions.	**Consistent with Mitigation.** As noted above, the project would result be consistent with regional VMT reduction targets, which would result in overall reductions in mobile-source emissions, including emissions of criteria air pollutants. In addition, implementation of Mitigation Measure GHG-1 would include measures to promote alternative forms of transportation, which would also result in reductions of mobile-source criteria air pollutants (refer to Mitigation Measure GHG-1).
E3: Encourage affordable and workforce housing and mixed-use development within urban boundaries.	**Consistent.** As noted above, the project includes a mix of residential and commercia land uses, which would assist the City and County in meeting their housing requirements.
E4: Promote transit use and alternative transportation.	**Consistent.** The project is located along roadways proposed to have future bike lanes by the Santa Maria Bikeway Master Plan. The project would not inhibit these bike lanes from being constructed. Therefore, the project would be consistent with E4. In addition, Mitigation Measure GHG-1 requires the implementation of measures to reduce operational GHG emissions, including measures to promote the use of alternative means of transportation.
E5: Reduce vehicle miles traveled.	**Consistent.** As noted above, the project would be consistent with regional VMT-reduction targets.
M&SR1: Manage congestion at acceptable levels.	**Consistent.** The project would reduce congestion by reducing the VMT for residence in the southern Santa Maria and Orcutt areas. Therefore, the project would be consistent with M&SR1.
M&SR2: Increase bike, walk, and transit mode share.	**Consistent with Mitigation.** Mitigation measures have been included to further support alternative modes of transportation (refer to Mitigation Measure GHG-1). With mitigation, the project would be consistent with M&SR2
EQ1: Comply with HCD/Regional Housing Needs Assessment.	**Consistent.** The proposed project would assist the county in meeting its housing requirements.
EQ3: Support State and federal goals for reducing the frequency and severity of collisions.	**Consistent.** The intersections effected by the project are not anticipated to have an accident rate above the statewide average (ATE 2022). As a result, the project would reduce the frequency of collisions on the transportation network. Therefore, the project would be consistent with EQ2.
H&S2: Optimize network performance to reduce time lost to commuting.	**Consistent.** The project design would reduce congestion by reducing the VMT for residences in the southern Santa Maria and Orcutt Areas. Therefore, the project would be consistent with H&S2.

ARB California's 2017 Climate Change Scoping Plan

As previously noted, ARB's 2017 Climate Change Scoping Plan reflects the new statewide GHG emissions reductions of 40 percent below 1990 emissions levels by 2030, as mandated by SB 32. A significant part of achieving the SB 32 goals are strategies to promote sustainable communities, such as the promotion of zero

net energy buildings, and improved transportation choices that result in reducing VMT. Other measures include the increased use of low-carbon fuels and cleaner vehicles.

To support the State's GHG emissions reduction goals, including the goals mandated by SB 32, California established the Sustainable Communities and Climate Protection Act (SB 375). SB 375 requires regional metropolitan planning organizations, such as SBCAG, to develop SCSs which align transportation, housing, and land use decisions toward achieving the State's GHG emissions-reduction targets. Under SB 375, the development and implementation of SCSs, which link transportation, land use, housing, and climate policy at the regional level, are designed to reduce per capita mobile-source GHG emissions, which is accomplished through implementation of measures that would result in reductions in per capita VMT.

In 2018, ARB adopted more aggressive SB 375 targets as one measure to support progress toward the 2017 Scoping Plan goals. SB 375 aims to achieve, a 19 percent reduction in statewide per capita GHG emissions from passenger vehicles by year 2035 (relative to year 2005). To achieve this reduction, ARB sets target reductions for various regions throughout the state to be included in the RTP and SCS prepared for these regions. As discussed above (refer to Table GHG-6, Objective E1) , the proposed project would not exceed applicable VMT thresholds. As a result, the proposed project would not conflict with regional VMT-reduction goals. In addition, as noted in Impact GHG-1, the proposed project would not exceed the efficiency threshold of 3.4 $MTCO_2e$/SP/year, which is based on achieving SB-32 year 2030 GHG-reduction targets, consistent with ARB's 2017 Climate Change Scoping Plan. For these reasons, the proposed project would not conflict with the 2017 Climate Change Scoping Plan.

However, it is important to note that the ARB has recently released its Draft 2022 Climate Change Scoping Plan Update (ARB 2022). Consistent with the current 2017 Scoping Plan, the Draft 2022 Scoping Plan assesses the State's progress towards meeting its target of reducing statewide GHG emissions to 40 percent below the 1990 levels by 2030. The Draft 2022 Scoping Plan also lays out a path for achieving carbon neutrality no later than 2045, per the goal identified in Executive Order B-55-18. The draft Scoping Plan is anticipated to be approved in the fall of 2022.

For land use development projects, additional reductions in GHG emissions maybe required in order to meet the project's fair share of the statewide reductions required to achieve carbon neutrality, consistent with Executive Order B-55-18 and ARB's Draft 2022 Climate Change Scoping Plan Update. Neither the SBCAPCD nor the City of Santa Maria have developed recommended thresholds of significance that are based on achieving carbon neutrality by year 2045. However, the Bay Area Air Quality Management District (BAAQMD) has recently release recommended GHG significance thresholds that are based on a "fair share" approach for achieving carbon neutrality goals. Consistent with this approach, new land use development projects would be considered to be consistent with the State's carbon neutrality goals and would be considered to have a less than significant impact if: 1) the project is deemed consistent with regional VMT-reduction targets; 2) the project prohibits the installation of natural gas infrastructure; and 3) the project would not result in a wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. Similarly, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has also recently released Best Management Practices (BMPs), which also include the prohibited installation of natural gas infrastructure for development projects, as well as, a requirement that project's meet current CalGreen Tier 2 standards for electric vehicle (EV) spaces, except that EV-capable spaces shall instead be EV ready. This additional requirement requires the installation of electrical infrastructure sufficient to service the future installation of EV chargers. The BAAQMD and SMAQMD thresholds are based on an approach endorsed by the Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015). Although not located within these jurisdictions, development in Santa Maria and associated GHG emissions are comparable to those generated by developments within other areas of the state, including the BAAQMD and SMAQMD jurisdictions. Given that climate change is inherently a cumulative impact that occurs on a global scale, these BMPs would, likewise, be considered representative of the project's "fair share" of what would be required to meet the State's long-term climate goals, including achieving carbon neutrality by 2045, as identified by the BAAQMD and the SMAQMD.

As noted above, the proposed project would be consistent with the regional VMT-reduction targets. However, the proposed project does not include BMPs that would constitute its "fair share" of what would be required to meet the State's long-term climate goals, including achieving carbon neutrality by 2045. As a result, this impact would be considered **potentially significant**.

Mitigation Measures

GHG-1: The project shall include the following design features to encourage the use of alternate transportation modes and reduce mobile-source emissions:

a. Provide a pedestrian-friendly and interconnected streetscape with good access to/from the development for pedestrians, bicyclists, and transit users to make alternative transportation more convenient, comfortable, and safe.
b. Incorporate traffic calming modifications to project roads to reduce vehicle speeds and increase pedestrian and bicycle usage and safety.
c. Provide employee lockers and showers to promote bicycle and pedestrian use. One shower and 5 lockers for every 25 new employees is recommended.
d. Increase bicycle accessibility and safety in the vicinity of the project; for example: provide interconnected bicycle routes/lanes or construction of bikeways.
e. Exceed Cal Green standards by 25 percent for providing on-site bicycle parking: both short-term racks and long-term lockers, or a locked room with standard racks and access limited to bicyclists only.
f. Meet current CalGreen Tier 2 standards for electric vehicle (EV) parking spaces, except that all EV parking spaces required by the code to be EV capable shall instead be EV ready.

GHG-2: The servicing of proposed residential and commercial development by natural gas shall be prohibited.

Significance After Mitigation

Implementation of Mitigation Measure GHG-1 would include measures to promote the use of alternative means of transportation, which would reduce VMT and associated mobile-source emissions consistent with applicable RTP/SCS objectives. The installation of electrically-powered appliances and building mechanical equipment in place of natural-gas fueled equipment would further reduce on-site emissions of GHGs in residential land uses. In addition, Mitigation Measure Energy-1 would require proposed land uses to receive electricity from Central Coast Community Energy (3CE). 3CE is striving to provide 100 percent electricity from renewable sources by 2030. Additional measures have also been included to require the installation of EV-ready parking spaces and to prohibit the installation of natural gas. With mitigation, the proposed project would not conflict with ARB's 2017 Climate Change Scoping Plan and would be contributing its fair share toward achieving the State's goal of carbon neutrality by 2045, per Executive Order B-55-18 and ARB's Draft 2022 Climate Change Scoping Plan. With mitigation, this impact would be considered **less than significant**.

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

Santa Barbara-North of Santa Ynez County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	152.51	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2027.

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construstion to reflect typical consturction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	440.00	557.00
tblConstructionPhase	NumDays	35.00	469.00
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	6.4690e-003	1.0000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblLandUse	LotAcreage	25.00	18.20
tblLandUse	LotAcreage	5.94	9.20
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	WD_TR	7.32	4.62
tblVehicleTrips	WD_TR	7.32	4.62

2.0 Emissions Summary

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	9.4263	32.4106	28.0973	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,112.1243	6,112.1243	1.9475	0.2266	6,161.8263
2025	9.2448	16.7173	26.2068	0.0597	3.0109	0.6052	3.6162	0.8058	0.5724	1.3782	0.0000	5,998.1832	5,998.1832	0.7377	0.2192	6,081.9420
2026	9.1845	16.6025	25.6422	0.0589	3.0109	0.6040	3.6150	0.8058	0.5713	1.3771	0.0000	5,927.5064	5,927.5064	0.7427	0.2124	6,009.1244
Maximum	**9.4263**	**32.4106**	**28.0973**	**0.0631**	**19.7707**	**1.3360**	**21.0006**	**10.1326**	**1.2291**	**11.2641**	**0.0000**	**6,112.1243**	**6,112.1243**	**1.9475**	**0.2266**	**6,161.8263**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	8.1315	5.5925	33.3736	0.0631	7.7799	0.1021	7.8425	3.9701	0.1021	4.0327	0.0000	6,112.1243	6,112.1243	1.9475	0.2266	6,161.8263
2025	8.0640	5.4656	27.6057	0.0597	3.0109	0.0709	3.0818	0.8058	0.0694	0.8752	0.0000	5,998.1832	5,998.1832	0.7377	0.2192	6,081.9420
2026	8.0037	5.3508	27.0410	0.0589	3.0109	0.0697	3.0806	0.8058	0.0682	0.8741	0.0000	5,927.5064	5,927.5064	0.7427	0.2124	6,009.1244
Maximum	**8.1315**	**5.5925**	**33.3736**	**0.0631**	**7.7799**	**0.1021**	**7.8425**	**3.9701**	**0.1021**	**4.0327**	**0.0000**	**6,112.1243**	**6,112.1243**	**1.9475**	**0.2266**	**6,161.8263**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	13.13	75.04	-10.10	0.00	46.49	90.46	50.39	52.47	89.90	58.76	0.00	0.00	0.00	0.00	0.00	0.00

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357
Mobile	2.7534	4.9799	28.5158	0.0731	8.9080	0.0543	8.9623	2.3693	0.0507	2.4199		7,842.1442	7,842.1442	0.5322	0.4293	7,983.3663
Total	**15.5850**	**6.8604**	**69.9155**	**0.0843**	**8.9080**	**0.3948**	**9.3027**	**2.3693**	**0.3911**	**2.7604**	**0.0000**	**9,716.4125**	**9,716.4125**	**0.6371**	**0.4623**	**9,870.0959**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357
Mobile	2.6802	4.3070	25.0678	0.0582	6.9927	0.0445	7.0372	1.8599	0.0415	1.9013		6,236.0967	6,236.0967	0.4719	0.3672	6,357.3050
Total	**15.5118**	**6.1876**	**66.4675**	**0.0693**	**6.9927**	**0.3849**	**7.3776**	**1.8599**	**0.3819**	**2.2418**	**0.0000**	**8,110.3649**	**8,110.3649**	**0.5768**	**0.4002**	**8,244.0346**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.47	9.81	4.93	17.76	21.50	2.49	20.69	21.50	2.35	18.79	0.00	16.53	16.53	9.46	13.43	16.47

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Building Construction	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**		**0.9602**	**0.9602**		**0.8922**	**0.8922**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0389	0.0253	0.2809	7.4000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		76.7817	76.7817	2.8700e-003	2.5500e-003	77.6143
Total	**0.0389**	**0.0253**	**0.2809**	**7.4000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**76.7817**	**76.7817**	**2.8700e-003**	**2.5500e-003**	**77.6143**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**		**0.0616**	**0.0616**		**0.0616**	**0.0616**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0389	0.0253	0.2809	7.4000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		76.7817	76.7817	2.8700e-003	2.5500e-003	77.6143
Total	**0.0389**	**0.0253**	**0.2809**	**7.4000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**76.7817**	**76.7817**	**2.8700e-003**	**2.5500e-003**	**77.6143**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0303	0.3370	8.9000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		92.1380	92.1380	3.4400e-003	3.0600e-003	93.1372
Total	**0.0466**	**0.0303**	**0.3370**	**8.9000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**92.1380**	**92.1380**	**3.4400e-003**	**3.0600e-003**	**93.1372**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**0.4656**	**2.0175**	**20.8690**	**0.0381**	**7.6662**	**0.0621**	**7.7283**	**3.9400**	**0.0621**	**4.0020**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0303	0.3370	8.9000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		92.1380	92.1380	3.4400e-003	3.0600e-003	93.1372
Total	**0.0466**	**0.0303**	**0.3370**	**8.9000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**92.1380**	**92.1380**	**3.4400e-003**	**3.0600e-003**	**93.1372**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0518	0.0337	0.3745	9.9000e-004	0.1263	5.9000e-004	0.1269	0.0335	5.4000e-004	0.0341		102.3756	102.3756	3.8300e-003	3.4000e-003	103.4858
Total	**0.0518**	**0.0337**	**0.3745**	**9.9000e-004**	**0.1263**	**5.9000e-004**	**0.1269**	**0.0335**	**5.4000e-004**	**0.0341**		**102.3756**	**102.3756**	**3.8300e-003**	**3.4000e-003**	**103.4858**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**0.7616**	**3.3000**	**32.9991**	**0.0621**	**3.5894**	**0.1015**	**3.6909**	**1.4250**	**0.1015**	**1.5265**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0518	0.0337	0.3745	9.9000e-004	0.1263	5.9000e-004	0.1269	0.0335	5.4000e-004	0.0341		102.3756	102.3756	3.8300e-003	3.4000e-003	103.4858
Total	**0.0518**	**0.0337**	**0.3745**	**9.9000e-004**	**0.1263**	**5.9000e-004**	**0.1269**	**0.0335**	**5.4000e-004**	**0.0341**		**102.3756**	**102.3756**	**3.8300e-003**	**3.4000e-003**	**103.4858**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0636	2.5099	0.8539	9.5000e-003	0.3142	0.0146	0.3288	0.0904	0.0139	0.1044		1,043.1248	1,043.1248	0.0454	0.1539	1,090.1133
Worker	0.9223	0.5996	6.6659	0.0177	2.2483	0.0105	2.2588	0.5965	9.6200e-003	0.6061		1,822.2854	1,822.2854	0.0681	0.0606	1,842.0464
Total	**0.9859**	**3.1095**	**7.5198**	**0.0272**	**2.5625**	**0.0250**	**2.5875**	**0.6869**	**0.0236**	**0.7105**		**2,865.4102**	**2,865.4102**	**0.1135**	**0.2145**	**2,932.1597**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0636	2.5099	0.8539	9.5000e-003	0.3142	0.0146	0.3288	0.0904	0.0139	0.1044		1,043.1248	1,043.1248	0.0454	0.1539	1,090.1133
Worker	0.9223	0.5996	6.6659	0.0177	2.2483	0.0105	2.2588	0.5965	9.6200e-003	0.6061		1,822.2854	1,822.2854	0.0681	0.0606	1,842.0464
Total	**0.9859**	**3.1095**	**7.5198**	**0.0272**	**2.5625**	**0.0250**	**2.5875**	**0.6869**	**0.0236**	**0.7105**		**2,865.4102**	**2,865.4102**	**0.1135**	**0.2145**	**2,932.1597**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0608	2.4567	0.8341	9.3100e-003	0.3142	0.0142	0.3284	0.0904	0.0136	0.1040		1,024.4743	1,024.4743	0.0470	0.1514	1,070.7510
Worker	0.8684	0.5381	6.2353	0.0171	2.2483	9.9700e-003	2.2583	0.5965	9.1800e-003	0.6056		1,780.6557	1,780.6557	0.0620	0.0566	1,799.0598
Total	**0.9292**	**2.9948**	**7.0694**	**0.0264**	**2.5625**	**0.0242**	**2.5867**	**0.6869**	**0.0228**	**0.7097**		**2,805.1300**	**2,805.1300**	**0.1090**	**0.2079**	**2,869.8108**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0608	2.4567	0.8341	9.3100e-003	0.3142	0.0142	0.3284	0.0904	0.0136	0.1040		1,024.4743	1,024.4743	0.0470	0.1514	1,070.7510
Worker	0.8684	0.5381	6.2353	0.0171	2.2483	9.9700e-003	2.2583	0.5965	9.1800e-003	0.6056		1,780.6557	1,780.6557	0.0620	0.0566	1,799.0598
Total	**0.9292**	**2.9948**	**7.0694**	**0.0264**	**2.5625**	**0.0242**	**2.5867**	**0.6869**	**0.0228**	**0.7097**		**2,805.1300**	**2,805.1300**	**0.1090**	**0.2079**	**2,869.8108**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0582	2.4043	0.8178	9.1200e-003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1037		1,005.7927	1,005.7927	0.0485	0.1488	1,051.3472
Worker	0.8203	0.4861	5.7782	0.0165	2.2483	9.2900e-003	2.2576	0.5965	8.5500e-003	0.6050		1,737.3061	1,737.3061	0.0564	0.0531	1,754.5275
Total	**0.8785**	**2.8904**	**6.5960**	**0.0257**	**2.5625**	**0.0231**	**2.5856**	**0.6869**	**0.0218**	**0.7087**		**2,743.0988**	**2,743.0988**	**0.1049**	**0.2019**	**2,805.8747**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0582	2.4043	0.8178	9.1200e-003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1037		1,005.7927	1,005.7927	0.0485	0.1488	1,051.3472
Worker	0.8203	0.4861	5.7782	0.0165	2.2483	9.2900e-003	2.2576	0.5965	8.5500e-003	0.6050		1,737.3061	1,737.3061	0.0564	0.0531	1,754.5275
Total	**0.8785**	**2.8904**	**6.5960**	**0.0257**	**2.5625**	**0.0231**	**2.5856**	**0.6869**	**0.0218**	**0.7087**		**2,743.0988**	**2,743.0988**	**0.1049**	**0.2019**	**2,805.8747**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**6.7849**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1839	0.1196	1.3294	3.5200e-003	0.4484	2.0800e-003	0.4505	0.1190	1.9200e-003	0.1209		363.4333	363.4333	0.0136	0.0121	367.3744
Total	**0.1839**	**0.1196**	**1.3294**	**3.5200e-003**	**0.4484**	**2.0800e-003**	**0.4505**	**0.1190**	**1.9200e-003**	**0.1209**		**363.4333**	**363.4333**	**0.0136**	**0.0121**	**367.3744**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**6.6338**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1839	0.1196	1.3294	3.5200e-003	0.4484	2.0800e-003	0.4505	0.1190	1.9200e-003	0.1209		363.4333	363.4333	0.0136	0.0121	367.3744
Total	**0.1839**	**0.1196**	**1.3294**	**3.5200e-003**	**0.4484**	**2.0800e-003**	**0.4505**	**0.1190**	**1.9200e-003**	**0.1209**		**363.4333**	**363.4333**	**0.0136**	**0.0121**	**367.3744**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7750**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1732	0.1073	1.2436	3.4100e-003	0.4484	1.9900e-003	0.4504	0.1190	1.8300e-003	0.1208		355.1308	355.1308	0.0124	0.0113	358.8013
Total	**0.1732**	**0.1073**	**1.2436**	**3.4100e-003**	**0.4484**	**1.9900e-003**	**0.4504**	**0.1190**	**1.8300e-003**	**0.1208**		**355.1308**	**355.1308**	**0.0124**	**0.0113**	**358.8013**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.6338**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1732	0.1073	1.2436	3.4100e-003	0.4484	1.9900e-003	0.4504	0.1190	1.8300e-003	0.1208		355.1308	355.1308	0.0124	0.0113	358.8013
Total	**0.1732**	**0.1073**	**1.2436**	**3.4100e-003**	**0.4484**	**1.9900e-003**	**0.4504**	**0.1190**	**1.8300e-003**	**0.1208**		**355.1308**	**355.1308**	**0.0124**	**0.0113**	**358.8013**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7750**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1636	0.0969	1.1524	3.3000e-003	0.4484	1.8500e-003	0.4503	0.1190	1.7100e-003	0.1207		346.4852	346.4852	0.0113	0.0106	349.9198
Total	**0.1636**	**0.0969**	**1.1524**	**3.3000e-003**	**0.4484**	**1.8500e-003**	**0.4503**	**0.1190**	**1.7100e-003**	**0.1207**		**346.4852**	**346.4852**	**0.0113**	**0.0106**	**349.9198**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.6338**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1636	0.0969	1.1524	3.3000e-003	0.4484	1.8500e-003	0.4503	0.1190	1.7100e-003	0.1207		346.4852	346.4852	0.0113	0.0106	349.9198
Total	**0.1636**	**0.0969**	**1.1524**	**3.3000e-003**	**0.4484**	**1.8500e-003**	**0.4503**	**0.1190**	**1.7100e-003**	**0.1207**		**346.4852**	**346.4852**	**0.0113**	**0.0106**	**349.9198**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0205	0.2435	7.0000e-004	0.0947	3.9000e-004	0.0951	0.0251	3.6000e-004	0.0255		73.2011	73.2011	2.3800e-003	2.2400e-003	73.9267
Total	**0.0346**	**0.0205**	**0.2435**	**7.0000e-004**	**0.0947**	**3.9000e-004**	**0.0951**	**0.0251**	**3.6000e-004**	**0.0255**		**73.2011**	**73.2011**	**2.3800e-003**	**2.2400e-003**	**73.9267**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0346	0.0205	0.2435	7.0000e-004	0.0947	3.9000e-004	0.0951	0.0251	3.6000e-004	0.0255		73.2011	73.2011	2.3800e-003	2.2400e-003	73.9267
Total	**0.0346**	**0.0205**	**0.2435**	**7.0000e-004**	**0.0947**	**3.9000e-004**	**0.0951**	**0.0251**	**3.6000e-004**	**0.0255**		**73.2011**	**73.2011**	**2.3800e-003**	**2.2400e-003**	**73.9267**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6802	4.3070	25.0678	0.0582	6.9927	0.0445	7.0372	1.8599	0.0415	1.9013		6,236.0967	6,236.0967	0.4719	0.3672	6,357.3050
Unmitigated	2.7534	4.9799	28.5158	0.0731	8.9080	0.0543	8.9623	2.3693	0.0507	2.4199		7,842.1442	7,842.1442	0.5322	0.4293	7,983.3663

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500
Condo/Townhouse	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357
NaturalGas Unmitigated	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	10814	0.1166	0.9966	0.4241	6.3600e-003		0.0806	0.0806		0.0806	0.0806		1,272.2372	1,272.2372	0.0244	0.0233	1,279.7975
Condo/Townhouse	4492.23	0.0485	0.4140	0.1762	2.6400e-003		0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e-003	531.6382
Total		**0.1651**	**1.4106**	**0.6003**	**9.0000e-003**		**0.1141**	**0.1141**		**0.1141**	**0.1141**		**1,800.7349**	**1,800.7349**	**0.0345**	**0.0330**	**1,811.4357**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	10.814	0.1166	0.9966	0.4241	6.3600e-003		0.0806	0.0806		0.0806	0.0806		1,272.2372	1,272.2372	0.0244	0.0233	1,279.7975
Condo/Townhouse	4.49223	0.0485	0.4140	0.1762	2.6400e-003		0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e-003	531.6382
Total		**0.1651**	**1.4106**	**0.6003**	**9.0000e-003**		**0.1141**	**0.1141**		**0.1141**	**0.1141**		**1,800.7349**	**1,800.7349**	**0.0345**	**0.0330**	**1,811.4357**

6.0 Area Detail

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Unmitigated	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8486					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	**12.6666**	**0.4700**	**40.7994**	**2.1600e-003**		**0.2264**	**0.2264**		**0.2264**	**0.2264**	**0.0000**	**73.5334**	**73.5334**	**0.0704**	**0.0000**	**75.2938**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8486					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	**12.6666**	**0.4700**	**40.7994**	**2.1600e-003**		**0.2264**	**0.2264**		**0.2264**	**0.2264**	**0.0000**	**73.5334**	**73.5334**	**0.0704**	**0.0000**	**75.2938**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

Santa Barbara-North of Santa Ynez County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	152.51	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2027.

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construstion to reflect typical consturction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	440.00	557.00
tblConstructionPhase	NumDays	35.00	469.00
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	6.4690e-003	1.0000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblLandUse	LotAcreage	25.00	18.20
tblLandUse	LotAcreage	5.94	9.20
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	WD_TR	7.32	4.62
tblVehicleTrips	WD_TR	7.32	4.62

2.0 Emissions Summary

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	9.3359	32.4064	28.0817	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,114.2479	6,114.2479	1.9471	0.2199	6,194.0242
2025	9.1578	16.5616	25.8547	0.0601	3.0109	0.6052	3.6161	0.8058	0.5723	1.3782	0.0000	6,041.0150	6,041.0150	0.7306	0.2130	6,122.7499
2026	9.1001	16.4556	25.2937	0.0593	3.0109	0.6040	3.6149	0.8058	0.5712	1.3770	0.0000	5,969.1952	5,969.1952	0.7413	0.2066	6,048.9159
Maximum	**9.3359**	**32.4064**	**28.0817**	**0.0631**	**19.7707**	**1.3360**	**21.0006**	**10.1326**	**1.2291**	**11.2641**	**0.0000**	**6,114.2479**	**6,114.2479**	**1.9471**	**0.2199**	**6,194.0242**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	8.0411	5.4264	33.3580	0.0631	7.7799	0.1021	7.8425	3.9701	0.1021	4.0327	0.0000	6,114.2479	6,114.2479	1.9471	0.2199	6,194.0242
2025	7.9771	5.3098	27.2536	0.0601	3.0109	0.0709	3.0818	0.8058	0.0693	0.8751	0.0000	6,041.0150	6,041.0150	0.7306	0.2130	6,122.7499
2026	7.9194	5.2039	26.6925	0.0593	3.0109	0.0697	3.0806	0.8058	0.0682	0.8740	0.0000	5,969.1952	5,969.1952	0.7413	0.2066	6,048.9159
Maximum	**8.0411**	**5.4264**	**33.3580**	**0.0631**	**7.7799**	**0.1021**	**7.8425**	**3.9701**	**0.1021**	**4.0327**	**0.0000**	**6,114.2479**	**6,114.2479**	**1.9471**	**0.2199**	**6,194.0242**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	13.25	75.64	-10.19	0.00	46.49	90.47	50.39	52.47	89.90	58.76	0.00	0.00	0.00	0.00	0.00	0.00

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357
Mobile	2.8664	4.6227	26.2752	0.0743	8.9080	0.0542	8.9622	2.3693	0.0506	2.4199		7,968.8247	7,968.8247	0.4965	0.4080	8,102.8115
Total	**15.6980**	**6.5032**	**67.6749**	**0.0855**	**8.9080**	**0.3947**	**9.3027**	**2.3693**	**0.3910**	**2.7603**	**0.0000**	**9,843.0930**	**9,843.0930**	**0.6014**	**0.4410**	**9,989.5411**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357
Mobile	2.7932	3.9889	22.7313	0.0591	6.9927	0.0444	7.0371	1.8599	0.0414	1.9012		6,333.9607	6,333.9607	0.4358	0.3479	6,448.5394
Total	**15.6248**	**5.8695**	**64.1310**	**0.0703**	**6.9927**	**0.3848**	**7.3775**	**1.8599**	**0.3818**	**2.2417**	**0.0000**	**8,208.2289**	**8,208.2289**	**0.5407**	**0.3809**	**8,335.2689**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.47	9.75	5.24	17.83	21.50	2.49	20.69	21.50	2.35	18.79	0.00	16.61	16.61	10.09	13.62	16.56

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Building Construction	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**		**0.9602**	**0.9602**		**0.8922**	**0.8922**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0357	0.0221	0.2691	7.6000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		78.3745	78.3745	2.5900e-003	2.3300e-003	79.1343
Total	**0.0357**	**0.0221**	**0.2691**	**7.6000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**78.3745**	**78.3745**	**2.5900e-003**	**2.3300e-003**	**79.1343**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**		**0.0616**	**0.0616**		**0.0616**	**0.0616**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0357	0.0221	0.2691	7.6000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		78.3745	78.3745	2.5900e-003	2.3300e-003	79.1343
Total	**0.0357**	**0.0221**	**0.2691**	**7.6000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**78.3745**	**78.3745**	**2.5900e-003**	**2.3300e-003**	**79.1343**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0428	0.0265	0.3230	9.1000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		94.0493	94.0493	3.1100e-003	2.8000e-003	94.9611
Total	**0.0428**	**0.0265**	**0.3230**	**9.1000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**94.0493**	**94.0493**	**3.1100e-003**	**2.8000e-003**	**94.9611**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**0.4656**	**2.0175**	**20.8690**	**0.0381**	**7.6662**	**0.0621**	**7.7283**	**3.9400**	**0.0621**	**4.0020**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0428	0.0265	0.3230	9.1000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		94.0493	94.0493	3.1100e-003	2.8000e-003	94.9611
Total	**0.0428**	**0.0265**	**0.3230**	**9.1000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**94.0493**	**94.0493**	**3.1100e-003**	**2.8000e-003**	**94.9611**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0475	0.0295	0.3588	1.0100e-003	0.1263	5.9000e-004	0.1269	0.0335	5.4000e-004	0.0341		104.4993	104.4993	3.4500e-003	3.1100e-003	105.5124
Total	**0.0475**	**0.0295**	**0.3588**	**1.0100e-003**	**0.1263**	**5.9000e-004**	**0.1269**	**0.0335**	**5.4000e-004**	**0.0341**		**104.4993**	**104.4993**	**3.4500e-003**	**3.1100e-003**	**105.5124**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**0.7616**	**3.3000**	**32.9991**	**0.0621**	**3.5894**	**0.1015**	**3.6909**	**1.4250**	**0.1015**	**1.5265**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0475	0.0295	0.3588	1.0100e-003	0.1263	5.9000e-004	0.1269	0.0335	5.4000e-004	0.0341		104.4993	104.4993	3.4500e-003	3.1100e-003	105.5124
Total	**0.0475**	**0.0295**	**0.3588**	**1.0100e-003**	**0.1263**	**5.9000e-004**	**0.1269**	**0.0335**	**5.4000e-004**	**0.0341**		**104.4993**	**104.4993**	**3.4500e-003**	**3.1100e-003**	**105.5124**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0647	2.4338	0.8304	9.4800e-003	0.3142	0.0145	0.3287	0.0904	0.0139	0.1043		1,041.7929	1,041.7929	0.0456	0.1535	1,088.6834
Worker	0.8460	0.5245	6.3873	0.0180	2.2483	0.0105	2.2588	0.5965	9.6200e-003	0.6061		1,860.0869	1,860.0869	0.0615	0.0554	1,878.1201
Total	**0.9107**	**2.9583**	**7.2177**	**0.0275**	**2.5625**	**0.0250**	**2.5875**	**0.6869**	**0.0235**	**0.7104**		**2,901.8798**	**2,901.8798**	**0.1071**	**0.2089**	**2,966.8034**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0647	2.4338	0.8304	9.4800e-003	0.3142	0.0145	0.3287	0.0904	0.0139	0.1043		1,041.7929	1,041.7929	0.0456	0.1535	1,088.6834
Worker	0.8460	0.5245	6.3873	0.0180	2.2483	0.0105	2.2588	0.5965	9.6200e-003	0.6061		1,860.0869	1,860.0869	0.0615	0.0554	1,878.1201
Total	**0.9107**	**2.9583**	**7.2177**	**0.0275**	**2.5625**	**0.0250**	**2.5875**	**0.6869**	**0.0235**	**0.7104**		**2,901.8798**	**2,901.8798**	**0.1071**	**0.2089**	**2,966.8034**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0619	2.3818	0.8109	9.2900e-003	0.3142	0.0142	0.3284	0.0904	0.0135	0.1040		1,023.1119	1,023.1119	0.0472	0.1510	1,069.2937
Worker	0.7949	0.4707	5.9611	0.0174	2.2483	9.9700e-003	2.2583	0.5965	9.1800e-003	0.6056		1,817.5015	1,817.5015	0.0559	0.0517	1,834.2973
Total	**0.8569**	**2.8525**	**6.7720**	**0.0267**	**2.5625**	**0.0241**	**2.5866**	**0.6869**	**0.0227**	**0.7096**		**2,840.6134**	**2,840.6134**	**0.1031**	**0.2027**	**2,903.5910**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0619	2.3818	0.8109	9.2900e-003	0.3142	0.0142	0.3284	0.0904	0.0135	0.1040		1,023.1119	1,023.1119	0.0472	0.1510	1,069.2937
Worker	0.7949	0.4707	5.9611	0.0174	2.2483	9.9700e-003	2.2583	0.5965	9.1800e-003	0.6056		1,817.5015	1,817.5015	0.0559	0.0517	1,834.2973
Total	**0.8569**	**2.8525**	**6.7720**	**0.0267**	**2.5625**	**0.0241**	**2.5866**	**0.6869**	**0.0227**	**0.7096**		**2,840.6134**	**2,840.6134**	**0.1031**	**0.2027**	**2,903.5910**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0595	2.3305	0.7949	9.1100e-003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1036		1,004.4083	1,004.4083	0.0487	0.1485	1,049.8706
Worker	0.7489	0.4252	5.5067	0.0169	2.2483	9.2900e-003	2.2576	0.5965	8.5500e-003	0.6050		1,773.2173	1,773.2173	0.0507	0.0485	1,788.9336
Total	**0.8084**	**2.7557**	**6.3016**	**0.0260**	**2.5625**	**0.0231**	**2.5856**	**0.6869**	**0.0217**	**0.7086**		**2,777.6256**	**2,777.6256**	**0.0994**	**0.1970**	**2,838.8042**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0595	2.3305	0.7949	9.1100e-003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1036		1,004.4083	1,004.4083	0.0487	0.1485	1,049.8706
Worker	0.7489	0.4252	5.5067	0.0169	2.2483	9.2900e-003	2.2576	0.5965	8.5500e-003	0.6050		1,773.2173	1,773.2173	0.0507	0.0485	1,788.9336
Total	**0.8084**	**2.7557**	**6.3016**	**0.0260**	**2.5625**	**0.0231**	**2.5856**	**0.6869**	**0.0217**	**0.7086**		**2,777.6256**	**2,777.6256**	**0.0994**	**0.1970**	**2,838.8042**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**6.7849**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1687	0.1046	1.2739	3.6000e-003	0.4484	2.0800e-003	0.4505	0.1190	1.9200e-003	0.1209		370.9724	370.9724	0.0123	0.0110	374.5689
Total	**0.1687**	**0.1046**	**1.2739**	**3.6000e-003**	**0.4484**	**2.0800e-003**	**0.4505**	**0.1190**	**1.9200e-003**	**0.1209**		**370.9724**	**370.9724**	**0.0123**	**0.0110**	**374.5689**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**6.6338**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1687	0.1046	1.2739	3.6000e-003	0.4484	2.0800e-003	0.4505	0.1190	1.9200e-003	0.1209		370.9724	370.9724	0.0123	0.0110	374.5689
Total	**0.1687**	**0.1046**	**1.2739**	**3.6000e-003**	**0.4484**	**2.0800e-003**	**0.4505**	**0.1190**	**1.9200e-003**	**0.1209**		**370.9724**	**370.9724**	**0.0123**	**0.0110**	**374.5689**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7750**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1585	0.0939	1.1889	3.4800e-003	0.4484	1.9900e-003	0.4504	0.1190	1.8300e-003	0.1208		362.4792	362.4792	0.0112	0.0103	365.8290
Total	**0.1585**	**0.0939**	**1.1889**	**3.4800e-003**	**0.4484**	**1.9900e-003**	**0.4504**	**0.1190**	**1.8300e-003**	**0.1208**		**362.4792**	**362.4792**	**0.0112**	**0.0103**	**365.8290**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.6338**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1585	0.0939	1.1889	3.4800e-003	0.4484	1.9900e-003	0.4504	0.1190	1.8300e-003	0.1208		362.4792	362.4792	0.0112	0.0103	365.8290
Total	**0.1585**	**0.0939**	**1.1889**	**3.4800e-003**	**0.4484**	**1.9900e-003**	**0.4504**	**0.1190**	**1.8300e-003**	**0.1208**		**362.4792**	**362.4792**	**0.0112**	**0.0103**	**365.8290**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**6.7750**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1494	0.0848	1.0983	3.3700e-003	0.4484	1.8500e-003	0.4503	0.1190	1.7100e-003	0.1207		353.6473	353.6473	0.0101	9.6700e-003	356.7817
Total	**0.1494**	**0.0848**	**1.0983**	**3.3700e-003**	**0.4484**	**1.8500e-003**	**0.4503**	**0.1190**	**1.7100e-003**	**0.1207**		**353.6473**	**353.6473**	**0.0101**	**9.6700e-003**	**356.7817**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**6.6338**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1494	0.0848	1.0983	3.3700e-003	0.4484	1.8500e-003	0.4503	0.1190	1.7100e-003	0.1207		353.6473	353.6473	0.0101	9.6700e-003	356.7817
Total	**0.1494**	**0.0848**	**1.0983**	**3.3700e-003**	**0.4484**	**1.8500e-003**	**0.4503**	**0.1190**	**1.7100e-003**	**0.1207**		**353.6473**	**353.6473**	**0.0101**	**9.6700e-003**	**356.7817**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0179	0.2320	7.1000e-004	0.0947	3.9000e-004	0.0951	0.0251	3.6000e-004	0.0255		74.7142	74.7142	2.1400e-003	2.0400e-003	75.3764
Total	**0.0316**	**0.0179**	**0.2320**	**7.1000e-004**	**0.0947**	**3.9000e-004**	**0.0951**	**0.0251**	**3.6000e-004**	**0.0255**		**74.7142**	**74.7142**	**2.1400e-003**	**2.0400e-003**	**75.3764**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0179	0.2320	7.1000e-004	0.0947	3.9000e-004	0.0951	0.0251	3.6000e-004	0.0255		74.7142	74.7142	2.1400e-003	2.0400e-003	75.3764
Total	**0.0316**	**0.0179**	**0.2320**	**7.1000e-004**	**0.0947**	**3.9000e-004**	**0.0951**	**0.0251**	**3.6000e-004**	**0.0255**		**74.7142**	**74.7142**	**2.1400e-003**	**2.0400e-003**	**75.3764**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7932	3.9889	22.7313	0.0591	6.9927	0.0444	7.0371	1.8599	0.0414	1.9012		6,333.9607	6,333.9607	0.4358	0.3479	6,448.5394
Unmitigated	2.8664	4.6227	26.2752	0.0743	8.9080	0.0542	8.9622	2.3693	0.0506	2.4199		7,968.8247	7,968.8247	0.4965	0.4080	8,102.8115

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500
Condo/Townhouse	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357
NaturalGas Unmitigated	0.1651	1.4106	0.6002	9.0000e-003		0.1141	0.1141		0.1141	0.1141		1,800.7349	1,800.7349	0.0345	0.0330	1,811.4357

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	10814	0.1166	0.9966	0.4241	6.3600e-003		0.0806	0.0806		0.0806	0.0806		1,272.2372	1,272.2372	0.0244	0.0233	1,279.7975
Condo/Townhouse	4492.23	0.0485	0.4140	0.1762	2.6400e-003		0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e-003	531.6382
Total		**0.1651**	**1.4106**	**0.6003**	**9.0000e-003**		**0.1141**	**0.1141**		**0.1141**	**0.1141**		**1,800.7349**	**1,800.7349**	**0.0345**	**0.0330**	**1,811.4357**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	10.814	0.1166	0.9966	0.4241	6.3600e-003		0.0806	0.0806		0.0806	0.0806		1,272.2372	1,272.2372	0.0244	0.0233	1,279.7975
Condo/Townhouse	4.49223	0.0485	0.4140	0.1762	2.6400e-003		0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e-003	531.6382
Total		**0.1651**	**1.4106**	**0.6003**	**9.0000e-003**		**0.1141**	**0.1141**		**0.1141**	**0.1141**		**1,800.7349**	**1,800.7349**	**0.0345**	**0.0330**	**1,811.4357**

6.0 Area Detail

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Unmitigated	12.6666	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8486					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	**12.6666**	**0.4700**	**40.7994**	**2.1600e-003**		**0.2264**	**0.2264**		**0.2264**	**0.2264**	**0.0000**	**73.5334**	**73.5334**	**0.0704**	**0.0000**	**75.2938**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8486					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e-003		0.2264	0.2264		0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	**12.6666**	**0.4700**	**40.7994**	**2.1600e-003**		**0.2264**	**0.2264**		**0.2264**	**0.2264**	**0.0000**	**73.5334**	**73.5334**	**0.0704**	**0.0000**	**75.2938**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	152.51	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2027.

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construstion to reflect typical consturction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

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Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	440.00	557.00
tblConstructionPhase	NumDays	35.00	469.00
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	6.4690e-003	1.0000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblLandUse	LotAcreage	25.00	18.20
tblLandUse	LotAcreage	5.94	9.20
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	WD_TR	7.32	4.62
tblVehicleTrips	WD_TR	7.32	4.62

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.4842	2.7252	3.1470	7.0600e-003	0.6277	0.1114	0.7391	0.2434	0.1039	0.3472	0.0000	634.4136	634.4136	0.1197	0.0165	642.3247
2025	1.1969	2.1805	3.3917	7.8000e-003	0.3844	0.0790	0.4634	0.1031	0.0747	0.1778	0.0000	710.2800	710.2800	0.0870	0.0258	720.1370
2026	0.7291	1.2432	1.9524	4.3200e-003	0.1995	0.0473	0.2468	0.0535	0.0446	0.0980	0.0000	393.3755	393.3755	0.0545	0.0126	398.4794
Maximum	**1.1969**	**2.7252**	**3.3917**	**7.8000e-003**	**0.6277**	**0.1114**	**0.7391**	**0.2434**	**0.1039**	**0.3472**	**0.0000**	**710.2800**	**710.2800**	**0.1197**	**0.0258**	**720.1370**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2815	0.5769	3.4531	7.0600e-003	0.3815	9.4800e-003	0.3910	0.1316	9.3500e-003	0.1409	0.0000	634.4131	634.4131	0.1197	0.0165	642.3242
2025	1.0428	0.7121	3.5742	7.8000e-003	0.3844	9.2500e-003	0.3937	0.1031	9.0500e-003	0.1121	0.0000	710.2796	710.2796	0.0870	0.0258	720.1366
2026	0.6393	0.3702	2.0906	4.3200e-003	0.1995	5.2600e-003	0.2048	0.0535	5.1600e-003	0.0586	0.0000	393.3753	393.3753	0.0545	0.0126	398.4791
Maximum	**1.0428**	**0.7121**	**3.5742**	**7.8000e-003**	**0.3844**	**9.4800e-003**	**0.3937**	**0.1316**	**9.3500e-003**	**0.1409**	**0.0000**	**710.2796**	**710.2796**	**0.1197**	**0.0258**	**720.1366**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	18.53	73.02	-7.38	0.00	20.32	89.91	31.73	27.95	89.44	49.97	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.9235	0.0958
2	4-1-2024	6-30-2024	0.8517	0.1763
3	7-1-2024	9-30-2024	0.6172	0.2113
4	10-1-2024	12-31-2024	0.8056	0.3727
5	1-1-2025	3-31-2025	0.8345	0.4349
6	4-1-2025	6-30-2025	0.8359	0.4318
7	7-1-2025	9-30-2025	0.8451	0.4366
8	10-1-2025	12-31-2025	0.8530	0.4445
9	1-1-2026	3-31-2026	0.8289	0.4293
10	4-1-2026	6-30-2026	0.8306	0.4265
11	7-1-2026	9-30-2026	0.3127	0.1520
		Highest	0.9235	0.4445

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1983	0.0423	3.6720	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e-003	0.0000	6.1475
Energy	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	442.3673	442.3673	0.0294	8.3000e-003	445.5755
Mobile	0.5004	0.8933	4.9905	0.0133	1.5858	9.8700e-003	1.5956	0.4225	9.2000e-003	0.4317	0.0000	1,293.9933	1,293.9933	0.0855	0.0698	1,316.9432
Waste						0.0000	0.0000		0.0000	0.0000	47.2850	0.0000	47.2850	2.3447	0.0000	105.9027
Water						0.0000	0.0000		0.0000	0.0000	11.4105	16.9951	28.4057	0.0421	0.0252	36.9514
Total	**2.7289**	**1.1930**	**8.7719**	**0.0151**	**1.5858**	**0.0511**	**1.6368**	**0.4225**	**0.0504**	**0.4729**	**58.6955**	**1,759.3594**	**1,818.0549**	**2.5074**	**0.1033**	**1,911.5203**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1983	0.0423	3.6720	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e-003	0.0000	6.1475
Energy	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	442.3673	442.3673	0.0294	8.3000e-003	445.5755
Mobile	0.4871	0.7706	4.3654	0.0106	1.2448	8.0800e-003	1.2529	0.3317	7.5300e-003	0.3392	0.0000	1,028.8651	1,028.8651	0.0756	0.0596	1,048.5215
Waste						0.0000	0.0000		0.0000	0.0000	23.6425	0.0000	23.6425	1.1724	0.0000	52.9513
Water						0.0000	0.0000		0.0000	0.0000	9.1284	14.2804	23.4088	0.0338	0.0201	30.2522
Total	**2.7156**	**1.0703**	**8.1469**	**0.0124**	**1.2448**	**0.0493**	**1.2941**	**0.3317**	**0.0487**	**0.3804**	**32.7709**	**1,491.5165**	**1,524.2874**	**1.3168**	**0.0881**	**1,583.4480**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.49**	**10.29**	**7.13**	**17.98**	**21.50**	**3.51**	**20.94**	**21.50**	**3.31**	**19.56**	**44.17**	**15.22**	**16.16**	**47.48**	**14.75**	**17.16**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	

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4	Building Construction	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42

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Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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3.2 Grubbing - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0337	0.3132	0.2956	5.8000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	50.9941	50.9941	0.0143	0.0000	51.3508
Total	**0.0337**	**0.3132**	**0.2956**	**5.8000e-004**		**0.0144**	**0.0144**		**0.0134**	**0.0134**	**0.0000**	**50.9941**	**50.9941**	**0.0143**	**0.0000**	**51.3508**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.7000e-004	4.1000e-003	1.0000e-005	1.3900e-003	1.0000e-005	1.4000e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0459	1.0459	4.0000e-005	3.0000e-005	1.0570
Total	**5.4000e-004**	**3.7000e-004**	**4.1000e-003**	**1.0000e-005**	**1.3900e-003**	**1.0000e-005**	**1.4000e-003**	**3.7000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.0459**	**1.0459**	**4.0000e-005**	**3.0000e-005**	**1.0570**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9300e-003	0.0301	0.3492	5.8000e-004		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	50.9940	50.9940	0.0143	0.0000	51.3507
Total	**6.9300e-003**	**0.0301**	**0.3492**	**5.8000e-004**		**9.2000e-004**	**9.2000e-004**		**9.2000e-004**	**9.2000e-004**	**0.0000**	**50.9940**	**50.9940**	**0.0143**	**0.0000**	**51.3507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.7000e-004	4.1000e-003	1.0000e-005	1.3900e-003	1.0000e-005	1.4000e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0459	1.0459	4.0000e-005	3.0000e-005	1.0570
Total	**5.4000e-004**	**3.7000e-004**	**4.1000e-003**	**1.0000e-005**	**1.3900e-003**	**1.0000e-005**	**1.4000e-003**	**3.7000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.0459**	**1.0459**	**4.0000e-005**	**3.0000e-005**	**1.0570**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2718	0.1834	3.8000e-004		0.0123	0.0123		0.0113	0.0113	0.0000	33.4571	33.4571	0.0108	0.0000	33.7276
Total	**0.0266**	**0.2718**	**0.1834**	**3.8000e-004**	**0.1966**	**0.0123**	**0.2089**	**0.1010**	**0.0113**	**0.1123**	**0.0000**	**33.4571**	**33.4571**	**0.0108**	**0.0000**	**33.7276**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.8367	0.8367	3.0000e-005	3.0000e-005	0.8456
Total	**4.3000e-004**	**3.0000e-004**	**3.2800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**0.8367**	**0.8367**	**3.0000e-005**	**3.0000e-005**	**0.8456**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0767	0.0000	0.0767	0.0394	0.0000	0.0394	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0202	0.2087	3.8000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	33.4570	33.4570	0.0108	0.0000	33.7275
Total	**4.6600e-003**	**0.0202**	**0.2087**	**3.8000e-004**	**0.0767**	**6.2000e-004**	**0.0773**	**0.0394**	**6.2000e-004**	**0.0400**	**0.0000**	**33.4570**	**33.4570**	**0.0108**	**0.0000**	**33.7275**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.8367	0.8367	3.0000e-005	3.0000e-005	0.8456
Total	**4.3000e-004**	**3.0000e-004**	**3.2800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**0.8367**	**0.8367**	**3.0000e-005**	**3.0000e-005**	**0.8456**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0724	0.7285	0.6238	1.4000e-003		0.0301	0.0301		0.0276	0.0276	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608
Total	**0.0724**	**0.7285**	**0.6238**	**1.4000e-003**	**0.2071**	**0.0301**	**0.2371**	**0.0822**	**0.0276**	**0.1099**	**0.0000**	**122.6689**	**122.6689**	**0.0397**	**0.0000**	**123.6608**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0900e-003	7.4000e-004	8.2000e-003	2.0000e-005	2.7800e-003	1.0000e-005	2.7900e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.0918	2.0918	8.0000e-005	7.0000e-005	2.1140
Total	**1.0900e-003**	**7.4000e-004**	**8.2000e-003**	**2.0000e-005**	**2.7800e-003**	**1.0000e-005**	**2.7900e-003**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**0.0000**	**2.0918**	**2.0918**	**8.0000e-005**	**7.0000e-005**	**2.1140**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0808	0.0000	0.0808	0.0321	0.0000	0.0321	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.0743	0.7425	1.4000e-003		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606
Total	**0.0171**	**0.0743**	**0.7425**	**1.4000e-003**	**0.0808**	**2.2800e-003**	**0.0830**	**0.0321**	**2.2800e-003**	**0.0343**	**0.0000**	**122.6688**	**122.6688**	**0.0397**	**0.0000**	**123.6606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0900e-003	7.4000e-004	8.2000e-003	2.0000e-005	2.7800e-003	1.0000e-005	2.7900e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.0918	2.0918	8.0000e-005	7.0000e-005	2.1140
Total	**1.0900e-003**	**7.4000e-004**	**8.2000e-003**	**2.0000e-005**	**2.7800e-003**	**1.0000e-005**	**2.7900e-003**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**0.0000**	**2.0918**	**2.0918**	**8.0000e-005**	**7.0000e-005**	**2.1140**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1229	1.1226	1.3499	2.2500e-003		0.0512	0.0512		0.0482	0.0482	0.0000	193.5940	193.5940	0.0458	0.0000	194.7385
Total	**0.1229**	**1.1226**	**1.3499**	**2.2500e-003**		**0.0512**	**0.0512**		**0.0482**	**0.0482**	**0.0000**	**193.5940**	**193.5940**	**0.0458**	**0.0000**	**194.7385**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3500e-003	0.2104	0.0703	7.9000e-004	0.0258	1.2100e-003	0.0270	7.4300e-003	1.1600e-003	8.5900e-003	0.0000	78.9577	78.9577	3.4500e-003	0.0117	82.5143
Worker	0.0717	0.0488	0.5417	1.4800e-003	0.1836	8.7000e-004	0.1845	0.0488	8.0000e-004	0.0496	0.0000	138.1819	138.1819	4.9600e-003	4.5000e-003	139.6477
Total	**0.0770**	**0.2591**	**0.6120**	**2.2700e-003**	**0.2094**	**2.0800e-003**	**0.2115**	**0.0562**	**1.9600e-003**	**0.0582**	**0.0000**	**217.1396**	**217.1396**	**8.4100e-003**	**0.0162**	**222.1620**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0274	0.1866	1.4579	2.2500e-003		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	193.5938	193.5938	0.0458	0.0000	194.7383
Total	**0.0274**	**0.1866**	**1.4579**	**2.2500e-003**		**3.4100e-003**	**3.4100e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**193.5938**	**193.5938**	**0.0458**	**0.0000**	**194.7383**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3500e-003	0.2104	0.0703	7.9000e-004	0.0258	1.2100e-003	0.0270	7.4300e-003	1.1600e-003	8.5900e-003	0.0000	78.9577	78.9577	3.4500e-003	0.0117	82.5143
Worker	0.0717	0.0488	0.5417	1.4800e-003	0.1836	8.7000e-004	0.1845	0.0488	8.0000e-004	0.0496	0.0000	138.1819	138.1819	4.9600e-003	4.5000e-003	139.6477
Total	**0.0770**	**0.2591**	**0.6120**	**2.2700e-003**	**0.2094**	**2.0800e-003**	**0.2115**	**0.0562**	**1.9600e-003**	**0.0582**	**0.0000**	**217.1396**	**217.1396**	**8.4100e-003**	**0.0162**	**222.1620**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.3217	0.1073	1.2100e-003	0.0403	1.8500e-003	0.0421	0.0116	1.7700e-003	0.0134	0.0000	121.1909	121.1909	5.5800e-003	0.0179	126.6650
Worker	0.1053	0.0684	0.7914	2.2300e-003	0.2869	1.3000e-003	0.2883	0.0763	1.2000e-003	0.0775	0.0000	211.0274	211.0274	7.0600e-003	6.5700e-003	213.1607
Total	**0.1133**	**0.3901**	**0.8987**	**3.4400e-003**	**0.3272**	**3.1500e-003**	**0.3304**	**0.0879**	**2.9700e-003**	**0.0908**	**0.0000**	**332.2183**	**332.2183**	**0.0126**	**0.0245**	**339.8257**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0428	0.2916	2.2786	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0428**	**0.2916**	**2.2786**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.3217	0.1073	1.2100e-003	0.0403	1.8500e-003	0.0421	0.0116	1.7700e-003	0.0134	0.0000	121.1909	121.1909	5.5800e-003	0.0179	126.6650
Worker	0.1053	0.0684	0.7914	2.2300e-003	0.2869	1.3000e-003	0.2883	0.0763	1.2000e-003	0.0775	0.0000	211.0274	211.0274	7.0600e-003	6.5700e-003	213.1607
Total	**0.1133**	**0.3901**	**0.8987**	**3.4400e-003**	**0.3272**	**3.1500e-003**	**0.3304**	**0.0879**	**2.9700e-003**	**0.0908**	**0.0000**	**332.2183**	**332.2183**	**0.0126**	**0.0245**	**339.8257**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0882	0.8043	1.0375	1.7400e-003		0.0340	0.0340		0.0320	0.0320	0.0000	149.5881	149.5881	0.0352	0.0000	150.4671
Total	**0.0882**	**0.8043**	**1.0375**	**1.7400e-003**		**0.0340**	**0.0340**		**0.0320**	**0.0320**	**0.0000**	**149.5881**	**149.5881**	**0.0352**	**0.0000**	**150.4671**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1556	0.0520	5.9000e-004	0.0199	8.9000e-004	0.0208	5.7400e-003	8.5000e-004	6.5900e-003	0.0000	58.8051	58.8051	2.8500e-003	8.7000e-003	61.4684
Worker	0.0491	0.0305	0.3621	1.0700e-003	0.1418	6.0000e-004	0.1424	0.0377	5.5000e-004	0.0382	0.0000	101.7620	101.7620	3.1700e-003	3.0400e-003	102.7485
Total	**0.0529**	**0.1861**	**0.4141**	**1.6600e-003**	**0.1617**	**1.4900e-003**	**0.1632**	**0.0434**	**1.4000e-003**	**0.0448**	**0.0000**	**160.5671**	**160.5671**	**6.0200e-003**	**0.0117**	**164.2169**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0211	0.1441	1.1262	1.7400e-003		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	149.5879	149.5879	0.0352	0.0000	150.4670
Total	**0.0211**	**0.1441**	**1.1262**	**1.7400e-003**		**2.6300e-003**	**2.6300e-003**		**2.6300e-003**	**2.6300e-003**	**0.0000**	**149.5879**	**149.5879**	**0.0352**	**0.0000**	**150.4670**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1556	0.0520	5.9000e-004	0.0199	8.9000e-004	0.0208	5.7400e-003	8.5000e-004	6.5900e-003	0.0000	58.8051	58.8051	2.8500e-003	8.7000e-003	61.4684
Worker	0.0491	0.0305	0.3621	1.0700e-003	0.1418	6.0000e-004	0.1424	0.0377	5.5000e-004	0.0382	0.0000	101.7620	101.7620	3.1700e-003	3.0400e-003	102.7485
Total	**0.0529**	**0.1861**	**0.4141**	**1.6600e-003**	**0.1617**	**1.4900e-003**	**0.1632**	**0.0434**	**1.4000e-003**	**0.0448**	**0.0000**	**160.5671**	**160.5671**	**6.0200e-003**	**0.0117**	**164.2169**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**0.1459**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6800e-003	2.5000e-003	0.0278	8.0000e-005	9.4300e-003	4.0000e-005	9.4700e-003	2.5100e-003	4.0000e-005	2.5500e-003	0.0000	7.0960	7.0960	2.5000e-004	2.3000e-004	7.1712
Total	**3.6800e-003**	**2.5000e-003**	**0.0278**	**8.0000e-005**	**9.4300e-003**	**4.0000e-005**	**9.4700e-003**	**2.5100e-003**	**4.0000e-005**	**2.5500e-003**	**0.0000**	**7.0960**	**7.0960**	**2.5000e-004**	**2.3000e-004**	**7.1712**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4000e-004	2.7700e-003	0.0394	6.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**0.1426**	**2.7700e-003**	**0.0394**	**6.0000e-005**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6800e-003	2.5000e-003	0.0278	8.0000e-005	9.4300e-003	4.0000e-005	9.4700e-003	2.5100e-003	4.0000e-005	2.5500e-003	0.0000	7.0960	7.0960	2.5000e-004	2.3000e-004	7.1712
Total	**3.6800e-003**	**2.5000e-003**	**0.0278**	**8.0000e-005**	**9.4300e-003**	**4.0000e-005**	**9.4700e-003**	**2.5100e-003**	**4.0000e-005**	**2.5500e-003**	**0.0000**	**7.0960**	**7.0960**	**2.5000e-004**	**2.3000e-004**	**7.1712**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**0.8841**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0210	0.0136	0.1578	4.5000e-004	0.0572	2.6000e-004	0.0575	0.0152	2.4000e-004	0.0155	0.0000	42.0869	42.0869	1.4100e-003	1.3100e-003	42.5124
Total	**0.0210**	**0.0136**	**0.1578**	**4.5000e-004**	**0.0572**	**2.6000e-004**	**0.0575**	**0.0152**	**2.4000e-004**	**0.0155**	**0.0000**	**42.0869**	**42.0869**	**1.4100e-003**	**1.3100e-003**	**42.5124**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.8657**	**0.0168**	**0.2391**	**3.9000e-004**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0210	0.0136	0.1578	4.5000e-004	0.0572	2.6000e-004	0.0575	0.0152	2.4000e-004	0.0155	0.0000	42.0869	42.0869	1.4100e-003	1.3100e-003	42.5124
Total	**0.0210**	**0.0136**	**0.1578**	**4.5000e-004**	**0.0572**	**2.6000e-004**	**0.0575**	**0.0152**	**2.4000e-004**	**0.0155**	**0.0000**	**42.0869**	**42.0869**	**1.4100e-003**	**1.3100e-003**	**42.5124**

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3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5448					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0945	0.1493	2.5000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	21.0643	21.0643	1.1500e-003	0.0000	21.0931
Total	**0.5589**	**0.0945**	**0.1493**	**2.5000e-004**		**4.2500e-003**	**4.2500e-003**		**4.2500e-003**	**4.2500e-003**	**0.0000**	**21.0643**	**21.0643**	**1.1500e-003**	**0.0000**	**21.0931**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	7.7800e-003	0.0924	2.7000e-004	0.0362	1.5000e-004	0.0363	9.6100e-003	1.4000e-004	9.7500e-003	0.0000	25.9590	25.9590	8.1000e-004	7.8000e-004	26.2107
Total	**0.0125**	**7.7800e-003**	**0.0924**	**2.7000e-004**	**0.0362**	**1.5000e-004**	**0.0363**	**9.6100e-003**	**1.4000e-004**	**9.7500e-003**	**0.0000**	**25.9590**	**25.9590**	**8.1000e-004**	**7.8000e-004**	**26.2107**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5448					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4500e-003	0.0106	0.1512	2.5000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	21.0643	21.0643	1.1500e-003	0.0000	21.0930
Total	**0.5473**	**0.0106**	**0.1512**	**2.5000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**21.0643**	**21.0643**	**1.1500e-003**	**0.0000**	**21.0930**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	7.7800e-003	0.0924	2.7000e-004	0.0362	1.5000e-004	0.0363	9.6100e-003	1.4000e-004	9.7500e-003	0.0000	25.9590	25.9590	8.1000e-004	7.8000e-004	26.2107
Total	**0.0125**	**7.7800e-003**	**0.0924**	**2.7000e-004**	**0.0362**	**1.5000e-004**	**0.0363**	**9.6100e-003**	**1.4000e-004**	**9.7500e-003**	**0.0000**	**25.9590**	**25.9590**	**8.1000e-004**	**7.8000e-004**	**26.2107**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0160**	**0.1502**	**0.2551**	**4.0000e-004**		**7.3200e-003**	**7.3200e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3170**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.5000e-004	4.1400e-003	1.0000e-005	1.6200e-003	1.0000e-005	1.6300e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.1633	1.1633	4.0000e-005	3.0000e-005	1.1746
Total	**5.6000e-004**	**3.5000e-004**	**4.1400e-003**	**1.0000e-005**	**1.6200e-003**	**1.0000e-005**	**1.6300e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.1633**	**1.1633**	**4.0000e-005**	**3.0000e-005**	**1.1746**

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3.7 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9100e-003	0.0213	0.3027	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9100e-003**	**0.0213**	**0.3027**	**4.0000e-004**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3169**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.5000e-004	4.1400e-003	1.0000e-005	1.6200e-003	1.0000e-005	1.6300e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.1633	1.1633	4.0000e-005	3.0000e-005	1.1746
Total	**5.6000e-004**	**3.5000e-004**	**4.1400e-003**	**1.0000e-005**	**1.6200e-003**	**1.0000e-005**	**1.6300e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.1633**	**1.1633**	**4.0000e-005**	**3.0000e-005**	**1.1746**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4871	0.7706	4.3654	0.0106	1.2448	8.0800e-003	1.2529	0.3317	7.5300e-003	0.3392	0.0000	1,028.8651	1,028.8651	0.0756	0.0596	1,048.5215
Unmitigated	0.5004	0.8933	4.9905	0.0133	1.5858	9.8700e-003	1.5956	0.4225	9.2000e-003	0.4317	0.0000	1,293.9933	1,293.9933	0.0855	0.0698	1,316.9432

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500
Condo/Townhouse	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.2354	144.2354	0.0236	2.8400e-003	145.6720
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.2354	144.2354	0.0236	2.8400e-003	145.6720
NaturalGas Mitigated	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7100e-003	5.4700e-003	299.9035
NaturalGas Unmitigated	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7100e-003	5.4700e-003	299.9035

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.94712e+006	0.0213	0.1819	0.0774	1.1600e-003		0.0147	0.0147		0.0147	0.0147	0.0000	210.6331	210.6331	4.0400e-003	3.8600e-003	211.8848
Condo/Townhouse	1.63966e+006	8.8400e-003	0.0756	0.0322	4.8000e-004		6.1100e-003	6.1100e-003		6.1100e-003	6.1100e-003	0.0000	87.4987	87.4987	1.6800e-003	1.6000e-003	88.0187
Total		**0.0301**	**0.2574**	**0.1095**	**1.6400e-003**		**0.0208**	**0.0208**		**0.0208**	**0.0208**	**0.0000**	**298.1319**	**298.1319**	**5.7200e-003**	**5.4600e-003**	**299.9035**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.94712e+006	0.0213	0.1819	0.0774	1.1600e-003		0.0147	0.0147		0.0147	0.0147	0.0000	210.6331	210.6331	4.0400e-003	3.8600e-003	211.8848
Condo/Townhouse	1.63966e+006	8.8400e-003	0.0756	0.0322	4.8000e-004		6.1100e-003	6.1100e-003		6.1100e-003	6.1100e-003	0.0000	87.4987	87.4987	1.6800e-003	1.6000e-003	88.0187
Total		**0.0301**	**0.2574**	**0.1095**	**1.6400e-003**		**0.0208**	**0.0208**		**0.0208**	**0.0208**	**0.0000**	**298.1319**	**298.1319**	**5.7200e-003**	**5.4600e-003**	**299.9035**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.6244e+006	112.3720	0.0184	2.2100e-003	113.4912
Condo/Townhouse	460605	31.8634	5.2200e-003	6.3000e-004	32.1808
Total		**144.2354**	**0.0236**	**2.8400e-003**	**145.6720**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.6244e+006	112.3720	0.0184	2.2100e-003	113.4912
Condo/Townhouse	460605	31.8634	5.2200e-003	6.3000e-004	32.1808
Total		**144.2354**	**0.0236**	**2.8400e-003**	**145.6720**

6.0 Area Detail

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1983	0.0423	3.6720	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e-003	0.0000	6.1475
Unmitigated	2.1983	0.0423	3.6720	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e-003	0.0000	6.1475

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1549					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9332					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1103	0.0423	3.6720	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e-003	0.0000	6.1475
Total	**2.1983**	**0.0423**	**3.6720**	**1.9000e-004**		**0.0204**	**0.0204**		**0.0204**	**0.0204**	**0.0000**	**6.0038**	**6.0038**	**5.7500e-003**	**0.0000**	**6.1475**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1549					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9332					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1103	0.0423	3.6720	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e-003	0.0000	6.1475
Total	**2.1983**	**0.0423**	**3.6720**	**1.9000e-004**		**0.0204**	**0.0204**		**0.0204**	**0.0204**	**0.0000**	**6.0038**	**6.0038**	**5.7500e-003**	**0.0000**	**6.1475**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.4088	0.0338	0.0201	30.2522
Unmitigated	28.4057	0.0421	0.0252	36.9514

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	26.0616 / 16.4301	22.9541	0.0340	0.0203	29.8597
Condo/Townhouse	6.18963 / 3.90216	5.4516	8.0700e-003	4.8300e-003	7.0917
Total		**28.4057**	**0.0421**	**0.0252**	**36.9514**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	20.8493 / 15.4279	18.9162	0.0273	0.0163	24.4462
Condo/Townhouse	4.95171 / 3.66413	4.4926	6.4800e-003	3.8600e-003	5.8060
Total		**23.4088**	**0.0338**	**0.0201**	**30.2522**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.6425	1.1724	0.0000	52.9513
Unmitigated	47.2850	2.3447	0.0000	105.9027

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	184	38.2101	1.8947	0.0000	85.5779
Condo/Townhouse	43.7	9.0749	0.4500	0.0000	20.3248
Total		**47.2850**	**2.3447**	**0.0000**	**105.9027**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	92	19.1050	0.9474	0.0000	42.7890
Condo/Townhouse	21.85	4.5375	0.2250	0.0000	10.1624
Total		**23.6425**	**1.1724**	**0.0000**	**52.9513**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	127.09	**CH4 Intensity (lb/MWhr)**	0.021	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2030.

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construstion to reflect typical consturction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	440.00	557.00
tblConstructionPhase	NumDays	35.00	469.00
tblLandUse	LotAcreage	25.00	18.20
tblLandUse	LotAcreage	5.94	9.20
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	WD_TR	7.32	4.62
tblVehicleTrips	WD_TR	7.32	4.62

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.4842	2.7252	3.1470	7.0600e-003	0.6277	0.1114	0.7391	0.2434	0.1039	0.3472	0.0000	634.4136	634.4136	0.1197	0.0165	642.3247
2025	1.1969	2.1805	3.3917	7.8000e-003	0.3844	0.0790	0.4634	0.1031	0.0747	0.1778	0.0000	710.2800	710.2800	0.0870	0.0258	720.1370
2026	0.7291	1.2432	1.9524	4.3200e-003	0.1995	0.0473	0.2468	0.0535	0.0446	0.0980	0.0000	393.3755	393.3755	0.0545	0.0126	398.4794
Maximum	**1.1969**	**2.7252**	**3.3917**	**7.8000e-003**	**0.6277**	**0.1114**	**0.7391**	**0.2434**	**0.1039**	**0.3472**	**0.0000**	**710.2800**	**710.2800**	**0.1197**	**0.0258**	**720.1370**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2815	0.5769	3.4531	7.0600e-003	0.3815	9.4800e-003	0.3910	0.1316	9.3500e-003	0.1409	0.0000	634.4131	634.4131	0.1197	0.0165	642.3242
2025	1.0428	0.7121	3.5742	7.8000e-003	0.3844	9.2500e-003	0.3937	0.1031	9.0500e-003	0.1121	0.0000	710.2796	710.2796	0.0870	0.0258	720.1366
2026	0.6393	0.3702	2.0906	4.3200e-003	0.1995	5.2600e-003	0.2048	0.0535	5.1600e-003	0.0586	0.0000	393.3753	393.3753	0.0545	0.0126	398.4791
Maximum	**1.0428**	**0.7121**	**3.5742**	**7.8000e-003**	**0.3844**	**9.4800e-003**	**0.3937**	**0.1316**	**9.3500e-003**	**0.1409**	**0.0000**	**710.2796**	**710.2796**	**0.1197**	**0.0258**	**720.1366**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**18.53**	**73.02**	**-7.38**	**0.00**	**20.32**	**89.91**	**31.73**	**27.95**	**89.44**	**49.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2024**	**3-31-2024**	0.9235	0.0958
2	**4-1-2024**	**6-30-2024**	0.8517	0.1763
3	**7-1-2024**	**9-30-2024**	0.6172	0.2113
4	**10-1-2024**	**12-31-2024**	0.8056	0.3727
5	**1-1-2025**	**3-31-2025**	0.8345	0.4349
6	**4-1-2025**	**6-30-2025**	0.8359	0.4318
7	**7-1-2025**	**9-30-2025**	0.8451	0.4366
8	**10-1-2025**	**12-31-2025**	0.8530	0.4445
9	**1-1-2026**	**3-31-2026**	0.8289	0.4293
10	**4-1-2026**	**6-30-2026**	0.8306	0.4265
11	**7-1-2026**	**9-30-2026**	0.3127	0.1520
		Highest	0.9235	0.4445

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2365	0.0423	3.6657	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7200e-003	0.0000	6.1468
Energy	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	418.3265	418.3265	0.0256	7.3600e-003	421.1583
Mobile	0.7799	0.8664	6.5926	0.0127	1.5952	9.1600e-003	1.6044	0.4269	8.5600e-003	0.4355	0.0000	1,240.9250	1,240.9250	0.0872	0.0643	1,262.2637
Waste						0.0000	0.0000		0.0000	0.0000	47.2850	0.0000	47.2850	2.3447	0.0000	105.9027
Water						0.0000	0.0000		0.0000	0.0000	11.4105	14.1624	25.5730	0.0416	0.0250	34.0744
Total	**3.0465**	**1.1660**	**10.3678**	**0.0145**	**1.5952**	**0.0504**	**1.6456**	**0.4269**	**0.0498**	**0.4767**	**58.6955**	**1,679.4177**	**1,738.1131**	**2.5048**	**0.0967**	**1,829.5458**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2365	0.0423	3.6657	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7200e-003	0.0000	6.1468
Energy	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	418.3265	418.3265	0.0256	7.3600e-003	421.1583
Mobile	0.7160	0.7315	5.6214	0.0101	1.2522	7.4800e-003	1.2597	0.3351	6.9800e-003	0.3421	0.0000	984.8001	984.8001	0.0766	0.0546	1,002.9908
Waste						0.0000	0.0000		0.0000	0.0000	23.6425	0.0000	23.6425	1.1724	0.0000	52.9513
Water						0.0000	0.0000		0.0000	0.0000	9.1284	11.9002	21.0286	0.0334	0.0200	27.8347
Total	**2.9826**	**1.0311**	**9.3967**	**0.0119**	**1.2522**	**0.0487**	**1.3009**	**0.3351**	**0.0482**	**0.3833**	**32.7709**	**1,421.0305**	**1,453.8014**	**1.3136**	**0.0820**	**1,511.0819**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.10**	**11.57**	**9.37**	**18.02**	**21.50**	**3.34**	**20.95**	**21.50**	**3.18**	**19.59**	**44.17**	**15.39**	**16.36**	**47.56**	**15.17**	**17.41**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0337	0.3132	0.2956	5.8000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	50.9941	50.9941	0.0143	0.0000	51.3508
Total	**0.0337**	**0.3132**	**0.2956**	**5.8000e-004**		**0.0144**	**0.0144**		**0.0134**	**0.0134**	**0.0000**	**50.9941**	**50.9941**	**0.0143**	**0.0000**	**51.3508**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.7000e-004	4.1000e-003	1.0000e-005	1.3900e-003	1.0000e-005	1.4000e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0459	1.0459	4.0000e-005	3.0000e-005	1.0570
Total	**5.4000e-004**	**3.7000e-004**	**4.1000e-003**	**1.0000e-005**	**1.3900e-003**	**1.0000e-005**	**1.4000e-003**	**3.7000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.0459**	**1.0459**	**4.0000e-005**	**3.0000e-005**	**1.0570**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9300e-003	0.0301	0.3492	5.8000e-004		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	50.9940	50.9940	0.0143	0.0000	51.3507
Total	**6.9300e-003**	**0.0301**	**0.3492**	**5.8000e-004**		**9.2000e-004**	**9.2000e-004**		**9.2000e-004**	**9.2000e-004**	**0.0000**	**50.9940**	**50.9940**	**0.0143**	**0.0000**	**51.3507**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.7000e-004	4.1000e-003	1.0000e-005	1.3900e-003	1.0000e-005	1.4000e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.0459	1.0459	4.0000e-005	3.0000e-005	1.0570
Total	**5.4000e-004**	**3.7000e-004**	**4.1000e-003**	**1.0000e-005**	**1.3900e-003**	**1.0000e-005**	**1.4000e-003**	**3.7000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.0459**	**1.0459**	**4.0000e-005**	**3.0000e-005**	**1.0570**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2718	0.1834	3.8000e-004		0.0123	0.0123		0.0113	0.0113	0.0000	33.4571	33.4571	0.0108	0.0000	33.7276
Total	**0.0266**	**0.2718**	**0.1834**	**3.8000e-004**	**0.1966**	**0.0123**	**0.2089**	**0.1010**	**0.0113**	**0.1123**	**0.0000**	**33.4571**	**33.4571**	**0.0108**	**0.0000**	**33.7276**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.8367	0.8367	3.0000e-005	3.0000e-005	0.8456
Total	**4.3000e-004**	**3.0000e-004**	**3.2800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**0.8367**	**0.8367**	**3.0000e-005**	**3.0000e-005**	**0.8456**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0767	0.0000	0.0767	0.0394	0.0000	0.0394	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0202	0.2087	3.8000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	33.4570	33.4570	0.0108	0.0000	33.7275
Total	**4.6600e-003**	**0.0202**	**0.2087**	**3.8000e-004**	**0.0767**	**6.2000e-004**	**0.0773**	**0.0394**	**6.2000e-004**	**0.0400**	**0.0000**	**33.4570**	**33.4570**	**0.0108**	**0.0000**	**33.7275**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.8367	0.8367	3.0000e-005	3.0000e-005	0.8456
Total	**4.3000e-004**	**3.0000e-004**	**3.2800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**0.8367**	**0.8367**	**3.0000e-005**	**3.0000e-005**	**0.8456**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0724	0.7285	0.6238	1.4000e-003		0.0301	0.0301		0.0276	0.0276	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608
Total	**0.0724**	**0.7285**	**0.6238**	**1.4000e-003**	**0.2071**	**0.0301**	**0.2371**	**0.0822**	**0.0276**	**0.1099**	**0.0000**	**122.6689**	**122.6689**	**0.0397**	**0.0000**	**123.6608**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0900e-003	7.4000e-004	8.2000e-003	2.0000e-005	2.7800e-003	1.0000e-005	2.7900e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.0918	2.0918	8.0000e-005	7.0000e-005	2.1140
Total	**1.0900e-003**	**7.4000e-004**	**8.2000e-003**	**2.0000e-005**	**2.7800e-003**	**1.0000e-005**	**2.7900e-003**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**0.0000**	**2.0918**	**2.0918**	**8.0000e-005**	**7.0000e-005**	**2.1140**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0808	0.0000	0.0808	0.0321	0.0000	0.0321	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.0743	0.7425	1.4000e-003		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606
Total	**0.0171**	**0.0743**	**0.7425**	**1.4000e-003**	**0.0808**	**2.2800e-003**	**0.0830**	**0.0321**	**2.2800e-003**	**0.0343**	**0.0000**	**122.6688**	**122.6688**	**0.0397**	**0.0000**	**123.6606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0900e-003	7.4000e-004	8.2000e-003	2.0000e-005	2.7800e-003	1.0000e-005	2.7900e-003	7.4000e-004	1.0000e-005	7.5000e-004	0.0000	2.0918	2.0918	8.0000e-005	7.0000e-005	2.1140
Total	**1.0900e-003**	**7.4000e-004**	**8.2000e-003**	**2.0000e-005**	**2.7800e-003**	**1.0000e-005**	**2.7900e-003**	**7.4000e-004**	**1.0000e-005**	**7.5000e-004**	**0.0000**	**2.0918**	**2.0918**	**8.0000e-005**	**7.0000e-005**	**2.1140**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1229	1.1226	1.3499	2.2500e-003		0.0512	0.0512		0.0482	0.0482	0.0000	193.5940	193.5940	0.0458	0.0000	194.7385
Total	**0.1229**	**1.1226**	**1.3499**	**2.2500e-003**		**0.0512**	**0.0512**		**0.0482**	**0.0482**	**0.0000**	**193.5940**	**193.5940**	**0.0458**	**0.0000**	**194.7385**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3500e-003	0.2104	0.0703	7.9000e-004	0.0258	1.2100e-003	0.0270	7.4300e-003	1.1600e-003	8.5900e-003	0.0000	78.9577	78.9577	3.4500e-003	0.0117	82.5143
Worker	0.0717	0.0488	0.5417	1.4800e-003	0.1836	8.7000e-004	0.1845	0.0488	8.0000e-004	0.0496	0.0000	138.1819	138.1819	4.9600e-003	4.5000e-003	139.6477
Total	**0.0770**	**0.2591**	**0.6120**	**2.2700e-003**	**0.2094**	**2.0800e-003**	**0.2115**	**0.0562**	**1.9600e-003**	**0.0582**	**0.0000**	**217.1396**	**217.1396**	**8.4100e-003**	**0.0162**	**222.1620**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0274	0.1866	1.4579	2.2500e-003		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	193.5938	193.5938	0.0458	0.0000	194.7383
Total	**0.0274**	**0.1866**	**1.4579**	**2.2500e-003**		**3.4100e-003**	**3.4100e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**193.5938**	**193.5938**	**0.0458**	**0.0000**	**194.7383**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3500e-003	0.2104	0.0703	7.9000e-004	0.0258	1.2100e-003	0.0270	7.4300e-003	1.1600e-003	8.5900e-003	0.0000	78.9577	78.9577	3.4500e-003	0.0117	82.5143
Worker	0.0717	0.0488	0.5417	1.4800e-003	0.1836	8.7000e-004	0.1845	0.0488	8.0000e-004	0.0496	0.0000	138.1819	138.1819	4.9600e-003	4.5000e-003	139.6477
Total	**0.0770**	**0.2591**	**0.6120**	**2.2700e-003**	**0.2094**	**2.0800e-003**	**0.2115**	**0.0562**	**1.9600e-003**	**0.0582**	**0.0000**	**217.1396**	**217.1396**	**8.4100e-003**	**0.0162**	**222.1620**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.3217	0.1073	1.2100e-003	0.0403	1.8500e-003	0.0421	0.0116	1.7700e-003	0.0134	0.0000	121.1909	121.1909	5.5800e-003	0.0179	126.6650
Worker	0.1053	0.0684	0.7914	2.2300e-003	0.2869	1.3000e-003	0.2883	0.0763	1.2000e-003	0.0775	0.0000	211.0274	211.0274	7.0600e-003	6.5700e-003	213.1607
Total	**0.1133**	**0.3901**	**0.8987**	**3.4400e-003**	**0.3272**	**3.1500e-003**	**0.3304**	**0.0879**	**2.9700e-003**	**0.0908**	**0.0000**	**332.2183**	**332.2183**	**0.0126**	**0.0245**	**339.8257**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0428	0.2916	2.2786	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0428**	**0.2916**	**2.2786**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.3217	0.1073	1.2100e-003	0.0403	1.8500e-003	0.0421	0.0116	1.7700e-003	0.0134	0.0000	121.1909	121.1909	5.5800e-003	0.0179	126.6650
Worker	0.1053	0.0684	0.7914	2.2300e-003	0.2869	1.3000e-003	0.2883	0.0763	1.2000e-003	0.0775	0.0000	211.0274	211.0274	7.0600e-003	6.5700e-003	213.1607
Total	**0.1133**	**0.3901**	**0.8987**	**3.4400e-003**	**0.3272**	**3.1500e-003**	**0.3304**	**0.0879**	**2.9700e-003**	**0.0908**	**0.0000**	**332.2183**	**332.2183**	**0.0126**	**0.0245**	**339.8257**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0882	0.8043	1.0375	1.7400e-003		0.0340	0.0340		0.0320	0.0320	0.0000	149.5881	149.5881	0.0352	0.0000	150.4671
Total	**0.0882**	**0.8043**	**1.0375**	**1.7400e-003**		**0.0340**	**0.0340**		**0.0320**	**0.0320**	**0.0000**	**149.5881**	**149.5881**	**0.0352**	**0.0000**	**150.4671**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1556	0.0520	5.9000e-004	0.0199	8.9000e-004	0.0208	5.7400e-003	8.5000e-004	6.5900e-003	0.0000	58.8051	58.8051	2.8500e-003	8.7000e-003	61.4684
Worker	0.0491	0.0305	0.3621	1.0700e-003	0.1418	6.0000e-004	0.1424	0.0377	5.5000e-004	0.0382	0.0000	101.7620	101.7620	3.1700e-003	3.0400e-003	102.7485
Total	**0.0529**	**0.1861**	**0.4141**	**1.6600e-003**	**0.1617**	**1.4900e-003**	**0.1632**	**0.0434**	**1.4000e-003**	**0.0448**	**0.0000**	**160.5671**	**160.5671**	**6.0200e-003**	**0.0117**	**164.2169**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0211	0.1441	1.1262	1.7400e-003		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	149.5879	149.5879	0.0352	0.0000	150.4670
Total	**0.0211**	**0.1441**	**1.1262**	**1.7400e-003**		**2.6300e-003**	**2.6300e-003**		**2.6300e-003**	**2.6300e-003**	**0.0000**	**149.5879**	**149.5879**	**0.0352**	**0.0000**	**150.4670**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-003	0.1556	0.0520	5.9000e-004	0.0199	8.9000e-004	0.0208	5.7400e-003	8.5000e-004	6.5900e-003	0.0000	58.8051	58.8051	2.8500e-003	8.7000e-003	61.4684
Worker	0.0491	0.0305	0.3621	1.0700e-003	0.1418	6.0000e-004	0.1424	0.0377	5.5000e-004	0.0382	0.0000	101.7620	101.7620	3.1700e-003	3.0400e-003	102.7485
Total	**0.0529**	**0.1861**	**0.4141**	**1.6600e-003**	**0.1617**	**1.4900e-003**	**0.1632**	**0.0434**	**1.4000e-003**	**0.0448**	**0.0000**	**160.5671**	**160.5671**	**6.0200e-003**	**0.0117**	**164.2169**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**0.1459**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6800e-003	2.5000e-003	0.0278	8.0000e-005	9.4300e-003	4.0000e-005	9.4700e-003	2.5100e-003	4.0000e-005	2.5500e-003	0.0000	7.0960	7.0960	2.5000e-004	2.3000e-004	7.1712
Total	**3.6800e-003**	**2.5000e-003**	**0.0278**	**8.0000e-005**	**9.4300e-003**	**4.0000e-005**	**9.4700e-003**	**2.5100e-003**	**4.0000e-005**	**2.5500e-003**	**0.0000**	**7.0960**	**7.0960**	**2.5000e-004**	**2.3000e-004**	**7.1712**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4000e-004	2.7700e-003	0.0394	6.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**0.1426**	**2.7700e-003**	**0.0394**	**6.0000e-005**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6800e-003	2.5000e-003	0.0278	8.0000e-005	9.4300e-003	4.0000e-005	9.4700e-003	2.5100e-003	4.0000e-005	2.5500e-003	0.0000	7.0960	7.0960	2.5000e-004	2.3000e-004	7.1712
Total	**3.6800e-003**	**2.5000e-003**	**0.0278**	**8.0000e-005**	**9.4300e-003**	**4.0000e-005**	**9.4700e-003**	**2.5100e-003**	**4.0000e-005**	**2.5500e-003**	**0.0000**	**7.0960**	**7.0960**	**2.5000e-004**	**2.3000e-004**	**7.1712**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**0.8841**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0210	0.0136	0.1578	4.5000e-004	0.0572	2.6000e-004	0.0575	0.0152	2.4000e-004	0.0155	0.0000	42.0869	42.0869	1.4100e-003	1.3100e-003	42.5124
Total	**0.0210**	**0.0136**	**0.1578**	**4.5000e-004**	**0.0572**	**2.6000e-004**	**0.0575**	**0.0152**	**2.4000e-004**	**0.0155**	**0.0000**	**42.0869**	**42.0869**	**1.4100e-003**	**1.3100e-003**	**42.5124**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.8657**	**0.0168**	**0.2391**	**3.9000e-004**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0210	0.0136	0.1578	4.5000e-004	0.0572	2.6000e-004	0.0575	0.0152	2.4000e-004	0.0155	0.0000	42.0869	42.0869	1.4100e-003	1.3100e-003	42.5124
Total	**0.0210**	**0.0136**	**0.1578**	**4.5000e-004**	**0.0572**	**2.6000e-004**	**0.0575**	**0.0152**	**2.4000e-004**	**0.0155**	**0.0000**	**42.0869**	**42.0869**	**1.4100e-003**	**1.3100e-003**	**42.5124**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5448					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0945	0.1493	2.5000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	21.0643	21.0643	1.1500e-003	0.0000	21.0931
Total	**0.5589**	**0.0945**	**0.1493**	**2.5000e-004**		**4.2500e-003**	**4.2500e-003**		**4.2500e-003**	**4.2500e-003**	**0.0000**	**21.0643**	**21.0643**	**1.1500e-003**	**0.0000**	**21.0931**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	7.7800e-003	0.0924	2.7000e-004	0.0362	1.5000e-004	0.0363	9.6100e-003	1.4000e-004	9.7500e-003	0.0000	25.9590	25.9590	8.1000e-004	7.8000e-004	26.2107
Total	**0.0125**	**7.7800e-003**	**0.0924**	**2.7000e-004**	**0.0362**	**1.5000e-004**	**0.0363**	**9.6100e-003**	**1.4000e-004**	**9.7500e-003**	**0.0000**	**25.9590**	**25.9590**	**8.1000e-004**	**7.8000e-004**	**26.2107**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5448					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4500e-003	0.0106	0.1512	2.5000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	21.0643	21.0643	1.1500e-003	0.0000	21.0930
Total	**0.5473**	**0.0106**	**0.1512**	**2.5000e-004**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**21.0643**	**21.0643**	**1.1500e-003**	**0.0000**	**21.0930**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	7.7800e-003	0.0924	2.7000e-004	0.0362	1.5000e-004	0.0363	9.6100e-003	1.4000e-004	9.7500e-003	0.0000	25.9590	25.9590	8.1000e-004	7.8000e-004	26.2107
Total	**0.0125**	**7.7800e-003**	**0.0924**	**2.7000e-004**	**0.0362**	**1.5000e-004**	**0.0363**	**9.6100e-003**	**1.4000e-004**	**9.7500e-003**	**0.0000**	**25.9590**	**25.9590**	**8.1000e-004**	**7.8000e-004**	**26.2107**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0160**	**0.1502**	**0.2551**	**4.0000e-004**		**7.3200e-003**	**7.3200e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3170**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.5000e-004	4.1400e-003	1.0000e-005	1.6200e-003	1.0000e-005	1.6300e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.1633	1.1633	4.0000e-005	3.0000e-005	1.1746
Total	**5.6000e-004**	**3.5000e-004**	**4.1400e-003**	**1.0000e-005**	**1.6200e-003**	**1.0000e-005**	**1.6300e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.1633**	**1.1633**	**4.0000e-005**	**3.0000e-005**	**1.1746**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9100e-003	0.0213	0.3027	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9100e-003**	**0.0213**	**0.3027**	**4.0000e-004**		**6.5000e-004**	**6.5000e-004**		**6.5000e-004**	**6.5000e-004**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3169**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.5000e-004	4.1400e-003	1.0000e-005	1.6200e-003	1.0000e-005	1.6300e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.1633	1.1633	4.0000e-005	3.0000e-005	1.1746
Total	**5.6000e-004**	**3.5000e-004**	**4.1400e-003**	**1.0000e-005**	**1.6200e-003**	**1.0000e-005**	**1.6300e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.1633**	**1.1633**	**4.0000e-005**	**3.0000e-005**	**1.1746**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7160	0.7315	5.6214	0.0101	1.2522	7.4800e-003	1.2597	0.3351	6.9800e-003	0.3421	0.0000	984.8001	984.8001	0.0766	0.0546	1,002.9908
Unmitigated	0.7799	0.8664	6.5926	0.0127	1.5952	9.1600e-003	1.6044	0.4269	8.5600e-003	0.4355	0.0000	1,240.9250	1,240.9250	0.0872	0.0643	1,262.2637

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Condo/Townhouse	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	120.1946	120.1946	0.0199	1.8900e-003	121.2548
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	120.1946	120.1946	0.0199	1.8900e-003	121.2548
NaturalGas Mitigated	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7100e-003	5.4700e-003	299.9035
NaturalGas Unmitigated	0.0301	0.2574	0.1095	1.6400e-003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7100e-003	5.4700e-003	299.9035

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.94712e+006	0.0213	0.1819	0.0774	1.1600e-003		0.0147	0.0147		0.0147	0.0147	0.0000	210.6331	210.6331	4.0400e-003	3.8600e-003	211.8848
Condo/Townhouse	1.63966e+006	8.8400e-003	0.0756	0.0322	4.8000e-004		6.1100e-003	6.1100e-003		6.1100e-003	6.1100e-003	0.0000	87.4987	87.4987	1.6800e-003	1.6000e-003	88.0187
Total		**0.0301**	**0.2574**	**0.1095**	**1.6400e-003**		**0.0208**	**0.0208**		**0.0208**	**0.0208**	**0.0000**	**298.1319**	**298.1319**	**5.7200e-003**	**5.4600e-003**	**299.9035**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.94712e+006	0.0213	0.1819	0.0774	1.1600e-003		0.0147	0.0147		0.0147	0.0147	0.0000	210.6331	210.6331	4.0400e-003	3.8600e-003	211.8848
Condo/Townhouse	1.63966e+006	8.8400e-003	0.0756	0.0322	4.8000e-004		6.1100e-003	6.1100e-003		6.1100e-003	6.1100e-003	0.0000	87.4987	87.4987	1.6800e-003	1.6000e-003	88.0187
Total		**0.0301**	**0.2574**	**0.1095**	**1.6400e-003**		**0.0208**	**0.0208**		**0.0208**	**0.0208**	**0.0000**	**298.1319**	**298.1319**	**5.7200e-003**	**5.4600e-003**	**299.9035**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.6244e+006	93.6421	0.0155	1.4700e-003	94.4681
Condo/Townhouse	460605	26.5525	4.3900e-003	4.2000e-004	26.7867
Total		**120.1946**	**0.0199**	**1.8900e-003**	**121.2548**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.6244e+006	93.6421	0.0155	1.4700e-003	94.4681
Condo/Townhouse	460605	26.5525	4.3900e-003	4.2000e-004	26.7867
Total		**120.1946**	**0.0199**	**1.8900e-003**	**121.2548**

6.0 Area Detail

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.2365	0.0423	3.6657	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7200e-003	0.0000	6.1468
Unmitigated	2.2365	0.0423	3.6657	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7200e-003	0.0000	6.1468

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1936					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9332					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1096	0.0423	3.6657	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7200e-003	0.0000	6.1468
Total	**2.2364**	**0.0423**	**3.6657**	**1.9000e-004**		**0.0204**	**0.0204**		**0.0204**	**0.0204**	**0.0000**	**6.0038**	**6.0038**	**5.7200e-003**	**0.0000**	**6.1468**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1936					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.9332					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1096	0.0423	3.6657	1.9000e-004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7200e-003	0.0000	6.1468
Total	**2.2364**	**0.0423**	**3.6657**	**1.9000e-004**		**0.0204**	**0.0204**		**0.0204**	**0.0204**	**0.0000**	**6.0038**	**6.0038**	**5.7200e-003**	**0.0000**	**6.1468**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	21.0286	0.0334	0.0200	27.8347
Unmitigated	25.5730	0.0416	0.0250	34.0744

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	26.0616 / 16.4301	20.6650	0.0336	0.0202	27.5348
Condo/Townhouse	6.18963 / 3.90216	4.9079	7.9900e-003	4.8100e-003	6.5395
Total		**25.5730**	**0.0416**	**0.0250**	**34.0744**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	20.8493 / 15.4279	16.9928	0.0270	0.0162	22.4927
Condo/Townhouse	4.95171 / 3.66413	4.0358	6.4100e-003	3.8500e-003	5.3420
Total		**21.0286**	**0.0334**	**0.0200**	**27.8347**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.6425	1.1724	0.0000	52.9513
Unmitigated	47.2850	2.3447	0.0000	105.9027

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	184	38.2101	1.8947	0.0000	85.5779
Condo/Townhouse	43.7	9.0749	0.4500	0.0000	20.3248
Total		**47.2850**	**2.3447**	**0.0000**	**105.9027**

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	92	19.1050	0.9474	0.0000	42.7890
Condo/Townhouse	21.85	4.5375	0.2250	0.0000	10.1624
Total		**23.6425**	**1.1724**	**0.0000**	**52.9513**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial

Santa Barbara-North of Santa Ynez County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.59	1000sqft	0.08	3,590.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	1,411.75	0
Gasoline/Service Station	3.00	Pump	0.01	423.52	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	152.51	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2027.

Land Use -

Construction Phase - Building and Arch Coating are based on construction schedule

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	587.00
tblConstructionPhase	NumDays	300.00	557.00
tblConstructionPhase	NumDays	30.00	20.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	23.72	48.55
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01
tblVehicleTrips	SU_TR	11.88	48.55
tblVehicleTrips	SU_TR	322.50	140.56
tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.55
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	9.5772	27.7221	37.7079	0.0754	19.7707	1.2299	21.0006	10.1326	1.1315	11.2641	0.0000	7,463.8989	7,463.8989	1.4327	0.2311	7,568.5879
2025	9.3540	25.6275	37.2919	0.0748	1.7550	1.0216	2.7766	0.4745	0.9555	1.4301	0.0000	7,415.1537	7,415.1537	1.4269	0.2255	7,518.0195
2026	7.5257	16.9277	22.1738	0.0508	1.6603	0.6018	2.2621	0.4494	0.5693	1.0187	0.0000	5,085.4108	5,085.4108	0.7093	0.2179	5,168.0811
Maximum	**9.5772**	**27.7221**	**37.7079**	**0.0754**	**19.7707**	**1.2299**	**21.0006**	**10.1326**	**1.1315**	**11.2641**	**0.0000**	**7,463.8989**	**7,463.8989**	**1.4327**	**0.2311**	**7,568.5879**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	7.5747	7.1138	41.6935	0.0754	7.7799	0.1069	7.8425	3.9701	0.1056	4.0327	0.0000	7,463.8989	7,463.8989	1.4327	0.2311	7,568.5878
2025	7.5386	7.0095	41.4085	0.0748	1.7550	0.1061	1.8612	0.4745	0.1049	0.5794	0.0000	7,415.1537	7,415.1537	1.4269	0.2255	7,518.0195
2026	6.3450	5.6760	23.5727	0.0508	1.6603	0.0675	1.7277	0.4494	0.0663	0.5157	0.0000	5,085.4108	5,085.4108	0.7093	0.2179	5,168.0811
Maximum	**7.5747**	**7.1138**	**41.6935**	**0.0754**	**7.7799**	**0.1069**	**7.8425**	**3.9701**	**0.1056**	**4.0327**	**0.0000**	**7,463.8989**	**7,463.8989**	**1.4327**	**0.2311**	**7,568.5878**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	18.89	71.83	-9.78	0.00	51.72	90.17	56.10	55.74	89.58	62.61	0.00	0.00	0.00	0.00	0.00	0.00

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7546	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Energy	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577
Mobile	21.1192	18.4307	143.1801	0.1962	22.1123	0.1716	22.2839	5.9096	0.1602	6.0698		20,739.9631	20,739.9631	2.3663	1.4697	21,237.0776
Total	**25.0671**	**20.1874**	**144.6868**	**0.2067**	**22.1123**	**0.3052**	**22.4175**	**5.9096**	**0.2938**	**6.2034**		**22,847.7628**	**22,847.7628**	**2.4068**	**1.5083**	**23,357.4070**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0530	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Energy	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577
Mobile	20.1456	16.2417	128.0122	0.1575	17.3579	0.1446	17.5025	4.6390	0.1348	4.7738		16,653.1595	16,653.1595	2.1954	1.3084	17,097.9585
Total	**23.3919**	**17.9984**	**129.5189**	**0.1680**	**17.3579**	**0.2782**	**17.6361**	**4.6390**	**0.2684**	**4.9074**		**18,760.9592**	**18,760.9592**	**2.2360**	**1.3471**	**19,218.2878**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	6.68	10.84	10.48	18.71	21.50	8.86	21.33	21.50	8.63	20.89	0.00	17.89	17.89	7.10	10.69	17.72

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/9/2024	5	20	
3	Building Construction	Building Construction	2/10/2024	3/31/2026	5	557	
4	Architectural Coating	Architectural Coating	4/1/2024	6/30/2026	5	587	
5	Paving	Paving	12/28/2024	1/24/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 194,513; Non-Residential Outdoor: 64,838; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	167.00	67.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0303	0.3370	8.9000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		92.1380	92.1380	3.4400e-003	3.0600e-003	93.1372
Total	**0.0466**	**0.0303**	**0.3370**	**8.9000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**92.1380**	**92.1380**	**3.4400e-003**	**3.0600e-003**	**93.1372**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**0.4656**	**2.0175**	**20.8690**	**0.0381**	**7.6662**	**0.0621**	**7.7283**	**3.9400**	**0.0621**	**4.0020**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0303	0.3370	8.9000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		92.1380	92.1380	3.4400e-003	3.0600e-003	93.1372
Total	**0.0466**	**0.0303**	**0.3370**	**8.9000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**92.1380**	**92.1380**	**3.4400e-003**	**3.0600e-003**	**93.1372**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**		**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0389	0.0253	0.2809	7.4000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		76.7817	76.7817	2.8700e-003	2.5500e-003	77.6143
Total	**0.0389**	**0.0253**	**0.2809**	**7.4000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**76.7817**	**76.7817**	**2.8700e-003**	**2.5500e-003**	**77.6143**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7622	0.0000	2.7622	1.3357	0.0000	1.3357			0.0000			0.0000
Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**0.3632**	**1.5737**	**17.7527**	**0.0297**	**2.7622**	**0.0484**	**2.8106**	**1.3357**	**0.0484**	**1.3841**	**0.0000**	**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0389	0.0253	0.2809	7.4000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		76.7817	76.7817	2.8700e-003	2.5500e-003	77.6143
Total	**0.0389**	**0.0253**	**0.2809**	**7.4000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**76.7817**	**76.7817**	**2.8700e-003**	**2.5500e-003**	**77.6143**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0804	3.1729	1.0795	0.0120	0.3972	0.0184	0.4156	0.1143	0.0176	0.1319		1,318.6672	1,318.6672	0.0574	0.1945	1,378.0678
Worker	0.4327	0.2813	3.1270	8.2900e-003	1.0547	4.9000e-003	1.0596	0.2798	4.5100e-003	0.2843		854.8361	854.8361	0.0319	0.0284	864.1060
Total	**0.5131**	**3.4541**	**4.2064**	**0.0203**	**1.4519**	**0.0233**	**1.4752**	**0.3941**	**0.0221**	**0.4163**		**2,173.5033**	**2,173.5033**	**0.0894**	**0.2229**	**2,242.1738**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0804	3.1729	1.0795	0.0120	0.3972	0.0184	0.4156	0.1143	0.0176	0.1319		1,318.6672	1,318.6672	0.0574	0.1945	1,378.0678
Worker	0.4327	0.2813	3.1270	8.2900e-003	1.0547	4.9000e-003	1.0596	0.2798	4.5100e-003	0.2843		854.8361	854.8361	0.0319	0.0284	864.1060
Total	**0.5131**	**3.4541**	**4.2064**	**0.0203**	**1.4519**	**0.0233**	**1.4752**	**0.3941**	**0.0221**	**0.4163**		**2,173.5033**	**2,173.5033**	**0.0894**	**0.2229**	**2,242.1738**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0768	3.1057	1.0544	0.0118	0.3972	0.0180	0.4152	0.1143	0.0172	0.1315		1,295.0901	1,295.0901	0.0594	0.1913	1,353.5909
Worker	0.4074	0.2524	2.9250	8.0200e-003	1.0547	4.6800e-003	1.0594	0.2798	4.3100e-003	0.2841		835.3076	835.3076	0.0291	0.0265	843.9410
Total	**0.4842**	**3.3581**	**3.9794**	**0.0198**	**1.4519**	**0.0227**	**1.4745**	**0.3941**	**0.0215**	**0.4156**		**2,130.3977**	**2,130.3977**	**0.0885**	**0.2179**	**2,197.5319**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0768	3.1057	1.0544	0.0118	0.3972	0.0180	0.4152	0.1143	0.0172	0.1315		1,295.0901	1,295.0901	0.0594	0.1913	1,353.5909
Worker	0.4074	0.2524	2.9250	8.0200e-003	1.0547	4.6800e-003	1.0594	0.2798	4.3100e-003	0.2841		835.3076	835.3076	0.0291	0.0265	843.9410
Total	**0.4842**	**3.3581**	**3.9794**	**0.0198**	**1.4519**	**0.0227**	**1.4745**	**0.3941**	**0.0215**	**0.4156**		**2,130.3977**	**2,130.3977**	**0.0885**	**0.2179**	**2,197.5319**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	3.0394	1.0338	0.0115	0.3972	0.0175	0.4147	0.1143	0.0167	0.1310		1,271.4738	1,271.4738	0.0613	0.1881	1,329.0615
Worker	0.3848	0.2280	2.7106	7.7600e-003	1.0547	4.3600e-003	1.0590	0.2798	4.0100e-003	0.2838		814.9722	814.9722	0.0265	0.0249	823.0508
Total	**0.4584**	**3.2674**	**3.7444**	**0.0193**	**1.4519**	**0.0218**	**1.4737**	**0.3941**	**0.0207**	**0.4148**		**2,086.4460**	**2,086.4460**	**0.0878**	**0.2130**	**2,152.1123**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	3.0394	1.0338	0.0115	0.3972	0.0175	0.4147	0.1143	0.0167	0.1310		1,271.4738	1,271.4738	0.0613	0.1881	1,329.0615
Worker	0.3848	0.2280	2.7106	7.7600e-003	1.0547	4.3600e-003	1.0590	0.2798	4.0100e-003	0.2838		814.9722	814.9722	0.0265	0.0249	823.0508
Total	**0.4584**	**3.2674**	**3.7444**	**0.0193**	**1.4519**	**0.0218**	**1.4737**	**0.3941**	**0.0207**	**0.4148**		**2,086.4460**	**2,086.4460**	**0.0878**	**0.2130**	**2,152.1123**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**5.6338**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0556	0.6179	1.6400e-003	0.2084	9.7000e-004	0.2094	0.0553	8.9000e-004	0.0562		168.9197	168.9197	6.3100e-003	5.6200e-003	170.7515
Total	**0.0855**	**0.0556**	**0.6179**	**1.6400e-003**	**0.2084**	**9.7000e-004**	**0.2094**	**0.0553**	**8.9000e-004**	**0.0562**		**168.9197**	**168.9197**	**6.3100e-003**	**5.6200e-003**	**170.7515**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**5.4828**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0855	0.0556	0.6179	1.6400e-003	0.2084	9.7000e-004	0.2094	0.0553	8.9000e-004	0.0562		168.9197	168.9197	6.3100e-003	5.6200e-003	170.7515
Total	**0.0855**	**0.0556**	**0.6179**	**1.6400e-003**	**0.2084**	**9.7000e-004**	**0.2094**	**0.0553**	**8.9000e-004**	**0.0562**		**168.9197**	**168.9197**	**6.3100e-003**	**5.6200e-003**	**170.7515**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**5.6239**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0805	0.0499	0.5780	1.5800e-003	0.2084	9.2000e-004	0.2093	0.0553	8.5000e-004	0.0561		165.0608	165.0608	5.7500e-003	5.2400e-003	166.7668
Total	**0.0805**	**0.0499**	**0.5780**	**1.5800e-003**	**0.2084**	**9.2000e-004**	**0.2093**	**0.0553**	**8.5000e-004**	**0.0561**		**165.0608**	**165.0608**	**5.7500e-003**	**5.2400e-003**	**166.7668**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**5.4828**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0805	0.0499	0.5780	1.5800e-003	0.2084	9.2000e-004	0.2093	0.0553	8.5000e-004	0.0561		165.0608	165.0608	5.7500e-003	5.2400e-003	166.7668
Total	**0.0805**	**0.0499**	**0.5780**	**1.5800e-003**	**0.2084**	**9.2000e-004**	**0.2093**	**0.0553**	**8.5000e-004**	**0.0561**		**165.0608**	**165.0608**	**5.7500e-003**	**5.2400e-003**	**166.7668**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**5.6239**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0760	0.0451	0.5356	1.5300e-003	0.2084	8.6000e-004	0.2093	0.0553	7.9000e-004	0.0561		161.0424	161.0424	5.2300e-003	4.9200e-003	162.6388
Total	**0.0760**	**0.0451**	**0.5356**	**1.5300e-003**	**0.2084**	**8.6000e-004**	**0.2093**	**0.0553**	**7.9000e-004**	**0.0561**		**161.0424**	**161.0424**	**5.2300e-003**	**4.9200e-003**	**162.6388**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**5.4828**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0760	0.0451	0.5356	1.5300e-003	0.2084	8.6000e-004	0.2093	0.0553	7.9000e-004	0.0561		161.0424	161.0424	5.2300e-003	4.9200e-003	162.6388
Total	**0.0760**	**0.0451**	**0.5356**	**1.5300e-003**	**0.2084**	**8.6000e-004**	**0.2093**	**0.0553**	**7.9000e-004**	**0.0561**		**161.0424**	**161.0424**	**5.2300e-003**	**4.9200e-003**	**162.6388**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8344**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0389	0.0253	0.2809	7.4000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		76.7817	76.7817	2.8700e-003	2.5500e-003	77.6143
Total	**0.0389**	**0.0253**	**0.2809**	**7.4000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**76.7817**	**76.7817**	**2.8700e-003**	**2.5500e-003**	**77.6143**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1267**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0389	0.0253	0.2809	7.4000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		76.7817	76.7817	2.8700e-003	2.5500e-003	77.6143
Total	**0.0389**	**0.0253**	**0.2809**	**7.4000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**76.7817**	**76.7817**	**2.8700e-003**	**2.5500e-003**	**77.6143**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7614**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0366	0.0227	0.2627	7.2000e-004	0.0947	4.2000e-004	0.0952	0.0251	3.9000e-004	0.0255		75.0276	75.0276	2.6100e-003	2.3800e-003	75.8031
Total	**0.0366**	**0.0227**	**0.2627**	**7.2000e-004**	**0.0947**	**4.2000e-004**	**0.0952**	**0.0251**	**3.9000e-004**	**0.0255**		**75.0276**	**75.0276**	**2.6100e-003**	**2.3800e-003**	**75.8031**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1267**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0366	0.0227	0.2627	7.2000e-004	0.0947	4.2000e-004	0.0952	0.0251	3.9000e-004	0.0255		75.0276	75.0276	2.6100e-003	2.3800e-003	75.8031
Total	**0.0366**	**0.0227**	**0.2627**	**7.2000e-004**	**0.0947**	**4.2000e-004**	**0.0952**	**0.0251**	**3.9000e-004**	**0.0255**		**75.0276**	**75.0276**	**2.6100e-003**	**2.3800e-003**	**75.8031**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.1456	16.2417	128.0122	0.1575	17.3579	0.1446	17.5025	4.6390	0.1348	4.7738		16,653.1595	16,653.1595	2.1954	1.3084	17,097.9585
Unmitigated	21.1192	18.4307	143.1801	0.1962	22.1123	0.1716	22.2839	5.9096	0.1602	6.0698		20,739.9631	20,739.9631	2.3663	1.4697	21,237.0776

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	174.29	174.29	174.29	130,977	102,816
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320
Total	12,259.84	12,259.84	12,259.84	10,447,366	8,201,076

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	6.60	5.50	6.40	33.00	48.00	19.00	21	51	28
Convenience Market with Gas	6.60	5.50	6.40	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Convenience Market with Gas Pumps	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant w/o Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant with Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Gasoline/Service Station	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
High Turnover (Sit Down Restaurant)	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Other Asphalt Surfaces	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Parking Lot	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Strip Mall	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Unrefrigerated Warehouse-No Rail	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

5.0 Energy Detail

Historical Energy Use: N

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577
NaturalGas Unmitigated	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	257.496	2.7800e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2937	30.2937	5.8000e-004	5.6000e-004	30.4737
Convenience Market with Gas Pumps	9.05067	1.0000e-004	8.9000e-004	7.5000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0648	1.0648	2.0000e-005	2.0000e-005	1.0711
Fast Food Restaurant w/o Drive Thru	3407.18	0.0367	0.3340	0.2806	2.0000e-003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e-003	7.3500e-003	403.2265
Fast Food Restaurant with Drive Thru	10647.4	0.1148	1.0439	0.8769	6.2600e-003		0.0793	0.0793		0.0793	0.0793		1,252.6390	1,252.6390	0.0240	0.0230	1,260.0828
Gasoline/Service Station	30.3774	3.3000e-004	2.9800e-003	2.5000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.5738	3.5738	7.0000e-005	7.0000e-005	3.5951
High Turnover (Sit Down Restaurant)	2839.32	0.0306	0.2784	0.2338	1.6700e-003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e-003	6.1200e-003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	352.603	3.8000e-003	0.0346	0.0290	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003		41.4827	41.4827	8.0000e-004	7.6000e-004	41.7292
Unrefrigerated Warehouse-No Rail	372.274	4.0100e-003	0.0365	0.0307	2.2000e-004		2.7700e-003	2.7700e-003		2.7700e-003	2.7700e-003		43.7969	43.7969	8.4000e-004	8.0000e-004	44.0572
Total		**0.1932**	**1.7565**	**1.4754**	**0.0105**		**0.1335**	**0.1335**		**0.1335**	**0.1335**		**2,107.7325**	**2,107.7325**	**0.0404**	**0.0387**	**2,120.2577**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0.257496	2.7800e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2937	30.2937	5.8000e-004	5.6000e-004	30.4737
Convenience Market with Gas Pumps	0.00905067	1.0000e-004	8.9000e-004	7.5000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0648	1.0648	2.0000e-005	2.0000e-005	1.0711
Fast Food Restaurant w/o Drive Thru	3.40718	0.0367	0.3340	0.2806	2.0000e-003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e-003	7.3500e-003	403.2265
Fast Food Restaurant with Drive Thru	10.6474	0.1148	1.0439	0.8769	6.2600e-003		0.0793	0.0793		0.0793	0.0793		1,252.6390	1,252.6390	0.0240	0.0230	1,260.0828
Gasoline/Service Station	0.0303774	3.3000e-004	2.9800e-003	2.5000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.5738	3.5738	7.0000e-005	7.0000e-005	3.5951
High Turnover (Sit Down Restaurant)	2.83932	0.0306	0.2784	0.2338	1.6700e-003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e-003	6.1200e-003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.352603	3.8000e-003	0.0346	0.0290	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003		41.4827	41.4827	8.0000e-004	7.6000e-004	41.7292
Unrefrigerated Warehouse-No Rail	0.372274	4.0100e-003	0.0365	0.0307	2.2000e-004		2.7700e-003	2.7700e-003		2.7700e-003	2.7700e-003		43.7969	43.7969	8.4000e-004	8.0000e-004	44.0572
Total		**0.1932**	**1.7565**	**1.4754**	**0.0105**		**0.1335**	**0.1335**		**0.1335**	**0.1335**		**2,107.7325**	**2,107.7325**	**0.0404**	**0.0387**	**2,120.2577**

6.0 Area Detail

6.1 Mitigation Measures Area

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0530	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Unmitigated	3.7546	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8770					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8800e-003	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Total	**3.7546**	**2.8000e-004**	**0.0313**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0673**	**0.0673**	**1.8000e-004**		**0.0717**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8800e-003	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Total	**3.0530**	**2.8000e-004**	**0.0313**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0673**	**0.0673**	**1.8000e-004**		**0.0717**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial

Santa Barbara-North of Santa Ynez County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.59	1000sqft	0.08	3,590.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	1,411.75	0
Gasoline/Service Station	3.00	Pump	0.01	423.52	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	152.51	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2027.

Land Use -

Construction Phase - Building and Arch Coating are based on construction schedule

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	587.00
tblConstructionPhase	NumDays	300.00	557.00
tblConstructionPhase	NumDays	30.00	20.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	23.72	48.55
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01
tblVehicleTrips	SU_TR	11.88	48.55
tblVehicleTrips	SU_TR	322.50	140.56
tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.55
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	9.5325	27.5806	37.5100	0.0756	19.7707	1.2299	21.0006	10.1326	1.1315	11.2641	0.0000	7,485.0447	7,485.0447	1.4290	0.2275	7,588.5662
2025	9.3111	25.4920	37.0970	0.0750	1.7550	1.0215	2.7765	0.4745	0.9555	1.4300	0.0000	7,435.6838	7,435.6838	1.4235	0.2221	7,537.4583
2026	7.4873	16.8001	21.9923	0.0509	1.6603	0.6017	2.2620	0.4494	0.5692	1.0186	0.0000	5,103.8356	5,103.8356	0.7064	0.2149	5,185.5437
Maximum	**9.5325**	**27.5806**	**37.5100**	**0.0756**	**19.7707**	**1.2299**	**21.0006**	**10.1326**	**1.1315**	**11.2641**	**0.0000**	**7,485.0447**	**7,485.0447**	**1.4290**	**0.2275**	**7,588.5662**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	7.5300	6.9723	41.4956	0.0756	7.7799	0.1068	7.8425	3.9701	0.1055	4.0327	0.0000	7,485.0447	7,485.0447	1.4290	0.2275	7,588.5662
2025	7.4957	6.8740	41.2136	0.0750	1.7550	0.1061	1.8611	0.4745	0.1048	0.5793	0.0000	7,435.6838	7,435.6838	1.4235	0.2221	7,537.4583
2026	6.3065	5.5484	23.3912	0.0509	1.6603	0.0674	1.7277	0.4494	0.0662	0.5156	0.0000	5,103.8356	5,103.8356	0.7064	0.2149	5,185.5437
Maximum	**7.5300**	**6.9723**	**41.4956**	**0.0756**	**7.7799**	**0.1068**	**7.8425**	**3.9701**	**0.1055**	**4.0327**	**0.0000**	**7,485.0447**	**7,485.0447**	**1.4290**	**0.2275**	**7,588.5662**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	18.98	72.24	-9.84	0.00	51.72	90.18	56.10	55.74	89.59	62.61	0.00	0.00	0.00	0.00	0.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7546	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Energy	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577
Mobile	22.0101	16.9543	124.7387	0.1988	22.1123	0.1714	22.2836	5.9096	0.1599	6.0695		21,013.9151	21,013.9151	2.0997	1.3756	21,476.3249
Total	**25.9579**	**18.7110**	**126.2454**	**0.2093**	**22.1123**	**0.3050**	**22.4172**	**5.9096**	**0.2935**	**6.2031**		**23,121.7149**	**23,121.7149**	**2.1403**	**1.4142**	**23,596.6543**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0530	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Energy	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577
Mobile	21.0839	14.9123	110.1764	0.1595	17.3579	0.1443	17.5022	4.6390	0.1345	4.7735		16,861.2948	16,861.2948	1.9333	1.2213	17,273.5810
Total	**24.3301**	**16.6690**	**111.6831**	**0.1700**	**17.3579**	**0.2779**	**17.6358**	**4.6390**	**0.2681**	**4.9071**		**18,969.0946**	**18,969.0946**	**1.9739**	**1.2600**	**19,393.9103**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	6.27	10.91	11.53	18.77	21.50	8.87	21.33	21.50	8.64	20.89	0.00	17.96	17.96	7.78	10.91	17.81

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/9/2024	5	20	
3	Building Construction	Building Construction	2/10/2024	3/31/2026	5	557	
4	Architectural Coating	Architectural Coating	4/1/2024	6/30/2026	5	587	
5	Paving	Paving	12/28/2024	1/24/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 194,513; Non-Residential Outdoor: 64,838; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	167.00	67.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0428	0.0265	0.3230	9.1000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		94.0493	94.0493	3.1100e-003	2.8000e-003	94.9611
Total	**0.0428**	**0.0265**	**0.3230**	**9.1000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**94.0493**	**94.0493**	**3.1100e-003**	**2.8000e-003**	**94.9611**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**0.4656**	**2.0175**	**20.8690**	**0.0381**	**7.6662**	**0.0621**	**7.7283**	**3.9400**	**0.0621**	**4.0020**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0428	0.0265	0.3230	9.1000e-004	0.1137	5.3000e-004	0.1142	0.0302	4.9000e-004	0.0306		94.0493	94.0493	3.1100e-003	2.8000e-003	94.9611
Total	**0.0428**	**0.0265**	**0.3230**	**9.1000e-004**	**0.1137**	**5.3000e-004**	**0.1142**	**0.0302**	**4.9000e-004**	**0.0306**		**94.0493**	**94.0493**	**3.1100e-003**	**2.8000e-003**	**94.9611**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**		**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0357	0.0221	0.2691	7.6000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		78.3745	78.3745	2.5900e-003	2.3300e-003	79.1343
Total	**0.0357**	**0.0221**	**0.2691**	**7.6000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**78.3745**	**78.3745**	**2.5900e-003**	**2.3300e-003**	**79.1343**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7622	0.0000	2.7622	1.3357	0.0000	1.3357			0.0000			0.0000
Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**0.3632**	**1.5737**	**17.7527**	**0.0297**	**2.7622**	**0.0484**	**2.8106**	**1.3357**	**0.0484**	**1.3841**	**0.0000**	**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0357	0.0221	0.2691	7.6000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		78.3745	78.3745	2.5900e-003	2.3300e-003	79.1343
Total	**0.0357**	**0.0221**	**0.2691**	**7.6000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**78.3745**	**78.3745**	**2.5900e-003**	**2.3300e-003**	**79.1343**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0817	3.0767	1.0498	0.0120	0.3972	0.0183	0.4156	0.1143	0.0175	0.1319		1,316.9835	1,316.9835	0.0577	0.1941	1,376.2601
Worker	0.3969	0.2460	2.9963	8.4600e-003	1.0547	4.9000e-003	1.0596	0.2798	4.5100e-003	0.2843		872.5688	872.5688	0.0288	0.0260	881.0282
Total	**0.4786**	**3.3228**	**4.0461**	**0.0205**	**1.4519**	**0.0232**	**1.4751**	**0.3941**	**0.0221**	**0.4162**		**2,189.5523**	**2,189.5523**	**0.0865**	**0.2201**	**2,257.2883**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0817	3.0767	1.0498	0.0120	0.3972	0.0183	0.4156	0.1143	0.0175	0.1319		1,316.9835	1,316.9835	0.0577	0.1941	1,376.2601
Worker	0.3969	0.2460	2.9963	8.4600e-003	1.0547	4.9000e-003	1.0596	0.2798	4.5100e-003	0.2843		872.5688	872.5688	0.0288	0.0260	881.0282
Total	**0.4786**	**3.3228**	**4.0461**	**0.0205**	**1.4519**	**0.0232**	**1.4751**	**0.3941**	**0.0221**	**0.4162**		**2,189.5523**	**2,189.5523**	**0.0865**	**0.2201**	**2,257.2883**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0783	3.0109	1.0251	0.0118	0.3972	0.0179	0.4151	0.1143	0.0171	0.1314		1,293.3678	1,293.3678	0.0597	0.1909	1,351.7486
Worker	0.3729	0.2208	2.7964	8.1800e-003	1.0547	4.6800e-003	1.0594	0.2798	4.3100e-003	0.2841		852.5920	852.5920	0.0262	0.0242	860.4709
Total	**0.4512**	**3.2317**	**3.8215**	**0.0199**	**1.4519**	**0.0226**	**1.4745**	**0.3941**	**0.0214**	**0.4155**		**2,145.9598**	**2,145.9598**	**0.0859**	**0.2151**	**2,212.2195**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0783	3.0109	1.0251	0.0118	0.3972	0.0179	0.4151	0.1143	0.0171	0.1314		1,293.3678	1,293.3678	0.0597	0.1909	1,351.7486
Worker	0.3729	0.2208	2.7964	8.1800e-003	1.0547	4.6800e-003	1.0594	0.2798	4.3100e-003	0.2841		852.5920	852.5920	0.0262	0.0242	860.4709
Total	**0.4512**	**3.2317**	**3.8215**	**0.0199**	**1.4519**	**0.0226**	**1.4745**	**0.3941**	**0.0214**	**0.4155**		**2,145.9598**	**2,145.9598**	**0.0859**	**0.2151**	**2,212.2195**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0752	2.9460	1.0049	0.0115	0.3972	0.0174	0.4146	0.1143	0.0167	0.1310		1,269.7237	1,269.7237	0.0616	0.1877	1,327.1949
Worker	0.3513	0.1995	2.5832	7.9200e-003	1.0547	4.3600e-003	1.0590	0.2798	4.0100e-003	0.2838		831.8182	831.8182	0.0238	0.0227	839.1908
Total	**0.4265**	**3.1455**	**3.5881**	**0.0194**	**1.4519**	**0.0218**	**1.4736**	**0.3941**	**0.0207**	**0.4148**		**2,101.5419**	**2,101.5419**	**0.0854**	**0.2104**	**2,166.3857**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0752	2.9460	1.0049	0.0115	0.3972	0.0174	0.4146	0.1143	0.0167	0.1310		1,269.7237	1,269.7237	0.0616	0.1877	1,327.1949
Worker	0.3513	0.1995	2.5832	7.9200e-003	1.0547	4.3600e-003	1.0590	0.2798	4.0100e-003	0.2838		831.8182	831.8182	0.0238	0.0227	839.1908
Total	**0.4265**	**3.1455**	**3.5881**	**0.0194**	**1.4519**	**0.0218**	**1.4736**	**0.3941**	**0.0207**	**0.4148**		**2,101.5419**	**2,101.5419**	**0.0854**	**0.2104**	**2,166.3857**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**5.6338**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0486	0.5921	1.6700e-003	0.2084	9.7000e-004	0.2094	0.0553	8.9000e-004	0.0562		172.4238	172.4238	5.7000e-003	5.1300e-003	174.0954
Total	**0.0784**	**0.0486**	**0.5921**	**1.6700e-003**	**0.2084**	**9.7000e-004**	**0.2094**	**0.0553**	**8.9000e-004**	**0.0562**		**172.4238**	**172.4238**	**5.7000e-003**	**5.1300e-003**	**174.0954**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**5.4828**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0486	0.5921	1.6700e-003	0.2084	9.7000e-004	0.2094	0.0553	8.9000e-004	0.0562		172.4238	172.4238	5.7000e-003	5.1300e-003	174.0954
Total	**0.0784**	**0.0486**	**0.5921**	**1.6700e-003**	**0.2084**	**9.7000e-004**	**0.2094**	**0.0553**	**8.9000e-004**	**0.0562**		**172.4238**	**172.4238**	**5.7000e-003**	**5.1300e-003**	**174.0954**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**5.6239**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0737	0.0436	0.5526	1.6200e-003	0.2084	9.2000e-004	0.2093	0.0553	8.5000e-004	0.0561		168.4763	168.4763	5.1800e-003	4.7900e-003	170.0332
Total	**0.0737**	**0.0436**	**0.5526**	**1.6200e-003**	**0.2084**	**9.2000e-004**	**0.2093**	**0.0553**	**8.5000e-004**	**0.0561**		**168.4763**	**168.4763**	**5.1800e-003**	**4.7900e-003**	**170.0332**

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**5.4828**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0737	0.0436	0.5526	1.6200e-003	0.2084	9.2000e-004	0.2093	0.0553	8.5000e-004	0.0561		168.4763	168.4763	5.1800e-003	4.7900e-003	170.0332
Total	**0.0737**	**0.0436**	**0.5526**	**1.6200e-003**	**0.2084**	**9.2000e-004**	**0.2093**	**0.0553**	**8.5000e-004**	**0.0561**		**168.4763**	**168.4763**	**5.1800e-003**	**4.7900e-003**	**170.0332**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**5.6239**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0394	0.5105	1.5600e-003	0.2084	8.6000e-004	0.2093	0.0553	7.9000e-004	0.0561		164.3713	164.3713	4.7000e-003	4.4900e-003	165.8281
Total	**0.0694**	**0.0394**	**0.5105**	**1.5600e-003**	**0.2084**	**8.6000e-004**	**0.2093**	**0.0553**	**7.9000e-004**	**0.0561**		**164.3713**	**164.3713**	**4.7000e-003**	**4.4900e-003**	**165.8281**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.4531					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**5.4828**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0694	0.0394	0.5105	1.5600e-003	0.2084	8.6000e-004	0.2093	0.0553	7.9000e-004	0.0561		164.3713	164.3713	4.7000e-003	4.4900e-003	165.8281
Total	**0.0694**	**0.0394**	**0.5105**	**1.5600e-003**	**0.2084**	**8.6000e-004**	**0.2093**	**0.0553**	**7.9000e-004**	**0.0561**		**164.3713**	**164.3713**	**4.7000e-003**	**4.4900e-003**	**165.8281**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8344**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0357	0.0221	0.2691	7.6000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		78.3745	78.3745	2.5900e-003	2.3300e-003	79.1343
Total	**0.0357**	**0.0221**	**0.2691**	**7.6000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**78.3745**	**78.3745**	**2.5900e-003**	**2.3300e-003**	**79.1343**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1267**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0357	0.0221	0.2691	7.6000e-004	0.0947	4.4000e-004	0.0952	0.0251	4.1000e-004	0.0255		78.3745	78.3745	2.5900e-003	2.3300e-003	79.1343
Total	**0.0357**	**0.0221**	**0.2691**	**7.6000e-004**	**0.0947**	**4.4000e-004**	**0.0952**	**0.0251**	**4.1000e-004**	**0.0255**		**78.3745**	**78.3745**	**2.5900e-003**	**2.3300e-003**	**79.1343**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7614**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0335	0.0198	0.2512	7.4000e-004	0.0947	4.2000e-004	0.0952	0.0251	3.9000e-004	0.0255		76.5801	76.5801	2.3600e-003	2.1800e-003	77.2878
Total	**0.0335**	**0.0198**	**0.2512**	**7.4000e-004**	**0.0947**	**4.2000e-004**	**0.0952**	**0.0251**	**3.9000e-004**	**0.0255**		**76.5801**	**76.5801**	**2.3600e-003**	**2.1800e-003**	**77.2878**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1267**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0335	0.0198	0.2512	7.4000e-004	0.0947	4.2000e-004	0.0952	0.0251	3.9000e-004	0.0255		76.5801	76.5801	2.3600e-003	2.1800e-003	77.2878
Total	**0.0335**	**0.0198**	**0.2512**	**7.4000e-004**	**0.0947**	**4.2000e-004**	**0.0952**	**0.0251**	**3.9000e-004**	**0.0255**		**76.5801**	**76.5801**	**2.3600e-003**	**2.1800e-003**	**77.2878**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.0839	14.9123	110.1764	0.1595	17.3579	0.1443	17.5022	4.6390	0.1345	4.7735		16,861.2948	16,861.2948	1.9333	1.2213	17,273.5810
Unmitigated	22.0101	16.9543	124.7387	0.1988	22.1123	0.1714	22.2836	5.9096	0.1599	6.0695		21,013.9151	21,013.9151	2.0997	1.3756	21,476.3249

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	174.29	174.29	174.29	130,977	102,816
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320
Total	12,259.84	12,259.84	12,259.84	10,447,366	8,201,076

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	6.60	5.50	6.40	33.00	48.00	19.00	21	51	28
Convenience Market with Gas	6.60	5.50	6.40	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Convenience Market with Gas Pumps	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant w/o Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant with Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Gasoline/Service Station	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
High Turnover (Sit Down Restaurant)	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Other Asphalt Surfaces	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Parking Lot	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Strip Mall	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Unrefrigerated Warehouse-No Rail	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

5.0 Energy Detail

Historical Energy Use: N

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577
NaturalGas Unmitigated	0.1932	1.7564	1.4754	0.0105		0.1335	0.1335		0.1335	0.1335		2,107.7325	2,107.7325	0.0404	0.0386	2,120.2577

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	257.496	2.7800e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2937	30.2937	5.8000e-004	5.6000e-004	30.4737
Convenience Market with Gas Pumps	9.05067	1.0000e-004	8.9000e-004	7.5000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0648	1.0648	2.0000e-005	2.0000e-005	1.0711
Fast Food Restaurant w/o Drive Thru	3407.18	0.0367	0.3340	0.2806	2.0000e-003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e-003	7.3500e-003	403.2265
Fast Food Restaurant with Drive Thru	10647.4	0.1148	1.0439	0.8769	6.2600e-003		0.0793	0.0793		0.0793	0.0793		1,252.6390	1,252.6390	0.0240	0.0230	1,260.0828
Gasoline/Service Station	30.3774	3.3000e-004	2.9800e-003	2.5000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.5738	3.5738	7.0000e-005	7.0000e-005	3.5951
High Turnover (Sit Down Restaurant)	2839.32	0.0306	0.2784	0.2338	1.6700e-003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e-003	6.1200e-003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	352.603	3.8000e-003	0.0346	0.0290	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003		41.4827	41.4827	8.0000e-004	7.6000e-004	41.7292
Unrefrigerated Warehouse-No Rail	372.274	4.0100e-003	0.0365	0.0307	2.2000e-004		2.7700e-003	2.7700e-003		2.7700e-003	2.7700e-003		43.7969	43.7969	8.4000e-004	8.0000e-004	44.0572
Total		**0.1932**	**1.7565**	**1.4754**	**0.0105**		**0.1335**	**0.1335**		**0.1335**	**0.1335**		**2,107.7325**	**2,107.7325**	**0.0404**	**0.0387**	**2,120.2577**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0.257496	2.7800e-003	0.0252	0.0212	1.5000e-004		1.9200e-003	1.9200e-003		1.9200e-003	1.9200e-003		30.2937	30.2937	5.8000e-004	5.6000e-004	30.4737
Convenience Market with Gas Pumps	0.00905067	1.0000e-004	8.9000e-004	7.5000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0648	1.0648	2.0000e-005	2.0000e-005	1.0711
Fast Food Restaurant w/o Drive Thru	3.40718	0.0367	0.3340	0.2806	2.0000e-003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e-003	7.3500e-003	403.2265
Fast Food Restaurant with Drive Thru	10.6474	0.1148	1.0439	0.8769	6.2600e-003		0.0793	0.0793		0.0793	0.0793		1,252.6390	1,252.6390	0.0240	0.0230	1,260.0828
Gasoline/Service Station	0.0303774	3.3000e-004	2.9800e-003	2.5000e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.5738	3.5738	7.0000e-005	7.0000e-005	3.5951
High Turnover (Sit Down Restaurant)	2.83932	0.0306	0.2784	0.2338	1.6700e-003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e-003	6.1200e-003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.352603	3.8000e-003	0.0346	0.0290	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003		41.4827	41.4827	8.0000e-004	7.6000e-004	41.7292
Unrefrigerated Warehouse-No Rail	0.372274	4.0100e-003	0.0365	0.0307	2.2000e-004		2.7700e-003	2.7700e-003		2.7700e-003	2.7700e-003		43.7969	43.7969	8.4000e-004	8.0000e-004	44.0572
Total		**0.1932**	**1.7565**	**1.4754**	**0.0105**		**0.1335**	**0.1335**		**0.1335**	**0.1335**		**2,107.7325**	**2,107.7325**	**0.0404**	**0.0387**	**2,120.2577**

6.0 Area Detail

6.1 Mitigation Measures Area

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0530	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Unmitigated	3.7546	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8770					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8800e-003	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Total	**3.7546**	**2.8000e-004**	**0.0313**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0673**	**0.0673**	**1.8000e-004**		**0.0717**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1754					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.8748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8800e-003	2.8000e-004	0.0313	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0673	0.0673	1.8000e-004		0.0717
Total	**3.0530**	**2.8000e-004**	**0.0313**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0673**	**0.0673**	**1.8000e-004**		**0.0717**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial

Santa Barbara-North of Santa Ynez County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.59	1000sqft	0.08	3,590.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	1,411.75	0
Gasoline/Service Station	3.00	Pump	0.01	423.52	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	152.51	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2027.

Land Use -

Construction Phase - Building and Arch Coating are based on construction schedule

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	587.00
tblConstructionPhase	NumDays	300.00	557.00
tblConstructionPhase	NumDays	30.00	20.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	23.72	48.55
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01
tblVehicleTrips	SU_TR	11.88	48.55
tblVehicleTrips	SU_TR	322.50	140.56
tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.55
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.8220	2.4022	2.8479	6.4600e-003	0.3557	0.0938	0.4495	0.1354	0.0883	0.2237	0.0000	583.9005	583.9005	0.0894	0.0239	593.2622
2025	0.9978	2.2993	3.0489	6.9100e-003	0.2129	0.0824	0.2953	0.0578	0.0779	0.1356	0.0000	626.3637	626.3637	0.0898	0.0263	636.4583
2026	0.4249	0.5804	0.7819	1.7700e-003	0.0586	0.0210	0.0796	0.0159	0.0199	0.0358	0.0000	160.6801	160.6801	0.0212	6.4500e-003	163.1301
Maximum	**0.9978**	**2.4022**	**3.0489**	**6.9100e-003**	**0.3557**	**0.0938**	**0.4495**	**0.1354**	**0.0883**	**0.2237**	**0.0000**	**626.3637**	**626.3637**	**0.0898**	**0.0263**	**636.4583**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.6497	0.7059	3.0454	6.4600e-003	0.2525	8.7600e-003	0.2613	0.0837	8.6100e-003	0.0923	0.0000	583.9001	583.9001	0.0894	0.0239	593.2618
2025	0.8380	0.7646	3.2559	6.9100e-003	0.2129	9.2500e-003	0.2222	0.0578	9.0900e-003	0.0668	0.0000	626.3633	626.3633	0.0898	0.0263	636.4578
2026	0.3825	0.1873	0.8274	1.7700e-003	0.0586	2.3100e-003	0.0610	0.0159	2.2700e-003	0.0181	0.0000	160.6800	160.6800	0.0212	6.4500e-003	163.1300
Maximum	**0.8380**	**0.7646**	**3.2559**	**6.9100e-003**	**0.2525**	**9.2500e-003**	**0.2613**	**0.0837**	**9.0900e-003**	**0.0923**	**0.0000**	**626.3633**	**626.3633**	**0.0898**	**0.0263**	**636.4578**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**16.68**	**68.61**	**-6.74**	**0.00**	**16.45**	**89.69**	**33.96**	**24.74**	**89.27**	**55.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2024**	**3-31-2024**	0.6597	0.1499
2	**4-1-2024**	**6-30-2024**	0.8351	0.3933
3	**7-1-2024**	**9-30-2024**	0.8443	0.3977
4	**10-1-2024**	**12-31-2024**	0.8665	0.4070
5	**1-1-2025**	**3-31-2025**	0.8792	0.4110
6	**4-1-2025**	**6-30-2025**	0.7932	0.3892
7	**7-1-2025**	**9-30-2025**	0.8019	0.3934
8	**10-1-2025**	**12-31-2025**	0.8076	0.3991
9	**1-1-2026**	**3-31-2026**	0.7860	0.3864
10	**4-1-2026**	**6-30-2026**	0.2235	0.1859
		Highest	0.8792	0.4110

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6850	3.0000e-005	2.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Energy	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	471.4926	471.4926	0.0268	8.8100e-003	474.7868
Mobile	3.8361	3.2986	24.6704	0.0357	3.9369	0.0312	3.9681	1.0541	0.0291	1.0832	0.0000	3,420.7224	3,420.7224	0.3738	0.2377	3,500.9057
Waste						0.0000	0.0000		0.0000	0.0000	94.4453	0.0000	94.4453	4.6832	0.0000	211.5263
Water						0.0000	0.0000		0.0000	0.0000	8.0386	9.3204	17.3591	0.0292	0.0177	23.3530
Total	**4.5563**	**3.6192**	**24.9425**	**0.0376**	**3.9369**	**0.0555**	**3.9925**	**1.0541**	**0.0535**	**1.1075**	**102.4839**	**3,901.5410**	**4,004.0249**	**5.1130**	**0.2642**	**4,210.5776**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5569	3.0000e-005	2.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Energy	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	471.4926	471.4926	0.0268	8.8100e-003	474.7868
Mobile	3.6620	2.8995	21.9742	0.0286	3.0904	0.0263	3.1167	0.8274	0.0245	0.8519	0.0000	2,746.2174	2,746.2174	0.3459	0.2112	2,817.7973
Waste						0.0000	0.0000		0.0000	0.0000	47.2227	0.0000	47.2227	2.3416	0.0000	105.7631
Water						0.0000	0.0000		0.0000	0.0000	6.7846	7.9439	14.7285	0.0247	0.0149	19.7882
Total	**4.2542**	**3.2201**	**22.2462**	**0.0306**	**3.0904**	**0.0506**	**3.1411**	**0.8274**	**0.0489**	**0.8763**	**54.0072**	**3,225.6594**	**3,279.6667**	**2.7390**	**0.2349**	**3,418.1412**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.63**	**11.03**	**10.81**	**18.73**	**21.50**	**8.86**	**21.32**	**21.50**	**8.62**	**20.88**	**47.30**	**17.32**	**18.09**	**46.43**	**11.08**	**18.82**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/9/2024	5	20	
3	Building Construction	Building Construction	2/10/2024	3/31/2026	5	557	

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4	Architectural Coating	Architectural Coating	4/1/2024	6/30/2026	5	587	
5	Paving	Paving	12/28/2024	1/24/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 194,513; Non-Residential Outdoor: 64,838; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	167.00	67.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6600e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.6400e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4184	0.4184	2.0000e-005	1.0000e-005	0.4228
Total	**2.2000e-004**	**1.5000e-004**	**1.6400e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4184**	**0.4184**	**2.0000e-005**	**1.0000e-005**	**0.4228**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**2.3300e-003**	**0.0101**	**0.1043**	**1.9000e-004**	**0.0383**	**3.1000e-004**	**0.0386**	**0.0197**	**3.1000e-004**	**0.0200**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.6400e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4184	0.4184	2.0000e-005	1.0000e-005	0.4228
Total	**2.2000e-004**	**1.5000e-004**	**1.6400e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4184**	**0.4184**	**2.0000e-005**	**1.0000e-005**	**0.4228**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0166	0.1703	0.1476	3.0000e-004		7.2400e-003	7.2400e-003		6.6600e-003	6.6600e-003	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2747
Total	**0.0166**	**0.1703**	**0.1476**	**3.0000e-004**	**0.0708**	**7.2400e-003**	**0.0781**	**0.0343**	**6.6600e-003**	**0.0409**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2747**

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3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.5000e-004	2.7300e-003	1.0000e-005	9.3000e-004	0.0000	9.3000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6973	0.6973	3.0000e-005	2.0000e-005	0.7047
Total	**3.6000e-004**	**2.5000e-004**	**2.7300e-003**	**1.0000e-005**	**9.3000e-004**	**0.0000**	**9.3000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.6973**	**0.6973**	**3.0000e-005**	**2.0000e-005**	**0.7047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0276	0.0000	0.0276	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6300e-003	0.0157	0.1775	3.0000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2746
Total	**3.6300e-003**	**0.0157**	**0.1775**	**3.0000e-004**	**0.0276**	**4.8000e-004**	**0.0281**	**0.0134**	**4.8000e-004**	**0.0138**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2746**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.5000e-004	2.7300e-003	1.0000e-005	9.3000e-004	0.0000	9.3000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6973	0.6973	3.0000e-005	2.0000e-005	0.7047
Total	**3.6000e-004**	**2.5000e-004**	**2.7300e-003**	**1.0000e-005**	**9.3000e-004**	**0.0000**	**9.3000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.6973**	**0.6973**	**3.0000e-005**	**2.0000e-005**	**0.7047**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1707	1.5595	1.8754	3.1300e-003		0.0711	0.0711		0.0669	0.0669	0.0000	268.9450	268.9450	0.0636	0.0000	270.5349
Total	**0.1707**	**1.5595**	**1.8754**	**3.1300e-003**		**0.0711**	**0.0711**		**0.0669**	**0.0669**	**0.0000**	**268.9450**	**268.9450**	**0.0636**	**0.0000**	**270.5349**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3900e-003	0.3694	0.1235	1.3900e-003	0.0452	2.1300e-003	0.0474	0.0131	2.0400e-003	0.0151	0.0000	138.6644	138.6644	6.0600e-003	0.0205	144.9104
Worker	0.0467	0.0318	0.3530	9.6000e-004	0.1197	5.7000e-004	0.1202	0.0318	5.2000e-004	0.0323	0.0000	90.0511	90.0511	3.2300e-003	2.9300e-003	91.0064
Total	**0.0561**	**0.4012**	**0.4765**	**2.3500e-003**	**0.1649**	**2.7000e-003**	**0.1676**	**0.0449**	**2.5600e-003**	**0.0474**	**0.0000**	**228.7155**	**228.7155**	**9.2900e-003**	**0.0234**	**235.9168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0380	0.2592	2.0254	3.1300e-003		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003	0.0000	268.9446	268.9446	0.0636	0.0000	270.5346
Total	**0.0380**	**0.2592**	**2.0254**	**3.1300e-003**		**4.7300e-003**	**4.7300e-003**		**4.7300e-003**	**4.7300e-003**	**0.0000**	**268.9446**	**268.9446**	**0.0636**	**0.0000**	**270.5346**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3900e-003	0.3694	0.1235	1.3900e-003	0.0452	2.1300e-003	0.0474	0.0131	2.0400e-003	0.0151	0.0000	138.6644	138.6644	6.0600e-003	0.0205	144.9104
Worker	0.0467	0.0318	0.3530	9.6000e-004	0.1197	5.7000e-004	0.1202	0.0318	5.2000e-004	0.0323	0.0000	90.0511	90.0511	3.2300e-003	2.9300e-003	91.0064
Total	**0.0561**	**0.4012**	**0.4765**	**2.3500e-003**	**0.1649**	**2.7000e-003**	**0.1676**	**0.0449**	**2.5600e-003**	**0.0474**	**0.0000**	**228.7155**	**228.7155**	**9.2900e-003**	**0.0234**	**235.9168**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.4067	0.1357	1.5300e-003	0.0509	2.3400e-003	0.0532	0.0147	2.2400e-003	0.0169	0.0000	153.2036	153.2036	7.0500e-003	0.0226	160.1237
Worker	0.0494	0.0321	0.3712	1.0500e-003	0.1346	6.1000e-004	0.1352	0.0358	5.6000e-004	0.0363	0.0000	98.9932	98.9932	3.3100e-003	3.0800e-003	99.9939
Total	**0.0595**	**0.4387**	**0.5069**	**2.5800e-003**	**0.1855**	**2.9500e-003**	**0.1885**	**0.0505**	**2.8000e-003**	**0.0533**	**0.0000**	**252.1968**	**252.1968**	**0.0104**	**0.0257**	**260.1177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0428	0.2916	2.2786	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0428**	**0.2916**	**2.2786**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.4067	0.1357	1.5300e-003	0.0509	2.3400e-003	0.0532	0.0147	2.2400e-003	0.0169	0.0000	153.2036	153.2036	7.0500e-003	0.0226	160.1237
Worker	0.0494	0.0321	0.3712	1.0500e-003	0.1346	6.1000e-004	0.1352	0.0358	5.6000e-004	0.0363	0.0000	98.9932	98.9932	3.3100e-003	3.0800e-003	99.9939
Total	**0.0595**	**0.4387**	**0.5069**	**2.5800e-003**	**0.1855**	**2.9500e-003**	**0.1885**	**0.0505**	**2.8000e-003**	**0.0533**	**0.0000**	**252.1968**	**252.1968**	**0.0104**	**0.0257**	**260.1177**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0438	0.3990	0.5147	8.6000e-004		0.0169	0.0169		0.0159	0.0159	0.0000	74.2142	74.2142	0.0175	0.0000	74.6504
Total	**0.0438**	**0.3990**	**0.5147**	**8.6000e-004**		**0.0169**	**0.0169**		**0.0159**	**0.0159**	**0.0000**	**74.2142**	**74.2142**	**0.0175**	**0.0000**	**74.6504**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0976	0.0326	3.7000e-004	0.0125	5.6000e-004	0.0130	3.6000e-003	5.3000e-004	4.1400e-003	0.0000	36.8811	36.8811	1.7800e-003	5.4600e-003	38.5515
Worker	0.0114	7.1000e-003	0.0843	2.5000e-004	0.0330	1.4000e-004	0.0332	8.7700e-003	1.3000e-004	8.9000e-003	0.0000	23.6833	23.6833	7.4000e-004	7.1000e-004	23.9129
Total	**0.0138**	**0.1047**	**0.1169**	**6.2000e-004**	**0.0455**	**7.0000e-004**	**0.0462**	**0.0124**	**6.6000e-004**	**0.0130**	**0.0000**	**60.5644**	**60.5644**	**2.5200e-003**	**6.1700e-003**	**62.4644**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0105	0.0715	0.5587	8.6000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	74.2141	74.2141	0.0175	0.0000	74.6503
Total	**0.0105**	**0.0715**	**0.5587**	**8.6000e-004**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**74.2141**	**74.2141**	**0.0175**	**0.0000**	**74.6503**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0976	0.0326	3.7000e-004	0.0125	5.6000e-004	0.0130	3.6000e-003	5.3000e-004	4.1400e-003	0.0000	36.8811	36.8811	1.7800e-003	5.4600e-003	38.5515
Worker	0.0114	7.1000e-003	0.0843	2.5000e-004	0.0330	1.4000e-004	0.0332	8.7700e-003	1.3000e-004	8.9000e-003	0.0000	23.6833	23.6833	7.4000e-004	7.1000e-004	23.9129
Total	**0.0138**	**0.1047**	**0.1169**	**6.2000e-004**	**0.0455**	**7.0000e-004**	**0.0462**	**0.0124**	**6.6000e-004**	**0.0130**	**0.0000**	**60.5644**	**60.5644**	**2.5200e-003**	**6.1700e-003**	**62.4644**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5371					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1201	0.1783	2.9000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	25.1496	25.1496	1.4200e-003	0.0000	25.1850
Total	**0.5549**	**0.1201**	**0.1783**	**2.9000e-004**		**6.0000e-003**	**6.0000e-003**		**6.0000e-003**	**6.0000e-003**	**0.0000**	**25.1496**	**25.1496**	**1.4200e-003**	**0.0000**	**25.1850**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8400e-003	5.3300e-003	0.0592	1.6000e-004	0.0201	1.0000e-004	0.0202	5.3400e-003	9.0000e-005	5.4200e-003	0.0000	15.1100	15.1100	5.4000e-004	4.9000e-004	15.2703
Total	**7.8400e-003**	**5.3300e-003**	**0.0592**	**1.6000e-004**	**0.0201**	**1.0000e-004**	**0.0202**	**5.3400e-003**	**9.0000e-005**	**5.4200e-003**	**0.0000**	**15.1100**	**15.1100**	**5.4000e-004**	**4.9000e-004**	**15.2703**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5371					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9300e-003	0.0127	0.1805	2.9000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	25.1495	25.1495	1.4200e-003	0.0000	25.1849
Total	**0.5401**	**0.0127**	**0.1805**	**2.9000e-004**		**3.9000e-004**	**3.9000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**25.1495**	**25.1495**	**1.4200e-003**	**0.0000**	**25.1849**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8400e-003	5.3300e-003	0.0592	1.6000e-004	0.0201	1.0000e-004	0.0202	5.3400e-003	9.0000e-005	5.4200e-003	0.0000	15.1100	15.1100	5.4000e-004	4.9000e-004	15.2703
Total	**7.8400e-003**	**5.3300e-003**	**0.0592**	**1.6000e-004**	**0.0201**	**1.0000e-004**	**0.0202**	**5.3400e-003**	**9.0000e-005**	**5.4200e-003**	**0.0000**	**15.1100**	**15.1100**	**5.4000e-004**	**4.9000e-004**	**15.2703**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**0.7339**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7600e-003	6.3400e-003	0.0734	2.1000e-004	0.0266	1.2000e-004	0.0267	7.0700e-003	1.1000e-004	7.1800e-003	0.0000	19.5615	19.5615	6.5000e-004	6.1000e-004	19.7593
Total	**9.7600e-003**	**6.3400e-003**	**0.0734**	**2.1000e-004**	**0.0266**	**1.2000e-004**	**0.0267**	**7.0700e-003**	**1.1000e-004**	**7.1800e-003**	**0.0000**	**19.5615**	**19.5615**	**6.5000e-004**	**6.1000e-004**	**19.7593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.7155**	**0.0168**	**0.2391**	**3.9000e-004**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7600e-003	6.3400e-003	0.0734	2.1000e-004	0.0266	1.2000e-004	0.0267	7.0700e-003	1.1000e-004	7.1800e-003	0.0000	19.5615	19.5615	6.5000e-004	6.1000e-004	19.7593
Total	**9.7600e-003**	**6.3400e-003**	**0.0734**	**2.1000e-004**	**0.0266**	**1.2000e-004**	**0.0267**	**7.0700e-003**	**1.1000e-004**	**7.1800e-003**	**0.0000**	**19.5615**	**19.5615**	**6.5000e-004**	**6.1000e-004**	**19.7593**

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0739	0.1167	1.9000e-004		3.3200e-003	3.3200e-003		3.3200e-003	3.3200e-003	0.0000	16.4685	16.4685	9.0000e-004	0.0000	16.4910
Total	**0.3627**	**0.0739**	**0.1167**	**1.9000e-004**		**3.3200e-003**	**3.3200e-003**		**3.3200e-003**	**3.3200e-003**	**0.0000**	**16.4685**	**16.4685**	**9.0000e-004**	**0.0000**	**16.4910**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5500e-003	2.8300e-003	0.0336	1.0000e-004	0.0132	6.0000e-005	0.0132	3.4900e-003	5.0000e-005	3.5400e-003	0.0000	9.4330	9.4330	2.9000e-004	2.8000e-004	9.5244
Total	**4.5500e-003**	**2.8300e-003**	**0.0336**	**1.0000e-004**	**0.0132**	**6.0000e-005**	**0.0132**	**3.4900e-003**	**5.0000e-005**	**3.5400e-003**	**0.0000**	**9.4330**	**9.4330**	**2.9000e-004**	**2.8000e-004**	**9.5244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	8.3100e-003	0.1182	1.9000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	16.4685	16.4685	9.0000e-004	0.0000	16.4909
Total	**0.3536**	**8.3100e-003**	**0.1182**	**1.9000e-004**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**16.4685**	**16.4685**	**9.0000e-004**	**0.0000**	**16.4909**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5500e-003	2.8300e-003	0.0336	1.0000e-004	0.0132	6.0000e-005	0.0132	3.4900e-003	5.0000e-005	3.5400e-003	0.0000	9.4330	9.4330	2.9000e-004	2.8000e-004	9.5244
Total	**4.5500e-003**	**2.8300e-003**	**0.0336**	**1.0000e-004**	**0.0132**	**6.0000e-005**	**0.0132**	**3.4900e-003**	**5.0000e-005**	**3.5400e-003**	**0.0000**	**9.4330**	**9.4330**	**2.9000e-004**	**2.8000e-004**	**9.5244**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9000e-004	9.5200e-003	0.0146	2.0000e-005		4.7000e-004	4.7000e-004		4.3000e-004	4.3000e-004	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0189
Paving	8.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8400e-003**	**9.5200e-003**	**0.0146**	**2.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**2.0027**	**2.0027**	**6.5000e-004**	**0.0000**	**2.0189**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.0697	0.0697	0.0000	0.0000	0.0705
Total	**4.0000e-005**	**2.0000e-005**	**2.7000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0697**	**0.0697**	**0.0000**	**0.0000**	**0.0705**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-004	1.2200e-003	0.0173	2.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0188
Paving	8.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1300e-003**	**1.2200e-003**	**0.0173**	**2.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.0027**	**2.0027**	**6.5000e-004**	**0.0000**	**2.0188**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.0697	0.0697	0.0000	0.0000	0.0705
Total	**4.0000e-005**	**2.0000e-005**	**2.7000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0697**	**0.0697**	**0.0000**	**0.0000**	**0.0705**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2400e-003	0.0772	0.1312	2.1000e-004		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630
Paving	7.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0159**	**0.0772**	**0.1312**	**2.1000e-004**		**3.7700e-003**	**3.7700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**18.0173**	**18.0173**	**5.8300e-003**	**0.0000**	**18.1630**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.3000e-003	1.0000e-005	8.3000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6132	0.6132	2.0000e-005	2.0000e-005	0.6194
Total	**3.1000e-004**	**2.0000e-004**	**2.3000e-003**	**1.0000e-005**	**8.3000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6132**	**0.6132**	**2.0000e-005**	**2.0000e-005**	**0.6194**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5200e-003	0.0109	0.1557	2.1000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630
Paving	7.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0101**	**0.0109**	**0.1557**	**2.1000e-004**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**18.0173**	**18.0173**	**5.8300e-003**	**0.0000**	**18.1630**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.3000e-003	1.0000e-005	8.3000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6132	0.6132	2.0000e-005	2.0000e-005	0.6194
Total	**3.1000e-004**	**2.0000e-004**	**2.3000e-003**	**1.0000e-005**	**8.3000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6132**	**0.6132**	**2.0000e-005**	**2.0000e-005**	**0.6194**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.6620	2.8995	21.9742	0.0286	3.0904	0.0263	3.1167	0.8274	0.0245	0.8519	0.0000	2,746.2174	2,746.2174	0.3459	0.2112	2,817.7973
Unmitigated	3.8361	3.2986	24.6704	0.0357	3.9369	0.0312	3.9681	1.0541	0.0291	1.0832	0.0000	3,420.7224	3,420.7224	0.3738	0.2377	3,500.9057

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	174.29	174.29	174.29	130,977	102,816
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320
Total	12,259.84	12,259.84	12,259.84	10,447,366	8,201,076

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	6.60	5.50	6.40	33.00	48.00	19.00	21	51	28
Convenience Market with Gas	6.60	5.50	6.40	0.80	80.20	19.00	14	21	65

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Convenience Market with Gas Pumps	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant w/o Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant with Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Gasoline/Service Station	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
High Turnover (Sit Down Restaurant)	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Other Asphalt Surfaces	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Parking Lot	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Strip Mall	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Unrefrigerated Warehouse-No Rail	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	122.5339	122.5339	0.0201	2.4100e-003	123.7543
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	122.5339	122.5339	0.0201	2.4100e-003	123.7543
NaturalGas Mitigated	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	348.9588	348.9588	6.6900e-003	6.4000e-003	351.0324
NaturalGas Unmitigated	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	348.9588	348.9588	6.6900e-003	6.4000e-003	351.0324

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	93986.2	5.1000e-004	4.6100e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0155	5.0155	1.0000e-004	9.0000e-005	5.0453
Convenience Market with Gas Pumps	3303.49	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1763	0.1763	0.0000	0.0000	0.1773
Fast Food Restaurant w/o Drive Thru	1.24362e+006	6.7100e-003	0.0610	0.0512	3.7000e-004		4.6300e-003	4.6300e-003		4.6300e-003	4.6300e-003	0.0000	66.3643	66.3643	1.2700e-003	1.2200e-003	66.7587
Fast Food Restaurant with Drive Thru	3.88631e+006	0.0210	0.1905	0.1600	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	207.3884	207.3884	3.9700e-003	3.8000e-003	208.6208
Gasoline/Service Station	11087.8	6.0000e-005	5.4000e-004	4.6000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5917	0.5917	1.0000e-005	1.0000e-005	0.5952
High Turnover (Sit Down Restaurant)	1.03635e+006	5.5900e-003	0.0508	0.0427	3.0000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	55.3036	55.3036	1.0600e-003	1.0100e-003	55.6322
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	128700	6.9000e-004	6.3100e-003	5.3000e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8679	6.8679	1.3000e-004	1.3000e-004	6.9087
Unrefrigerated Warehouse-No Rail	135880	7.3000e-004	6.6600e-003	5.6000e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2511	7.2511	1.4000e-004	1.3000e-004	7.2942
Total		**0.0353**	**0.3206**	**0.2693**	**1.9200e-003**		**0.0244**	**0.0244**		**0.0244**	**0.0244**	**0.0000**	**348.9587**	**348.9587**	**6.6800e-003**	**6.3900e-003**	**351.0324**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	93986.2	5.1000e-004	4.6100e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0155	5.0155	1.0000e-004	9.0000e-005	5.0453
Convenience Market with Gas Pumps	3303.49	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1763	0.1763	0.0000	0.0000	0.1773
Fast Food Restaurant w/o Drive Thru	1.24362e+006	6.7100e-003	0.0610	0.0512	3.7000e-004		4.6300e-003	4.6300e-003		4.6300e-003	4.6300e-003	0.0000	66.3643	66.3643	1.2700e-003	1.2200e-003	66.7587
Fast Food Restaurant with Drive Thru	3.88631e+006	0.0210	0.1905	0.1600	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	207.3884	207.3884	3.9700e-003	3.8000e-003	208.6208
Gasoline/Service Station	11087.8	6.0000e-005	5.4000e-004	4.6000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5917	0.5917	1.0000e-005	1.0000e-005	0.5952
High Turnover (Sit Down Restaurant)	1.03635e+006	5.5900e-003	0.0508	0.0427	3.0000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	55.3036	55.3036	1.0600e-003	1.0100e-003	55.6322
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	128700	6.9000e-004	6.3100e-003	5.3000e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8679	6.8679	1.3000e-004	1.3000e-004	6.9087
Unrefrigerated Warehouse-No Rail	135880	7.3000e-004	6.6600e-003	5.6000e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2511	7.2511	1.4000e-004	1.3000e-004	7.2942
Total		**0.0353**	**0.3206**	**0.2693**	**1.9200e-003**		**0.0244**	**0.0244**		**0.0244**	**0.0244**	**0.0000**	**348.9587**	**348.9587**	**6.6800e-003**	**6.3900e-003**	**351.0324**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	29079	2.0116	3.3000e-004	4.0000e-005	2.0316
Convenience Market with Gas Pumps	14668.1	1.0147	1.7000e-004	2.0000e-005	1.0248
Fast Food Restaurant w/o Drive Thru	193020	13.3526	2.1900e-003	2.6000e-004	13.4856
Fast Food Restaurant with Drive Thru	603188	41.7269	6.8400e-003	8.2000e-004	42.1425
Gasoline/Service Station	3430.51	0.2373	4.0000e-005	0.0000	0.2397
High Turnover (Sit Down Restaurant)	160850	11.1272	1.8200e-003	2.2000e-004	11.2380
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57365	3.9684	6.5000e-004	8.0000e-005	4.0079
Strip Mall	571450	39.5314	6.4800e-003	7.8000e-004	39.9251
Unrefrigerated Warehouse-No Rail	138250	9.5638	1.5700e-003	1.9000e-004	9.6590
Total		**122.5339**	**0.0201**	**2.4100e-003**	**123.7543**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	29079	2.0116	3.3000e-004	4.0000e-005	2.0316
Convenience Market with Gas Pumps	14668.1	1.0147	1.7000e-004	2.0000e-005	1.0248
Fast Food Restaurant w/o Drive Thru	193020	13.3526	2.1900e-003	2.6000e-004	13.4856
Fast Food Restaurant with Drive Thru	603188	41.7269	6.8400e-003	8.2000e-004	42.1425
Gasoline/Service Station	3430.51	0.2373	4.0000e-005	0.0000	0.2397
High Turnover (Sit Down Restaurant)	160850	11.1272	1.8200e-003	2.2000e-004	11.2380
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57365	3.9684	6.5000e-004	8.0000e-005	4.0079
Strip Mall	571450	39.5314	6.4800e-003	7.8000e-004	39.9251
Unrefrigerated Warehouse-No Rail	138250	9.5638	1.5700e-003	1.9000e-004	9.6590
Total		**122.5339**	**0.0201**	**2.4100e-003**	**123.7543**

6.0 Area Detail

6.1 Mitigation Measures Area

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5569	3.0000e-005	2.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Unmitigated	0.6850	3.0000e-005	2.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5246					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e-004	3.0000e-005	2.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Total	**0.6850**	**3.0000e-005**	**2.8200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.4900e-003**	**5.4900e-003**	**1.0000e-005**	**0.0000**	**5.8500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5246					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e-004	3.0000e-005	2.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Total	**0.5569**	**3.0000e-005**	**2.8200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.4900e-003**	**5.4900e-003**	**1.0000e-005**	**0.0000**	**5.8500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.7285	0.0247	0.0149	19.7882
Unmitigated	17.3591	0.0292	0.0177	23.3530

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.337751 / 0.207009	0.2960	4.4000e-004	2.6000e-004	0.3855
Convenience Market with Gas Pumps	0.104572 / 0.0640924	0.0917	1.4000e-004	8.0000e-005	0.1194
Fast Food Restaurant w/o Drive Thru	1.8212 / 0.116247	1.3542	2.3300e-003	1.4200e-003	1.8343
Fast Food Restaurant with Drive Thru	5.69126 / 0.363272	4.2319	7.2900e-003	4.4200e-003	5.7321
Gasoline/Service Station	0.0398457 / 0.0244215	0.0349	5.0000e-005	3.0000e-005	0.0455
High Turnover (Sit Down Restaurant)	1.51767 / 0.0968725	1.1285	1.9500e-003	1.1800e-003	1.5286
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.07399 / 2.49696	3.5709	5.3100e-003	3.1800e-003	4.6503
Unrefrigerated Warehouse-No Rail	9.13438 / 0	6.6509	0.0117	7.1000e-003	9.0574
Total		**17.3591**	**0.0292**	**0.0177**	**23.3530**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.285062 / 0.194381	0.2546	3.7000e-004	2.2000e-004	0.3302
Convenience Market with Gas Pumps	0.0882586 / 0.0601828	0.0788	1.2000e-004	7.0000e-005	0.1022
Fast Food Restaurant w/o Drive Thru	1.53709 / 0.109156	1.1456	1.9700e-003	1.1900e-003	1.5508
Fast Food Restaurant with Drive Thru	4.80342 / 0.341112	3.5801	6.1600e-003	3.7300e-003	4.8464
Gasoline/Service Station	0.0336297 / 0.0229318	0.0300	4.0000e-005	3.0000e-005	0.0390
High Turnover (Sit Down Restaurant)	1.28091 / 0.0909632	0.9547	1.6400e-003	1.0000e-003	1.2924
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.43845 / 2.34465	3.0713	4.4900e-003	2.6800e-003	3.9828
Unrefrigerated Warehouse-No Rail	7.70941 / 0	5.6134	9.8600e-003	5.9900e-003	7.6445
Total		**14.7285**	**0.0247**	**0.0149**	**19.7882**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	47.2227	2.3416	0.0000	105.7631
Unmitigated	94.4453	4.6832	0.0000	211.5263

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	13.71	2.8471	0.1412	0.0000	6.3765
Fast Food Restaurant w/o Drive Thru	69.11	14.3516	0.7117	0.0000	32.1429
Fast Food Restaurant with Drive Thru	215.98	44.8511	2.2240	0.0000	100.4517
Gasoline/Service Station	1.62	0.3364	0.0167	0.0000	0.7535
High Turnover (Sit Down Restaurant)	59.5	12.3560	0.6127	0.0000	27.6733
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	57.75	11.9926	0.5947	0.0000	26.8594
Unrefrigerated Warehouse-No Rail	37.13	7.7105	0.3823	0.0000	17.2691
Total		**94.4453**	**4.6832**	**0.0000**	**211.5263**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	6.855	1.4235	0.0706	0.0000	3.1882
Fast Food Restaurant w/o Drive Thru	34.555	7.1758	0.3558	0.0000	16.0714
Fast Food Restaurant with Drive Thru	107.99	22.4256	1.1120	0.0000	50.2259
Gasoline/Service Station	0.81	0.1682	8.3400e-003	0.0000	0.3767
High Turnover (Sit Down Restaurant)	29.75	6.1780	0.3064	0.0000	13.8367
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	28.875	5.9963	0.2973	0.0000	13.4297
Unrefrigerated Warehouse-No Rail	18.565	3.8553	0.1912	0.0000	8.6345
Total		**47.2227**	**2.3416**	**0.0000**	**105.7631**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.59	1000sqft	0.08	3,590.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	1,411.75	0
Gasoline/Service Station	3.00	Pump	0.01	423.52	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.1	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	127.09	**CH4 Intensity (lb/MWhr)**	0.021	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2030.

Land Use -

Construction Phase - Building and Arch Coating are based on construction schedule

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Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	587.00
tblConstructionPhase	NumDays	300.00	557.00
tblConstructionPhase	NumDays	30.00	20.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	ST_TR	23.72	48.55
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00
tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01
tblVehicleTrips	SU_TR	11.88	48.55
tblVehicleTrips	SU_TR	322.50	140.56

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.55
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.8220	2.4022	2.8479	6.4600e-003	0.3557	0.0938	0.4495	0.1354	0.0883	0.2237	0.0000	583.9005	583.9005	0.0894	0.0239	593.2622
2025	0.9978	2.2993	3.0489	6.9100e-003	0.2129	0.0824	0.2953	0.0578	0.0779	0.1356	0.0000	626.3637	626.3637	0.0898	0.0263	636.4583
2026	0.4249	0.5804	0.7819	1.7700e-003	0.0586	0.0210	0.0796	0.0159	0.0199	0.0358	0.0000	160.6801	160.6801	0.0212	6.4500e-003	163.1301
Maximum	**0.9978**	**2.4022**	**3.0489**	**6.9100e-003**	**0.3557**	**0.0938**	**0.4495**	**0.1354**	**0.0883**	**0.2237**	**0.0000**	**626.3637**	**626.3637**	**0.0898**	**0.0263**	**636.4583**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.6497	0.7059	3.0454	6.4600e-003	0.2525	8.7600e-003	0.2613	0.0837	8.6100e-003	0.0923	0.0000	583.9001	583.9001	0.0894	0.0239	593.2618
2025	0.8380	0.7646	3.2559	6.9100e-003	0.2129	9.2500e-003	0.2222	0.0578	9.0900e-003	0.0668	0.0000	626.3633	626.3633	0.0898	0.0263	636.4578
2026	0.3825	0.1873	0.8274	1.7700e-003	0.0586	2.3100e-003	0.0610	0.0159	2.2700e-003	0.0181	0.0000	160.6800	160.6800	0.0212	6.4500e-003	163.1300
Maximum	**0.8380**	**0.7646**	**3.2559**	**6.9100e-003**	**0.2525**	**9.2500e-003**	**0.2613**	**0.0837**	**9.0900e-003**	**0.0923**	**0.0000**	**626.3633**	**626.3633**	**0.0898**	**0.0263**	**636.4578**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**16.68**	**68.61**	**-6.74**	**0.00**	**16.45**	**89.69**	**33.96**	**24.74**	**89.27**	**55.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2024**	**3-31-2024**	0.6597	0.1499
2	**4-1-2024**	**6-30-2024**	0.8351	0.3933
3	**7-1-2024**	**9-30-2024**	0.8443	0.3977
4	**10-1-2024**	**12-31-2024**	0.8665	0.4070
5	**1-1-2025**	**3-31-2025**	0.8792	0.4110
6	**4-1-2025**	**6-30-2025**	0.7932	0.3892
7	**7-1-2025**	**9-30-2025**	0.8019	0.3934
8	**10-1-2025**	**12-31-2025**	0.8076	0.3991
9	**1-1-2026**	**3-31-2026**	0.7860	0.3864
10	**4-1-2026**	**6-30-2026**	0.2235	0.1859
		Highest	0.8792	0.4110

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6850	3.0000e-005	2.8100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Energy	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	451.0690	451.0690	0.0236	8.0000e-003	454.0433
Mobile	3.3207	2.8282	22.2676	0.0328	3.9340	0.0265	3.9605	1.0528	0.0247	1.0775	0.0000	3,204.1784	3,204.1784	0.3247	0.2144	3,276.1894
Waste						0.0000	0.0000		0.0000	0.0000	94.4453	0.0000	94.4453	4.6832	0.0000	211.5263
Water						0.0000	0.0000		0.0000	0.0000	8.0386	7.7669	15.8055	0.0290	0.0176	21.7752
Total	**4.0409**	**3.1488**	**22.5397**	**0.0347**	**3.9340**	**0.0508**	**3.9849**	**1.0528**	**0.0491**	**1.1019**	**102.4839**	**3,663.0198**	**3,765.5037**	**5.0605**	**0.2400**	**3,963.5400**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6850	3.0000e-005	2.8100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Energy	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	451.0690	451.0690	0.0236	8.0000e-003	454.0433
Mobile	3.1631	2.4955	19.8727	0.0264	3.0882	0.0223	3.1105	0.8265	0.0208	0.8473	0.0000	2,572.5373	2,572.5373	0.2986	0.1906	2,636.7847
Waste						0.0000	0.0000		0.0000	0.0000	47.2227	0.0000	47.2227	2.3416	0.0000	105.7631
Water						0.0000	0.0000		0.0000	0.0000	6.7846	6.6199	13.4045	0.0245	0.0149	18.4434
Total	**3.8833**	**2.8161**	**20.1447**	**0.0283**	**3.0882**	**0.0467**	**3.1349**	**0.8265**	**0.0452**	**0.8716**	**54.0072**	**3,030.2317**	**3,084.2389**	**2.6882**	**0.2134**	**3,215.0404**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.90**	**10.57**	**10.63**	**18.62**	**21.50**	**8.15**	**21.33**	**21.50**	**7.93**	**20.90**	**47.30**	**17.28**	**18.09**	**46.88**	**11.08**	**18.88**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/9/2024	5	20	
3	Building Construction	Building Construction	2/10/2024	3/31/2026	5	557	

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4	Architectural Coating	Architectural Coating	4/1/2024	6/30/2026	5	587	
5	Paving	Paving	12/28/2024	1/24/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 194,513; Non-Residential Outdoor: 64,838; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	167.00	67.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6600e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.6400e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4184	0.4184	2.0000e-005	1.0000e-005	0.4228
Total	**2.2000e-004**	**1.5000e-004**	**1.6400e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4184**	**0.4184**	**2.0000e-005**	**1.0000e-005**	**0.4228**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**2.3300e-003**	**0.0101**	**0.1043**	**1.9000e-004**	**0.0383**	**3.1000e-004**	**0.0386**	**0.0197**	**3.1000e-004**	**0.0200**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.6400e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4184	0.4184	2.0000e-005	1.0000e-005	0.4228
Total	**2.2000e-004**	**1.5000e-004**	**1.6400e-003**	**0.0000**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4184**	**0.4184**	**2.0000e-005**	**1.0000e-005**	**0.4228**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0166	0.1703	0.1476	3.0000e-004		7.2400e-003	7.2400e-003		6.6600e-003	6.6600e-003	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2747
Total	**0.0166**	**0.1703**	**0.1476**	**3.0000e-004**	**0.0708**	**7.2400e-003**	**0.0781**	**0.0343**	**6.6600e-003**	**0.0409**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2747**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.5000e-004	2.7300e-003	1.0000e-005	9.3000e-004	0.0000	9.3000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6973	0.6973	3.0000e-005	2.0000e-005	0.7047
Total	**3.6000e-004**	**2.5000e-004**	**2.7300e-003**	**1.0000e-005**	**9.3000e-004**	**0.0000**	**9.3000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.6973**	**0.6973**	**3.0000e-005**	**2.0000e-005**	**0.7047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0276	0.0000	0.0276	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6300e-003	0.0157	0.1775	3.0000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2746
Total	**3.6300e-003**	**0.0157**	**0.1775**	**3.0000e-004**	**0.0276**	**4.8000e-004**	**0.0281**	**0.0134**	**4.8000e-004**	**0.0138**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2746**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.5000e-004	2.7300e-003	1.0000e-005	9.3000e-004	0.0000	9.3000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6973	0.6973	3.0000e-005	2.0000e-005	0.7047
Total	**3.6000e-004**	**2.5000e-004**	**2.7300e-003**	**1.0000e-005**	**9.3000e-004**	**0.0000**	**9.3000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.6973**	**0.6973**	**3.0000e-005**	**2.0000e-005**	**0.7047**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1707	1.5595	1.8754	3.1300e-003		0.0711	0.0711		0.0669	0.0669	0.0000	268.9450	268.9450	0.0636	0.0000	270.5349
Total	**0.1707**	**1.5595**	**1.8754**	**3.1300e-003**		**0.0711**	**0.0711**		**0.0669**	**0.0669**	**0.0000**	**268.9450**	**268.9450**	**0.0636**	**0.0000**	**270.5349**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3900e-003	0.3694	0.1235	1.3900e-003	0.0452	2.1300e-003	0.0474	0.0131	2.0400e-003	0.0151	0.0000	138.6644	138.6644	6.0600e-003	0.0205	144.9104
Worker	0.0467	0.0318	0.3530	9.6000e-004	0.1197	5.7000e-004	0.1202	0.0318	5.2000e-004	0.0323	0.0000	90.0511	90.0511	3.2300e-003	2.9300e-003	91.0064
Total	**0.0561**	**0.4012**	**0.4765**	**2.3500e-003**	**0.1649**	**2.7000e-003**	**0.1676**	**0.0449**	**2.5600e-003**	**0.0474**	**0.0000**	**228.7155**	**228.7155**	**9.2900e-003**	**0.0234**	**235.9168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0380	0.2592	2.0254	3.1300e-003		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003	0.0000	268.9446	268.9446	0.0636	0.0000	270.5346
Total	**0.0380**	**0.2592**	**2.0254**	**3.1300e-003**		**4.7300e-003**	**4.7300e-003**		**4.7300e-003**	**4.7300e-003**	**0.0000**	**268.9446**	**268.9446**	**0.0636**	**0.0000**	**270.5346**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.3900e-003	0.3694	0.1235	1.3900e-003	0.0452	2.1300e-003	0.0474	0.0131	2.0400e-003	0.0151	0.0000	138.6644	138.6644	6.0600e-003	0.0205	144.9104
Worker	0.0467	0.0318	0.3530	9.6000e-004	0.1197	5.7000e-004	0.1202	0.0318	5.2000e-004	0.0323	0.0000	90.0511	90.0511	3.2300e-003	2.9300e-003	91.0064
Total	**0.0561**	**0.4012**	**0.4765**	**2.3500e-003**	**0.1649**	**2.7000e-003**	**0.1676**	**0.0449**	**2.5600e-003**	**0.0474**	**0.0000**	**228.7155**	**228.7155**	**9.2900e-003**	**0.0234**	**235.9168**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.4067	0.1357	1.5300e-003	0.0509	2.3400e-003	0.0532	0.0147	2.2400e-003	0.0169	0.0000	153.2036	153.2036	7.0500e-003	0.0226	160.1237
Worker	0.0494	0.0321	0.3712	1.0500e-003	0.1346	6.1000e-004	0.1352	0.0358	5.6000e-004	0.0363	0.0000	98.9932	98.9932	3.3100e-003	3.0800e-003	99.9939
Total	**0.0595**	**0.4387**	**0.5069**	**2.5800e-003**	**0.1855**	**2.9500e-003**	**0.1885**	**0.0505**	**2.8000e-003**	**0.0533**	**0.0000**	**252.1968**	**252.1968**	**0.0104**	**0.0257**	**260.1177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0428	0.2916	2.2786	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0428**	**0.2916**	**2.2786**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.4067	0.1357	1.5300e-003	0.0509	2.3400e-003	0.0532	0.0147	2.2400e-003	0.0169	0.0000	153.2036	153.2036	7.0500e-003	0.0226	160.1237
Worker	0.0494	0.0321	0.3712	1.0500e-003	0.1346	6.1000e-004	0.1352	0.0358	5.6000e-004	0.0363	0.0000	98.9932	98.9932	3.3100e-003	3.0800e-003	99.9939
Total	**0.0595**	**0.4387**	**0.5069**	**2.5800e-003**	**0.1855**	**2.9500e-003**	**0.1885**	**0.0505**	**2.8000e-003**	**0.0533**	**0.0000**	**252.1968**	**252.1968**	**0.0104**	**0.0257**	**260.1177**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0438	0.3990	0.5147	8.6000e-004		0.0169	0.0169		0.0159	0.0159	0.0000	74.2142	74.2142	0.0175	0.0000	74.6504
Total	**0.0438**	**0.3990**	**0.5147**	**8.6000e-004**		**0.0169**	**0.0169**		**0.0159**	**0.0159**	**0.0000**	**74.2142**	**74.2142**	**0.0175**	**0.0000**	**74.6504**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0976	0.0326	3.7000e-004	0.0125	5.6000e-004	0.0130	3.6000e-003	5.3000e-004	4.1400e-003	0.0000	36.8811	36.8811	1.7800e-003	5.4600e-003	38.5515
Worker	0.0114	7.1000e-003	0.0843	2.5000e-004	0.0330	1.4000e-004	0.0332	8.7700e-003	1.3000e-004	8.9000e-003	0.0000	23.6833	23.6833	7.4000e-004	7.1000e-004	23.9129
Total	**0.0138**	**0.1047**	**0.1169**	**6.2000e-004**	**0.0455**	**7.0000e-004**	**0.0462**	**0.0124**	**6.6000e-004**	**0.0130**	**0.0000**	**60.5644**	**60.5644**	**2.5200e-003**	**6.1700e-003**	**62.4644**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0105	0.0715	0.5587	8.6000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	74.2141	74.2141	0.0175	0.0000	74.6503
Total	**0.0105**	**0.0715**	**0.5587**	**8.6000e-004**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**74.2141**	**74.2141**	**0.0175**	**0.0000**	**74.6503**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0976	0.0326	3.7000e-004	0.0125	5.6000e-004	0.0130	3.6000e-003	5.3000e-004	4.1400e-003	0.0000	36.8811	36.8811	1.7800e-003	5.4600e-003	38.5515
Worker	0.0114	7.1000e-003	0.0843	2.5000e-004	0.0330	1.4000e-004	0.0332	8.7700e-003	1.3000e-004	8.9000e-003	0.0000	23.6833	23.6833	7.4000e-004	7.1000e-004	23.9129
Total	**0.0138**	**0.1047**	**0.1169**	**6.2000e-004**	**0.0455**	**7.0000e-004**	**0.0462**	**0.0124**	**6.6000e-004**	**0.0130**	**0.0000**	**60.5644**	**60.5644**	**2.5200e-003**	**6.1700e-003**	**62.4644**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5371					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0178	0.1201	0.1783	2.9000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	25.1496	25.1496	1.4200e-003	0.0000	25.1850
Total	**0.5549**	**0.1201**	**0.1783**	**2.9000e-004**		**6.0000e-003**	**6.0000e-003**		**6.0000e-003**	**6.0000e-003**	**0.0000**	**25.1496**	**25.1496**	**1.4200e-003**	**0.0000**	**25.1850**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8400e-003	5.3300e-003	0.0592	1.6000e-004	0.0201	1.0000e-004	0.0202	5.3400e-003	9.0000e-005	5.4200e-003	0.0000	15.1100	15.1100	5.4000e-004	4.9000e-004	15.2703
Total	**7.8400e-003**	**5.3300e-003**	**0.0592**	**1.6000e-004**	**0.0201**	**1.0000e-004**	**0.0202**	**5.3400e-003**	**9.0000e-005**	**5.4200e-003**	**0.0000**	**15.1100**	**15.1100**	**5.4000e-004**	**4.9000e-004**	**15.2703**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5371					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9300e-003	0.0127	0.1805	2.9000e-004		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	25.1495	25.1495	1.4200e-003	0.0000	25.1849
Total	**0.5401**	**0.0127**	**0.1805**	**2.9000e-004**		**3.9000e-004**	**3.9000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**25.1495**	**25.1495**	**1.4200e-003**	**0.0000**	**25.1849**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8400e-003	5.3300e-003	0.0592	1.6000e-004	0.0201	1.0000e-004	0.0202	5.3400e-003	9.0000e-005	5.4200e-003	0.0000	15.1100	15.1100	5.4000e-004	4.9000e-004	15.2703
Total	**7.8400e-003**	**5.3300e-003**	**0.0592**	**1.6000e-004**	**0.0201**	**1.0000e-004**	**0.0202**	**5.3400e-003**	**9.0000e-005**	**5.4200e-003**	**0.0000**	**15.1100**	**15.1100**	**5.4000e-004**	**4.9000e-004**	**15.2703**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**0.7339**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7600e-003	6.3400e-003	0.0734	2.1000e-004	0.0266	1.2000e-004	0.0267	7.0700e-003	1.1000e-004	7.1800e-003	0.0000	19.5615	19.5615	6.5000e-004	6.1000e-004	19.7593
Total	**9.7600e-003**	**6.3400e-003**	**0.0734**	**2.1000e-004**	**0.0266**	**1.2000e-004**	**0.0267**	**7.0700e-003**	**1.1000e-004**	**7.1800e-003**	**0.0000**	**19.5615**	**19.5615**	**6.5000e-004**	**6.1000e-004**	**19.7593**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.7155**	**0.0168**	**0.2391**	**3.9000e-004**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7600e-003	6.3400e-003	0.0734	2.1000e-004	0.0266	1.2000e-004	0.0267	7.0700e-003	1.1000e-004	7.1800e-003	0.0000	19.5615	19.5615	6.5000e-004	6.1000e-004	19.7593
Total	**9.7600e-003**	**6.3400e-003**	**0.0734**	**2.1000e-004**	**0.0266**	**1.2000e-004**	**0.0267**	**7.0700e-003**	**1.1000e-004**	**7.1800e-003**	**0.0000**	**19.5615**	**19.5615**	**6.5000e-004**	**6.1000e-004**	**19.7593**

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0739	0.1167	1.9000e-004		3.3200e-003	3.3200e-003		3.3200e-003	3.3200e-003	0.0000	16.4685	16.4685	9.0000e-004	0.0000	16.4910
Total	**0.3627**	**0.0739**	**0.1167**	**1.9000e-004**		**3.3200e-003**	**3.3200e-003**		**3.3200e-003**	**3.3200e-003**	**0.0000**	**16.4685**	**16.4685**	**9.0000e-004**	**0.0000**	**16.4910**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5500e-003	2.8300e-003	0.0336	1.0000e-004	0.0132	6.0000e-005	0.0132	3.4900e-003	5.0000e-005	3.5400e-003	0.0000	9.4330	9.4330	2.9000e-004	2.8000e-004	9.5244
Total	**4.5500e-003**	**2.8300e-003**	**0.0336**	**1.0000e-004**	**0.0132**	**6.0000e-005**	**0.0132**	**3.4900e-003**	**5.0000e-005**	**3.5400e-003**	**0.0000**	**9.4330**	**9.4330**	**2.9000e-004**	**2.8000e-004**	**9.5244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	8.3100e-003	0.1182	1.9000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	16.4685	16.4685	9.0000e-004	0.0000	16.4909
Total	**0.3536**	**8.3100e-003**	**0.1182**	**1.9000e-004**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**16.4685**	**16.4685**	**9.0000e-004**	**0.0000**	**16.4909**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5500e-003	2.8300e-003	0.0336	1.0000e-004	0.0132	6.0000e-005	0.0132	3.4900e-003	5.0000e-005	3.5400e-003	0.0000	9.4330	9.4330	2.9000e-004	2.8000e-004	9.5244
Total	**4.5500e-003**	**2.8300e-003**	**0.0336**	**1.0000e-004**	**0.0132**	**6.0000e-005**	**0.0132**	**3.4900e-003**	**5.0000e-005**	**3.5400e-003**	**0.0000**	**9.4330**	**9.4330**	**2.9000e-004**	**2.8000e-004**	**9.5244**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9000e-004	9.5200e-003	0.0146	2.0000e-005		4.7000e-004	4.7000e-004		4.3000e-004	4.3000e-004	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0189
Paving	8.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8400e-003**	**9.5200e-003**	**0.0146**	**2.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**2.0027**	**2.0027**	**6.5000e-004**	**0.0000**	**2.0189**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.0697	0.0697	0.0000	0.0000	0.0705
Total	**4.0000e-005**	**2.0000e-005**	**2.7000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0697**	**0.0697**	**0.0000**	**0.0000**	**0.0705**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-004	1.2200e-003	0.0173	2.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0188
Paving	8.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1300e-003**	**1.2200e-003**	**0.0173**	**2.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.0027**	**2.0027**	**6.5000e-004**	**0.0000**	**2.0188**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.0697	0.0697	0.0000	0.0000	0.0705
Total	**4.0000e-005**	**2.0000e-005**	**2.7000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0697**	**0.0697**	**0.0000**	**0.0000**	**0.0705**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2400e-003	0.0772	0.1312	2.1000e-004		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630
Paving	7.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0159**	**0.0772**	**0.1312**	**2.1000e-004**		**3.7700e-003**	**3.7700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**18.0173**	**18.0173**	**5.8300e-003**	**0.0000**	**18.1630**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.3000e-003	1.0000e-005	8.3000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6132	0.6132	2.0000e-005	2.0000e-005	0.6194
Total	**3.1000e-004**	**2.0000e-004**	**2.3000e-003**	**1.0000e-005**	**8.3000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6132**	**0.6132**	**2.0000e-005**	**2.0000e-005**	**0.6194**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5200e-003	0.0109	0.1557	2.1000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630
Paving	7.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0101**	**0.0109**	**0.1557**	**2.1000e-004**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**18.0173**	**18.0173**	**5.8300e-003**	**0.0000**	**18.1630**

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.3000e-003	1.0000e-005	8.3000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6132	0.6132	2.0000e-005	2.0000e-005	0.6194
Total	**3.1000e-004**	**2.0000e-004**	**2.3000e-003**	**1.0000e-005**	**8.3000e-004**	**0.0000**	**8.4000e-004**	**2.2000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6132**	**0.6132**	**2.0000e-005**	**2.0000e-005**	**0.6194**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.1631	2.4955	19.8727	0.0264	3.0882	0.0223	3.1105	0.8265	0.0208	0.8473	0.0000	2,572.5373	2,572.5373	0.2986	0.1906	2,636.7847
Unmitigated	3.3207	2.8282	22.2676	0.0328	3.9340	0.0265	3.9605	1.0528	0.0247	1.0775	0.0000	3,204.1784	3,204.1784	0.3247	0.2144	3,276.1894

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	174.29	174.29	174.29	130,977	102,816
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320
Total	12,259.84	12,259.84	12,259.84	10,447,366	8,201,076

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	6.60	5.50	6.40	33.00	48.00	19.00	21	51	28
Convenience Market with Gas	6.60	5.50	6.40	0.80	80.20	19.00	14	21	65

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Convenience Market with Gas Pumps	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Fast Food Restaurant w/o Drive Thru	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Fast Food Restaurant with Drive Thru	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Gasoline/Service Station	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
High Turnover (Sit Down Restaurant)	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Other Asphalt Surfaces	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Parking Lot	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Strip Mall	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Unrefrigerated Warehouse-No Rail	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	102.1102	102.1102	0.0169	1.6100e-003	103.0109
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	102.1102	102.1102	0.0169	1.6100e-003	103.0109
NaturalGas Mitigated	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	348.9588	348.9588	6.6900e-003	6.4000e-003	351.0324
NaturalGas Unmitigated	0.0353	0.3206	0.2693	1.9200e-003		0.0244	0.0244		0.0244	0.0244	0.0000	348.9588	348.9588	6.6900e-003	6.4000e-003	351.0324

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	93986.2	5.1000e-004	4.6100e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0155	5.0155	1.0000e-004	9.0000e-005	5.0453
Convenience Market with Gas Pumps	3303.49	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1763	0.1763	0.0000	0.0000	0.1773
Fast Food Restaurant w/o Drive Thru	1.24362e+006	6.7100e-003	0.0610	0.0512	3.7000e-004		4.6300e-003	4.6300e-003		4.6300e-003	4.6300e-003	0.0000	66.3643	66.3643	1.2700e-003	1.2200e-003	66.7587
Fast Food Restaurant with Drive Thru	3.88631e+006	0.0210	0.1905	0.1600	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	207.3884	207.3884	3.9700e-003	3.8000e-003	208.6208
Gasoline/Service Station	11087.8	6.0000e-005	5.4000e-004	4.6000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5917	0.5917	1.0000e-005	1.0000e-005	0.5952
High Turnover (Sit Down Restaurant)	1.03635e+006	5.5900e-003	0.0508	0.0427	3.0000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	55.3036	55.3036	1.0600e-003	1.0100e-003	55.6322
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	128700	6.9000e-004	6.3100e-003	5.3000e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8679	6.8679	1.3000e-004	1.3000e-004	6.9087
Unrefrigerated Warehouse-No Rail	135880	7.3000e-004	6.6600e-003	5.6000e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2511	7.2511	1.4000e-004	1.3000e-004	7.2942
Total		**0.0353**	**0.3206**	**0.2693**	**1.9200e-003**		**0.0244**	**0.0244**		**0.0244**	**0.0244**	**0.0000**	**348.9587**	**348.9587**	**6.6800e-003**	**6.3900e-003**	**351.0324**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	93986.2	5.1000e-004	4.6100e-003	3.8700e-003	3.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	5.0155	5.0155	1.0000e-004	9.0000e-005	5.0453
Convenience Market with Gas Pumps	3303.49	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1763	0.1763	0.0000	0.0000	0.1773
Fast Food Restaurant w/o Drive Thru	1.24362e+006	6.7100e-003	0.0610	0.0512	3.7000e-004		4.6300e-003	4.6300e-003		4.6300e-003	4.6300e-003	0.0000	66.3643	66.3643	1.2700e-003	1.2200e-003	66.7587
Fast Food Restaurant with Drive Thru	3.88631e+006	0.0210	0.1905	0.1600	1.1400e-003		0.0145	0.0145		0.0145	0.0145	0.0000	207.3884	207.3884	3.9700e-003	3.8000e-003	208.6208
Gasoline/Service Station	11087.8	6.0000e-005	5.4000e-004	4.6000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5917	0.5917	1.0000e-005	1.0000e-005	0.5952
High Turnover (Sit Down Restaurant)	1.03635e+006	5.5900e-003	0.0508	0.0427	3.0000e-004		3.8600e-003	3.8600e-003		3.8600e-003	3.8600e-003	0.0000	55.3036	55.3036	1.0600e-003	1.0100e-003	55.6322
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	128700	6.9000e-004	6.3100e-003	5.3000e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8679	6.8679	1.3000e-004	1.3000e-004	6.9087
Unrefrigerated Warehouse-No Rail	135880	7.3000e-004	6.6600e-003	5.6000e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.2511	7.2511	1.4000e-004	1.3000e-004	7.2942
Total		**0.0353**	**0.3206**	**0.2693**	**1.9200e-003**		**0.0244**	**0.0244**		**0.0244**	**0.0244**	**0.0000**	**348.9587**	**348.9587**	**6.6800e-003**	**6.3900e-003**	**351.0324**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	29079	1.6763	2.8000e-004	3.0000e-005	1.6911
Convenience Market with Gas Pumps	14668.1	0.8456	1.4000e-004	1.0000e-005	0.8530
Fast Food Restaurant w/o Drive Thru	193020	11.1270	1.8400e-003	1.8000e-004	11.2252
Fast Food Restaurant with Drive Thru	603188	34.7720	5.7500e-003	5.5000e-004	35.0787
Gasoline/Service Station	3430.51	0.1978	3.0000e-005	0.0000	0.1995
High Turnover (Sit Down Restaurant)	160850	9.2725	1.5300e-003	1.5000e-004	9.3543
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57365	3.3069	5.5000e-004	5.0000e-005	3.3361
Strip Mall	571450	32.9424	5.4400e-003	5.2000e-004	33.2330
Unrefrigerated Warehouse-No Rail	138250	7.9697	1.3200e-003	1.3000e-004	8.0400
Total		**102.1102**	**0.0169**	**1.6200e-003**	**103.0109**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	29079	1.6763	2.8000e-004	3.0000e-005	1.6911
Convenience Market with Gas Pumps	14668.1	0.8456	1.4000e-004	1.0000e-005	0.8530
Fast Food Restaurant w/o Drive Thru	193020	11.1270	1.8400e-003	1.8000e-004	11.2252
Fast Food Restaurant with Drive Thru	603188	34.7720	5.7500e-003	5.5000e-004	35.0787
Gasoline/Service Station	3430.51	0.1978	3.0000e-005	0.0000	0.1995
High Turnover (Sit Down Restaurant)	160850	9.2725	1.5300e-003	1.5000e-004	9.3543
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57365	3.3069	5.5000e-004	5.0000e-005	3.3361
Strip Mall	571450	32.9424	5.4400e-003	5.2000e-004	33.2330
Unrefrigerated Warehouse-No Rail	138250	7.9697	1.3200e-003	1.3000e-004	8.0400
Total		**102.1102**	**0.0169**	**1.6200e-003**	**103.0109**

6.0 Area Detail

6.1 Mitigation Measures Area

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6850	3.0000e-005	2.8100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Unmitigated	0.6850	3.0000e-005	2.8100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5246					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e-004	3.0000e-005	2.8100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Total	**0.6850**	**3.0000e-005**	**2.8100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.4900e-003**	**5.4900e-003**	**1.0000e-005**	**0.0000**	**5.8500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5246					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e-004	3.0000e-005	2.8100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.4900e-003	5.4900e-003	1.0000e-005	0.0000	5.8500e-003
Total	**0.6850**	**3.0000e-005**	**2.8100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.4900e-003**	**5.4900e-003**	**1.0000e-005**	**0.0000**	**5.8500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.4045	0.0245	0.0149	18.4434
Unmitigated	15.8055	0.0290	0.0176	21.7752

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.337751 / 0.207009	0.2666	4.4000e-004	2.6000e-004	0.3556
Convenience Market with Gas Pumps	0.104572 / 0.0640924	0.0826	1.3000e-004	8.0000e-005	0.1101
Fast Food Restaurant w/o Drive Thru	1.8212 / 0.116247	1.2359	2.3200e-003	1.4100e-003	1.7141
Fast Food Restaurant with Drive Thru	5.69126 / 0.363272	3.8621	7.2400e-003	4.4100e-003	5.3566
Gasoline/Service Station	0.0398457 / 0.0244215	0.0315	5.0000e-005	3.0000e-005	0.0420
High Turnover (Sit Down Restaurant)	1.51767 / 0.0968725	1.0299	1.9300e-003	1.1800e-003	1.4284
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.07399 / 2.49696	3.2160	5.2500e-003	3.1600e-003	4.2898
Unrefrigerated Warehouse-No Rail	9.13438 / 0	6.0810	0.0116	7.0700e-003	8.4786
Total		**15.8055**	**0.0290**	**0.0176**	**21.7752**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.285062 / 0.194381	0.2290	3.7000e-004	2.2000e-004	0.3042
Convenience Market with Gas Pumps	0.0882586 / 0.0601828	0.0709	1.1000e-004	7.0000e-005	0.0942
Fast Food Restaurant w/o Drive Thru	1.53709 / 0.109156	1.0453	1.9500e-003	1.1900e-003	1.4490
Fast Food Restaurant with Drive Thru	4.80342 / 0.341112	3.2666	6.1100e-003	3.7200e-003	4.5280
Gasoline/Service Station	0.0336297 / 0.0229318	0.0270	4.0000e-005	3.0000e-005	0.0359
High Turnover (Sit Down Restaurant)	1.28091 / 0.0909632	0.8711	1.6300e-003	9.9000e-004	1.2075
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.43845 / 2.34465	2.7621	4.4400e-003	2.6700e-003	3.6688
Unrefrigerated Warehouse-No Rail	7.70941 / 0	5.1324	9.7900e-003	5.9700e-003	7.1559
Total		**13.4044**	**0.0244**	**0.0149**	**18.4434**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	47.2227	2.3416	0.0000	105.7631
Unmitigated	94.4453	4.6832	0.0000	211.5263

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	13.71	2.8471	0.1412	0.0000	6.3765
Fast Food Restaurant w/o Drive Thru	69.11	14.3516	0.7117	0.0000	32.1429
Fast Food Restaurant with Drive Thru	215.98	44.8511	2.2240	0.0000	100.4517
Gasoline/Service Station	1.62	0.3364	0.0167	0.0000	0.7535
High Turnover (Sit Down Restaurant)	59.5	12.3560	0.6127	0.0000	27.6733
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	57.75	11.9926	0.5947	0.0000	26.8594
Unrefrigerated Warehouse-No Rail	37.13	7.7105	0.3823	0.0000	17.2691
Total		**94.4453**	**4.6832**	**0.0000**	**211.5263**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	6.855	1.4235	0.0706	0.0000	3.1882
Fast Food Restaurant w/o Drive Thru	34.555	7.1758	0.3558	0.0000	16.0714
Fast Food Restaurant with Drive Thru	107.99	22.4256	1.1120	0.0000	50.2259
Gasoline/Service Station	0.81	0.1682	8.3400e-003	0.0000	0.3767
High Turnover (Sit Down Restaurant)	29.75	6.1780	0.3064	0.0000	13.8367
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	28.875	5.9963	0.2973	0.0000	13.4297
Unrefrigerated Warehouse-No Rail	18.565	3.8553	0.1912	0.0000	8.6345
Total		**47.2227**	**2.3416**	**0.0000**	**105.7631**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Commercial		Sqft/employee	Emplyoyee per land use	
Fast Food With Drive-Thru	18,750 sf	92	203.8043478	
Fast Casual	6,000 sf	70	85.71428571	
Sit Down Restaurant	5,000 sf	134	37.31343284	
Car Wash	3,596 sf	463	7.766738661	
Gas Station	3,000 sf	463	6.479481641	
Lube Station	2,400 sf	463	5.183585313	
Shopping Center	55,000 sf	938	58.63539446	
Mini Storage	39,500 sf	781	50.57618438	
Total	**133,246 sf**	Total Employee	455.4734508	Based on Institute of Trasnportation Engineers
Residential				
Townhomes	95 Units			
Apartments	400 Units			
Total	**495 Units**	Total Residents	1,346	Based on CalEEMod

APPENDIX F

Biological Resources Assessment

RICHARDS RANCH, LLC

MIXED USE DEVELOPMENT PROJECT

CITY OF SANTA MARIA, CA

BIOLOGICAL RESOURCES ASSESSMENT

WATERS OF THE U.S./STATE JURISDICTIONAL DETERMINATION

CALIFORNIA TIGER SALAMANDER SITE ASSESSMENT

JULY 8, 2022

Prepared for:

RICHARDS RANCH, LLC

PREPARED BY:

David Wolff Environmental, LLC

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RICHARDS RANCH, LLC
MIXED USE DEVELOPMENT PROJECT
CITY OF SANTA MARIA, CA
BIOLOGICAL RESOURCES ASSESSMENT

1.0 EXECUTIVE SUMMARY

The Richards Ranch, LLC Project (project) proposes a mixed use residential and commercial development on approximately 43.64 acres to be annexed into the City of Santa Maria. The proposed project site is essentially an infill parcel between residential developments to the north, south and east of the site. Several vacant parcels surrounded by residential development are to the east. Orcutt Expressway runs along the western border of the project site that is bisected by Union Valley Parkway. Field surveys established existing conditions of the site at the time of the February 8, 2022 Environmental Impact Report Notice of Preparation (EIR NOP) as mostly non-native annual grassland habitat, with two patches of disturbed coastal scrub, stands of non-native eucalyptus and ornamental trees, and several coast live oak trees. Based on a formal jurisdictional determination, no jurisdictional wetlands or other waters of the U.S./State or riparian habitat occur on the project site.

The search and review of the CNDDB revealed 63 special-status species composed of 33 special-status plants, 25 special-status wildlife species, along with five natural communities of special concern with recorded occurrences within an approximately 10-mile radius of the proposed project site. In summary, two formally listed plants and four CNPS rank species associated with sandy soils have the potential to occur. A floristic inventory and rare plant survey conducted during the spring/summer 2022 confirmed that no special-status plant species occur on the project site.

The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for the northern legless lizard and Blainville's (coast) horned lizard. However, the regular mowing/discing of the site, periodic removal of shrubs reduces the suitability and value of the onsite habitat, and focused surveys determined the site does not support these species. A California tiger salamander site assessment determined that Orcutt Expressway (four lane Highway 135), Orcutt Road, and Union Valley Parkway are barriers to any California tiger salamander dispersal onto the site from known or potential breeding ponds. A small aggregation of wintering monarch butterflies (34 in 2022) have been observed in the onsite eucalyptus trees. There is no suitable habitat for any other special-status wildlife species on the site.

The conversion of disturbed non-native annual grassland, disturbed coastal scrub, and stands of non-native trees would not result in the loss CNPS rank plant species. Displacement of common local wildlife within the infill parcel may be considered a less than significant impact. A floristic inventory and rare plant survey conducted in spring/summer 2022

determined the absence of any special-status plants for a no impact determination. Locally common resident and migratory ground nesting birds that may use the site for breeding, foraging, and roosting could be impacted by project construction. Mitigation to avoid potentially significant impacts on nesting birds is recommended. Based on the findings described in this biological resources assessment and addendum, establishing the existing conditions of the proposed project site at the time of the EIR NOP, and incorporation of the recommended mitigation measure, implementation of the proposed project would not result in any substantial adverse effects on biological or botanical resources. No jurisdictional waters of the U.S./State, wetlands, or riparian habitat occur onsite so none would be impacted. Therefore, with mitigation measures incorporated into the project, direct and indirect project impacts on biological resources would be considered less than significant.

2.0 INTRODUCTION, PROJECT DESCRIPTION, AND PURPOSE

The Richards Ranch, LLC Mixed Use Development Project (project) proposes mixed use residential and commercial development on approximately 43.64 acres undeveloped as part of annexation to the City of Santa Maria. The BRA study area habitats including developed roadways totaled 53.57 acres. The site supports disturbed non-native grassland and coastal scrub habitats, and stands of non-native eucalyptus and ornamental trees. Two patches of arroyo willows occurred at mesic sites from developed area runoff that have been removed to deter homeless encampments prior to the EIR NOP and are not considered part of the existing conditions. The project site is essentially an infill site bordered by residential development on north, south, and east. Several vacant parcels next to residential development are on the east. The Orcutt Road alignment weaves through the western portion of the site. Orcutt Expressway (four lane Highway 135) frontage borders the site on the west with the Foxenwood residential development and expanses of active agricultural lands west of Hwy 135. The site is bisected by Union Valley Parkway. Figures 1 and 2 in Appendix A provide regional and vicinity location maps respectively.

The project proposes 27.40 acres of apartment and townhome residential development on the south of Union Valley Parkway (UVP) and 16.24 acres of commercial development concepts to the north of UVP and in the areas between Orcutt Road and Orcutt Expressway (clover leaf). A project layout schematic map is provided as Figure 3.

David Wolff Environmental (DWE) conducted the review of available background data, and biological resources field surveys, focused surveys for special-status wildlife, and a floristic inventory and rare plant survey on the project site on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022. The purpose of the field surveys and this biological resources assessment is to document existing conditions of the proposed project site, determine the suitability and presence/absence of rare, threatened, or endangered plants or wildlife (special-status species), and to evaluate the potential for any direct or indirect significant impacts on biological or waters of the U.S./State resources, or adverse effects on any special-status species.

3.0 EXISTING CONDITIONS – SETTING

The proposed project site is essentially an infill parcel surrounded on all sides by residential developments, with active agriculture to the northwest across Orcutt Expressway (Highway 135) some of which has been recently approved for commercial development. Union Valley Parkway bisects the project site with Orcutt Road realignments creating two "clover leaf" areas proposed for commercial development. A church property is adjacent to the southwest corner of the site. See Figures 2 and 3.

The site is mostly flat gently sloping downwards from east to west along with manufactured embankments and fill slopes from adjacent residential development and Union Valley Parkway construction. Roadside drainage from Union Valley Parkway construction and Orcutt Road realignment is managed through several constructed rocked ditches leading to culverts under Orcutt Road. No natural drainage features are present on the project site and there is no riparian context or natural drainages associated with the onsite roadside drainage ditches. The site is mostly disturbed non-native annual grassland, disturbed coastal scrub, and stands of non-native eucalyptus and landscape trees. There are several coast live oaks around the site but do not constitute an oak woodland habitat. The site appears have been substantially and regularly disturbed over time from Union Valley Parkway construction, and vegetation management (mowing/discing) for fire suppression and removal and discouragement of homeless encampments.

The USDA Natural Resources Conservation Service has identified three predominantly sandy soil series mapping units on the site as shown in Figure 4.

- Betteravia loamy sand 0 to 2 percent slopes (BmA), is a moderately well drained soil on terraces formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface of loamy sand to 36 inches with a cemented layer below the surface horizon. It is not a hydric (wetland) soil.
- Marina sand 0 to 2 percent slopes (MaA), is a somewhat excessively drained soil on terraces formed from eolian deposits (windblown) parent material. This mapping unit is characterized by surface horizons of sand to 88 inches. It is not a hydric (wetland) soil.
- Oceano sand 2 to 15 percent slopes severely eroded (OcD3), is an excessively drained soil on dunes formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface horizons of sand to 60 inches. It is not a hydric (wetland) soil.

Observations of surface soils, gopher mounds, ground squirrel burrows, and 24-inch-deep wetland delineation soil test pits corroborate the very sandy characteristics of these mapping units on the project site.

4.0 METHODS

Prior to field surveys, DWE Principal Ecologist David Wolff conducted a review of available background information including aerial photography of the project area over time (Google Earth), the Natural Resources Conservation Service soil survey, and final environmental impact reports for the Union Valley Parkway Extension/Interchange project and Santa Maria Airport Business Park Specific Plan Amendment (approved commercial development on active agriculture across Hwy 135), and the query results of an approximately 10-mile search radius of the California Natural Diversity Data Base (CNDDB). The CNDDB provided a list and mapped locations of special-status plant and wildlife species, and natural communities of special concern, that have been recorded in the region of the project site. The CNDDB records help to focus the field survey efforts and evaluation of potential project effects on specific species or habitats. It is noted that the CNDDB does not necessarily include all special-status species potentially occurring onsite or in the region, but rather only those that have been recorded by the CNDDB. In addition, the California Native Plant Society (CNPS) online rare plant inventory and the U.S. Fish and Wildlife Information for Planning and Conservation (USFWS IpaC) were queried for relevant potential rare, threatened or endangered plants or wildlife with the potential to occur in the onsite habitats. Data on monarch butterfly winter roost sites was gathered from the Xerces Society for Invertebrate Conservation community science program. To evaluate the potential for wetlands and other waters of the U.S./State, the National Wetlands Inventory (NWI) and USGS National Hydrography Dataset were queried for any onsite mapping of wetland or waters resources.

DWE Principal Ecologist David Wolff reviewed the available background data described above, and biological resources field surveys, focused surveys for special-status wildlife, and a floristic inventory and rare plant survey on the project site on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022. to document existing conditions of the onsite biological resources. Surveys were conducted by walking the entirety of the proposed project site recording plant and wildlife species observed and general site characteristics. Conditions for the site survey were conducive to the purpose of documenting plant and wildlife habitat to establish existing conditions. The March 7, 2022 field survey included a wetland delineation and jurisdictional determination of potential wetlands or other waters of the U.S./State with detailed report included as Appendix C. Additionally, the field surveys provided data to complete a California tiger salamander site assessment report that is included as Appendix D. The results of focused field surveys for special-status wildlife and the floristic inventory and rare plant survey are provided in Appendix E. The Pismo Beach monarch butterfly preserve was visited prior to conducting the December and January field surveys as a reference site for potential monarch butterfly winter use of the project site. The March 7 and April 27, 2022 field surveys included raking the surface around coastal scrub shrubs to attempt detection of legless and/or horned lizards. The overall purpose of the field surveys was to document existing conditions in terms of habitat for plant and wildlife species, determination of the presence/absence of special-status plant or wildlife species, the

potential to support wetland and/or riparian habitats, and/or other waters of the U.S./State. The study area habitat types were described by the aggregation of plants and wildlife based on the composition and structure of the dominant vegetation observed at the time the field reconnaissance was conducted and through review of multiple years of aerial photography.

DWE Principal Ecologist David Wolff reviewed the available background information and available aerial photography, conducted the field surveys, and is the primary author and principal in charge of report preparation. The survey data collected on plant and wildlife species and conclusions presented in this biological resources assessment are based on the methods and field reconnaissance conducted over the project site as described above.

5.0 RESULTS

5.1 HABITAT TYPES AND PLANT COMMUNITIES

Plant communities are generally described by the assemblages of plant species that occur together in the same area forming habitat types. The best fit based on observed site conditions for community alliance and alliance codes habitat classifications used in this report follow, *A manual of California vegetation, 2nd edition* (Sawyer et al. 2009) and California Department of Fish and Wildlife *California Natural Community List*. Plant names used in this report follow *The Jepson Manual, Vascular Plants of California, Second Edition Thoroughly Revised and Expanded* (Baldwin et al. 2012). The proposed project site supports three plant communities, non-native grassland over the majority of the site, disturbed coastal scrub to the north of Union Valley Parkway, and stands of non-native trees throughout. There are 15 coast live oak trees at various locations on the site. Figure 5 in Appendix A provides a habitat map showing the locations and extent of the habitat types on the proposed project site. Figure 7 includes a set of onsite representative photographs from DWE field surveys. Figure 8 provides a series of aerial photographs over time demonstrating periodic site disturbances mostly from what appears to be construction of Union Valley Parkway and the realignment of Orcutt Road. Table A-1 in Appendix E provides a complete list of plant species observed during DWE field surveys.

5.1.1 WILD OATS NON-NATIVE GRASSLAND

The Wild Oats Non-Native Grassland or *Avena (barbata, fatua) Semi-Natural Herbaceous Stands* (CDFW: 44.150.02), is best described as disturbed non-native annual grassland habitat from the past disturbance and regular weed suppression discing over time. The disturbed non-native annual grassland habitat covers most of the project site. It is dominated by non-native annual grasses and herbaceous broadleaf plant species, with few native forbs and wildflowers. Dominant plant species in the disturbed annual grassland habitat include oats (*Avena spp.*), ripgut brome (*Bromus diandrus*), and veldt grass (*Ehrharta calycina*). Other associated grasses and herbaceous broadleaf species include, soft chess (*Bromus hordeaceus*), filarees (*Erodium* spp.), wild radish (*Raphanus sativus*), croton (*Croton californicus*),

telegraph weed (*Heterotheca grandiflora*), thistles and mustards. The few wildflowers observed included fiddleneck (*Amsinckia intermedia*), California poppy (*Eschscholzia californica*), miniature lupine (*Lupinus nanus*), and popcorn flower (*Plagiobothrys nothofulvis*). The entirely of the annual grassland habitat had been recently disced as evidence by discing furrows throughout. Approximately 33.66 acres of disturbed non-native annual grassland habitat occur on the study area.

On the north side of Union Valley Parkway within the disturbed non-native annual grassland habitat is a small patch of 10 single and multi-trunk oak trees with approximate diameter at breast height (dbh) with trunk inches in parenthesis as follows (8), (10,10), (8,4,12), 15), (10), 10, 5, 4), (3,3), (3,2), (20,5), and (8,6,6,6). One oak tree is along Orcutt Road (6). Approximately 0.33 acre of coast live oak canopy (including those below) occurs within the study area.

5.1.2 COASTAL SCRUB – COYOTE BRUSH SCRUB / SILVER BUSH LUPINE SCRUB (DISTURBED)

The coyote brush scrub, or *Baccharis pilularis – Artemesia californica Shrubland Alliance* (CDFW: 32.060.05), is considered a sub-type of central Lucian coastal scrub. It differs primarily by the dominance of coyote brush. This scrub type habitat classification consists of coyote brush and California sagebrush shrubs with non-native grassland understory herbaceous species. However, on the study area only silver bush lupine (*Lupinus albifrons*) comprises the coastal scrub habitat onsite. The disturbed coastal scrub (from past removals and ongoing weed suppression discing) occurs on the north side of Union Valley Parkway with what appears to be disturbance and removal between 2012 and 2015 possibly associated with Union Valley Parkway construction with regrowth over time. More recently in 2021 a patch of dense disturbed coastal scrub was removed to discourage homeless encampments. Figure 8 provides a series of aerial photographs showing the removal and regrowth of the coastal scrub habitat areas over an approximately 27-year time period. Approximately 4.14 acres of disturbed coastal scrub habitat mapped off a January 2021 aerial photograph occurs in the study area.

5.1.3 NON-NATIVE EUCALYPTUS AND ORNAMENTAL TREE STANDS

The project site has several stands (wind rows) and individual eucalyptus trees mostly along the south side and north side of Union Valley Parkway frontage, and along the eastern border of the site north of Union Valley Parkway. It appears to be around 100 individual trees. There is an understory of non-native grassland amongst the typical accumulated eucalyptus leaf litter and bark debris. Approximately 7.67 acres of eucalyptus stands/trees occur in the study area.

The southwest corner of the project site supports an approximately 3.05-acre stand of mostly non-native trees and shrubs best described as an "Ornamental Wood" that does not fit any Manual of Vegetation community alliances. Non-native tree species include Chinese elm,

liquid amber, Bailey's acacia, African sumac, eucalyptus, olive, and lemon. The few native plant species in the "wood" include three coast live oak trees with dbh (10,8), (15), and (15), coyote brush, and California blackberry. While these are generally ornamental species, this stand appears as an unmaintained mix of trees and shrubs.

5.2 WILDLIFE

The project site oats, ripgut brome, and veldt grass dominated non-native grassland and coastal scrub habitats mowed and disced annually for fire/weed suppression, amidst the surrounding mosaic of urbanized residences and the Orcutt Expressway corridor around the project site, provides minimal quality habitat for locally common wildlife species that have become adapted to the residential environment. Common wildlife expected to use the site include raccoons, opossum, gopher, ground squirrel, and old world rats and mice. Bird species observed mostly around the stands of eucalyptus included acorn woodpecker, norther flicker, Audubon's warbler, Anna's hummingbird, red tailed hawk, and turkey vultures flying over. At some point prior to mowing or coastal scrub habitat disturbance when the grasses and shrubs are growing the site could provide habitat for ground/grassland/shrub nesting songbird species such as sparrows and finches.

The habitat on the project area does not support a substantial amount habitat in the context of the greater expanse of surrounding urban development and active agricultural lands. As such, the isolated site surrounded by development does not represent a migratory or movement corridor for wildlife.

5.3 WATERS OF THE U.S., WETLANDS, AND WATERS OF THE STATE

No jurisdictional wetlands or other waters of the U.S./State or riparian habitat under any regulatory authority or definition occur on the project site. A detailed wetland delineation and jurisdictional determination report is provided in Appendix C with the following summary of these findings.

There is a series of constructed rock-lined stormwater ditches and culverts receiving upland and roadside runoff from storm drain inlets on UVP and Orcutt Road that lacked any vegetation, wetland or otherwise. The varied network of rock lined roadside drainage ditches did not support any wetland vegetation only sporadic non-wetland non-native grasses. These ditches likely only flow in immediate response to impervious road surface runoff during rainfall. The current Rapanos guidance for definition of waters of the U.S. directs the Corps to not take jurisdiction over ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. The review of aerial photography over time clearly demonstrates that the onsite drainage ditches are excavated in uplands and are only draining uplands mostly as a result of UVP and Orcutt Road realignment construction.

Two patches of arroyo willow (*Salix lasiolepis*) associated with mesic (moist) areas from upland and roadway runoff occurred in the study area but were removed in 2021 to discourage homeless encampments. As such, they are not considered part of the existing conditions based on the February 8, 2022 EIR NOP. Based on review of aerial photographs, one patch of 0.55 acre along the east property border appears to have formed after the residential development construction and associated impervious surface runoff. There was no evidence of a drainage feature, culvert outfall, or other evidence of a drainageway or basin topography through the area or project site during DWE field review of the cleared area. This likely mesic (moist) area of willows may be from stormwater runoff from the low point of the adjacent townhome development. No hydric soil indicators or indicators of wetland hydrology are present. The National Wetlands Inventory (NWI) has a Freshwater Emergent Wetland polygon mapped within this patch of willows. The NWI is a broad view aerial photograph mapping of potential wetlands that requires field verification. In this case, the mapping is not an accurate depiction of the previous site conditions of a willow patch.

The second patch of 0.41 acre along Orcutt Highway appears to be supported by road runoff ditches, storm drain inlets, and culverts under the roadways. One small oak tree of unknown size occurred with these willows. Both patches were removed in 2021 to discourage homeless encampments. This patch appears to be persistent in location and extent from upland and roadside runoff from 1994 to 2021. No hydric soil indicators or indicators of wetland hydrology are present.

A total of approximately 0.96 acre of willows in the study area were mapped from the 2021 aerial photograph. Neither willow patch is associated with any recent or historic natural drainageway and lack any riparian context as a classified plant community or habitat type. A wetland delineation and jurisdictional determination report detailing these findings is included as Appendix C. Figure 6 in Appendix A provides a jurisdictional determination map. Based on collection of data at three data observation points in the above described removed willow patches (See Appendix C), while the presumed 100 percent cover of arroyo willow (FACW) meets the hydrophytic (wetland) vegetation criteria, in can be determined that the willow patches are not jurisdictional wetlands because of the lack of hydric soils and lack of any primary or secondary indicators of wetland hydrology. Further, there is no evidence of any historic natural drainage features at either of these willow locations or anywhere else on the site. No other potential wetland features were observed to be investigated.

The State Water Resources Control Board (Water Board) issued policy, procedures, and wetland definition for the discharge of dredged or fill material into waters of the State (Procedures). In brief, the Procedures define wetlands as waters of the State to be consistent with the federal three parameter definition requiring the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. As described above and detailed in Appendix C, the project site does not support any three parameter wetlands. As such, there are no State wetlands present on the project site.

The Procedures are silent on artificial ditches constructed wholly in and draining only uplands that is the case for the network of roadside ditches constructed mostly for the recent UVP extension and Orcutt Road realignment. There is no evidence of any historic natural drainage through the project site, so the ditches do not represent realigned natural drainages, and do not represent a bed, bank, or channel of a river or stream. As such, the network of roadside drainage ditches do not represent waters of the State.

Based on the above summary of findings and jurisdictional determination report included as Appendix C, no waters of the U.S./State, wetlands, or riparian habitat under any regulatory jurisdictions or definitions occur on the project site.

5.4 SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (FESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the CDFW; and plants occurring as a rank 1B, 2, and 4 of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California.* Natural Communities of Special Concern are habitat types considered rare and worthy of tracking in the California Natural Diversity Database (CNDDB) by the CNPS and CDFW because of their limited distribution or historic loss over time.

The search and review of the CNDDB, CNPS Inventory, and USFWS IpaC, revealed 63 special-status species composed of 33 special-status plants, 25 special-status wildlife species, along with five natural communities of special concern with recorded occurrences within an approximately 10-mile radius of the proposed project site. The following briefly describes or summarizes the special-status species issues and potential for occurrence on the project site. Figure 6 provides CNDDB mapped locations and Table B-1 in Appendix B provides a list of special-status species recorded in the CNDDB that includes scientific and common name, listing status, habitat requirements, and potential to occur on the project site.

5.4.1 Special-Status Botanical Resources

The CNDDB revealed the recorded occurrences of 33 special-status plant species and five natural communities of special concern within a 10-mile radius of the project site, eight of which are formally listed under the Federal or State Endangered Species Acts with the remainder being noted with a CNPS rank suggesting rarity. The five natural communities of special concern Central Dune Scrub, Central Foredunes, Coastal and Valley Freshwater Marsh, Southern Vernal Pool, and Southern California Three-spine Stickleback Stream do not occur on the entirely upland project site that is dominated by disturbed non-native

annual grassland, disturbed coastal scrub, and stands of non-native trees. While the site is predominantly eolian (windblown) sands in origin, the patches of disturbed coastal scrub habitat do not represent a sensitive dune community. None of the CNDDB plant or natural community occurrences are mapped within the project site. The floristic inventory and rare plant survey conducted on the project site on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022 resulted in no observations of any special-status plant species.

The special-status plant species occurrences recorded in the CNDDB include perennial woody shrubs and herbaceous annuals that are commonly associated with a specific soil type, moisture regime (marsh/creek/wetlands), habitat type, elevation range, and proximity to the immediate coast that dictates the range or microhabitat of the species and potential to occur on the project stie. The following provides a suitability analysis for special-status plant species with CNDDB recorded occurrences in the region. In summary, two formally listed plants and six CNPS rank species associated with sandy soils have the potential to occur. No special-status woody shrubs, wetland associated plants, or sandy soil plants have been observed on the project site.

The perennial species such as all the manzanitas (La Purisima, Refugio, sand mesa; *Arctostaphylos* spp.*)*, Lompoc yerba santa (*Eriodictyon capitatum*), Santa Barbara ceanothus (*Ceanothus impressus* var. *impressus*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), mesa and Kellogg's horkelia (*Horkelia cuneata* var. *puberula; H. c.* var*. sericea*), and slender bush-mallow (*Malacothamnus gracilis*) would have been noticeable and identifiable throughout the year and were not observed during the DWE floristic inventory and rare plant survey.

The special-status plant species recorded in the CNDDB known from mesic, moist, seep, wetland type habitats occurring in the region are marsh sandwort (*Arenairia paludicola*), Bolaner's water-hemlock (*Cicuta maculata* var. *bolanderi*), La Graciosa thistle (*Cirsium scariosum v*ar. *loncholepis*), California saw-grass (*Cladium californicum*), aparejo grass (*Muhlenbergia utilis*), Gambel's water cress (*Nasturtium gambelii*) and San Bernardino aster (*Symphyotrichum defoliatum*)). No natural mesic/moist/wetland habitats occur on the project site; therefore, these species are not expected to occur. None of these species were observed during the DWE floristic inventory and rare plant survey.

Special-status dune plants recorded in the CNDDB associated with various forms of dunes near the immediate coast that are not expected to occur on the project site include aphanisma (*Aphanisma blitoides*), surf thistle (*Cirsium rhothophilum*), beach spectaclepod (*Dithyrea maritima*), dune larkspur (*Delphinium parryi* ssp. *blochmaniae*), and beach layia (*Layia carnosa*). Special-status plants associated with non-sandy conditions such as rock outcrop, granite, clay, or shale soils not expected to occur on the project site include Miles' milk-vetch (*Astragualus didymocarpus* var. *milesianus*), straight-awned spineflower (*Chroizanthe rectispina*), and pale-yellow layia (*Layia heterotricha*). None of these species were observed during the DWE floristic inventory and rare plant survey.

Sandy soil associated special-status plants with the low potential to occur on the disturbed habitats on the project site include Hoover's bent grass (*Agrostis hooveri*), seasinde bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), Gaviota tarplant (*Deinandra increscens* ssp. *villosa*; out of current known range), paniculate tarplant (*Deinandra paniculata*), (Blochman's leafy daisy (*Erigeron blochmaniae*), three species of monardella (M*onardella sinuata* ssp. *sinuata*, *M. undulata* ssp. crispa, *M.u.* ssp. *undulata*), and black flowered figwort (*Scrophularia atrata*). None of these species have been observed by DWE field surveys. None of these species were observed during the DWE floristic inventory and rare plant survey.

5.4.2 Special-Status Wildlife

The CNDDB and USFWS IpaC search revealed the recorded occurrences of 25 special-status wildlife species within the region of the project site. Special-status wildlife species known from the region evaluated for this study are discussed below by groups based upon habitat preferences, specific habitat use requirements (i.e. terrestrial or aquatic), mobility, and migratory patterns. Table B-1 provides listing status, habitat detail, and potential to occur on the project site for each of the species discussed below.

Aquatic/Riparian Species – The CNDDB has recorded occurrences for aquatic stream associated tidewater goby (*Eucyclogobius newberryi*), unarmored three-spine stickleback (*Gasterosteus aculeatus williamsoni*), arroyo chub (*Gila orcuttii*), and steelhead (*Oncorhynchus mykiss irideus*). No stream habitat or any drainages are on the project site so these species would not occur.

The project site does not support habitat for any of the highly aquatic permanent pond, vernal pool, or riverine/riparian species vernal pool fairy shrimp (*Branchinecta lynchi*), California tiger salamander (*Ambystoma californiense*), arroyo toad (*Anaxyrus californicus*), western pond turtle (*Emys marmorata*), California red-legged frog (*Rana draytonii*), or two-striped garter snake (*Thamnophis hammondii*). These species would not occur on the project site.

The CNDDB has a 2011 western spadefoot (toad) (*Spea hammondii*) occurrence of 50 adults calling 600+ feet away offsite in a rain filled pool at the southeast corner of Hummel Drive and UVP. Intervening upland habitat between Hummel Drive and the project site was obliterated for construction of UVP and a detention basin. No suitable seasonal pools occur on project site. Interestingly, the UVP Final EIR had no mention of this occurrence even though the project ran along the site and appears to have disturbed adjacent uplands during construction.

The CNDDB has recorded occurrences of the California red-legged frog in the vicinity of the project site to the west of Highway 135 in ditches and ponds around the Santa Maria Airport, and agricultural ponds and ditches mostly to the west around Highway 1 and Black Road. There is no aquatic habitat of any kind on the project site that may attract a California red-legged frog from other areas. In addition, while the California red-legged frog may disperse

across uplands between breeding sites, Highway 135 creates a barrier to movement of frogs from the west, and there are no breeding sites in the urbanized development around the project site that might prompt movement across the site. As such, there is no suitable breeding or dispersal habitat on the project site for the California red-legged frog.

The California tiger salamander (*Ambystoma californiense*) spends most of its life in upland underground refuges in small mammal burrows and can disperse upwards of 1.3 miles from their temporary (seasonal) breeding ponds. There are known breeding ponds approximately 1.4 miles west of Highway 135 on airport lands and elsewhere mostly to the south. There is substantial residential development, active agriculture, curbs along UVP to the west, and the four-lane Highway 135 separating the project site from any known or potential breeding ponds that represents a positive barrier to any California tiger salamander dispersal onto the project site. The site is mapped by the USFWS as outside of the western Santa Maria/Orcutt metapopulation and potential distribution. Additionally, curbs along Orcutt Road and portions of UVP represent additional barriers to CTS movement. As such, the project site does not support upland dispersal or refuge habitat for the California tiger salamander. A complete CTS site assessment report substantiating these findings is provided in Appendix D.

The project site does not support any habitat for the marsh associated tricolored blackbird (*Agelaius tricolor*) or riparian obligate nesting migratory birds yellow warbler (*Setophaga petechia*) or least Bell's vireo (*Vireo bellii pusillus*), as such, they would not occur on the project site.

Monarch Butterfly – The monarch butterfly (*Danaus plexippus*) uses coastal woodlands and eucalyptus/pine tree stands for fall and winter roosts typically from October through January. The project site supports stands of trees that have been observed with a small aggregation fall/winter roosting site monarch butterflies dating back to 1998 with 176 individuals recorded. Currently 34 were recorded in 2021/2022. DWE visited the Pismo Beach monarch butterfly preserve prior to conducting field surveys on the project site. The 2021-2022 season documented over 22,000 monarch butterflies at the Pismo preserve, considered an excellent year compared to recent years. Monarch butterflies were readily observable in flight (100's in flight) and roosting at the Pismo preserve serving as a reference for project site surveys. No monarch butterflies were observed on the project site by DWE on the December 17, 2021 field survey under ideal sunny 64°F conditions with little wind. Similar ideal conditions for observing monarch butterflies occurred on DWE January 5, 2022 field survey. Four monarch butterflies were observed in flight and stationery on the east edge of the eucalyptus stand on the south side of the project site. Xerces Society community science program recorded 28 monarchs in November 2021 and 34 at "New Years" counts. Table 2 below provides the observation data from the CNDDB and Xerces Society monarch butterfly counts. The most recent observations of less than 40 monarch butterflies does not represent a substantial occurrence of a roosting site compared to the other Xerces Society monitoring sites of 500, 1,000s, and upwards to 20,000 individuals at winter roost sites.

Interestingly, the UVP Final EIR had no mention of this roost site or impacts to monarch butterflies even though the project cut through the northern edge of this stand of eucalyptus.

TABLE 2
MONARCH BUTTERFLY OVER WINTERING ROOST COUNTS
CNDDB OCCURRENCE #354; XERCES UNION VALLEY PARKWAY SITE ID 2688

CNDDB OCCURRENCE #354 COUNTS	
NOVEMBER 1998	71
DECEMBER 1998	176
FEBRUARY 1999	119
MARCH 1999	5
XERCES SOCIETY COMMUNITY SCIENCE COUNTS	
YEAR 2010	NOT COUNTED
YEAR 2011	NOT COUNTED
YEAR 2012	NOT COUNTED
YEAR 2013	NOT COUNTED
YEAR 2014	NOT COUNTED
YEAR 2015	19
YEAR 2016	30
YEAR 2017	18
YEAR 2018	2
YEAR 2019	0
THANKSGIVING COUNT 2021	28
NEW YEAR'S COUNT 2021-2022	34

SOURCE: *CALIFORNIA NATURAL DIVERSITY DATA BASE, ACCESSED MARCH 2022; XERCES SOCIETY FOR INVERTEBRATE CONSERVATION WESTERN MONARCH COUNT COMMUNITY SCIENCE PROGRAM*

Reptiles – The northern legless lizard *(Anniela pulchra)* is closely associated with sandy or very friable loamy soils under coastal scrub or woodland vegetation with soil moisture and vegetative cover being essential. The Blainvilles's (coast) horned lizard *(Phrynosoma blainvillii)* occurs in a wide variety of habitats with sandy soils, abundant ant colonies for food, open areas for sunning, and shrubs for cover needed. The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for these two species. However, the regular mowing/discing of the site and periodic removal of shrubs reduces the suitability and value of the onsite habitat to support these species. DWE field surveys on March 7, 2022 and April 27, 2022 that included raking around the coastal scrub habitat did

not result in any observations of either the legless or horned lizards. Further, the site disturbance over time and infill nature renders the site as unsuitable for these species

Upland Birds – The southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) and California horned lark (*Eremophila alpestris actia*) can occur in grassland and scrubland habitats in the region. The project site could support these species although they were not observed during DWE field surveys. The western burrowing owl *(Athene cunicularia)* use grasslands and areas with low or sparse vegetation for foraging and burrow sites typically associated with ground squirrel burrows. They may be nomadic winter migrants in coastal regions but typically breed further inland. No western burrowing owls or were observed on the project site and may be precluded by regular discing and mowing.

Mammals – The pallid bat (*Antrozous pallidus*) typically roosts in rocky areas and the Townsend's big eared bat *(Corynorhinus townsendii)* roost in colonies or individually in caves, mines, and large undisturbed spaces in buildings or other structures. There is no rocky areas or "structure" habitat to support pallid bat or Townsend's big eared bat roosts on the project site. The western red bat (*Lasiurus blossevillii*) roosts primarily in trees in cismontane and montane forests and riparian habitat that are not represented on the project site.
The American badger *(Taxidea taxus)* is a grassland species needing abundant small mammal prey and are easily detected by their distinctive half-moon shaped burrows. There was no evidence of badger use observed on the project site during DWE field surveys that included close inspection of burrows with the obvious tailings from ground squirrels. Very little small mammal use was observed as well suggesting the isolated infill site has low suitability for the American badger.

6.0 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

6.1 SUFFICIENCY OF BIOLOGICAL DATA

The DWE field surveys on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022 are sufficient to; 1) adequately establish existing conditions of the project site and context in the landscape and land use mosaic in the vicinity; 2) determine that the site does not support any special-status plant or wildlife species; 3) determine the absence of waters of the U.S./State, wetland or riparian habitats onsite, and 4) adequately evaluate proposed project impacts and provide recommended mitigation measures to reduce potential significant impacts to a less than significant level. The data collected as articulated in this report provide sufficient biological resources information to adequately address potential significance of impacts on biological resources.

6.2 IMPACT ASSESSMENT

Botanical Resources – The proposed project would develop the entire 43.64-acres of non-native annual grassland habitat, disturbed coastal scrub, and non-native stands of trees including oak trees into mixed use commercial and residential urban uses that would include

tree and shrub landscaping around the buildings. No natural communities of special concern occur on the project site so none would be impacted. The sandy soils of the grassland and coastal scrub habitat areas could support non-listed special-status plant species such as the monardellas or the Blochman's leafy daisy, however they were not observed during the DWE floristic inventory and rare plant survey. Other special-status plant species were not observed and are not expected to occur.

Wildlife Resources – Construction of the proposed project and conversion of the entire site to commercial and residential development could result in the mortality and/or displacement of locally common wildlife such as resident and migratory birds, raccoons, opossums, and small mammals.

- The sandy soil and disturbed coastal scrub habitat onsite support potentially suitable habitat for the northern legless lizard and Blainville's horned lizard, albeit not observed and the low-quality disturbed infill habitat. As such, there would be no impact on the northern legless lizard and Blainville's horned lizard.
- There is a low likelihood of western spadefoot refuge occurrence on the project site from the 2011 offsite recorded observation given it is over 600 feet away and the relatively recent disturbance to the intervening habitat. As such, potential impacts on the western spadefoot refuge habitat would be considered less-than significant.
- Removal of the eucalyptus trees would eliminate the opportunity for the small winter roost aggregation of monarch butterflies. There are other nearby groves of eucalyptus monitored by the Xerces Society that could serve as a winter roost site after the project site trees are removed. As such, potential impacts on the monarch butterfly winter roost habitat would be considered less-than significant.
- The project site is essentially an infill location for habitat surrounded by existing residential development and active agriculture, within the developed lands of Orcutt and the City of Santa Maria. The isolated site surrounded by development does not represent a movement corridor for wildlife. As such, there would be no impact on any wildlife movement corridors.

Vegetation removal (tree cutting, clearing and grubbing) during the nesting season for birds could result in the destruction of active bird's nests including tree and ground nesting birds. Destruction of active nests is prohibited by the Fish and Game Code of California Sections 3503 and 3503.1 (raptors specifically), and the Migratory Bird Treaty Act. ***As such, this could be considered a potentially significant impact.*** It is worthy of noting that the addition of tree and shrub landscaping around the development may offset the tree removal and benefit songbird nesting activity.

Project approval that includes the removal of onsite trees requires compliance with the City's landscape standards for tree removals and mitigation plantings. As such, this is considered a less than significant impact with no additional mitigation measures recommended.

6.3 RECOMMENDED MITIGATION MEASURES

The following mitigation measure is recommended to avoid, minimize, and mitigate for potentially significant impacts on nesting birds.

To reduce any potentially significant impact on nesting birds from vegetation removal, the following mitigation measures are recommended.

MM BIO-1: *Vegetation removal and initial site disturbance shall be conducted between September 1 and January 31 outside of the nesting season for birds. If vegetation and/or tree removal is planned for the bird nesting season (February 1 to August 31), then preconstruction nesting bird surveys shall be conducted by a qualified biologist to determine if any active nests would be impacted by project construction. If no active nests are found, then no further mitigation shall be required.*

If any active nests are found that would be impacted by construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected with the non-disturbance buffer zone until the adults and young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.

7.0 CONCLUSIONS

Based on the findings described above establishing the existing conditions of biological resources within the project site as of the February 8, 2022 EIR NOP, and incorporation of the recommended mitigation measures, implementation of the proposed project would not result in any substantial adverse effects on biological, botanical, or wetland habitat resources. ***Therefore, with mitigation measures incorporated into the project, direct and indirect project impacts on biological resources would be considered to be less than significant.***

8.0 REFERENCES

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APPENDIX A

FIGURES

FIGURE 1: REGIONAL LOCATION MAP
FIGURE 2: VICINITY LOCATION AERIAL MAP
FIGURE 3: PROJECT SCHEMATIC MAP
FIGURE 4: SOILS MAP
FIGURE 5: HABITAT MAP
FIGURE 6: JURISDICTIONAL DETERMINATION MAP
FIGURE 7: CNDDB OCCURRENCE MAP
FIGURE 8: REPRESENTATIVE PHOTOGRAPHS
FIGURE 9: AERIAL PHOTOGRAPHS OVER TIME

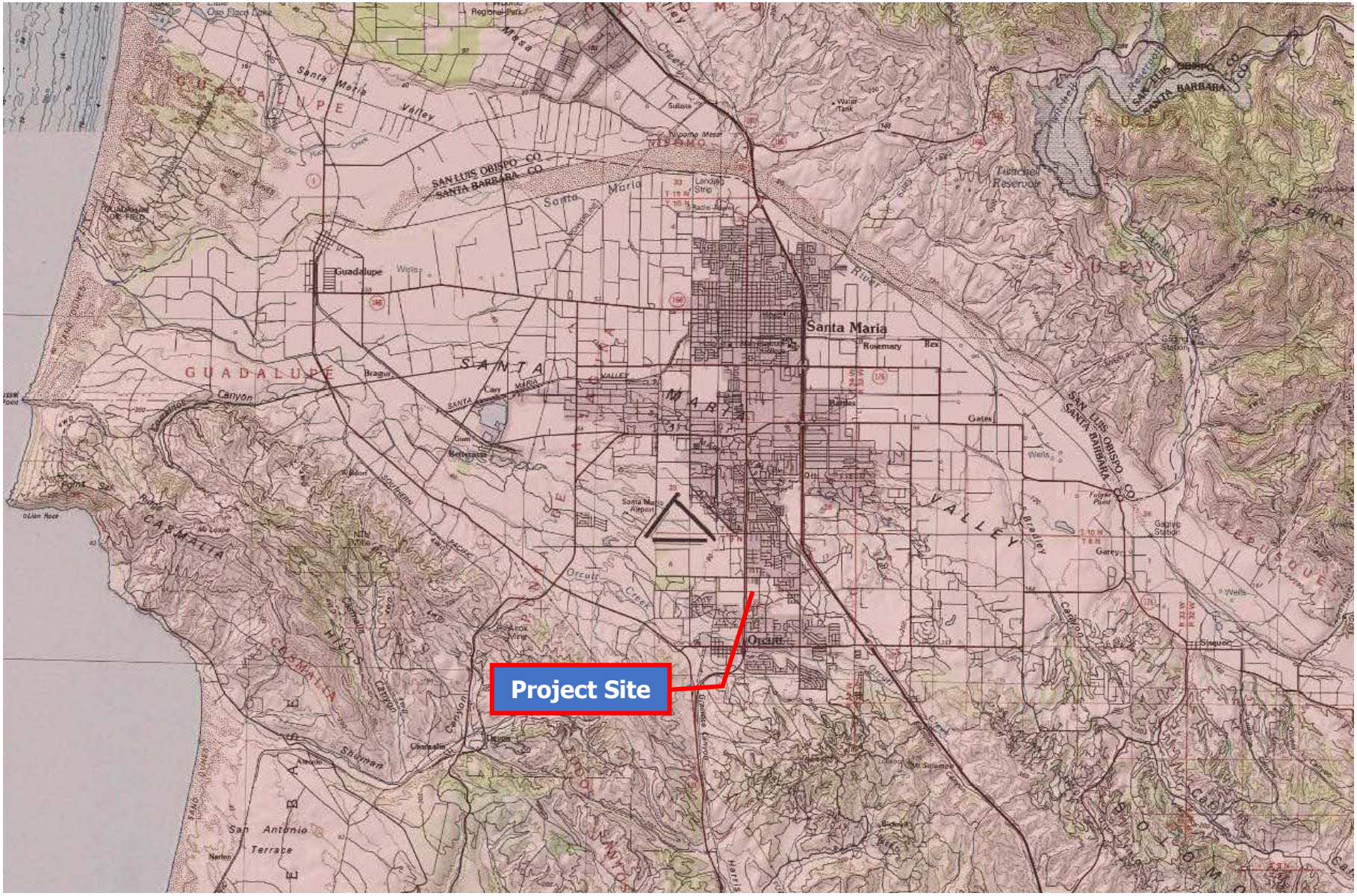


FIGURE 1 – USGS REGIONAL TOPO MAP



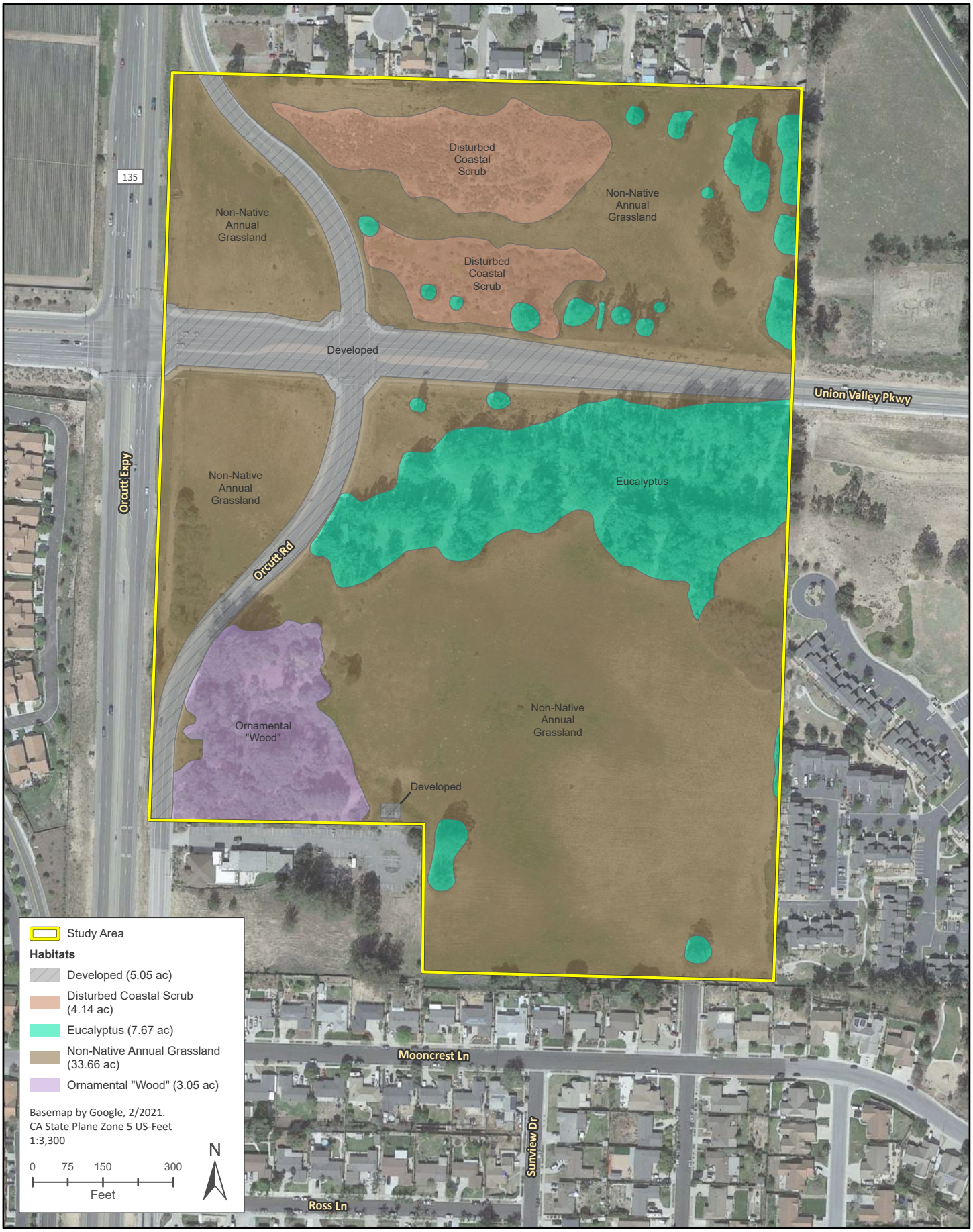
FIGURE 2 – VICINITY AERIAL PHOTO MAP



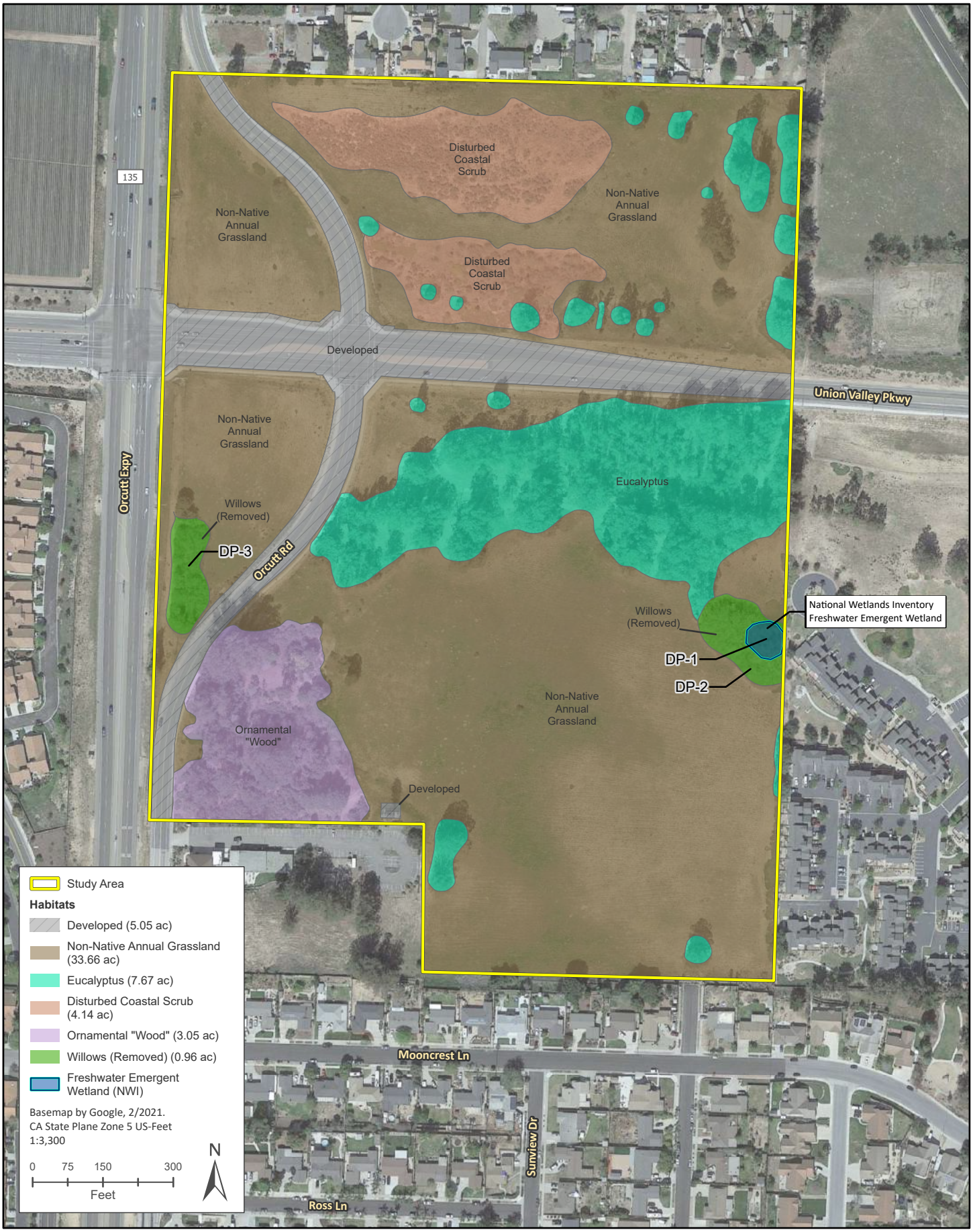
FIGURE 3 – PROJECT DETAIL SCHEMATIC



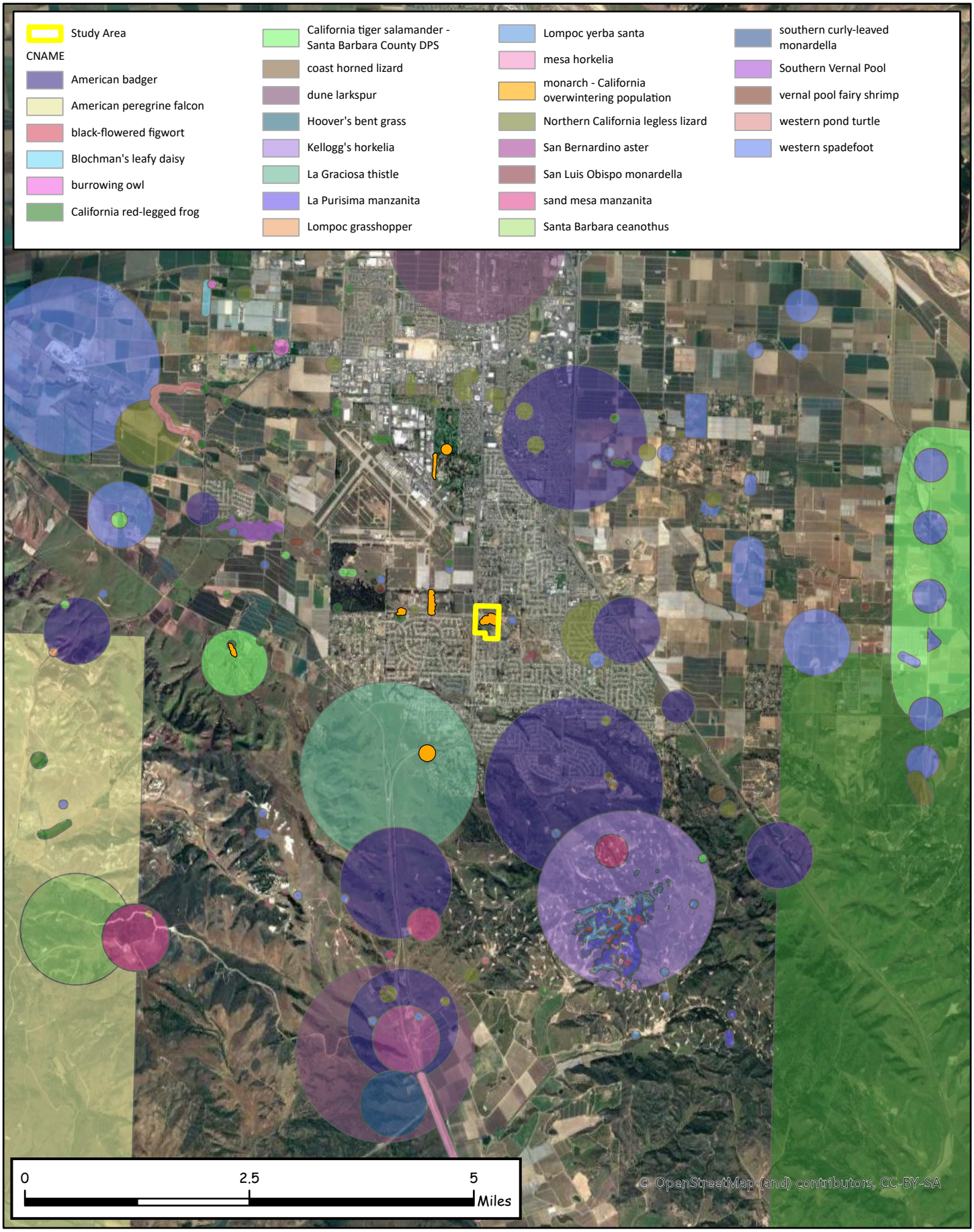
FIGURE 4 – SOILS MAP



David Wolff Environmental, LLC sage institute	Richards Ranch Mixed Use Development Project	**Figure 5**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENT	**Habitat Map**



David Wolff Environmental, LLC sage institute	Richards Ranch Mixed Use Development Project	**Figure 6**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENT	**Jurisdictional Determination Map**



sage institute inc David Wolff Environmental, LLC	Richards Ranch Mixed Use Development Project	**Figure 7**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENTS	**CNDDB Map**



Photo 1: View west at project site north of UVP at non-native annual grassland, eucalyptus, and disturbed coastal scrub (arrow). **12/17/2021**



Photo 2: View west at disturbed coastal scrub on project site north of UVP. Fire suppresion discing furrows evident. **12/17/2021**



Photo 3: View east at disturbed coastal scrub, disced grassland, and eucalyptus row along east border of site north of UVP. **12/17/2021**



Photo 4: View west north side of UVP showing discing furrows in disturbed grassland and disturbed coastal scrub. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS



Photo 5: View east at eucalyptus stands and grassland, and ice plant along both sides of UVP. **12/17/2021**



Photo 6: View north from south side of UVP at eastern project boundary development, eucalyptus, & willow removal area (arrow). **12/17/2021**



Photo 7: View south at eastern project boundary showing adjacent development & willow removal area (arrow). **3/7/2022**



Photo 8: View west at willow removal area lacking any drainage pattern, grassland, and euclyptus along on south side of UVP. **12/17/2021**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS



Photo 9: View west at project area south of UVP at grassland disc furrows, eucalyptus, and non-native ornamental "wood" (arrow). **3/7/2022**



Photo 10: View west at ornamental and native tree "wood" on the south side of UVP. **12/17/2021**



Photo 11: View south on north side of UVP showing disced grassalnd and rows of eucalyptus trees on both sides of UVP. **3/7/2022**



Photo 12. View north at non-native grassland and small patch of single and multi-trunk coast live oaks on north side of UVP. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS



Photo13: View west at wetland determination data point DP-1 (arrow) in center of willow removal area. No basin or drainage pattern. **3/7/2022**



Photo 14: View east at wetland determination data point DP-1 (arrow) in center of willow removal area. No basin or drainage pattern. **3/7/2022**



Photo 15: View north at wetland determination data point DP-2 (arrow) near edge of willow removal area. No basin or drainage pattern. **3/7/2022**



Photo 16. View south at wetland determination data point DP-2 (arrow) near edge of willow removal area. No basin or drainage pattern. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS



Photo 17: View north at wetland determination data point DP-3 (arrow) in center of willow removal area. Buried culvert yellow arrow. **3/7/2022**



Photo 18: View east at wetland determination data point DP-3 (arrow) in center of willow removal area. Road drainage concrete culvert. **3/7/2022**



Photo 19: View south at constructed rocked ditch drainage to culvert under Orcutt Road to DP-3 area. **3/7/2022**



Photo 20. View north rocked roadside drainage ditch & stormdrain inlet along Orcutt Road towards intersection and culvert under UVP. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS



Photo 21: View north at stormdrain inlet and constructed ditch drainage management system on UVP at Orcutt Road. **12/17/2021**



Photo 22: View south at constructed rocked ditch roadside drainage management system on Orcutt Road at UVP. **12/17/2021**



Photo 23: View south at constructed ditch drainage management system and culvert under Orcutt Road. **12/17/2021**



Photo 24. View west at drainage rock at culvert under Orcutt Road. No continued drainage pattern. **12/17/2021**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS



AERIAL VIEW SEPTEMBER 1994 – Showing stands of trees, coastal scrub, and grassland habitats. Some site disturbance evident.



AERIAL VIEW JUNE 2002 - Showing stands of trees, coastal scrub, and grassland habitats. Some site disturbance evident.

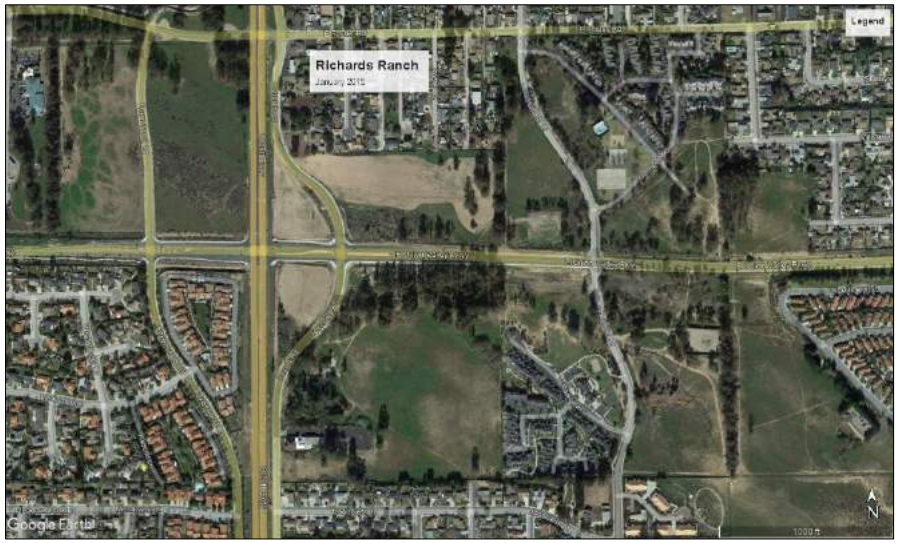


AERIAL VIEW JUNE 2012 – Showing stands of trees, coastal scrub, and grassland habitats. Substantial site disturbance and Union Valley Parkway construciton evident.



AERIAL VIEW APRIL 2013 - Showing stands of trees, coastal scrub, and grassland habitats. Substantial site disturbance and Union Valley Parkway construciton evident.

FIGURE 9 – AERIAL VIEW OVER TIME



AERIAL VIEW JANUARY 2015 - Showing stands of trees, coastal scrub, and grassland habitats. Substantial site disturbance and Union Valley Parkway completion evident.



AERIAL VIEW JANUARY 2021 - Showing stands of trees, coastal scrub, and grassland habitats. Regrowth of coastal scrub habitat in northern portion of the site evident.

FIGURE 9 – AERIAL VIEW OVER TIME

APPENDIX B

TABLE B-1: CNDDB SPECIAL-STATUS SPECIES

Table B-1 Special-Status Species

Scientific Name	Common Name	Fed Status	CA Status	CNPS	General Habitat	Micro Habitat	Presence/Absence Rationale
Plants							
Agrostis hooveri	Hoover's bent grass	None	None	1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland.	Sandy sites. 60-765 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Aphanisma blitoides	aphanisma	None	None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub.	On bluffs and slopes near the ocean in sandy or clay soils. 3-305 m. Channel Islands and immediate coast.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Arctostaphylos purissima	La Purisima manzanita	None	None	1B.1	Chaparral, coastal scrub.	Sandstone outcrops, sandy soil. 60-470 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Arctostaphylos refugioensis	Refugio manzanita	None	None	1B.2	Chaparral.	On sandstone. 60-765 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Arctostaphylos rudis	sand mesa manzanita	None	None	1B.2	Chaparral, coastal scrub.	On sandy soils in Lompoc/Nipomo area. 20-335 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Arenaria paludicola	marsh sandwort	Endangered	Endangered	1B.1	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Astragalus didymocarpus var. milesianus	Miles' milk-vetch	None	None	1B.2	Coastal scrub.	Clay soils. 50-385 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Ceanothus impressus var. impressus	Santa Barbara ceanothus	None	None	1B.2	Chaparral.	Sandy. 10-340 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Chenopodium littoreum	coastal goosefoot	None	None	1B.2	Coastal dunes.	Generally on sandy soils, and on dunes. 5-40 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Chorizanthe rectispina	straight-awned spineflower	None	None	1B.3	Chaparral, cismontane woodland, coastal scrub.	Often on granite in chaparral. 45-1040 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Cicuta maculata var. bolanderi	Bolander's water-hemlock	None	None	2B.1	Marshes and swamps.	In fresh or brackish water. 0-20 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Cirsium rhothophilum	surf thistle	None	Threatened	1B.2	Coastal dunes, coastal bluff scrub.	Open areas in central dune scrub; usually in coastal dunes. 3-60 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Cirsium scariosum var. loncholepis	La Graciosa thistle	Endangered	Threatened	1B.1	Coastal dunes, coastal scrub, brackish marshes, valley and foothill grassland, cismontane woodland.	Lake edges, riverbanks, other wetlands; often in dune areas. Mesic, sandy sites. 3-220 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Cladium californicum	California saw-grass	None	None	2B.2	Meadows and seeps, marshes and swamps (alkaline or freshwater).	Freshwater or alkaline moist habitats. -40-2150 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	None	Endangered	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes.	Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Deinandra increscens ssp. villosa	Gaviota tarplant	Endangered	Endangered	1B.1	Coastal scrub, valley and foothill grassland, coastal bluff scrub.	Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. 10-430 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Deinandra paniculata	paniculate tarplant	None	None	4.2	Coastal scrub, valley and foothill grassland	Ranges to San Diego County. Sandy sometimes vernally mesic sites. 25-980m	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Delphinium parryi ssp. blochmaniae	dune larkspur	None	None	1B.2	Chaparral, coastal dunes (maritime).	On rocky areas and dunes. 18-305 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Dithyrea maritima	beach spectaclepod	None	Threatened	1B.1	Coastal dunes, coastal scrub.	Sea shores, on sand dunes, and sandy places near the shore. 3-60 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None	None	1B.1	Coastal scrub, coastal bluff scrub, chaparral, valley/foothill grassland.	Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5-290 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Erigeron blochmaniae	Blochman's leafy daisy	None	None	1B.2	Coastal dunes, coastal scrub.	Sand dunes and hills. 0-185 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Eriodictyon capitatum	Lompoc yerba santa	Endangered	Rare	1B.2	Closed-cone coniferous forest, chaparral, coastal bluff scrub, oak woodland.	Sandy soils on terraces. 60-505 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Horkelia cuneata var. puberula	mesa horkelia	None	None	1B.1	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Horkelia cuneata var. sericea	Kellogg's horkelia	None	None	1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral.	Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Layia carnosa	beach layia	Endangered	Endangered	1B.1	Coastal dunes, coastal scrub.	On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 3-30 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Layia heterotricha	pale-yellow layia	None	None	1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland.	Alkaline or clay soils; open areas. 90-1800 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Monardella sinuata ssp. sinuata	southern curly-leaved monardella	None	None	1B.2	Coastal dunes, coastal scrub, chaparral, cismontane woodland.	Sandy soils. 20-305 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Monardella undulata ssp. crispa	crisp monardella	None	None	1B.2	Coastal dunes, coastal scrub.	Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. 5-125 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Monardella undulata ssp. undulata	San Luis Obispo monardella	None	None	1B.2	Coastal dunes, coastal scrub.	Stabilized sand of the immediate coast. 5-200 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Muhlenbergia utilis	aparejo grass	None	None	2B.2	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland.	Sometimes alkaline, sometimes serpentinite. 25-2325 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Nasturtium gambelii	Gambel's water cress	Endangered	Threatened	1B.1	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Scrophularia atrata	black-flowered figwort	None	None	1B.2	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub.	Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. 10-445 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Natural Communities of Special Concern							
Central Dune Scrub	Central Dune Scrub	None	None				Absent; highly disturbed inland site is no dune habitat.
Central Foredunes	Central Foredunes	None	None				Absent; highly disturbed inland site is no dune habitat.
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	None	None				Absent; no wetland habitats occur on the site.
Southern Vernal Pool	Southern Vernal Pool	None	None				Absent; no vernal pool habitat occurs on the site.
Southern California Threespine Stickleback Stream	Southern California Threespine Stickleback Stream	None	None				Absent; no stream habitat occurs on the site.
Invertebrates							
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None		Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Absent. Suitable conditions absent; no vernal pool habitat occurs on the site.

Danaus plexippus	monarch - California overwintering population	Candidate	None		Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	CNDDB Occurrence #354; Xerces #2688 Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Absent. Present; small winter roost site of 5 to 176 individuals observed over a 25 year period.
Fish							
Eucyclogobius newberryi	tidewater goby	Endangered	None		Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River.	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Absent. Suitable conditions absent; no lagoon or stream habitat occurs on the site.
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	Endangered	Endangered		Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.	Cool (<24 C), clear water with abundant vegetation.	Absent. Suitable conditions absent; no stream habitat occurs on the site.
Gila orcuttii	arroyo chub	None	SSC		Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Absent. Suitable conditions absent; no stream habitat occurs on the site.
Oncorhynchus mykiss irideus	steelhead - southern California DPS	Endangered	None		Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Absent. Suitable conditions absent; no stream habitat occurs on the site.
Amphibians							
Ambystoma californiense	California tiger salamander - Santa Barbara County DPS	Endangered	Threatened		Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats.	Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Absent. Suitable conditions absent; no breeding ponds occur on the site. Orcutt Hwy is a barrier to CTS movement to the site from known and potential ponds west of Orcutt Highway.
Anaxyrus californicus	arroyo toad	Endangered	SSC		Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Absent. Suitable conditions absent; no river floodplain, breeding ponds, or refuge habitat occur on the site.
Rana draytonii	California red-legged frog	Threatened	SSC		Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Absent. Suitable conditions absent; no aquatic breeding ponds occur on the site. Infill site surrounded by developments and roads and renders the site unsuitable for any CRLF dispersal opportunity.
Spea hammondii	western spadefoot	None	SSC		Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying. 2011 CNDDB rain filled pool occurrence of 50 calling adults 600 feet to the east of project site.	Absent. Suitable conditions absent; no breeding ponds occur on the site. Periodic site disturbance and yearly weed suppression discing renders the site unsuitable.
Reptiles							
Anniella pulchra	Northern California legless lizard	None	SSC		Sandy or loose loamy soils under sparse vegetation.	Soil moisture is essential. They prefer soils with a high moisture content.	Absent. Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.

Emys marmorata	western pond turtle	None	SSC		A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Absent. Suitable conditions absent; no aquatic habitat occurs on the site. Infill site surrounded by developments and roads and renders the site unsuitable for any western pond turtle dispersal opportunity.
Phrynosoma blainvillii	coast horned lizard	None	SSC		Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Absent. Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.
Thamnophis hammondii	two-striped gartersnake	None	SSC		Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Absent. Suitable conditions absent; no aquatic/stream/ riparian habitat occurs on the site. Infill site surrounded by developments and roads and renders the site unsuitable.
Birds							
Agelaius tricolor	tricolored blackbird	None	Threatened		Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Absent. No suitable aquatic/marsh/thicket habitat occurs on the site. Not observed.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None	NONE		Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	Absent. No suitable rocky slopes/hillsides on the site. Not observed during 2022 surveys..
Athene cunicularia	burrowing owl	None	SSC		Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Absent. Suitable ground squirrels burrows onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 surveys.
Eremophila alpestris actia	California horned lark	None	None		Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Suitable conditions onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 surveys.
Setophaga petechia	yellow warbler	None	SSC		Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable conditions absent. No suitable riparian habitat onsite. Not recorded on the site and not observed during 2022 surveys.
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered		Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable conditions absent. No suitable riparian habitat onsite. Not recorded on the site and not observed during 2022 surveys.
Mammals							
Antrozous pallidus	pallid bat	None	None		Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Suitable conditions absent. No suitable rocky outcrop or crevice roost sites present.
Corynorhinus townsendii	Townsend's big-eared bat	None	None		Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Suitable conditions absent. No suitable mesic areas, rocky outcrop or crevice roost sites present.

Lasiurus blossevillii	western red bat	None	None		Roosts primarily in riparian trees, 2-40 ft above ground, from sea level up through mixed conifer forests. May roost in orchards.	Prefers riparian habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Marginal suitable habitat conditions present in eucalyptus trees. Not recorded from site.
Taxidea taxus	American badger	None	None		Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Absent. Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.

APPENDIX C

WETLAND DELINEATION AND JURISDICTIONAL DETERMINATION REPORT

APPENDIX C

RICHARDS RANCH MIXED USE DEVELOPMENT
BIOLOGICAL RESOURCES ASSESSMENT

WATERS OF THE U.S./STATE
JURISDICTIONAL DETERMINATION
&
WETLAND DELINEATION

PREPARED FOR:
RICHARDS RANCH, LLC

PREPARED BY:
David Wolff Environmental

July 8, 2022

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1.0 INTRODUCTION AND PURPOSE

David Wolff Environmental (DWE) has prepared this wetland delineation and waters of the U.S./State jurisdictional determination of the Richards Ranch Mixed Use Development project site in support of the environmental review planning process. This wetland delineation and jurisdictional determination covers the approximately 43.64 acres project site to be annexed into the City of Santa Maria. Biological Resources Assessment report (BRA) Appendix A Figures 1 and 2 provide regional and vicinity location maps respectively.

The purpose of this report is to document the methods and results to determine if any jurisdictional wetlands or other waters of the U.S./State occur within the project site. The Corps 1987 Wetland Delineation Manual, current 2008 Arid West Regional Supplement (Version 2.0), and Rapanos/Carabell guidance were applied to the methods and results of this study. Wetland delineation field survey of the Richards Ranch Mixed Use Development project site was conducted by DWE on March 7, 2022.

The definition of waters of the U.S. has undergone recent changes in response to legal challenges against the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps). In brief, the 2020 Navigable Waters Protection Rule defining waters of the U.S. has been vacated and remanded by the court back to the EPA and Corps rendering it null and void. The 2015 Clean Water Rule still lacked legal stability to rely on so until the EPA and Corps can promulgate a new rule, the courts directed them to use the 2007 "Rapanos Guidance" as the most legally stable definition of waters of the U.S. for determining Clean Water Act jurisdictional status of our nation's waters. As such, the currently accepted "Rapanos Guidance" is the basis for this jurisdictional determination.

2.0 METHODS

2.1 WETLAND DELINEATION

The routine and problem areas methodology detailed in the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* (Corps Manual) were used as the basis to delineate waters of the U.S. including wetlands on the site. The definition of growing season and the basis of determining and recording indicators for hydrophytic vegetation, hydric soils, and wetland hydrology was the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (*Version 2.0*) (Arid West Supplement). Both the Corps Manual (Section G – Problem Areas) and Arid West Supplement (Chapter 5 – Difficult Wetland Situations in the Arid West) were used for the determination and evaluation of normal circumstances, atypical situations, and problem area wetlands as needed.

DWE Principal Ecologist David Wolff reviewed the National Wetlands Inventory (NWI) and USGS National Hydrography Dataset websites, and conducted this study to record observations of vegetation, soils, and hydrology on Arid West Supplement wetland determination data forms on

March 7, 2022. In accordance with the three parameter Corps Manual and Arid West Supplement, indicators and data on vegetation, soils, and hydrology were gathered at data observation points representing potential wetlands to determine what wetland parameters, if any, were present. The wetland determination data forms are included in the Arid West Supplement used for this wetland delineation are attached in Exhibit JD-2. A total of three data observation points (DP-1 through DP-3) were used to delineate potential wetland areas.

Vegetation – As defined in the Corps Manual and Arid West Supplement, the determination of hydrophytic (wetland) vegetation was made if greater than 50 percent of the dominant species were Facultative (FAC), Facultative Wetland (FACW), or Obligate Wetland (OBL) in the Corps 2020 National Wetland Plant List (NWPL). On the NWPL, there are five categories of wetland indicator status ratings, used to indicate a plant's likelihood for occurrence in wetlands versus non-wetlands:

- Obligate Wetland (OBL), almost always occur in wetlands;
- Facultative Wetland (FACW), usually occur in wetlands, but may occur in non-wetlands;
- Facultative (FAC), occur in wetlands and non-wetlands;
- Facultative Upland (FACU), usually occur in non-wetlands, but may occur in wetlands; and
- Upland (UPL), almost always occur in non-wetlands.

The Arid West Supplement Dominance Test and procedure for selecting dominant species using the "50/20 rule" was the hydrophytic vegetation indictor method used for this study. The determination of dominant species included those species that were most abundant and individually or collectively accounted for more that 50 percent of the total absolute aerial coverage of vegetation in each stratum. In addition, any other species that by itself accounted for at least 20 percent of the total plant cover were included as dominant species.

Soils – The Natural Resources Conservation Service (NRCS; formerly Soils Conservation Service) online *Soil Survey of Northern Santa Barbara County, California,* was reviewed to determine the soils mapping units recorded on the site. Soils descriptions were reviewed for profile characteristics to evaluate the consistency between the soils mapped by the NRCS and field observations. The landscape features of the site were reviewed to place the site in a context to support or not support wetlands. The determination of hydric soils was made using the hydric soil indicators detailed in the Arid West Supplement using the field indicators of soil color and texture and presence/absence of any redoximorphic features.

Hydrology – The determination of wetland hydrology was made if one primary indicator or two secondary indicators of wetland hydrology as detailed in the Arid West Supplement were recorded at data observation points.

2.2 WATERS OF THE U.S. – RAPANOS & CARABELL JURISDICTIONAL DEFINITION

The U.S. Army Corps of Engineers (Corps) and Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act Jurisdiction following the U.S. Supreme Court's decision in Rapanos v. United States and Carabell v. United States (herein referred to simply in this report as "Rapanos"). The EPA and Corps issued a summary memorandum of the guidance for implementing the Supreme Court's decision in Rapanos that addresses the jurisdiction over waters of the United States under the Clean Water Act. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for the project site for evaluation by the EPA and the Corps to determine Clean Water Act jurisdiction and to complete the "significant nexus test" as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances in situations (B) below the significant nexus test would take into account physical indicators of flow (evidence of an OHWM), if a hydrologic connection to a traditional navigable water exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a traditional navigable water.

Rapanos Key Points Summary

(A) The Corps and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent.
- Where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

(B) The Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

(C) The Corps and EPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

3.0 RESULTS

3.1 STUDY AREA DESCRIPTION

The Richards Ranch project proposes mixed use residential and commercial development on approximately 43.64 acres of undeveloped land as part of annexation to the City of Santa Maria. See BRA Appendix A Figure 3. The site supports mostly disturbed non-native grassland, disturbed coastal scrub, and stands of non-native eucalyptus and ornamental trees with several coast live oak mixed in the stands. Two patches of arroyo willow (*Salix lasiolepis*) were evident on aerial photographs but were removed in 2021 to remove and discourage homeless encampments. The site appears to have been substantially disturbed over time from Union Valley Parkway construction, and vegetation management (mowing/discing) for fire suppression, and removal/discouragement of homeless encampments. The project site is essentially an infill site bordered by residential development on north, south, and east. Several vacant parcels next to residential development are on the east. The Orcutt Road alignment weaves through the western portion of the site. Orcutt Expressway (Highway 135) frontage borders the site on the west with the Foxenwood residential development and expanses of active agricultural lands west of Hwy 135. The site is bisected by Union Valley Parkway. BRA Appendix A Figure 5 provides a habitat map of the study area.

The site is mostly flat gently sloping downwards from east to west along with manufactured embankments and fill slopes from adjacent residential development and Union Valley Parkway construction. Roadside drainage from Union Valley Parkway and Orcutt Road is managed through several constructed rocked ditches leading to culverts under Orcutt Road to unconsolidated sheet flow. Upland drainage trends east to west to the above described ditches and culverts. No natural drainage features are present on the project site.

3.2 WETLAND DELINEATION – WATERS OF THE U.S.

The two patches of arroyo willow (*Salix lasiolepis*; FACW) evident on recent aerial photographs of the project site were the focus of the wetland delineation. As noted above, both patches have been removed to remove and discourage homeless encampments. There is a series of constructed rock-lined stormwater ditches and culverts receiving upland and roadside runoff from drop inlets on UVP and Orcutt Road that lacked any vegetation, wetland or otherwise. No other wetland features were observed to be investigated. Three wetland determination data observation points were collected to evaluate the areas of arroyo willow as shown on attached Figure JD-1 in attached Exhibit JD-1, and forms attached in Exhibit JD-2. Representative photographs of the site and data observations points are included in BRA Appendix A Figure 8.

3.2.1 VEGETATION

- One patch of willows was on the north side of UVP at the center of the eastern property line. Review of aerial photograph over time indicates this willow patch appeared sometime after 2002 following the construction of adjacent residential development to

the east. The extent of willows seems to have expanded by 2009 and peaked in 2012 at 0.55 acre with the extent of presumed mesic conditions manifested from increased impervious surface runoff from the new development. There is no drainage pattern to or continuing west from the willow patch suggesting the limitations of the artificial mesic conditions. The NWI has a smaller polygon labeled within the willow patch as Freshwater Emergent Wetland at this location that is incorrect. The patch appeared to be 100% dominated by arroyo willow prior to removal in 2021. As such, this would meet the hydrophytic vegetation criteria.

    - With approximately 60 percent bare ground remaining during the wetland delineation field survey, several weedy herbaceous species with less than 10 percent cover observed included yellow sweetclover (*Melilotis officinalis;* FACU), and presumed non-wetland wild radish (*Raphanus sativus*) and ripgut brome (*Bromus diandrus*). See BRA Appendix A Figure 7 for site photographs, and Figure 8 for a series of aerial photographs over time. See Figure JD-1 in attached Exhibit JD-1 and data sheets DP-1 and DP-2 in attached Exhibit JD-2.

- The second willow patch was observed on aerial photography at the end of a roadside drainage ditch at the southwest corner of the site along Orcutt Highway. This patch appears to be persistent in location and extent back to 1994 to 2021 at approximately 0.41 acre. The lack of expansion suggests the limitations of the mesic conditions from the roadside runoff. The patch appeared to be 100% dominated by arroyo willow prior to removal in 2021. As such, this would meet the hydrophytic vegetation criteria.

    - It appears any surface flow is directed to a partially buried culvert under Orcutt Highway daylighting at the constructed ditch along the south side of UVP.

    - With approximately 60 percent bare ground remaining during the wetland delineation field survey, cheeseweed (*Malva parviflorum;* non-wetland) had 15% cover, poison hemlock (*Conium maculatum*; FACW) had 10% cover, with non-native grasses and wild radish making up the rest. See BRA Appendix A Figure 7 for site photographs, and Figure 8 for a series of aerial photographs over time. See Figure JD-1 in attached Exhibit JD-1 and data sheets DP-3 in attached Exhibit JD-2.

- The varied network of rock lined roadside drainage ditches did not support any wetland vegetation only sporadic non-wetland non-native grasses. These ditches likely only flow in immediate response to impervious road surface runoff during rainfall.

3.2.2 SOILS

The USDA Natural Resources Conservation Service has identified three predominantly sandy soil series mapping units on the site as shown in BRA Appendix A Figure 4.

- Betteravia loamy sand 0 to 2 percent slopes (BmA), is a moderately well drained soil on terraces formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface of loamy sand to a depth of 36 inches with a cemented layer below the surface horizon. It is not a hydric (wetland) soil.
- Marina sand 0 to 2 percent slopes (MaA), is a somewhat excessively drained soil on terraces formed from eolian deposits (windblown) parent material. This mapping unit is characterized by surface horizons of sand to a depth of 88 inches. It is not a hydric (wetland) soil.
- Oceano sand 2 to 15 percent slopes severely eroded (OcD3), is an excessively drained soil on dunes formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface horizons of sand to 60 inches depth. It is not a hydric (wetland) soil.

Observations of surface soils and gopher mounds and ground squirrel burrows corroborate the very sandy characteristics of these soil mapping units.

- Two soil test pits were excavated to a 24-inch depth in the willow patch area on the east property line (DP-1 and DP-2; see Figure JD-1). Both test pits were pure sand to depth with a 100% matrix color of 7.5YR 3/2 with no redoximorphic features. To be considered a sandy hydric soil redoximorphic features would need to be present. As such, there were no field indicators of hydric soils present.
- One soil test pit was excavated to a 24-inch depth in the willow patch area on the southwest corner of the property (DP-3; see Figure JD-1). This test pit was pure sand to depth with a 100% matrix color of 7.5YR 3/2 with no redoximorphic features. To be considered a sandy hydric soil redoximorphic features would need to be present. As such, there were no field indicators of hydric soils present.

3.2.3 HYDROLOGY

There were no primary or secondary indicators of wetland hydrology at any of the data observation point locations in the two willow patches. Mesic conditions supporting willows at the east property (DP-1 and DP-2) appears limited in extent with no visible drainage pattern to or from this area. It appears that a detention basin was constructed adjacent to the property on the south side of UVP that may now receive runoff from the residential development. The mesic conditions supporting willows at the southwest corner of the property (DP-3) appears limited in extent from the roadside ditches constructed in uplands and draining only uplands and impervious roadways. As such, there is no wetland hydrology present on the project site.

3.3 WETLAND DETERMINATION

Based on collection of data at three data observation points, while the presumed 100 percent cover of arroyo willow (FACW) meets the hydrophytic (wetland) vegetation criteria, in can be determined that the willow patches are not jurisdictional wetlands because of the lack of hydric soils and lack of any primary or secondary indicators of hydrology.

3.4 RAPANOS/CARABELL GUIDANCE DETERMINATION

The current Rapanos guidance states that the Corps would not take jurisdiction over ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. The review of aerial photography over time clearly demonstrates that the onsite drainage ditches are excavated in uplands and are only draining uplands mostly as a result of UVP construction. The ditches along UVP also appear to be excavated in uplands. Further, there is no Ordinary High Water Mark (OHWM) connection from the drainage ditches to a traditional navigable water (TNW) or a tributary to a TNW. The project site is not part of the nearest tributary Orcutt Creek watershed as delineated by the USGS national hydrography data set. As such, these ditches are not considered to be other waters of the U.S. subject to Corps jurisdiction.

3.5 WATERS OF THE STATE

The State Water Resources Control Board (Water Board) issued policy, procedures, and wetland definition for the discharge of dredged or fill material into waters of the State (Procedures). In brief, the Procedures define wetlands as waters of the State to be consistent with the federal three parameter definition requiring the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. As demonstrated above, the project site does not support any three parameter wetlands. As such, there are no State wetlands present on the project site.

The Procedures are silent on artificial ditches constructed wholly in and draining only uplands that is the case for the network of roadside ditches constructed mostly for the recent UVP extension Orcutt Road realignment. There is no evidence of any historic natural drainage through the project site so the ditches do not represent realigned natural drainages, and do not represent a bed, bank, or channel of a river or stream. As such, the network of drainage ditches do not represent waters of the State.

4.0 CONCLUSIONS

Based on DWE field surveys, review of federal and state regulations, guidelines, and Procedures, there are no wetlands or other waters of the U.S./State present on the Richards Ranch Mixed Use Development Project site.

5.0 REFERENCES

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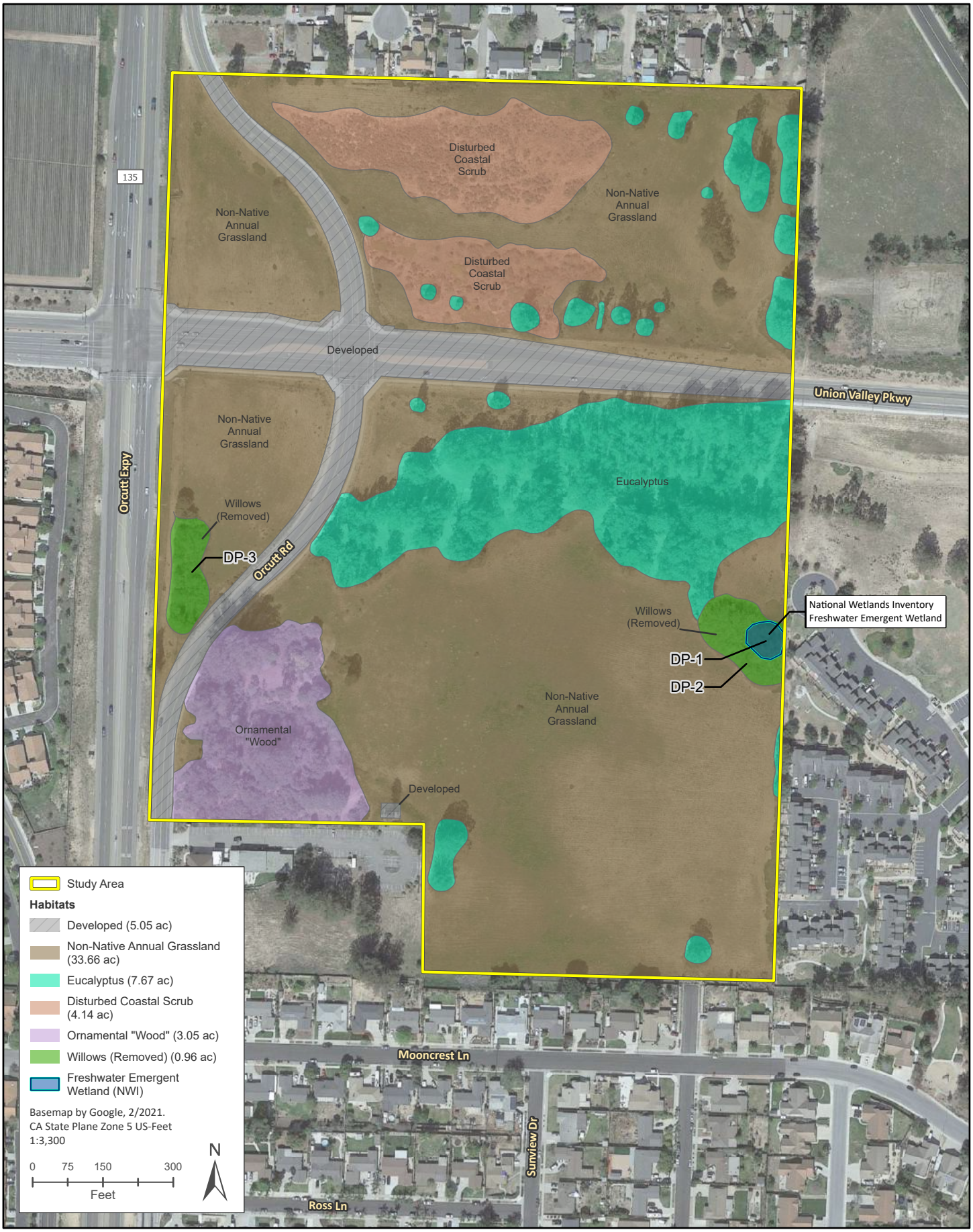
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EXHIBIT JD-1

Figure JD-1: Jurisdictional Determination Map



David Wolff Environmental, LLC sage institute	Richards Ranch Mixed Use Development Project	**Figure JD-1**
	WETLAND DELINEATION & JURISDICTIONAL DETERMINATION	**Jurisdictional Determination Map**

EXHIBIT JD-2

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Richards Ranch Mixed Use Development City/County: Santa Maria/Santa Barbara Co Sampling Date: March 7,2022

Applicant/Owner: Richards Ranch, LLC State: CA Sampling Point: DP-1

Investigator(s): David Wolff, DWE Principal Ecologist Section, Township, Range: S11 T9N R34W

Landform (hillslope, terrace, etc.): Upland Terrace Local relief (concave, convex, none): Level Slope (%): 0-3%

Subregion (LRR): LRR C Lat: 34.878050 Long: -120.432294 Datum: WGS 84

Soil Map Unit Name: MaA Marina sand 0 to 2 percent slopes NWI classification: FEW (Incorrect)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Prolonged Jan to Feb dry period without rain. NWI mapping as freshwater emergent wetland (FEW) is incorrect. Willow patch removed to discourage homeless encampments identified from aerial photographs. Non-wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 0.20 ac.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis (presumed cover)	100%	Yes	FACW
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 400 sq. ft)			
1. Melilotus officinalis	10%	No	FACU
2. Raphanus sativus	10%	No	--
3. Bromus diandrus	2%	No	--
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Presumed 100 % absolute cover by FACW Salix lasiolepis from review of aerial photograph was removed.
Herb statum more indicative of surrounding disturbed non-native annual grassland.
NWI mapping as freshwater emergent wetland (FEW) is incorrect.

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/2	100%	NONE				Sand	Root zone; No redox features
10-24	7.5YR 3/2	100%	NONE				Sand	No redox features

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

Sandy soils with no redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary or secondary indicators of wetland hydrology. Mesic conditions for willow growth likely from impervious surface runoff from upslope residential development.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Richards Ranch Mixed Use Development City/County: Santa Maria/Santa Barbara Co Sampling Date: March 7,2022

Applicant/Owner: Richards Ranch, LLC State: CA Sampling Point: DP-2

Investigator(s): David Wolff, DWE Principal Ecologist Section, Township, Range: S11 T9N R34W

Landform (hillslope, terrace, etc.): Upland Terrace Local relief (concave, convex, none): Level Slope (%): 0-3%

Subregion (LRR): LRR C Lat: 34.877781 Long: -120.432187 Datum: WGS 84

Soil Map Unit Name: MaA Marina sand 0 to 2 percent slopes NWI classification: FEW (Incorrect)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

Prolonged Jan to Feb dry period without rain. NWI mapping as freshwater emergent wetland (FEW) is incorrect. Willow patch removed to discourage homeless encampments ientified from aerial photographs. Non-wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 0.35 ac.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis (presumed cover)	100%	Yes	FACW
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 400 sq .ft)			
1. Raphanus sativus	10%	No	FACU
2. Avena sp.	2%	No	--
3. Bromus diandrus	2%	No	--
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

Presumed 100 % absolute cover by FACW Salix lasiolepis from review of aerial photograph was removed.
Herb stratum more indicative of surrounding disturbed non-native annual grassland.
NWI mapping as freshwater emergent wetland (FEW) is incorrect.

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/2	100%	NONE				Sand	Root zone; No redox features
10-24	7.5YR 3/2	100%	NONE				Sand	No redox features

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

Sandy soils with no redox features

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary or secondary indicators of wetland hydrology. Mesic conditions for willow growth likely from impervious surface runoff from upslope residential development.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Richards Ranch Mixed Use Development City/County: Santa Maria/Santa Barbara Co Sampling Date: March 7,2022

Applicant/Owner: Richards Ranch, LLC State: CA Sampling Point: DP-3

Investigator(s): David Wolff, DWE Principal Ecologist Section, Township, Range: S 11 T9N R34W

Landform (hillslope, terrace, etc.): Low Terrace Local relief (concave, convex, none): Somewhat concave Slope (%): 0-2%

Subregion (LRR): LRR C Lat: 34.878133 Long: -120.436175 Datum: WGS 84

Soil Map Unit Name: BmA Betteravia loamy sand 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Prolonged Jan to Feb dry period without rain. Willow patch removed to discourage homeless encampments identified from aerial photographs. Part of roadside ditch system excavated on dry land draining uplands. Non-wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 0.41 ac.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis (presumed cover)	100%	Yes	FACW
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 400 sq. ft)			
1. Malva parviflora	15%	No	--
2. Conium maculatum	10%	No	FACW
3. Raphanus sativus	10%	No	--
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Presumed 100 % absolute cover by FACW Salix lasiolepis from review of aerial photograph was removed. Herb statum more indicative of surrounding disturbed non-native annual grassland.

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/2	100%	NONE				Sand	Root zone; No redox features
10-24	7.5YR 3/2	100%	NONE				Sand	No redox features

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

Sandy soils with no redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary or secondary indicators of wetland hydrology. Mesic conditions for willow growth likely from roadside ditch culvert runoff to partially buried culvert under Orcutt Highway.

APPENDIX D

CALIFORNIA TIGER SALAMANDER SITE ASSESSMENT REPORT

APPENDIX D

RICHARDS RANCH MIXED USE DEVELOPMENT
BIOLOGICAL RESOURCES ASSESSMENT

CALIFORNIA TIGER SALAMANDER
SITE ASSESSMENT REPORT

PREPARED FOR:
RICHARDS RANCH, LLC

PREPARED BY:
David Wolff Environmental

July 8, 2022

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EXHIBIT 1: USFWS CTS DISTRIBUTION AND METAPOPULATION MAP (2016 RECOVERY PLAN)

EXHIBIT 2: USFWS BREEDING POND MAP (5KM RADIUS)

I. METHODS

David Wolff Environmental (DWE) has prepared this California tiger salamander (*Ambystoma californiense*; CTS) site assessment in accordance with the U.S. Fish and Wildlife Service (USFWS) *October 2003 Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California tiger Salamander*. This CTS site assessment is based on a desktop review of the Richards Ranch Mixed Use Development project site in relationship to the U.S. Fish and Wildlife (USFWS) northern Santa Barbara County CTS distinct population segment (DPS) distribution, metapopulation areas, designated Critical Habitat, and USFWS mapped known and potential CTS breeding ponds. The "underline" emphasis on known and potential ponds is intentional to distinguish that there is no evidence or field surveys determining CTS use in USFWS identified potential ponds, apparently just mapped from seasonal pond signatures from aerial photograph review. The USFWS CTS distribution, metapopulation, and breeding pond information is based on the USFWS 2016 *Final Recovery Plan for the Santa Barbara County Distinct Population Segment (DPS) of the California tiger salamander*. Field surveys of the Richards Ranch Mixed Use Development project site to identify and map habitat onsite types and windshield surveys to evaluate surrounding land uses were conducted by DWE Principal Ecologist David Wolff on December 17, 2021, January 5, 2022, and March 7, 2022.

II. ELEMENT 1: CTS RANGE & METAPOPULATION ANALYSIS

The project site is on the east side of Highway 135 (Orcutt Highway) at the intersection with Union Valley Parkway (UVP). The USFWS 2016 Final Recover Plan Figure 1 (attached as Exhibit CTS-1) shows the potential distribution (range) of the northern Santa Barbara County CTS DPS and Western Santa Maria/Orcutt Area metapopulation ending at the west side of Orcutt Highway. This clearly indicates USFWS views Orcutt Highway as a positive barrier to CTS movement into the urbanized lands east of the highway. The Western Santa Maria/Orcutt Area metapopulation coincides with USFWS designated Critical Habitat Unit 1 for the CTS. The CTS potential distribution and Eastern Santa Maria Area metapopulation is east of Highway 101 across an urbanized landscape from the project site. The west Los Alamos/Careaga Area metapopulation is south of Clarke Avenue across an urbanized landscape from the project site. See attached Exhibit CTS-1). Therefore, the project site falls across a positive barrier to CTS movement outside any metapopulations, and outside of the CTS range and potential distribution as identified by the USFWS.

III. ELEMENT 2: CTS BREEDING POND LOCALITIES

The closest USFWS mapped known and potential CTS breeding ponds are west of the four-lane Orcutt Highway that represents a positive barrier to CTS movement into the totally urbanized areas east of the Orcutt Highway. See attached Exhibit CTS-2. The closest extant (remaining) known CTS ponds are SAMA-7 and SAMA-6 approximately 1.4 miles to the west of the project site. SAMA-10,

while closer to the project site (still to the west of Orcutt Highway) has been extirpated (no longer exists) and planted in strawberries north of Foster Road all the way west to Blosser Road. The closest extant potential CTS breeding pond is SAMA-20 (the Foxenwood detention basin) that is 0.85 mile to the west of the project site that has never been confirmed for CTS use. There is almost no CTS upland refuge habitat around SAMA-20, and it is now isolated from any ponds to the north by Union Valley Parkway (UVP) curbs on both sides of the road. Potential CTS pond SAMA-8 is 1.1 miles away and has not been confirmed with any CTS use or suitable long-duration ponding. As stated in Section II above, the USFWS CTS distribution, metapopulation, and designated Critical Habitat end at the Orcutt Highway to the west of the project site.

IV. ELEMENT 3: PROJECT SITE HABITATS & DISPERSAL DISTANCE ANALYSIS

The proposed project site supports disturbed non-native annual grassland, disturbed coastal scrub, and stands of mostly non-native trees. There is evidence of ground squirrel and gopher use that CTS typically use for underground refuge. However, the site has undergone substantial surface disturbance and vegetation removal over time, and is regularly disced for weed/fire suppression. There are no seasonal ponds on the project site.

The USFWS established maximum upland dispersal distance based on predictive modelling and straight-line movement assumptions is 1.3 miles from known or potential breeding ponds. This long-distance upland dispersal potential movement is based on studies from the Sacramento Valley in a vastly different nearly level grassland landscape of Central California CTS distinct population segment compared to the woody vegetation covered generally hilly landscape of the northern Santa Barbara County DPS. Actual capture data in the studies used for the 1.3 mile prediction did not exceed 1,000 meters (0.62 mile) (Searcy 2013; Trenham 2005). Observations from an inter-pond dispersal study of CTS from a Monterey County study site in a rolling hills setting similar to the Santa Barbara County CTS DPS did not exceed 670 meters (0.42 mile) (Trenham 2001). A study of upland dispersal of CTS from ponds at the Santa Maria Public Airport District had a maximum dispersal distance of 197 meters (0.12 mile) (Sykes 2006). Dispersal distances of CTS can be much shorter or truncated if impaired by positive barriers to CTS movement such as roads with curbs, highways, and urban development.

As discussed in Section III above, the closest known extant USFWS CTS breeding ponds in the West Santa Maria/Orcutt Metapopulation Area are SAMA-6 and SAMA-7 at 1.4 miles away. This is a greater distance than the maximum presumed 1.3-mile dispersal ability of the CTS. Intervening land uses from Blosser Road to Orcutt Highway are now active agricultural strawberry fields surrounded by silt fences, Foster Road, development, and curbs on both sides of UVP representing positive barriers to CTS movement. Potential CTS ponds SAMA-20 and SAMA-8 are within the 1.3-mile dispersal ability, but the intervening developed and agricultural land uses are prohibitive of CTS overland movement. Only a steep bank narrow constructed drainage ditch runs along UVP from SAMA-20 to Orcutt Highway (stormwater drainage runs from east to west). CTS cannot climb so

this does not represent a viable dispersal opportunity from this constructed detention basin potential pond. There are almost no undeveloped uplands around SAMA-20 for CTS dispersal and there are curbs along both sides of UVP as a positive barrier precluding CTS movement from elsewhere to SAMA-20. It is my understanding that the curbs on both sides of UVP were for mitigation to provide a barrier to potential CTS movement from the northwest airport lands to the UVP roadway.

There are stormwater culverts draining uplands from the project site that run approximately 300 feet under the four-lane Orcutt Highway to narrow drainage ditch corridors along both sides of UVP. These are recently constructed and/or modified by the UVP construction and realignment of Orcutt Road. CTS disperse randomly in all directions from ponds and not necessarily along narrow constructed ditch corridors with curb barriers. While the site has grassland and coastal scrub habitats with small mammal burrows, because of the many impediments to CTS movement, the project site does not represent suitable dispersal upland refuge habitat for the CTS.

V. CONCLUSIONS

Given distances exceeding the maximum predicted CTS upland dispersal from extant known ponds, intervening urbanized and agricultural landscape, improbable use of narrow constructed drainage ditches and curbs along UVP, and long culverts only from potential ponds within the 1.3 mile maximum CTS dispersal ability, there would be no CTS dispersing to the Richards Ranch site from any USFWS known or potential CTS breeding ponds. There are no seasonal ponds or any potential breeding ponds on the project site.

Based on DWE field surveys, review of available literature, and desktop evaluation of the potential CTS dispersal to the Richards Ranch project site using the currently accepted best scientifically available CTS data from the USFWS, the proposed Richards Ranch project would not support any CTS breeding or upland refuge habitat and would have no impact on the CTS.

VI. REFERENCES

Searcy, C.A. et. al. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. Biological Conservation 158 (2013) 80-87. 2013.

Sykes, Stephen A. 2006. Results of California Tiger Salamander Research Conducted from 2001-2004 at Two Ponds at the Santa Maria Airport, Santa Maria, California. Prepared for U.S. Fish and Wildlife Service, Ventura, CA. February 27, 2006.

Trenham, P. C., W. D. Koenig, and H. B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the California tiger salamander, *Ambystoma californiense*. Ecology 82:3519–3530.

Trenham, Peter C. and Shaffer, H. Bradley. 2005. Amphibian Upland Habitat Use and Its Consequences for Population Viability. Ecological Applications, 15(4), 2005 pp. 1158-1168. Ecological Society of America. 2005.

U.S. Fish and Wildlife Service. 2003. Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander. Joint Service and CDFW survey protocol guidance. October 2003.

U.S. Fish and Wildlife Service. 2016. Final Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander Central California (*Ambystoma californiense*). U.S. Fish and Wildlife Service Pacific Southwest Region, Ventura, California.

CTS SITE ASSESSMENT EXHIBITS

Exhibit CTS-1: Santa Barbara County DPS Distribution Map

Exhibit CTS-2: CTS Site Assessment Map

Exhibit CTS-1

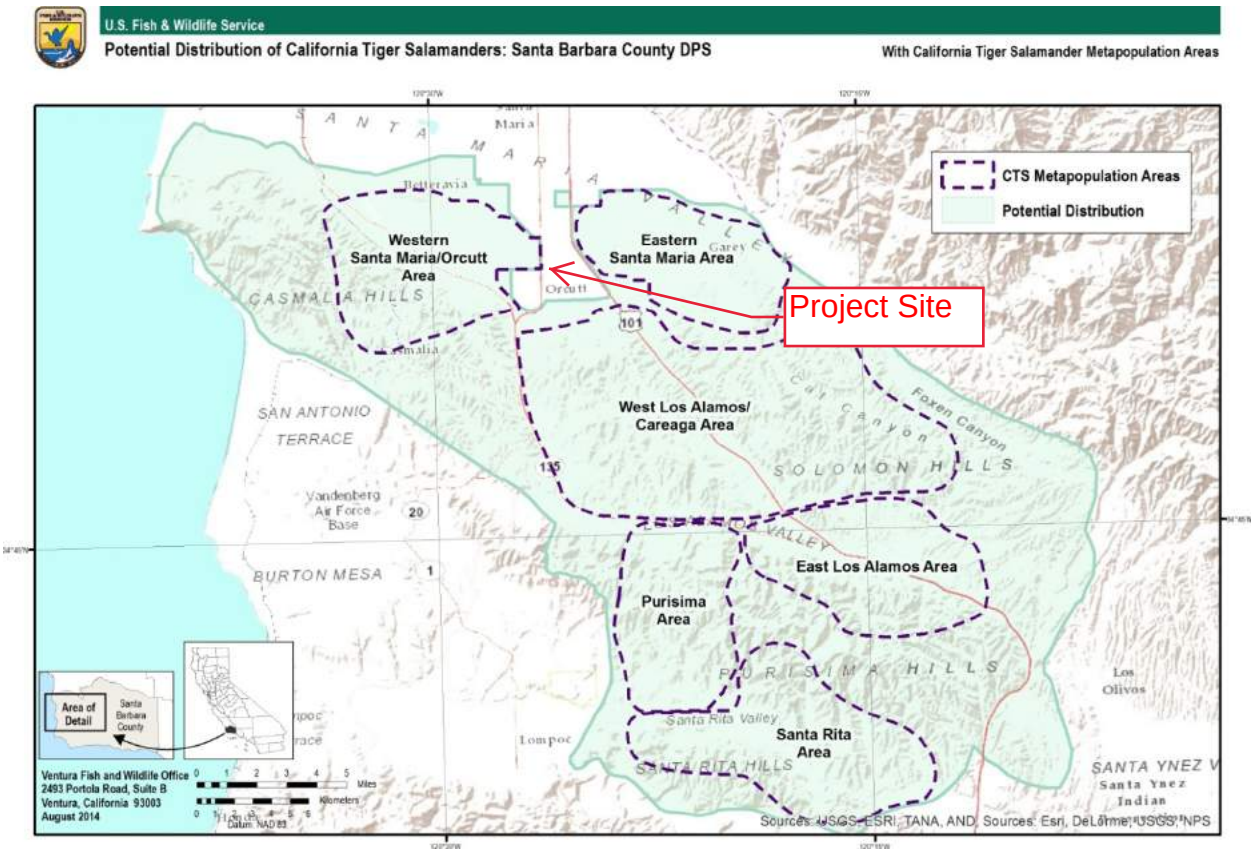
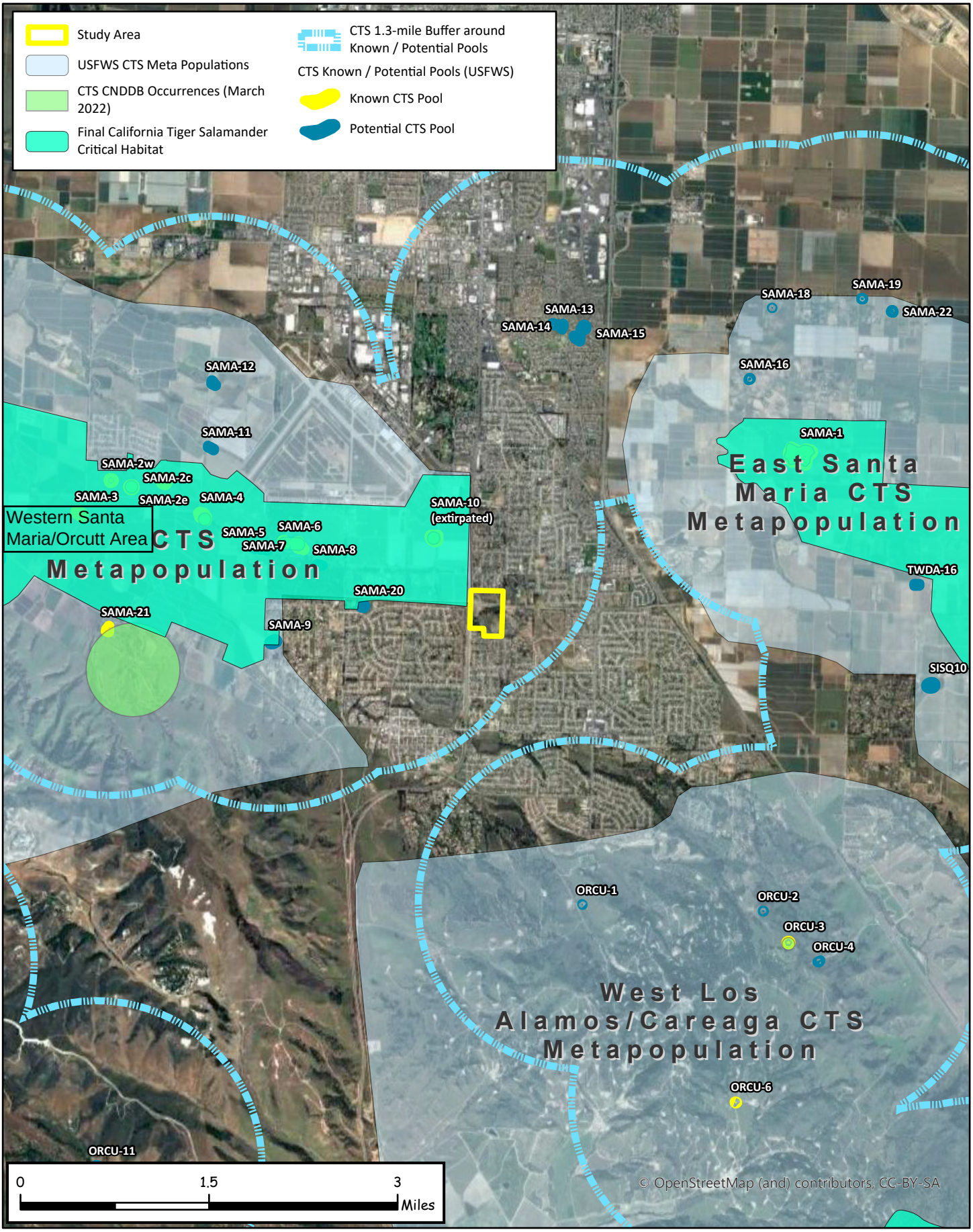


Figure 1. Distribution of Santa Barbara County California Tiger Salamanders. Metapopulation areas encompass the general area of current occurrences and associated habitat and outline the general areas where recovery actions will be focused. Potential Distribution includes the general area of suitable habitat within the range of the species that is currently occupied or has the potential to become occupied.

Source: U.S. Fish and Wildlife Service. 2016. Final Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander Central California (Ambystoma californiense). U.S. Fish and Wildlife Service Pacific Southwest Region, Ventura, California.



sage institute inc David Wolff Environmental, LLC	Richards Ranch Mixed Use Development Project	**Exhibit CTS-2**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENTS	**CTS Site Assessment Map**

APPENDIX E

BIOLOGICAL RESOURCES ASSESSMENT ADDENDUM

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May 27, 2022

Michael D. Stoltey, MBA
Managing Member
Richards Ranch LLC
Via email

SUBJECT: Biological Resources Assessment Addendum for the Richards Ranch, LLC Mixed use Development Project, Santa Maria, CA

David Wolff Environmental (DWE) is pleased to submit this Biological Resources Assessment Addendum (BRA Addendum) to the April 1, 2022 Biological Resources Assessment (BRA) for the Richards Ranch, LLC, Mixed Use Development Project that is hereby incorporated by reference. This BRA Addendum has been prepared to document the results of completing the 2022 floristic inventory and rare plant survey, and additional surveys for northern legless lizard, coast horned lizard, and American badger. The BRA provided negative findings for rare plants, northern legless lizards, coast horned lizards, and American badger based on surveys conducted by DWE on December 17, 2021, January 5, 2022, and March 7, 2022. DWE Principal Ecologist David Wolff conducted a follow up field reconnaissance on April 27, 2022 to further evaluate project site existing conditions with the specific focus on rare plants, the two species of lizards, and burrow inspection for American badgers. The attached Figure A-1 provides a set of representative photographs from the DWE April 27, 2022 field survey further documenting the existing conditions of the proposed project site. The following provides the results of the April 27, 2022 DWE field survey to complete the biological resources analysis for the proposed project environmental review documentation.

1.0 Floristic Inventory and Rare Plant Survey

DWE conducted the floristic inventory and rare plant survey over four separate surveys on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022. The surveys covered a range of plant expressions on the proposed project site from dormant winter, through completion of the 2022 spring growth period, and to seed set of observable onsite plants. The survey was conducted in accordance with the guidelines recommended by the California Native Plant Society, the California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) that includes:

- Conducting the survey at the proper time of year when rare plants are both evident and identifiable. This is typically during the spring/summer flowering period.
- Surveys that are floristic in nature. That is all plant species noted in the field are identified to the level necessary to determine if it is rare, threatened, or endangered.
- Conducting the survey using systematic field techniques in all habitats of the site to ensure a reasonable and thorough visual coverage.
- Up to three visits to the site may be necessary to ensure that seasonal variations in the flowering period of the target species are adequately covered.

The BRA provided a detailed list and evaluation of the potential special-status plant species that are known from the region with the potential to occur on the proposed project site. The BRA concluded that perennial species, mesic (moist/wetland) species, and coastal dune species were not observed or not expected to occur. The final April 27, 2022 DWE field survey confirmed that they were not observed on the proposed project site.

The BRA suggested sandy soil associated special-status plants with the low potential to occur on the disturbed habitats on the project site include Hoover's bent grass (*Agrostis hooveri*), seasinde bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), Gaviota tarplant (*Deinandra increscens* ssp. *villosa*; out of current known range), paniculate tarplant (*Deinandra paniculata*), (Blochman's leafy daisy (*Erigeron blochmaniae*), three species of monardella (M*onardella sinuata* ssp. *sinuata*, *M. undulata* ssp. *crispa*, *M.u.* ssp. *undulata*), and black flowered figwort (*Scrophularia atrata*). The final April 27, 2022 DWE field survey confirmed that they were not observed on the proposed project site.

In conclusion, no rare, threatened, or endangered plant species were observed on the proposed project site. The expression of plants with a low diversity of native plants is indicative of the regular weed suppression mowing and discing evidenced during the DWE field surveys. Attached Table A-1 provides a list of plant species observed during the 2021 and 2022 DWE field surveys.

2.0 NORTHERN LEGLESS LIZARD AND COAST HORNED LIZARD SURVEY

As stated in the BRA, the northern legless lizard *(Anniela pulchra)* is closely associated with sandy or very friable loamy soils under coastal scrub or woodland vegetation with soil moisture and vegetative cover being essential. The Blainvilles's (coast) horned lizard *(Phrynosoma blainvillii)* occurs in a wide variety of habitats with sandy soils, abundant ant colonies for food, open areas for sunning, and shrubs for cover needed. The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for these two species. However, the regular mowing/discing of the site and periodic removal of shrubs reduces the suitability and value of the onsite habitat to support these species. DWE field surveys on March 7, 2022 and again on April 27, 2022 included raking around the coastal scrub habitat to attempt detection of these two species of lizard.

The coastal scrub habitat is highly disturbed by the discing activities uprooting the shrubs and disturbing the soil surface. There were no observations of either the legless lizard or horned lizard during DWE field surveys. Further, the site disturbance over time and infill nature of the site surrounded by development renders the site as unsuitable for these species.

3.0 AMERICAN BADGER SURVEY

The American badger *(Taxidea taxus)* is a grassland species needing abundant small mammal prey and are easily detected by their distinctive half-moon shaped burrows. There was no evidence of badger use observed on the project site during DWE field surveys in preparation of the BRA. Further close inspection of burrows during the DWE April 27, 2022 field survey did not detect any distinct American badger burrow sign. Only the obvious burrows and tailings (piles of soil) from ground squirrels and gophers.

4.0 CONCLUSION

The results of the DWE field surveys documented in the BRA and this BRA Addendum provide a definitive determination that the site does not support any rare, threatened or endangered plant or wildlife species. Given the potential for nesting birds at the time of project implementation, the BRA recommended mitigation measure MM BIO-1 should stand to avoid impacts on nesting birds. Based on the findings of the BRA and the BRA Addendum, no further mitigation measures are recommended.

Thank you for the opportunity to provide this BRA Addendum to for use in completing the City's environmental review process for the proposed project.

Very truly yours,



David K. Wolff
DWE Principal Ecologist

ATTACHMENT:

TABLE A-1 – PLANT SPECIES OBSERVED
FIGURE A-1 – REPRESENTATIVE PHOTOGRAPHS APRIL 27, 2022

TABLE A-1: PLANT SPECIES OBSERVED DWE SURVEYS: DECEMBER 17, 2021, JANUARY 5, 2022, MARCH 7, 2022, APRIL 27, 2022	
SCIENTIFIC NAME	**COMMON NAME**
Acacia baileyana	Bailey acacia
Amsinckia intermedia	Common fiddleneck
Anagallis arvensis	Poor-man's weatherglass
Avena sativa	Oats
Baccharis pilularis	Coyote brush
Brassica rapa	Field mustard
Bromus diandrus	Rip gut brome
Bromus hordeaceus	Soft chess
Camissonia sp.	Sun cup
Carpobrotus edulis	Sea fig
Chorizanthe angustifolia	Spineflower
Claytonia perfoliata	Miner's lettuce
Conium maculatum	Poison hemlock
Croton californicus	Croton
Ehrharta calycina	Veldt grass
Erodium botrys	Filaree
Erodium cicutarium	Redstem filaree
Eschscholzia californica	California poppy
Eucalyptus sp.	Eucalyptus
Heterotheca grandiflora	Telegraph weed
Hirschfeldia incana	Shortpod mustard
Lamarckia aurea	Goldentop grass
Liquidambar styraciflua	American sweetgum
Lupinus bicolor	Miniature lupine
Malva parviflora	Cheese weed
Olea europaea	Olive
Oxalis pes-caprae	Bermuda buttercup
Plagiobothrys nothofulvis	Popcorn flower
Quercus agrifolia	Coast live oak
Raphanus sativus	Wild radish
Rubus ursinus	California blackberry
Rumex acetosella	Sheep sorrel
Rumex crispus	Curly dock
Salix lasiolepis	Arroyo willow
Salsola iberica	Russian thistle
Searsia lancea	African sumac
Trifolium hirtum	Rose clover
Ulmus parvifolia	Chinese elm
Vulpia myuros	Six weeks grass



Photo A-1: View at southeast corner of project site north of UVP at non-native annual grassland; discing furrows evident. **4/27/2022**



Photo A-2: View west of project site north of UVP at non-native annual grassland, non-native wood; discing furrows evident. **4/27/2022**



Photo A-3: View north at non-native grassland and eucalyptus stand on south side of UVP. **4/27/2022**



Photo A-4: View east from at project site north of UVP showing non-native grassland, euclyptus stand, and non-native wood. **4/27/2022**

FIGURE A-1 – REPRESENTATIVE PHOTOGRAPHS



Photo A-5: View northwest of non-native grassland on south side of UVP. Stormwater outfall from offsite detention basin. **4/27/2022**



Photo A-6: View east on south side of UVP at eastern project boundary with stands of eucalyptus and oaks. **4/27/2022**



Photo A-7: View west at disturbed coastal scrub and non-native grassland on project site north of UVP. **4/27/2022**



Photo A-8: View northwest at non-native grassland between Orcutt Road and Orcutt Expressway on south side of UVP. **4/27/2022**

FIGURE A-1 – REPRESENTATIVE PHOTOGRAPHS

APPENDIX G

Energy Impact Assessment

ENERGY IMPACT ASSESSMENT

FOR THE PROPOSED

RICHARDS RANCH PROJECT

SANTA MARIA, CA

SEPTEMBER 2022

PREPARED FOR:
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SAN LUIS OBISPO 93401

PREPARED BY:
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APPENDICES

Appendix A: Energy Modeling

LIST OF COMMON TERMS & ACRONYMS

°F	Fahrenheit
3CE	Central Coast Community Energy
AB	Assembly Bill
AFV	Alternative Fuel Vehicle
APS	Alternative Planning Strategy
ARB	California Air Resource Board
BSC	Building Standards Commission
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CBC	California Building Code
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO_2	Carbon Dioxide
CPUC	California Public Utilities Commission
EAP	Energy Action Plan
EMFAC	Emissions Factor
EO	Executive Order
EPAct	Energy Policy Act
GHG	Greenhouse Gas
kBTU	Kilo British Thermal Units
kWh	Kilowatt Hour
MMBTU	Million British Thermal Units
mpg	Miles per Gallon
MPO	Metropolitan Planning Organization
NHSTA	National Highway Traffic Safety Administration
PG&E	Pacific Gas and Electric
RME	Resources Management Element
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SAF	State Alternative Fuel
SB	Senate Bill
SBCAPCD	Santa Barbara County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SoCalGas	Southern California Gas Company
U.S. DOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
VMT	Vehicle Mile Traveled

INTRODUCTION

This report provides an analysis of potential energy impacts associated with the proposed Richards Ranch Annexation Project. This report also provides a summary of existing conditions in the project area and the applicable regulatory framework pertaining to energy.

PROJECT DESCRIPTION

The proposed Richards Ranch Annexation Project would include the annexation, pre-zoning, and a conceptual development plan for approximately 43.75 acres of property located in unincorporated Santa Barbara County (County) by the City of Santa Maria (City). The conceptual development plan is a mixed commercial/residential project which includes a total of 495 residential units, including 400 apartments and 95 townhomes and an approximate buildout of 130,000 square feet of commercial uses. As identified in the Santa Barbara County Orcutt Community Plan, the current land use designation is Mixed Commercial/Residential, which provides for general commercial, office, and professional, and residential uses. All four parcels have a zoning designation of Retail Commercial (C-2). The proposed project's site plan is depicted in Figure 1 and Figure 2.

ENERGY FUNDAMENTALS

Energy use is typically associated with transportation, construction, and the operation of land uses. Transportation energy use is generally categorized by direct and indirect energy. Direct energy relates to energy consumption by vehicle propulsion. Indirect energy relates to the long-term indirect energy consumption of equipment, such as maintenance activities. Energy is also consumed by construction and routine operation and maintenance of land use. Construction energy relates to a direct one-time energy expenditure primarily associated with the consumption of fuel use to operate construction equipment. Energy-related to land use is normally associated with direct energy consumption for heating, ventilation, and air conditioning of buildings.

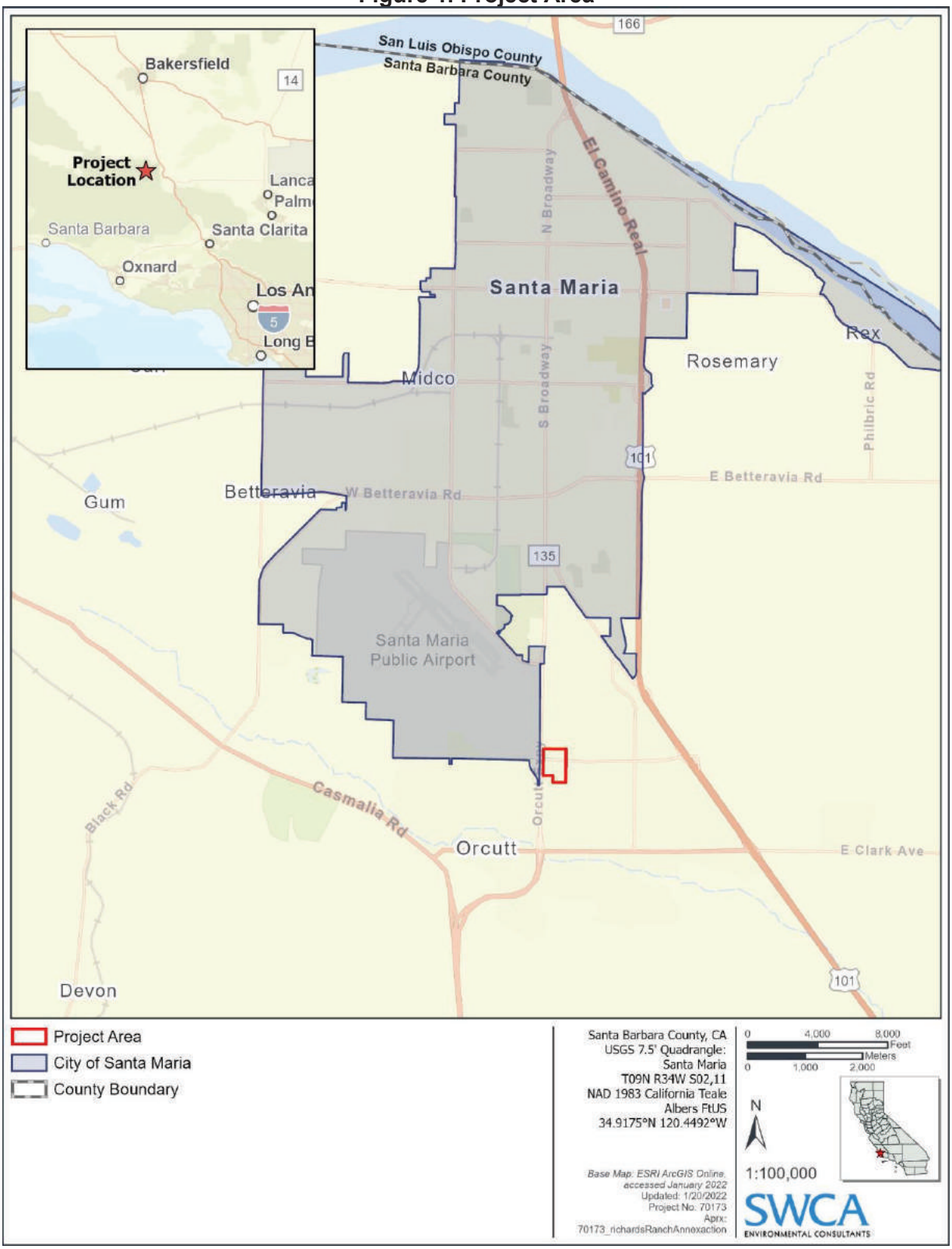
EXISTING SETTING

The project is located in the unincorporated area of Santa Barbara County. Figure 3 shows a map of the project site with nearby roadways. The project area experiences a cool Mediterranean climate, with an annual normal precipitation of approximately 13.00 inches. Temperatures in the project area range from an average minimum of approximately 38.7 degrees Fahrenheit (°F), in December, to an average maximum of 74.4°F, in September (WRCC 2020).

Energy Resources

Energy sources for the City of Santa Maria are served primarily by Pacific Gas & Electric (PG&E), Central Coast Community Energy (3CE), and Southern California Gas Company (SoCalGas). Energy resources consist largely of natural gas, nuclear, fossil fuels, hydropower, solar, and wind. The primary use of energy sources is for electricity to operate buildings.

Figure 1. Project Area



Source: SWCA 2022

Figure 2. Project Site Plan



Source: SWCA 2022

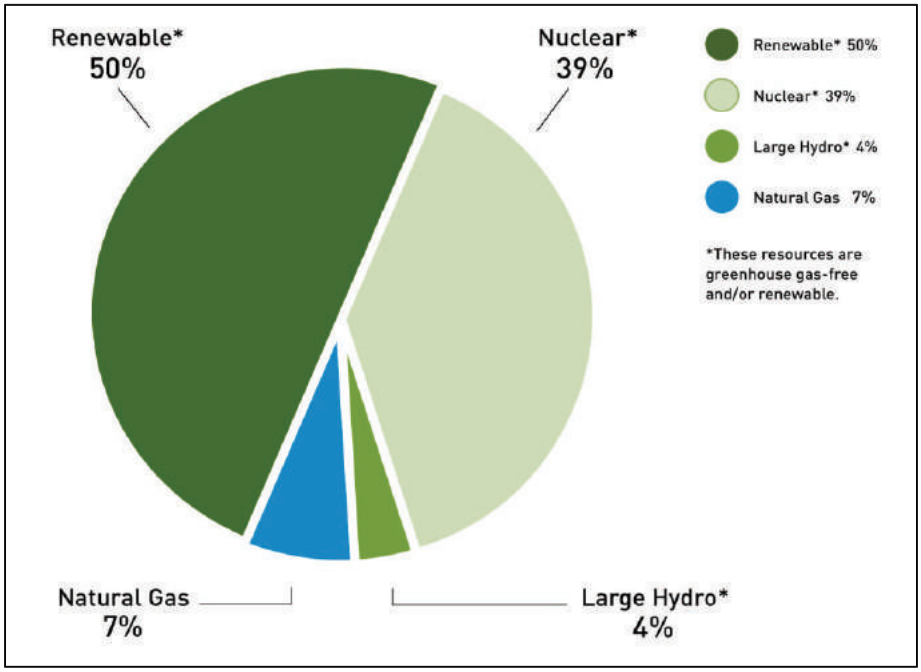
Electricity

Electric services in the City of Santa Maria are provided by PG&E and 3CE.

Pacific Gas & Electric

The breakdown of PG&E's power mix is shown in Figure 3. As shown, 97 percent of PG&E's 2021 total electric power mix came from greenhouse gas (GHG)-free sources that include nuclear, large hydro, renewable energy sources, and natural gas (PG&E 2021).

Figure 3. Pacific Gas & Electric 2021 Power Content Label



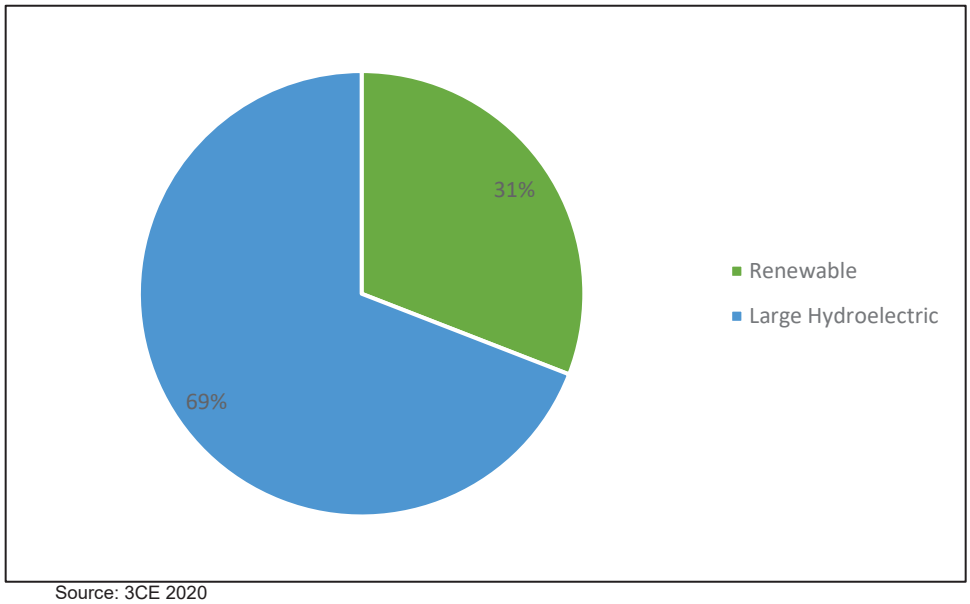
Source: PG&E 2021a

Central Coast Community Energy

Central Coast Community Energy (3CE) is a locally-controlled public agency supplying clean and renewable electricity for residents and businesses in Monterey, San Benito, parts of San Luis Obispo, Santa Barbara, and Santa Cruz Counties. 3CE is based on a local energy model called Community Choice Energy that partners with the local utility (i.e., PG&E) which continues to provide consolidated billing, electricity transmission and distribution, customer service, and grid maintenance services. 3CE provides customers with a choice for clean and renewable energy, and community reinvestment through rate benefits and local GHG reducing energy programs for residential, commercial, and agricultural customers. Participation in 3CE as an electricity provider is voluntary (3CE 2021).

The breakdown of 3CE power mix is shown in Figure 4. As shown, 3CE energy generation was supplied from approximately 31 percent of renewable energy sources (i.e., biomass and waste, geothermal, small hydroelectric, solar, and wind) and 69 percent of large hydroelectric sources.

Figure 4. Central Coast Community Energy 2019 Power Content Label



Source: 3CE 2020

Natural Gas

Natural gas services in the City of Santa Maria are purchased from SoCalGas. SoCalGas's natural gas system encompasses approximately 20,000 square miles in Southern California (SoCalGas 2020). Natural gas throughput provided by SoCalGas totals approximately 2.8 billion cubic feet per day (SoCalGas 2013).

Regulatory Framework

Federal

Regulations for Greenhouse Gas Emissions from Passenger Cars and Trucks and Corporate Average Fuel Economy Standards

In October 2012, the United States Environmental Protection Agency (U.S. EPA) and National Highway Traffic Safety Administration (NHSTA), on behalf of the United States Department of Transportation (U.S. DOT), issued final rules to further reduce greenhouse gas (GHG) emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond. NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon (mpg) limiting vehicle emissions to 163 grams of carbon dioxide (CO_2) per mile for the fleet of cars and light-duty trucks by the model year 2025.

In January 2017, U.S. EPA Administrator Gina McCarthy signed a Final Determination to maintain the current GHG emissions standards for the model year 2022-2025 vehicles. However, on March 15, 2017, U.S. EPA Administrator Scott Pruitt and U.S. DOT Secretary Elaine Chao announced that U.S. EPA intends to reconsider the Final Determination. On April 2, 2018, U.S. EPA Administrator Scott Pruitt officially withdrew the January 2017 Final Determination, citing information that suggests that these current standards may be too stringent due to changes in key assumptions since the January 2017 Determination. According to the U.S. EPA, these key assumptions include gasoline prices and overly optimistic consumer acceptance of advanced technology vehicles. The April 2, 2018 notice is not U.S. EPA's final agency action. The U.S. EPA intends to initiate rulemaking to adopt new standards. Until that rulemaking has been completed, the current standards remain in effect. (U.S. EPA 2017, U.S. EPA 2018).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the United States would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the NHSTA, which is part of the U.S. DOT, is responsible for establishing additional vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The CAFE program, administered by U.S. EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. U.S. EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the U.S. DOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the Act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

State

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The Act established a state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

Assembly Bill 32: Climate Change Scoping Plan and Update

In October 2008, ARB published its Climate Change Proposed Scoping Plan, which is the State's plan to achieve GHG reductions in California required by AB 32. This initial Scoping Plan contained the main strategies to be implemented in order to achieve the target emission levels identified in AB 32. The Scoping Plan included ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reduction recommendations were associated with improving emissions standards for light-duty vehicles, implementing the Low Carbon Fuel Standard program, implementation of energy efficiency measures in buildings and appliances, and the widespread development of combined heat and power systems, and developing a renewable portfolio standard for electricity production.

The initial Scoping Plan was first approved by ARB on December 11, 2008 and is updated every five years. The first update of the Scoping Plan was approved by the ARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030-2035) on the road to reach the 2050 goals (ARB 2014). The most recent update released by ARB is the 2017 Climate Change Scoping Plan, which was released in November 2017. The

measures identified in the 2017 Climate Change Scoping Plan have the co-benefit of increasing energy efficiency and reducing California's dependency on fossil fuels.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statues of 2005) required CEC to prepare a state plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels (SAF) Plan in partnership with ARB and in consultation with other state, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing significant degradation of public health and environmental quality.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the California Air Resource Board (ARB) prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles traveled (VMT) (ARB 2003). Further, a performance-based goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand by 2020.

Senate Bill 350: Clean Energy and Pollution Prevention Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires a doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

Senate Bill 375

SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will address land use allocation in that MPOs regional transportation plan (RTP). ARB, in consultation with MPOs, establishes regional reduction targets for GHGs emitted by passenger cars and light trucks for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, funding for transportation projects may be withheld.

Senate Bill 1078: California Renewables Portfolio Standard Program

Senate Bill (SB) 1078 (Public Utilities Code Sections 387, 390.1, 399.25 and Article 16) addresses electricity supply and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide a minimum of 20 percent of their supply from renewable sources by 2017. This SB will affect statewide GHG emissions associated with electricity generation. In 2008, Governor Schwarzenegger signed Executive Order (EO) S-14-08, which set the Renewables Portfolio Standard (RPS) target to 33 percent by 2020. It directed state government agencies and retail sellers of electricity to take all appropriate actions to implement this target. EO S-14-08 was later superseded by EO S-21-09 on September 15, 2009. EO S-21-09 directed the ARB to adopt regulations requiring 33 percent of electricity sold in the State to come from renewable energy by 2020. Statute SB X1-2 superseded this EO in 2011, which obligated all California electricity providers, including investor-owned utilities and publicly owned utilities, to obtain at least 33 percent of their energy from renewable electrical generation facilities by 2020.

Senate Bill 32 and Assembly Bill 197 of 2016

SB 32 was signed by Governor Brown on September 8, 2016. SB 32 effectively extends California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40 percent below

1990 levels by 2030 is intended to promote further GHG reductions in support of the State's ultimate goal of reducing GHG emissions by 80 percent below 1990 levels by 2050. SB 32 also directs the ARB to update the Climate Change Scoping Plan to address this interim 2030 emission-reduction target. Achievement of these goals will have the co-benefit of increasing energy efficiency and reducing California's dependency on fossil fuels.

Executive Order S-06-06

EO S-06-06, signed on April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The EO also calls for the State to meet a target for use of biomass electricity. The Bioenergy Action Plans developed by CEC identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan provides a detailed action plan to achieve the following goals:

- increase environmentally- and economically-sustainable energy production from organic waste;
- encourage the development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications;
- create jobs and stimulate economic development, especially in rural regions of the state; and
- reduce fire danger, improve air and water quality, and reduce waste.

In 2019, 2.87 percent of the total electrical system power in California was derived from biomass (CEC 2020).

Executive Order B-48-18: Zero Emission Vehicles

In January 2018, Governor Brown signed EO B-48-18 which required all State entities to work with the private sector to put at least 5-million zero-emission vehicles on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 zero-emissions chargers by 2025. In addition, State entities are also required to continue to partner with local and regional governments to streamline the installation of zero-emission vehicle infrastructure. Additionally, all State entities are to support and recommend policies and actions to expand infrastructure in homes, through the Low-Carbon Fuel Standard.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The State's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 EAP II, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

California Building Code

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building

Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

Green Building Standards

In essence, green buildings standards are indistinguishable from any other building standards, are contained in the CBC, and regulate the construction of new buildings and improvements. Whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

The 2019 Building Energy Efficiency Standards (2019 Standards), adopted in May 2018, addressed four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and non-residential lighting requirements. The 2019 Standards required new residential and non-residential construction; as well as major alterations to existing structures, to include electric vehicle (EV)-capable parking spaces which have electrical panel capacity and conduit to accommodate future installation. In addition, the 2019 Standards also required the installation of solar photovoltaic (PV) systems for low-rise residential dwellings, defined as single-family dwellings and multi-family dwellings up to three-stories in height. These requirements are based on various factors, including the floor area of the home, sun exposure, and climate zone. Under the 2019 standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

The recently updated 2022 Building Energy Efficiency Standards (2022 Standards), which were approved in December 2021, encourages efficient electric heat pumps, establishes electric-ready requirements when natural gas is installed and to support the future installation of battery storage, and further expands solar photovoltaic and battery storage standards. The 2022 Standards extend solar PV system requirements, as well as battery storage capabilities for select land uses, including high-rise multi-family and non-residential land uses, such as office buildings, schools, restaurants, warehouses, theaters, grocery stores, and more. Depending on the land use and other factors, solar systems should be sized to meet targets of up to 60 percent of the structure's loads. These new solar requirements will become effective January 1, 2023 and contribute to California's goal of reaching net-zero carbon footprint by 2045 (CEC 2022).

Advanced Clean Cars Program

In January 2012, ARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires a battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions than the statewide fleet in 2016 (ARB 2016).

Local

City of Santa Maria General Plan Resource Management Element

The City of Santa Maria General Plan contains a Resources Management Element (RME) (City of Santa Maria 2001). The Element is a comprehensive long-range planning document that sets forth goals, policies, objectives, and programs to address the conservation and preservation of energy resources by increasing energy efficiency of buildings, appliances, and buildings to the use of alternative forms of energy. Applicable energy policies and objectives include, but are not limited to:

• Policy 6.2: Promote the reduction of overall consumption of limited, non-renewable energy sources, the increase in the efficient use of energy, and the utilization of cost-effective, renewable sources of energy.

• Objective 6.1.b(2): Encourage innovative building and site design which maximizes energy efficiency in private and public facilities.

• Objective 6.1.b(4): Contribute to the energy efficiency of the community through street orientation, the placement of buildings and the use of shading.

The RME also refers to the Circulation Element to implement and promote alternative transportation modes and other transportation system management into project designs such as bicycle and pedestrian paths and those support facilities (e.g., as bicycle lockers and showers), ridesharing programs, and transit improvements (bus turnouts, shelters, and benches).

IMPACT ANALYSIS

Thresholds of Significance

In accordance with Appendix F and G of the California Environmental Quality Act (CEQA) Guidelines, energy use impacts associated with the proposed project would be considered significant if it would:

a) Result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; or

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The CEQA Guidelines, Appendix F, requires environmental analyses to include a discussion of potential energy impacts associated with a proposed project. Where necessary, CEQA requires that mitigation measures be incorporated to reduce the inefficient, wasteful or unnecessary consumption of energy. The State CEQA Guidelines, however, do not establish criteria that define inefficient, wasteful or unnecessary consumption. Compliance with the State's building standards for energy efficiency would result in decreased energy consumption for proposed buildings. However, compliance with building codes may not adequately address all potential energy impacts associated with project construction and operation. As a result, this analysis includes an evaluation of electricity and natural gas usage requirements associated with future development, as well as, energy requirements associated with the use of on-road and off-road vehicles. The degree to which the proposed project would comply with existing energy standards, as well as, applicable regulatory requirements and policies related to energy conservation was also taken into consideration for the evaluation of project-related energy impacts.

Methodology

Construction Impacts

Regarding energy use (e.g., fuel use) during construction, it is assumed that only diesel fuel would be used in construction equipment. On-road vehicles for hauling materials and worker commute trips assumed a mix of diesel and gasoline fuel use. Construction schedules, equipment numbers, horsepower ratings, and load factors were used to calculate construction-related fuel use, based on default assumptions contained in the California Emissions Estimator Model (CalEEMod). Diesel fuel use was estimated based on a factor of 0.05739 gallons of diesel fuel per horsepower-hour derived from the California Air Resources Board (ARB) Off-Road Diesel Emissions Factors (ARB 2017a). Energy uses were quantified for site preparation, grading, building construction, and paving. Demolition would not occur with project implementation. Proposed land uses are summarized in Table 1.

Table 1. Planned Land Uses

Use	Size	Employees/Residents
General Commercial	131,100 sf	456
High Density Residential Apartment	400 units	1088
High Density Residential Townhouse	95 units	258
Total	131,100 sf & 495 units	1,802 Residents

sf = square feet
Source: SWCA 2022

Operational Impacts

The long-term operation of the proposed project would require electricity and natural gas usage for lighting, water conveyance, and landscaping maintenance equipment. Indirect energy use would include solid waste removal. Project operation would include the consumption of diesel and gasoline fuel from on-road vehicles. Building energy use was estimated using CalEEMod, version 2020.4.0. With continued improvements in building energy efficiencies, energy use in future years would be less. Transportation fuel-use estimates were calculated by applying average fuel usage rates per vehicle mile to VMT associated with the proposed project. A maximum daily trip rate of 14,842 was used to calculate mobile-source emissions. (ATE 2022). Annual energy usage was quantified based on CalEEMod default assumptions for PG&E, including compliance with renewable portfolio standards. Average fuel usage rates by vehicle class, fuel type (e.g., diesel, gasoline, electric, and natural gas), and calendar year were obtained from Santa Barbara County's emissions inventory that's derived from ARB's Emissions Factors (EMFAC) 2017 version 1.0.3 (ARB 2017b).

Project Impacts and Mitigation Measures

Impact E-A. Would the project result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Implementation of the proposed project would increase electricity, diesel, gasoline, and natural gas consumption associated with construction activities, as well as long-term operational activities. Energy consumption associated with short-term construction and long-term operational activities are discussed in greater detail, as follows:

Construction-Related Energy Consumption

Energy consumption would occur during construction, including fuel use associated with the on-site operation of off-road equipment and vehicles traveling to and from the construction site. Table 2 summarizes the levels of energy consumption associated with project construction. As depicted, the operation of off-road construction equipment would use an estimated total of 197,755 gallons of diesel. On-road vehicles would use an estimated total of 98,136 gallons of gasoline and 15,261 gallons of diesel. In total, construction fuel use would equate to approximately 41,069 million British thermal units (MMBTU). Construction equipment use and associated energy consumption would be typical of that commonly associated with the construction of new land uses. As a result, project construction would not be anticipated to require the use of construction equipment that would be less energy efficient than those commonly used for the construction of similar facilities. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes in accordance with Santa Barbara County Air Pollution Control District (SBCAPCD) requirements. Furthermore, implementation of Air Quality Mitigation Measure AQ-1.2 includes numerous measures that would further reduce construction-related fuel use and promote the use of alternative fuels. Energy use associated with construction of the proposed project would be temporary and would not be anticipated to result in the need for additional capacity, nor would construction be anticipated to result in increased peak-period demands for electricity. As a result, the construction of the proposed project would not result in an inefficient, wasteful, or unnecessary consumption of energy. This impact would be considered **less than significant**.

Table 2. Construction Energy Consumption

Source	Total Fuel Use (gallons)	Total MMBTU
Phase 1		
Off-Road Equipment Use (Diesel)	197,755	27,168
On-Road Vehicles (Gasoline)	98,136	11,804
On-Road Vehicles (Diesel)	15,261	2,097
	Total:	41,069

MMBTU = Million British thermal units

Fuel use was calculated based, in part, on default construction schedules, the equipment uses, and vehicle trips identified for the construction of similar land uses contained in the CalEEMod output files prepared for the air quality analysis conducted for this project.

Refer to Appendix A for modeling assumptions and results.

Operational Mobile-Source Energy Consumption

Operational mobile-source energy consumption would be primarily associated with vehicle trips to and from the project. Table 3 summarizes the annual fuel use at project build-out. As noted in Table 3, the vehicle trips associated with the proposed land uses would consume an annual estimated 76,414 gallons of diesel and 412,601 gallons of gasoline. The development of increasingly efficient automobile engines would result in increased energy efficiency and energy conservation. Implementation of Greenhouse Gas Mitigation Measure GHG-1 would also help to promote the use of alternative means of transportation and help to ensure that the proposed project meets or exceeds applicable building code requirements. The proposed project would not result in increased fuel usage that would be considered unnecessary, inefficient, or wasteful. This impact would be considered **less than significant**.

Table 3. Operational Fuel Consumption

Source	Annual Fuel Use (gallons)	Annual MMBTU
Scenario 1 (Phase 1 and Phase 2)		
On-Road Vehicles (Diesel)	76,414	10,498
On-Road Vehicles (Gasoline)	412,601	49,630
	Total:	60,128

MMBTU = Million British thermal units

Fuel use was calculated based, in part, on project trip generation rates derived from the traffic analysis for the project (ATE 2022).

Refer to Appendix A for modeling assumptions and results.

Operational Building-Use Energy Consumption

The proposed project would result in increased electricity and natural gas consumption associated with the long-term operation of the proposed land uses.

Estimated electricity and natural gas consumption associated with the proposed facilities are summarized in Table 4. As depicted, the project would result in the annual consumption of approximately 3,856,306 kilowatt hours (kWh) of electricity, 231,812 kWh of water, and 12,126,017 kilo British thermal units (kBTU) of natural gas. In total, the proposed facilities would consume an annual total of approximately 26,075 MMBTU. The development of increasingly efficient building fixtures would result in increased energy efficiency and energy conservation. The project would be subject to energy conservation requirements in the CEC (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (CALGreen) (Title 24, Part 11 of the California Code of Regulations). However, additional measures would be required to support the State's goal of achieving carbon neutrality by year 2045, per the ARB's Draft 2022 Climate Change Scoping Plan Update and Executive Order B-55-18. For this reason, this impact would be considered **potentially significant**.

Table 4. Operational Electricity, Water, and Natural Gas Consumption

Source	Annual Energy Use	Annual MMBTU
Residential and Commercial		
Electricity (kWh)	3,856,306	13,158
Water (kWh)	231,812	791
Natural Gas Use (kBTU)	12,126,017	12,126
	Total:	26,075

MMBTU = Million British thermal units; kWh = Kilowatt hour; kBTU = Kilo British thermal unit

Mitigation Measures

Implement Mitigation Measure GHG-2.

Energy-1: The project shall include the following measures:

a. Meet or exceed Cal Green Tier 2 standards at the time of development for building energy efficiency.
b. Meet or exceed Cal Green building standards at the time of development for water conservation (e.g. use of low flow water fixtures, water efficient irrigation systems, and draught tolerant landscaping.
c. All built-in appliances shall be Energy Star certified or equivalent.
d. To the extent allowed by the building code at the time of development, incorporate natural lighting in buildings to minimize daytime lighting demand.
e. Outdoor lighting shall be designed to minimize electrical demand, such as the use of solar-powered lighting and lighting controlled by motion sensors.
f. Proposed residential and non-residential land uses shall elect to receive electricity from Central Coast Community Energy (3CE).

Significance After Mitigation

Implementation of Mitigation Measure Energy-1 would include measures that would further reduce project-related energy use. In addition, Mitigation Measure GHG-1 would prohibit the use of natural gas-fired equipment/appliances. Pacific Gas & Electric Company (PG&E) has historically been the primary electricity provider within the City of Santa Maria. Central Coast Community Energy (3CE, formerly Monterey Bay Community Power) is striving to provide 100 percent electricity from renewable sources by 2030. Electing to receive energy from 3CE would ensure increased use of electricity from renewable sources. In addition, Mitigation Measure GHG-2 would prohibit the use of natural gas for proposed residential and commercial development. With mitigation, this impact would be considered **less than significant**.

Impact E-B. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would be required to be in full compliance with the CBC, including applicable green building standards and building energy efficiency standards. However, as noted above, additional measures would be required to support the State's goal of achieving carbon neutrality by year 2045, per the ARB's Draft 2022 Climate Change Scoping Plan Update and Executive Order B-55-18. For this reason, this impact would be considered **potentially significant**.

Implementation of Mitigation Measure Energy-1 and Mitigation Measure GHG-2 would ensure consistency with the City's General Plan RME. The City's General Plan RME ensures the conservation and preservation of energy resources by increasing the energy efficiency of buildings, appliances, and buildings to the use of alternative forms of energy. The project would not conflict with other goals and policies set forth in RME pertaining to renewable energy and energy efficiency. Furthermore, implementation of Mitigation Measure Energy-1 would ensure that the proposed project meets or exceeds building code requirements related to building energy efficiency. Mitigation Measure Energy-1 would also require proposed land uses to obtain electricity from 3CE, which would further ensure the use of electricity from renewable sources in support of the State's carbon neutrality goal per Executive Order B-55-18 and ARB's 2022 Draft Climate Change Scoping Plan. With mitigation, the proposed project would not conflict with state or local plans for renewable energy or energy efficiency. With mitigation, this impact would be considered **less than significant**.

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APPENDIX A

Energy Modeling

Energy Use Summary Operational Year 2027 Mitigated

Construction Energy Use

	Gallons	Annual MMBTU
Off-Road Equipment Fuel (Diesel)	197,755	27,168
On-Road Vehicle Fuel (Gasoline)	98,136	11,804
On-Road Vehicle Fuel (Diesel)	15,261	2,097
Total:		41,069

Operational Fuel Use

	Gallons	Annual MMBTU
Mobile Fuel (Diesel)	76,414	10,498
Mobile Fuel (Gasoline)	412,601	49,630
Total:		60,128

Operational Electricity & Natural Gas Use

	Annual Energy	Annual MMBTU
Electricity (kWh/yr, MMBTU)	3,856,306	13,158
Water Use, Treatment & Conveyance (kWh/Yr, MMBTU)	231,812	791
Natural Gas (kBTU/yr, MMBTU)	12,126,017	12,126
Total:		26,075

Construction Equipment Fuel Use

OFF-ROAD EQUIPMENT FUEL USE

Primary Construction Activity	Activity Duration (Days)	Equipment Type	Size (hp)	Number of Pieces	Hours of Daily Use/Piece of Equipment	Total Days of Use	Load Factor	Fuel Usage Rate (g/bhph)*	Total Fuel Diesel (Gallons)
Grubbing	30	Concrete/Industrial Saws	81	1	8	30	0.73	0.05739	814
		Excavators	158	3	8	30	0.38	0.05739	2481
		Rubber Tired Dozers	247	2	8	30	0.4	0.05739	2722
Site Prep Residential	20	Rubber Tired Dozers	247	3	8	20	0.4	0.05739	2722
		Tractors/Loaders/Backhoes	97	4	8	20	0.37	0.05739	1318
Site Prep Commercial	10	Rubber Tired Dozers	247	3	8	10	0.4	0.05739	1361
		Tractors/Loaders/Backhoes	97	4	8	10	0.37	0.05739	659
Grading Residential	45	Excavators	158	2	8	45	0.38	0.05739	2481
		Graders	187	1	8	45	0.41	0.05739	1584
		Rubber Tired Dozers	247	1	8	45	0.4	0.05739	2041
		Scrapers	367	2	8	45	0.48	0.05739	7279
		Tractors/Loaders/Backhoes	97	2	8	45	0.37	0.05739	1483
Grading Commercial	20	Excavators	158	1	8	20	0.38	0.05739	551
		Graders	187	1	8	20	0.41	0.05739	704
		Rubber Tired Dozers	247	1	8	20	0.4	0.05739	907
		Tractors/Loaders/Backhoes	97	3	8	20	0.37	0.05739	989
Construction Residential	557	Cranes	231	1	7	557	0.29	0.05739	14990
		Forklifts	89	3	8	557	0.2	0.05739	13656
		Generator Sets	84	1	8	557	0.74	0.05739	15896
		Tractors/Loaders/Backhoes	97	3	7	557	0.37	0.05739	24093
		Welders	46	1	8	557	0.45	0.05739	5294
Construction Commercial	557	Cranes	231	1	7	557	0.29	0.05739	14990
		Forklifts	89	3	8	557	0.2	0.05739	13656
		Generator Sets	84	1	8	557	0.74	0.05739	15896
		Tractors/Loaders/Backhoes	97	3	7	557	0.37	0.05739	24093
		Welders	46	1	8	557	0.45	0.05739	5294
Paving Residential	35	Pavers	130	2	8	35	0.48	0.05739	2005
		Paving Equipment	132	2	8	35	0.36	0.05739	1527
		Rollers	80	2	8	35	0.38	0.05739	977
Paving Commercial	20	Pavers	130	2	8	20	0.42	0.05739	1003
		Paving Equipment	132	2	8	20	0.36	0.05739	873
		Rollers	80	2	8	20	0.38	0.05739	558
Architectural Coating Residential	469	Air Compressor	78	1	6	469	0.42	0.05739	5291
Architectural Coating Commercial	587	Air Compressor	78	1	6	587	0.48	0.05739	7568

Equipment usage assumptions based on default assumptions contained in CalEEMod.

*Based on CARB Off-road Diesel Emissions Factors https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-

Total Diesel Fuel Use (Gallons):	197755
Number of Construction Years:	3.21
Average Diesel Fuel Use/Year:	61606
BTU/Gallon:	137381
BTU:	27167712998
MMBTU:	27168

Construction Fuel Use - On-Road Vehicles

Activity	Grubbing	Site Prep Commercial	Sire Prep Residential	Grading Commercial	Grading Residential	Construction Commercial	Construction Residential	Arch Coating Commercial	Arch Coating Residential	Paving Commercial	Paving Residential
Days	30	10	20	20	45	557	557	587	469	20	35
Worker Trips	15	18	18	15	20	156	356	15	71	31	15
Miles/Trip	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Total VMT	3735	1494	2988	2490	7470	721203.6	1645823.6	73081.5	276381.7	5146	4357.5
Vendor Trips	0	0	0	0	0	64	53	0	0	0	0
Miles/Trip	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Total VMT	0	0	0	0	0	228147.2	188934.4	0	0	0	0
Haul Trips	0	0	0	0	0	0	0	0	0	0	0
Miles/Trip	20	20	20	20	20	20	20	20	20	20	20
Total VMT	0	0	0	0	0	0	0	0	0	0	0

	Annual VMT	Gallons/Mile*	Gallons	BTU/gallon**		BTU	MMBTU
HDT	0	0.18853355	0	137381		0	0.00
LDA	914724	0.03099285	28350	120286		3410094841	3410.09
LDT1	914724	0.03634600	33247	120286		3999094404	3999.09
LDT2	914724	0.03994594	36539	120286		4395189648	4395.19
MDV	417082	0.03658918	15261	137381		2096526421	2096.53

**Gallons per mile based on year 2027 conditions for Santa Barbara County. Derived from Emfac2017 (v1.0.2) Emissions Inventory.*

***Energy coefficient derived from US EIA.*

https://www.eia.gov/energyexplained/index.php?page=about_energy_units

EMFAC2017 Fuel Rate Calculation	Fuel Consumption (1000 Gallons/Day)*		VMT (Miles/Day)**			
	Diesel	Gasoline	Diesel	Gasoline		TOTAL
LDA	1.55540407	171.4361318	77744.39644	5531474.113		
LDT1	0.0127893	21.07885122	353.7104788	579949.616		
LDT2	0.48712851	90.58711624	17222.23218	2267742.808		
MDV	1.5961722	79.94299312	43624.16292	1679831.445		
HDT***	3.506774894	0.041176945	18600.26949	181.9970735		
Total	7.158268975	363.0862693	157544.7715	10059179.98		10216724.75
Percent of Total			1.54%	98.46%		
LDA-Miles/Gallon	49.98340818	32.26550935				
LDA-Gallons/Mile	0.020006639	0.030992847				
LDT1-Miles/Gallon	27.65674585	27.51334073				
LDT1-Gallons/Mile	0.036157544	0.036346004				
LDT2-Miles/Gallon	35.35459688	25.03383375				
LDT2-Gallons/Mile	0.028284865	0.039945939				
MDV-Miles/Gallon	27.33048661	21.01286654				
MDV-Gallons/Mile	0.036589177	0.04758989				
HDT-Miles/Gallon	5.304095659	0.000226251				
HDT-Gallons/Mile	0.188533553	4419.877957				

**Fuel consumptions derived from EMFAC2017 (v1.0.2) for year 2027 conditions.*

***VMT derived from EMFAC2017 (v1.0.2) for year 2027 conditons.*

****HDT diesel engine T7 CAIRP construction, T7 single construction, T7 tractor construction. HDT gasoline engine T7IS.*

Fuel consumption and VMT based on the Santa Barbara County.

Operational Fuel Use - Proposed Project Year 2027 Mitigated

LAND USE	Total Annual VMT
Santa Maria Richards Ranch	11,526,540

	VMT	Gallons/Mile*	Gallons	BTU/gallon**	BTU	MMBTU
Diesel	821062	0.09306695	76414	137381	10497792026	10497.79
Gasoline	10705478	0.03854112	412601	120286	49630138363	49630.14

**Gallons per mile based on year 2027 conditions for Santa Barbara County. Derived from Emfac2017 (v1.0.2) Emissions Inventory.*

**Energy coefficient derived from US EIA.

https://www.eia.gov/energyexplained/index.php?page=about_energy_units

EMFAC2017 Fuel Rate Calculation	Fuel Consumption (1000 Gallons/Day)*		VMT (Miles/Day)**		
	Diesel	Gasoline	Diesel	Gasoline	
All Other Buses	0.87267849		8054.095974		
LDA	1.55540407	171.4361318	78720.03072	5603760.867	
LDT1	0.0127893	21.07885122	316.4537309	591852.1255	
LDT2	0.48712851	90.58711624	18212.01448	2269108.914	
LHD1	8.94045887	21.4264202	159047.74	177362.0339	
LHD2	3.4622276	3.859200951	55050.21612	27862.75303	
MDV	1.5961722	79.94299312	45204.32391	1649801.916	
MH	0.3427297	1.909102267	3361.327856	9093.686583	
Motor Coach	0.60854221		3892.800988		
PTO	1.30449828		6385.277652		
SBUS	3.50895045	1.957408529	27823.04546	17564.90792	
T6 Ag	0.02857563		255.0726458		
T6 CAIRP heavy	0.23120399		2636.941683		
T6 CAIRP small	0.02581603		271.4334468		
T6 instate construction heavy	0.58954613		4876.888274		
T6 instate construction small	2.32037044		19204.508		
T6 instate heavy	8.19173228		80131.57253		
T6 instate small	8.71568685		83239.49586		
T6 OOS heavy	0.12546484		1427.694801		
T6 OOS small	0.016107		169.8386503		
T6 Public	0.51586725		3659.178556		
T6 utility	0.10198059		932.1105666		
T7 Ag	0.01577202		91.34935093		
T7 CAIRP	4.49940406		30491.76433		
T7 CAIRP construction	0.59733741		3503.111212		
T7 NNOOS	5.22021014		37187.08228		
T7 NOOS	1.81146287		11975.4194		
T7 other port	1.41602468		7887.271609		
T7 Public	1.07415573		5569.499192		
T7 Single	5.23770123		32157.53457		
T7 single construction	1.58139579		8690.574588		
T7 SWCV	0.86295066		1914.88941		
T7 tractor	5.78182503		42511.47128		
T7 tractor construction	1.3280417		7168.95891		
T7 utility	0.05028985		297.322696		
UBUS	1.75305021	0.581478796	11227.46071	3020.045788	
MCY		2.218870471		85954.16176	
OBUS		1.932746561		9133.056854	
T6TS		6.827467462		32410.38409	
T7IS		0.041176945		169.8963109	
Total	74.78355206	403.7989646	803545.7714	10477094.75	11280640.52
Percent of Total			7.12%	92.88%	
Miles/Gallon	10.74495326	25.94631405			
Gallons/Mile	0.093066947	0.03854112			

*Fuel consumptions derived from EMFAC2017 (v1.0.2) for year 2027 conditons.

**VMT derived from EMFAC2017 (v1.0.2) for year 2027 conditons.

Fuel consumption and VMT based on the Santa Barbara County.

Operational Electricity & Natural Gas Use Year 2027 Mitigated

	kWh/yr	MWh/Yr	BTU/kWh*	BTU	MMBTU
Electricity	3856306	3856	3412	13157714741	13158

*Energy coefficient derived from US EIA.
https://www.eia.gov/energyexplained/index.php?page=about_energy_units

	kBTU/yr			BTU	MMBTU
Natural Gas	12126017			12126017000	12126

*Energy coefficient derived from US EIA.
https://www.eia.gov/energyexplained/index.php?page=about_energy_units

Water Energy Use Year 2027 Mitigated

	WATER USE*	ELECTRIC INTENSITY FACTORS		ANNUAL ELECTRIC USE (kWh/Yr)		
	MGAL/YR	INDOOR	OUTDOOR	INDOOR	OUTDOOR	TOTAL
ANNUAL INDOOR WATER USE	43.98	3500		153920		231,812
ANNUAL OUTDOOR WATER USE	22.26		3500		77893	

*Based on estimated water use derived from CalEEMod.

**Energy coefficient derived from US EIA.

https://www.eia.gov/energyexplained/index.php?page=about_energy_units

BTU/kWh**	3412
BTU:	790942544
MMBTU:	790.94

APPENDIX H

Geotechnical Engineering Report

GEOTECHNICAL ENGINEERING REPORT
RICHARDS RANCH UNION VALLEY SITE
EAST OF SOUTH BROADWAY AND UNION VALLEY PARKWAY
SANTA MARIA AREA OF SANTA BARBARA COUNTY, CALIFORNIA

November 22, 2021

Prepared for:

Richards Ranch, LLC
c/o
Mr. Michael D. Stoltey, MBA
Managing Member, MD3 Investments

Prepared by:

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November 22, 2021

File No.: 304918-001

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PO Box 13914
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c/o Mr. Michael D. Stoltey, MBA, Managing Member
MD3 Investments
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PROJECT: RICHARDS RANCH UNION VALLEY SITE
EAST OF SOUTH BROADWAY AND UNION VALLEY PARKWAY
SANTA MARIA AREA OF SANTA BARBARA COUNTY, CALIFORNIA

REF: Revised Proposal for a Geotechnical Engineering Report with an Option for a Soil Corrosivity Evaluation, Richards Ranch Union Valley, by Earth Systems Pacific, dated September 16, 2021, Doc. No. SM 2109-017.REVPRP

Dear Mr. Stoltey:

In accordance with the authorization of the above-referenced proposal, this geotechnical engineering report has been prepared for the Richards Ranch Union Valley Site. This project site is east of South Broadway and Union Valley Parkway in the Santa Maria area of Santa Barbara County, California.

Preliminary geotechnical recommendations for site preparation, grading, utility trenches, foundations, retaining walls, slabs-on-grade and exterior flatwork, pavement sections, drainage and maintenance, and construction observation and testing are presented herein. An electronic copy of this report is being furnished for your use.

We appreciate the opportunity to have provided services for this project and look forward to working with you again in the future. If there are any questions concerning this report, please do not hesitate to contact the undersigned.

Sincerely,
Earth Systems Pacific

Phillip Madrid, PE
Project Engineer

Doc. No. 2111-022.SER/ln

REGISTERED PROFESSIONAL ENGINEER
PHILLIP W. MADRID
PE 87519
CIVIL
STATE OF CALIFORNIA
11/22/21

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Typical Detail A: Pipe Placed Parallel to Foundations

1.0 INTRODUCTION

The Richards Ranch Union Valley project is planned within a property located east of South Broadway and Union Valley Parkway in the Santa Maria area of Santa Barbara County, California. The property is referred to herein as "the site" and is shown on the Exploration Location Map presented in Appendix A.

We understand this 43.16-acre site will be developed with residential and commercial structures and associated surface and subsurface improvements. We have assumed that residential and commercial buildings will be one to three stories, will be of wood and steel frame construction, and will utilize Portland cement concrete (PCC) slabs-on-grade. Masonry and/or concrete retaining walls for sitework and not connected to and forming part of the buildings are anticipated. We have assumed these retaining walls will not exceed 6 feet in height. For the purposes of this report we have assumed maximum line loads of 3 kips per linear foot, maximum point loads of 60 kips, and fundamental structure periods of less than 0.5 seconds.

We have assumed surface improvements will consist of hot mix asphalt (HMA) and/or PCC pavement placed over aggregate base (AB) for vehicles and PCC flatwork for pedestrian use. We have assumed subsurface improvements will be the underground municipal sewer, water, power, and communications utilities that will provide service to the project. No Low Impact Development (LID) drainage disposal improvements or on-site effluent disposal systems have been identified; therefore, these items are not addressed in this report.

We have assumed the site will be mass graded to develop the building and surface improvement areas, to improve access, and to improve drainage. Cuts and fills are anticipated to be on the order 15 feet or less. Cut and fill slopes not exceeding 15 feet in height and inclined at 2:1 or flatter may also be constructed.

2.0 SCOPE OF SERVICES

The scope of work for the geotechnical engineering report included a general site reconnaissance, subsurface exploration, laboratory testing of selected samples, geotechnical

analysis of data, and preparation of this report. The analysis and subsequent recommendations were based, in part, upon information provided by the client.

This report and preliminary geotechnical recommendations are intended to comply with the considerations of California Building Code (CBC) Sections 1803.1 through 1803.6, J104.3 and J104.4 (CBSC, 2019), as applicable; and common geotechnical engineering practice in this area under similar conditions at this time. The test procedures were performed in general conformance with the standards noted, as modified by common geotechnical engineering practice in this area under similar conditions at this time.

Preliminary geotechnical recommendations for site preparation, grading, utility trenches, foundations, retaining walls, slabs-on-grade and exterior flatwork, pavement sections, drainage and maintenance, and construction observation and testing are presented to guide the development of project plans and specifications. It is our intent that this report be used exclusively by the client to form the geotechnical basis of the design of the project and in the preparation of the plans and specifications. Application beyond this intent is strictly at the user's risk. If future parties wish to use this report, such use may be allowed to the extent the report is applicable, only if the user agrees to be bound by the same contractual conditions as the original client, or contractual conditions that may be applicable at the time of the report use.

This report does not address issues in the domain of contractors such as, but not limited to, site safety, loss of volume due to stripping of the site, shrinkage of soils during compaction, dewatering, temporary slope angles, construction means and methods, etc. Analyses of the soil for asbestos (either naturally occurring or in man-made products), radioisotopes, mold or other microbial content, hydrocarbons, lead, and/or other chemical properties (except for geotechnical corrosivity) are beyond the scope of this report. Ancillary features such as temporary access roads, fencing, flag and light poles, signage, effluent disposal systems, LID drainage disposal systems, and nonstructural fills are not within our scope and are also not addressed.

As there may be unresolved geotechnical issues with respect to this project, the geotechnical engineer should be retained to provide consultation as the design progresses, and to review project plans as they near completion to assist in verifying that pertinent geotechnical issues have been addressed and to aid in conformance with the intent of this report. In the event that there are any changes in the nature, design, or location of improvements, or if any assumptions used in the preparation of this report prove to be incorrect, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report are modified or verified by the geotechnical engineer in writing. The criteria presented in this report are considered preliminary until such time as any peer review or review by any jurisdiction has been completed, conditions are observed by the geotechnical engineer in the field during construction, and the recommendations have been verified as appropriate or are modified by the geotechnical engineer in writing.

3.0 SITE SETTING

The site is an approximately 43.16-acre parcel located east of South Broadway and Union Valley Parkway in the Santa Maria area or the northwest sector of Santa Barbara County, California. Vehicle access to the site is via Union Valley Parkway and Orcutt Road; these two roads divide the site into four unevenly sized areas. The approximate central site coordinates and elevation obtained from the Google Earth website (Google, 2021) are latitude 34.8785 degrees north, longitude 120.4335 degrees west, and 352 feet.

The site is generally undeveloped except for an asphalt paved driveway in the southeast area of the site that connects to Orcutt Road. At the time of our investigation, most of the central portions of the four areas had been cleared of vegetation; however, several perimeter areas were covered with a sparse to dense growth of vegetation consisting mostly of seasonal grasses, brush, and mature eucalyptus trees. The ground surface of the site generally slopes gently to the northeast; drainage is by sheet flow.

4.0 FIELD INVESTIGATION AND LABORATORY ANALYSIS

Seventeen borings were drilled at the site on October 18 and 19, 2021 to depths ranging from 16.5 to 51.5 feet below the existing ground surface (bgs). The borings were drilled with a rubber track mounted CME 75 drill rig equipped with an 8-inch outside diameter hollow stem auger and an automatic trip hammer for sampling. The approximate locations of the borings are shown on the Exploration Location Map presented in Appendix A.

Soils encountered in the exploratory borings were logged and categorized in general accordance with the Unified Soil Classification System and ASTM D2488-17. Copies of the boring logs can also be found in Appendix A. In reviewing the boring logs and the legend, the reader should recognize that the legend is intended as a guideline only, and there are a number of conditions that may influence the characteristics observed during drilling. These include, but are not limited to, the presence of cobbles or boulders, cementation, variations in soil moisture, presence of groundwater, and other factors. Consequently, the logger must exercise judgment in interpreting soil characteristics, possibly resulting in subsurface descriptions that vary somewhat from the legend. The reader should also consider the sampler type used when reviewing the blow counts.

As the borings were drilled, soil samples were obtained using a 3-inch outside diameter ring-lined barrel sampler (ASTM D3550-17 with shoe similar to D2937-17). Standard penetration tests (SPT) using a 2-inch outside diameter split-spoon sampler were also performed in the borings (ASTM D1586-18) at selected depths. Bulk soil samples were obtained from the auger cuttings.

Ring samples were tested for bulk density per ASTM D2937-17 (modified for ring liners). Two bulk samples were tested for maximum density and optimum moisture content (ASTM D1557-12), and direct shear tests (ASTM D3080/D3080M-11) were conducted on the same samples after they were remolded to approximately 90 percent of maximum dry density. Selected samples were tested for particle size per ASTM D1140-17 and one sample was tested for plasticity index (ASTM D4318-17). Two one-dimensional consolidation tests (ASTM D2435/D2435M-11(2020)) were performed on ring samples. Two bulk samples were also sent to CERCO Analytical, Inc. of

Concord, California for use in preparing a corrosion evaluation report. The corrosion evaluation report and associated test results are for use by the architect/engineer in determining appropriate corrosion mitigation measures. The laboratory test results and the corrosion evaluation report prepared by CERCO Analytical, Inc. are presented in Appendices B and C, respectively.

5.0 GENERAL SUBSURFACE SOIL PROFILE

The subsurface profile observed in the borings generally consisted of layered sand, silt, and clay soils. These soils were generally in a dry to wet condition. The sands ranged from loose to very dense in consistency, and the clays and silts were stiff to very stiff. Groundwater was encountered during drilling in several of the borings, and our measurements are presented in Table 1 below.

TABLE 1 - GROUNDWATER MEASUREMENTS

Boring No.	Approx. Surface Elev. From Google Earth	Boring Depth (feet bgs)	Groundwater Depth (feet bgs)
1	336	16.5	15.5
2	341	51.5	None
3	342	16.5	None
4	340	26.5	None
5	345	16.5	None
6	343	26.5	None
7	343	26.5	15.0 (no water after drilling was complete)
8	353	16.5	None
9	366	26.5	24.0
10	344	16.5	None
11	354	51.5	13.0
12	376	16.5	None
13	355	16.5	9.5
14	352	26.5	9.5
15	369	16.5	None
16	373	51.5	28.5
17	368	26.5	20.0

Please refer to the boring logs presented in Appendix A for a more detailed description of the subsurface profile.

6.0 CONCLUSIONS

In our opinion, the site is suitable, from a geotechnical engineering standpoint, for the planned development as described in the "Introduction" section of this report, provided the recommendations contained herein are implemented in the design and construction. The upper site soils were judged to be nonexpansive; therefore, no special measures with respect to expansive soils are considered necessary. Assuming the site is designed and prepared in accordance with the "Preliminary Geotechnical Recommendations" section of this report, the structures may be supported by shallow conventional continuous and spread (pad) footings.

The primary geotechnical concerns are the potential for strong ground shaking, the potential for settlement, the excavation characteristics of the soils, the suitability of the soils for use as fill and backfill, the stability of the soils during grading, the erodible nature of the soils, the corrosive soils, the potential for groundwater, and the potential for liquefaction and seismically induced settlement of dry sand.

Strong Ground Shaking

The site is in a region of high seismic activity with the potential for large seismic events that could generate strong ground shaking. The CBC requires that seismic loads be considered in structural design. A seismic analysis was undertaken to provide seismic acceleration design parameters; the results are presented in the "Foundations" section of this report for use by others in the structural design process.

The ASCE 7-16 (ASCE, 2017/2018) method available on the Structural Engineers Association of California (SEAOC) Seismic Design Map Tool website (SEAOC, 2021) was used for the seismic analysis. The risk category for buildings and structures is assigned by others in accordance with Table 1604.5 (CBSC, 2019); however, based on our current understanding of the project, we selected Risk Category II for our analysis. The site coordinates from the "Site Setting" section of

this report were used in the analysis. Based on the general subsurface profile encountered and the sampler blowcounts, the Site Class per Chapter 20 Table 20.3-1 (ASCE, 2017) is "D", a "Stiff Soil Profile." A general ground motion seismic analysis was performed assuming that Exception 2 listed in Section 11.4.8 (ASCE, 2017) will apply to the project. We also provided seismic parameters if the Simplified Lateral Force Analysis Procedure from Section 12.14.8 (ASCE, 2017) will be used in structural design.

Settlement Potential

Settlement (total and differential) can occur when foundations and surface improvements span materials having variable consolidation, moisture, and density characteristics. Such a situation can stress and possibly damage foundations and surface improvements, often resulting in severe cracks and displacement. To reduce this settlement potential, it is necessary for all foundations and surface improvements to bear on material that is as uniform as practicable. A program of overexcavation, scarification, moisture conditioning, and compaction of the upper soils in the building and the surface improvement areas is recommended to provide more uniform soil moisture and density and appropriate support.

Another concern with respect to settlement is the potential for hydroconsolidation. Hydroconsolidation is the tendency of soils to settle upon saturation, even without being subjected to increased loads. Based on our laboratory test data the soils are considered to have a slight potential to collapse when saturated. The recommended earthwork program and the installation and maintenance of drainage improvements will reduce the potential for hydroconsolidation to affect the building and surface improvements.

Excavation Characteristics

The soils are anticipated to be excavatable with conventional earthmoving equipment; however, the stability of excavations is a concern. Additionally, various amounts of gravel size rocks were noted in some of the soil layers. Based on our preliminary testing, the soils are considered to be "Type C" soils per the 2019 Cal/OSHA classification system. This classification should be verified by the contractor's "Competent Person" at the time of construction. Excavation sloping and

shoring will be needed to safely work in and to restrict the size of the excavations, and to reduce the potential for falling rock hazards. As with all construction safety issues, the methods of excavation stabilization, sloping, and/or shoring are ultimately the responsibility of the contractor.

Suitability of the Soils for Use as Fill and Backfill

We anticipate that the majority, if not all, of the soils excavated at the site will be acceptable from a geotechnical viewpoint for reuse as compacted fill and backfill. However, special requirements for utility trench bedding and shading per the specifications of the governing jurisdiction, the conduit manufacturer, and the utility companies should be anticipated.

Stability of the Soils During Grading

The soils may be susceptible to temporary high soil moisture contents, especially during or soon after the rainy season. Attempting to compact the soils in an overly moist condition may create unstable conditions in the form of pumping, yielding, shearing, and/or rutting. These conditions will not allow proper compaction and are inappropriate for continued fill placement. Therefore, the construction schedule should allow adequate time during grading for aerating and drying the soils to near optimum moisture content prior to compaction. If unstable conditions occur, the geotechnical engineer should be consulted to provide recommendations for correction of the conditions.

Soil Erosion

The site soils are considered to be highly erodible. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means *during* and *following* construction is essential to reduce the potential of erosion damage. Care should be taken to establish and maintain proper drainage around the structures and improvements.

Soil Corrosivity

Based on the testing performed by CERCO Analytical, Inc., the upper site soils were classified as “negligibly to mildly corrosive” to certain construction materials that will be in contact with the

soils. The engineer should refer to the CERCO Analytical, Inc. report presented in Appendix C for use in determining appropriate mitigation measures for soil corrosivity.

Groundwater

We did not observe groundwater in nine of the seventeen borings. In the remaining borings the approximate groundwater elevation was variable. We observed groundwater while drilling Boring 7, but by the time drilling was completed no groundwater was present.

To supplement the field data, we reviewed nearby monitoring wells available on the California Department of Water Resources Water Data Library (DWR) 2021. Two wells (Nos. 348944N1204395W001 and 348900N1204449W001) are located within about a mile of the site. Recent readings from these wells indicate that groundwater is in excess of 200 feet below the ground surface near the site. Based on this information, it is our opinion that the groundwater observed during drilling likely represents a localized, perched condition rather than a phreatic surface.

Liquefaction and Seismically Induced Settlement of Dry Sand

Liquefaction is the loss of soil strength caused by a significant seismic event. It occurs primarily in loose, fine to medium-grained sands, and in very soft to medium stiff silts that are saturated by groundwater. During a major earthquake, the saturated sands and silts tend to compress and the void spaces between the soil particles that are filled with water decrease in volume. This causes the pore water pressure to build up in the soils. Then if the water does drain away rapidly, the soils may lose their strength and transition into a liquefied state.

Seismically induced settlement of dry sand is also caused by a significant seismic event, and may occur in lower density and sand and silt soils that are not saturated by groundwater. During a major earthquake, the void spaces between the unsaturated soil particles that are filled with air tend to compress which translates to a decrease in volume or settlement.

In order to estimate the potential for liquefaction and seismically induced settlement of dry sand and their relative effects on the site, we reviewed the boring data and utilized methods suggested

by the Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117a (CGS, 2008). Considering the presence of groundwater and the density of the soils, there appears to be a potential for both liquefaction and seismically induced settlement of dry sand to occur.

To further understand the magnitude and potential effects of liquefaction and seismically induced settlement of dry sand, we analyzed of boring data using the PGA_M of 0.484g from the "Foundations" section of this report, and an earthquake mean magnitude over all sources of 6.73 (USGS, 2021). As a conservative assumption, we used a groundwater elevation of 10 feet bgs for our analyses, although it is our opinion that the shallow groundwater encountered during drilling represents a localized, perched condition. Our analyses indicated that the potentially liquefiable soils are present below 25 feet. Based on our analyses and assuming the site is prepared in accordance with the recommendations later in this report, total and differential dynamic settlement from liquefaction and seismically induced settlement of dry sand is not expected to exceed 2 inches and 1 inch, respectively.

Due to the potential for liquefaction, we also evaluated the potential for loss of soil bearing strength and lateral spreading. The potential for loss of soil bearing strength is considered very low due to the thickness of the overlying non-liquefiable soils (the upper 25 feet of soil) with respect to the depth and thickness of the underlying and potential liquefiable soil layers. Lateral spreading can occur when a soil mass either slides laterally on liquefied soil layers towards a free slope or moves downslope on sloping ground. Since there is not a consistent groundwater surface and the potentially liquefiable soils are discontinuous, the conditions needed for lateral spreading to occur do not appear to exist at the site.

Accordingly, no special measures will be needed to protect the structures and associated improvements from liquefaction and/or seismically induced settlement of dry sand.

7.0 PRELIMINARY GEOTECHNICAL RECOMMENDATIONS

The following preliminary geotechnical recommendations are applicable to the structures and improvements as described in the "Introduction" section of this report and assume that all floors will be above grade. If basements or cellars, taller or stacked retaining walls, or other such features are incorporated into site development, this firm should be contacted for individual assessment.

Definitions

Unless otherwise noted, the following definitions are used in these recommendations. Where specific terms are not defined, common definitions used in the construction industry are intended.

- **Building Area:** The building area is defined as the area within and extending a minimum of 5 feet beyond the perimeter of the foundations for commercial structures or the entire lot where residential structures are planned. The building area also includes the foundation areas (plus 5 feet to each side) of any ancillary structure that will be rigidly attached to the main structure and is expected to perform in the same manner as the main structure. Such structures could include covered walkways, patio covers, arbors, etc.

- **Surface Improvement Area:** The area within and extending a minimum of 2 feet beyond the perimeter of the surface improvement.

- **Scarified**: Ripping the exposed soil surface in two orthogonal directions to a minimum depth of 12 inches.

- **Moisture Conditioning:** Adjusting the soil moisture to optimum moisture content or slightly above, prior to the application of compaction effort.

- **Compacted or Recompacted:** Soils placed in level lifts not exceeding 8 inches in loose thickness, and compacted to a minimum of 90 percent of maximum dry density. A

minimum of 95 percent will be required in the upper 1-foot of subgrade below vehicle pavement and in all AB. The standard tests used to define maximum dry density and field density should be ASTM D1557-12 and ASTM D6938-17a, respectively, or by other methods acceptable to the geotechnical engineer and the governing jurisdiction.

- **Nonexpansive Material:** Nonexpansive material is defined as being a coarse-grained soil (ASTM D2487-17) and having an expansion index of 10 or less (ASTM D4829-19).

Site Preparation

1. The existing ground surface in the building and surface improvements areas should be prepared for construction by removing existing improvements, vegetation, large roots, debris, and other deleterious material. *Any existing fill soils should be completely removed and replaced as compacted fill.* Any existing utilities that will not remain in service should be removed or properly abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.

2. Voids created by the removal of materials or utilities, and extending below the recommended overexcavation depth, should be immediately called to the attention of the geotechnical engineer. No fill should be placed unless the geotechnical engineer has observed the underlying soil.

Grading

1. Following site preparation, the soils in the building area for one and two-story buildings should be removed to a level plane at a minimum depth of 3 feet below the bottom of the deepest footing or 4 feet below existing grade, *whichever is deeper*. The soils in the building area for three-story buildings should be removed to a level plane at a minimum depth of 4 feet below the bottom of the deepest footing or 5 feet below existing grade, *whichever is deeper.* During construction, locally deeper removals may be recommended

based on field conditions. The resulting soil surface should then be scarified, moisture conditioned, and compacted prior to placing any fill soil.

2. In addition to the recommendations of Paragraph 1 of this section, we recommend that all cut or cut/fill transition areas be overexcavated such that a minimum of 5 feet of compacted fill is provided within all the one to two-story building areas and a minimum of 6 feet of compacted fill is provided within all the three-story building areas. Also, the minimum depth of the fill below the building area should not be less than half of the maximum depth of fill below the building area. For example, if the maximum depth of fill below the building area is 10 feet, then the minimum depth of fill below the same building area grades should be no less than 5 feet. In no case should the depth of fill be less than 5 feet on the building areas.

3. Following site preparation, the soils in the surface improvement area should be removed to a level plane at a minimum depth of 1-foot below the proposed subgrade elevation or 2 feet below the existing ground surface, whichever is deeper. During construction, locally deeper removals may be recommended based on field conditions. The resulting soil surface should then be scarified, moisture conditioned, and compacted prior to placing any fill soil

4. Following site preparation, the soils in fill areas beyond the building and surface improvement areas should be removed to a depth of 2 feet below existing grade. During construction, locally deeper removals may be recommended based on field conditions. The resulting soil surface should then be scarified, moisture conditioned, and compacted prior to placing any fill soil.

5. Voids created by dislodging cobbles and/or debris during scarification should be backfilled and compacted, and the dislodged materials should be removed from the area of work.

6. On-site material and approved import materials may be used as general fill. All imported soil should be nonexpansive. The proposed imported soils should be evaluated by the

geotechnical engineer before being used, and on an intermittent basis during placement on the site.

7. All materials used as fill should be cleaned of any debris and rocks larger than 6 inches in diameter. No rocks larger than 3 inches in diameter should be used within the upper 3 feet of finish grade. When fill material includes rocks, the rocks should be placed in a sufficient soil matrix to ensure that voids caused by nesting of the rocks will not occur and that the fill can be properly compacted.

8. Where fill will be placed on existing slopes that are steeper than 10 percent, the slope should be cut to level benches into competent material. The benches should be a minimum of 10 feet wide and angled 2 to 3 percent back into the slope. Where fill is planned on existing slopes that are steeper than 20 percent, the toe of the fill should be keyed into competent material. The keyway should be a minimum of 10 feet wide or the width should equal one-half the height of the slope, whichever is greater. The keyway should be angled 2 to 3 percent back into the slope, and should penetrate 2 feet into the competent material. The geotechnical engineer should observe all keyways and benches.

9. Backdrains should be provided in all keyways and on benches at approximately 10-foot vertical intervals, unless otherwise recommended by the geotechnical engineer at the time of construction. Typical Bench and Keyway, and Backdrain Details are presented in Appendix D.

10. Slopes should be constructed at 2:1 (horizontal to vertical) or flatter inclinations. Slopes subject to inundation should be constructed at 3:1 or flatter. We also recommend that cut slopes and fill over cut slopes be overexcavated and constructed as compacted fill slopes.

11. Unless otherwise recommended by the landscape architect, completely constructed fill slopes should be covered with a synthetic vegetation matting (Enkamat or equivalent),

and the slopes should be revegetated, in accordance with the installation recommendations of the manufacturer and the CBC.

Utility Trenches

1. Unless otherwise recommended, utility trenches adjacent to foundations should not be excavated within the zone of foundation influence, as shown on Typical Detail A presented in Appendix E.

2. Utilities that must pass beneath foundations should be placed with properly compacted utility trench backfill and the foundation should be designed to span the trench.

3. A select, noncorrosive, granular, easily compacted material should be used as bedding and shading immediately around utilities. Generally, the soil found at the site may be used for trench backfill above the select material.

4. A select, noncorrosive, granular, easily compacted material should be used as bedding and shading immediately around utilities. Generally, the soil found at the site may be used for trench backfill above the select material.

5. Utility trench backfill should be moisture conditioned and compacted; however, the Engineering Design Standards (SBC, 2011) requires a minimum compaction of 95 percent of maximum dry density in trench backfill in existing or future public roadway areas. A minimum of 95 percent of maximum dry density should also be obtained where trench backfill comprises the upper 1-foot of subgrade beneath HMA or PCC pavement, and in all AB. A minimum of 85 percent of maximum dry density will generally be sufficient where trench backfill is located in landscaped or other unimproved areas, where settlement of trench backfill would not be detrimental.

6. Jetting of trench backfill should generally not be allowed as a means of backfill densification. However, to aid in *encasing* utility conduits, particularly corrugated conduits and multiple closely spaced conduits in a single trench, jetting or flooding may

be useful. Jetting or flooding should only be attempted with extreme caution, and any jetting or flooding operation should be subject to review by the geotechnical engineer.

7. The Corrosion Evaluation Report prepared by CERCO Analytical, Inc. and presented in Appendix C should be used by the architect/engineer in specifying appropriate corrosion protection measures for the utility improvements.

8. The recommendations of this section are minimums only, and may be superseded by the architect/engineer based upon the soil corrosivity, or the requirements of the pipe manufacturer, the utility companies, or the governing jurisdiction.

Foundations

1. Conventional continuous and spread footings bearing on soil compacted per the "Grading" section of this report may be used to support the structures. Grade beams should also be placed across all large entrances into the buildings. Footings and grade beams should have a minimum depth of 12 inches below lowest adjacent grade; however, footings and grade beams for the two and three-story buildings should have a minimum depth of 18 inches below lowest adjacent grade. All spread footings should be a minimum of 2 feet square. Footing and grade beam dimensions should also conform to the applicable requirements of Section 1809 (CBSC, 2019). Footing and grade beam reinforcement should be in accordance with the requirements of the architect/engineer; minimum continuous footing and grade beam reinforcement should consist of two No. 4 rebar, one near the top and one near the bottom of the footing or grade beam.

2. Footings should be designed using a maximum allowable bearing capacity of 2,000 psf dead plus live load. The allowable bearing capacity may be increased by 200 psf for each additional 6 inches of embedment below a depth of 12 inches below lowest adjacent grade. The allowable bearing capacity should not exceed 3,000 psf dead plus live loads. Using these criteria, maximum total and differential settlement under static conditions are expected to be on the order of 3/4-inch and 1/4-inch in 25 feet, respectively. Footings

should also be designed to withstand total and differential dynamic settlement of 2 inches and 1 inch across the largest building dimension, respectively.

3. Lateral loads may be resisted by soil friction and by passive resistance of the soil acting on foundations. Lateral capacity is based on the assumption that backfill adjacent to foundations is properly compacted. A passive equivalent fluid pressure of 375 pcf and a coefficient of friction of 0.39 may be used in design. No factors of safety, load factors, and/or other factors have been applied to any of the values.

4. The allowable bearing capacity may be increased by one-third when transient loads such as wind or seismicity are included if the structural engineer determines they are allowed per Sections 1605.3.1 and 1605.3.2 (CBSC, 2019). The following seismic parameters are presented for use in structural design.

TABLE 2 - SEISMIC DESIGN PARAMETERS

2019 CBC Mapped Values		**Site Class "D" Adjusted Values**				**Design Values**	
Seismic Parameters	**Values (g)**	**Site Coefficients**	**Values**	**Seismic Parameters**	**Values (g)**	**Seismic Parameters**	**Values (g)**
S_S	0.933	**F_a**	1.127*	**S_{MS}**	1.051	**S_{DS}**	0.701*
S_1	0.349	**F_v**	1.951	**S_{M1}**	0.681	**S_{D1}**	0.454
Peak Mean Ground Acceleration (PGA_M) = 0.484g **Seismic Design Category** = D * F_a should be taken as 1.4 and S_{DS} as 0.871 if the Simplified Lateral Force Analysis Procedure in Section 12.14.8 (ASCE, 2017) is used in structural design							

5. Foundation excavations should be observed by the geotechnical engineer prior to placement of reinforcing steel or any formwork. Foundation excavations should be thoroughly moistened prior to PCC placement and no desiccation cracks should be present.

Retaining Walls

1. All retaining wall foundations should be founded in soil compacted as recommended in paragraph 1 of the "Grading" section of this report. Conventional foundations for retaining walls should have a minimum depth of 12 inches below lowest adjacent grade not including the keyway. We have assumed that retaining walls will not exceed 6 feet in height.

2. As we have assumed that retaining wall heights will not exceed a height of 6 feet, seismic design per Section 1803.5.12.1 (CBSC, 2019) is not required. If retaining walls will retain more than 6 feet of soil, seismic design will be required by the geotechnical engineer.

3. Retaining wall design should be based on the following parameters:

Active equivalent fluid pressure	
(native soil, imported sand or gravel backfill)	35 pcf
At-rest equivalent fluid pressure	
(native soil, imported sand or gravel backfill)	55 pcf
Passive equivalent fluid pressure (compacted fill)	375 pcf
Maximum toe pressure (compacted fill)	2,000 psf
Coefficient of sliding friction (compacted fill)	0.39

4. No surcharges are taken into consideration in the above values. The maximum toe pressure is an *allowable* value to which a factor of safety has been applied. No factors of safety, load factors, and/or other factors have been applied to any of the remaining values.

5. The above pressures are applicable to a horizontal retained surface behind the wall. Walls having a retained surface that slopes upward from the wall should be designed for an additional equivalent fluid pressure of 1 pcf for the active case and 1.5 pcf for the at-rest case, for every two degrees of slope inclination.

6. The active and at-rest values presented above are for drained conditions. Consequently, retaining walls should be drained with rigid perforated pipe encased in a free draining gravel blanket. The pipe should be placed perforations downward and should discharge in a nonerosive manner away from foundations and other improvements. The gravel blanket should have a width of approximately 1-foot and should extend upward to approximately 1-foot from the top of the wall. The upper foot should be backfilled with on-site soil except in areas where a slab or pavement will abut the top of the wall. In such cases, the gravel backfill should extend up to the material that supports the slab or pavement. To reduce infiltration of the soil into the gravel, a permeable synthetic fabric conforming to the Standard Specifications (Caltrans, 2018) Section 96-1.02B – Class "C," should be placed between the two. Manufactured geocomposite wall drains conforming to the Standard Specifications (Caltrans, 2018) Section 96-1.02C are acceptable alternatives to the use of gravel provided that they are installed in accordance with the recommendations of the manufacturer. Where drainage can be properly controlled, weep holes on maximum 4-foot centers may be used in lieu of perforated pipe. A filter fabric as described above should be placed between the weep holes and the drain gravel.

7. Retaining walls where moisture transmission through the wall would be undesirable should be *thoroughly* waterproofed in accordance with the specifications of the architect/engineer.

8. The architect/engineer should bear in mind that retaining walls by their nature are flexible structures, and that surface treatments on walls often crack. Where walls are to be plastered or otherwise have a finish applied, the flexibility should be considered in determining the suitability of the surfacing material, spacing of horizontal and vertical control joints, etc. The flexibility should also be considered where a retaining wall will abut or be connected to a rigid structure, and where the geometry of the wall is such that its flexibility will vary along its length.

Slabs-on-Grade and Exterior Flatwork

1. Conventional interior light duty PCC slabs-on-grade and exterior flatwork should have a minimum thickness of 4 full inches; however, the thickness of heavy duty slabs and flatwork should be specified by the architect/engineer. Conventional interior slabs-on-grade should be doweled to footings and grade beams with dowels.

2. Reinforcement size, placement, and dowels should be as directed by the architect/engineer. Interior slabs-on-grade and light duty exterior flatwork should be reinforced, at a minimum, with No. 3 rebar at 18 inches on-center each way. Heavy duty exterior flatwork should have minimum rebar sizing and spacing that meets the criteria of American Concrete Institute (ACI) 318 (ACI, 2014). A modulus of subgrade reaction (K_{30}) of 100 psi/inch may be used in the design of heavy duty slabs-on-grade founded on compacted native soil. The modulus of subgrade reaction (K_{30}) may be increased to 150 psi/inch if the slab is underlain with a minimum of 6 inches of compacted Class 2 AB (Caltrans, 2018), and to 200 psi/inch if the slab is underlain with a minimum of 12 inches of compacted Class 2 AB.

3. Due to the current use of impermeable floor coverings, water-soluble flooring adhesives, and the speed at which buildings are now constructed, moisture vapor transmission through slabs is a much more common problem than in past years. Where moisture vapor transmitted from the underlying soil would be undesirable, the slabs should be protected from subsurface moisture vapor. A number of options for vapor protection are discussed below; however, the means of vapor protection, including the type and thickness of the vapor retarder, if specified, are left to the discretion of the architect/engineer.

4. Where specified, vapor retarders should conform to ASTM E1745-17. This standard specifies properties for three performance classes, Class “A”, “B” and “C”. The appropriate class should be selected based on the potential for damage to the vapor retarder during placement of slab reinforcement and concrete.

5. Several recent studies, including those of ACI Document 302.1R-15 (ACI, 2015), have concluded that excess water above the vapor retarder increases the potential for moisture damage to floor coverings and could increase the potential for mold growth or other microbial contamination. The studies also concluded that *it is preferable to eliminate the typical sand layer beneath the slab and place the slab concrete in direct contact with a Class "A" vapor retarder*, particularly during wet weather construction. However, placing the concrete directly on the vapor retarder requires special attention to using the proper vapor retarder (see discussion below), a very low water-cement ratio in the concrete mix, and special finishing and curing techniques.

6. Probably the next most effective option would be the *use of vapor-inhibiting admixtures in the slab concrete mix and/or application of a sealer* to the surface of the slab. This would also require special concrete mixes and placement procedures, depending upon the recommendations of the admixture or sealer manufacturer.

7. Another option that may be a reasonable compromise between effectiveness and cost considerations is *the use of a subslab vapor retarder protected by a sand layer*, however this would increase the potential for moisture damage to floor coverings and for mold growth or other microbiological contamination. If a Class "A" vapor retarder (see discussion below) is specified, the retarder can be placed directly on the material at pad grade. The retarder should be covered with a minimum 2 inches of clean sand. If a less durable vapor retarder is specified (Class "B" or "C"), a minimum of 4 inches of clean sand should be provided on top of the material at pad grade, and the retarder should be placed in the center of the clean sand layer. Clean sand is defined as well or poorly graded sand (ASTM D2487-17) of which less than 3 percent passes the No. 200 sieve. The site soils do not fulfill the criteria to be considered "clean" sand.

8. Regardless of the underslab vapor retarder selected, proper installation of the retarder is critical for optimum performance. All seams must be properly lapped, and all seams and

utility penetrations properly sealed in accordance with the vapor retarder manufacturer's recommendations. Installation should conform to ASTM E1643-18a.

9. If sand is used between the vapor retarder and the slab, it should be moistened only as necessary to promote concrete curing; saturation of the sand should be avoided, as the excess moisture would be on top of the vapor retarder, potentially resulting in vapor transmission through the slab for months or years.

10. In conventional construction, it is common to use four to six inches of sand beneath exterior flatwork. Another measure that can be taken to reduce the risk of movement of flatwork is to provide thickened edges or grade beams around the perimeters of the flatwork. The thickened edges or grade beams could be up to 12 inches deep, with the deeper edges or grade beams providing better protection. At a minimum, the thickened edge or grade beam should be reinforced by two No. 4 rebar, one near the top and one near the bottom of the thickened edge or grade beam.

11. Flatwork should be constructed with frequent joints to allow articulation as flatwork moves in response to seasonal moisture and/or temperature variations causing minor expansion and contraction of the soil, or variable bearing conditions. The soil in the subgrade should be moistened to at least optimum moisture content and no desiccation cracks should be present prior to casting the flatwork.

12. Where maintaining the elevation of the flatwork is desired, the flatwork should be doweled to the perimeter foundation as specified by the architect/engineer. In other areas, the flatwork may be doweled to the foundation or the flatwork may be allowed to "float free," at the discretion of the architect/engineer. Flatwork that is intended to float free should be separated from foundations by a felt joint or other means.

13. To reduce shrinkage cracks in PCC, the PCC aggregates should be of appropriate size and proportion, the water/cement ratio should be low, the PCC should be properly placed and finished, contraction joints should be installed, and the PCC should be properly cured. PCC

materials, placement, and curing specifications should be at the direction of the architect/engineer. The Guide for Concrete Floor and Slab Construction (ACI, 2015) is suggested as a resource for the architect/engineer in preparing such specifications.

Pavement Sections

The following preliminary pavement sections are based on an assumed R-value of 40 and should only be used for cost estimation purposes. The soil exposed at the roadway subgrade should be tested during construction for R-value to verify that these preliminary pavement sections are appropriate, otherwise revised pavement sections should be prepared. Pavement design sections are provided for assumed Traffic Indices (TI) of 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, and 8.0. Determination of the appropriate TI for specific areas is left to others. The pavement sections were calculated in accordance with the Highway Design Manual (Caltrans, 2020). The calculated AB and HMA thickness are for compacted material. Normal Caltrans construction tolerances should apply.

TABLE 3 – PRELIMINARY PAVEMENT SECTIONS

R-value	TI	HMA (inches)	Class 2 AB (inches)
40	4.5	2.50	4.0
	5.0	2.75	4.5
	5.5	3.00	5.0
	6.0	3.25	6.0
	6.5	3.75	6.5
	7.0	4.00	7.0
	7.5	4.25	8.0
	8.0	4.50	8.5

1. The upper 12 inches of subgrade and all AB should be compacted to a minimum of 95 percent of maximum dry density.

2. Subgrade and AB should be firm and unyielding when proof-rolled by heavy rubber-tired equipment prior to paving.

3. Where HMA will lie within 5 feet of landscape or LID drainage improvements, the HMA should be separated from these items by deepened curbs or other means that will reduce the potential for moisture fluctuations in the soils beneath the HMA and improve the stability of the curbs.

4. Finished HMA surfaces should slope toward drainage facilities such that rapid runoff will occur and no ponding is allowed on or adjacent to the HMA.

Drainage and Maintenance

1. Per Section 1804.4 (CBSC, 2019) unpaved ground surfaces should be *finish graded* to direct surface runoff away from foundations and other improvements at a minimum 5 percent grade for a minimum distance of 10 feet. The site should be similarly sloped to drain away from foundations, and other improvements during construction. Where this is not practicable due to other improvements, etc., swales with improved surfaces, area drains, or other drainage facilities, should be used to collect and discharge runoff.

2. The eaves of the buildings should be fitted with roof gutters. Runoff from flatwork, roof gutters, downspouts, planter drains, area drains, etc. should discharge in a nonerosive manner away from foundations and other improvements in accordance with the requirements of the governing agencies. Erosion protection should be placed at all discharge points unless the discharge is to a pavement surface.

3. To reduce the potential for planter drainage gaining access to subslab areas, any raised planter boxes adjacent to foundations should be installed with drains and sealed sides and bottoms. Drains should also be provided for areas adjacent to the structure and in landscape areas that would not otherwise freely drain.

4. The on-site soils are highly erodible. If soils are disturbed during construction, stabilization of soils by vegetation or other means, *during* and *following* construction, is essential to reduce erosion damage. Care should be taken to establish and maintain vegetation. The

landscaping should be planned and installed to maintain the surface drainage recommended above. Surface drainage should also be maintained during construction.

5. Maintenance of drainage and other improvements is critical to the long-term stability of the site and the integrity of the structures. Site improvements should be maintained on a regular basis.

6. Finished flatwork and pavement surfaces should be sloped to freely drain toward appropriate drainage facilities. Water should not be allowed to stand or pond on or adjacent to exterior pedestrian flatwork, vehicle pavement, or other improvements as it could infiltrate into the AB and/or subgrade, causing premature deterioration of pavement, flatwork, or other improvements. Any cracks that develop in the pavement should be promptly sealed.

7. All exterior drains and drain outlets should be maintained to be free-flowing. Care should be taken to establish and maintain vegetation. Vegetation and erosion matting (if utilized) should be maintained or augmented as needed. Irrigation systems should be maintained so that soils around structures are maintained at a relatively uniform year-round moisture content, and are neither over-watered nor allowed to dry and desiccate.

8. The owner or site maintenance personnel should periodically observe the areas within and around the site for indications of rodent activity and soil instability. The owner or site maintenance personnel should also implement an aggressive program for controlling the rodent activity in the general area.

Construction Observation and Testing

1. It must be recognized that the recommendations contained in this report are based on a limited number of borings and rely on continuity of the subsurface conditions encountered. It is assumed that the geotechnical engineer will be retained to provide consultation during the design phase, to review final plans once they are available, to

interpret this report during construction, and to provide construction monitoring in the form of testing and observation.

2. At a minimum, the geotechnical engineer should be retained to provide:

   - Review of final grading, utility, and foundation plans
   - Professional observation during grading, foundation excavations, and trench backfill
   - Oversight of compaction testing during grading
   - Oversight of special inspection during grading

3. Special inspection of grading should be provided as per Section 1705.6 and Table 1705.6 (CBSC, 2019). The special inspector should be under the direction of the geotechnical engineer. Special inspection of the following items should be provided by the special inspector.

   - Stripping and clearing of vegetation
   - Overexcavation to the recommended depths
   - Benches, keyways, and backdrains
   - Scarification, moisture conditioning, and compaction of the soil
   - Fill quality, placement, and compaction
   - Utility trench backfill
   - Retaining wall drains and backfill
   - Foundation excavations
   - Subgrade and AB compaction and proofrolling

4. A program of quality control should be developed prior to beginning grading. The contractor or project manager should determine any additional inspection items required by the architect/engineer or the governing jurisdiction.

5. Locations and frequency of compaction tests should be as per the recommendation of the geotechnical engineer at the time of construction. The recommended test location and frequency may be subject to modification by the geotechnical engineer, based upon soil and moisture conditions encountered, size and type of equipment used by the contractor, the general trend of the results of compaction tests, or other factors.

6. A preconstruction conference among the owner, the geotechnical engineer, the governing jurisdiction, the special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements.

7. The geotechnical engineer should be notified at least 48 hours prior to beginning construction operations. If Earth Systems Pacific is not retained to provide construction observation and testing services, it shall not be responsible for the interpretation of the information by others or any consequences arising therefrom.

8.0 CLOSURE

Our intent was to perform the investigation in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project under similar conditions. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client as discussed in the "Scope of Services" section. Application beyond the stated intent is strictly at the user's risk.

This report is valid for conditions as they exist at this time for the type of project described herein. The conclusions and recommendations contained in this report could be rendered invalid, either in whole or in part, due to changes in building codes, regulations, standards of geotechnical or construction practice, changes in physical conditions, or the broadening of knowledge.

If changes with respect to the project become necessary, if items not addressed in this report are incorporated into plans, or if any of the assumptions used in the preparation of this report are not correct, this firm shall be notified for modifications to this report. Any items not specifically

addressed in this report should comply with the CBC (CBSC, 2019) or other applicable standards, and the requirements of the governing jurisdiction.

The preliminary recommendations presented in this geotechnical report are based upon the geotechnical conditions encountered at the site, and may be augmented by additional requirements of the client, or by additional recommendations provided by the geotechnical engineer based on peer or jurisdiction reviews, or conditions exposed at the time of construction.

This document, the data, conclusions, and recommendations contained herein are the property of Earth Systems Pacific. This report shall be used in its entirety, with no individual sections reproduced or used out of context. Copies may be made only by Earth Systems Pacific, the client, and the client's authorized agents for use exclusively on the subject project. Any other use is subject to federal copyright laws and the written approval of Earth Systems Pacific.

Thank you for this opportunity to have been of service. If you have any questions, please feel free to contact this office at your convenience.

End of Text

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APPENDIX A

Exploration Location Map

Boring Log Legend

Boring Logs



LEGEND

17 Boring Location (Approx.)

BASE MAP PROVIDED BY: RRM DESIGN GROUP (2021)

NOT TO SCALE

Earth Systems
2049 Preisker Lane, Suite E, Santa Maria, CA 93454
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(805) 928-2991 • Fax (805) 928-9253

EXPLORATION LOCATION MAP

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

Date
October 2021

Project No.
304918-001

304918-001 Richard's Ranch Union Valley Site – ELM.dwg

Earth Systems Pacific

BORING LOG LEGEND

SAMPLE / SUBSURFACE WATER SYMBOLS	GRAPH. SYMBOL
CALIFORNIA MODIFIED	■
STANDARD PENETRATION TEST (SPT)	●
SHELBY TUBE	▭
BULK	○
SUBSURFACE WATER DURING DRILLING	▼
SUBSURFACE WATER AFTER DRILLING	▽

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)

MAJOR DIVISIONS	GROUP SYMBOL	TYPICAL DESCRIPTIONS	GRAPH. SYMBOL
COARSE GRAINED SOILS (MORE THAN HALF OF MATERIAL IS LARGER THAN #200 SIEVE SIZE)	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
	GP	POORLY GRADED GRAVELS, OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES, NON-PLASTIC FINES	
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES, PLASTIC FINES	
	SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
	SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES	
	SM	SILTY SANDS, SAND-SILT MIXTURES, NON-PLASTIC FINES	
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES, PLASTIC FINES	
FINE GRAINED SOILS (HALF OR MORE OF MATERIAL IS SMALLER THAN #200 SIEVE SIZE)	ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY	
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS	
	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	
	PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	

OBSERVED MOISTURE CONDITION

DRY	SLIGHTLY MOIST	MOIST	VERY MOIST	WET (SATURATED)

CONSISTENCY

COARSE GRAINED SOILS

BLOWS/FOOT SPT	BLOWS/FOOT CA SAMPLER	DESCRIPTIVE TERM
0-10	0-16	LOOSE
11-30	17-50	MEDIUM DENSE
31-50	51-83	DENSE
OVER 50	OVER 83	VERY DENSE

FINE GRAINED SOILS

BLOWS/FOOT SPT	BLOWS/FOOT CA SAMPLER	DESCRIPTIVE TERM
0-2	0-3	VERY SOFT
3-4	4-7	SOFT
5-8	8-13	MEDIUM STIFF
9-15	14-25	STIFF
16-30	26-50	VERY STIFF
OVER 30	OVER 50	HARD

GRAIN SIZES

U.S. STANDARD SERIES SIEVE				CLEAR SQUARE SIEVE OPENING		
# 200	# 40	# 10	# 4	3/4"	3"	12"

SILT & CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

TYPICAL BEDROCK HARDNESS

MAJOR DIVISIONS	TYPICAL DESCRIPTIONS
EXTREMELY HARD	CORE, FRAGMENT, OR EXPOSURE CANNOT BE SCRATCHED WITH KNIFE OR SHARP PICK; CAN ONLY BE CHIPPED WITH REPEATED HEAVY HAMMER BLOWS
VERY HARD	CANNOT BE SCRATCHED WITH KNIFE OR SHARP PICK; CORE OR FRAGMENT BREAKS WITH REPEATED HEAVY HAMMER BLOWS
HARD	CAN BE SCRATCHED WITH KNIFE OR SHARP PICK WITH DIFFICULTY (HEAVY PRESSURE); HEAVY HAMMER BLOW REQUIRED TO BREAK SPECIMEN
MODERATELY HARD	CAN BE GROOVED 1/16 INCH DEEP BY KNIFE OR SHARP PICK WITH MODERATE OR HEAVY PRESSURE; CORE OR FRAGMENT BREAKS WITH LIGHT HAMMER BLOW OR HEAVY MANUAL PRESSURE
SOFT	CAN BE GROOVED OR GOUGED EASILY BY KNIFE OR SHARP PICK WITH LIGHT PRESSURE, CAN BE SCRATCHED WITH FINGERNAIL; BREAKS WITH LIGHT TO MODERATE MANUAL PRESSURE
VERY SOFT	CAN BE READILY INDENTED, GROOVED OR GOUGED WITH FINGERNAIL, OR CARVED WITH KNIFE; BREAKS WITH LIGHT MANUAL PRESSURE

TYPICAL BEDROCK WEATHERING

MAJOR DIVISIONS	TYPICAL DESCRIPTIONS
FRESH	NO DISCOLORATION, NOT OXIDIZED
SLIGHTLY WEATHERED	DISCOLORATION OR OXIDATION IS LIMITED TO SURFACE OF, OR SHORT DISTANCE FROM, FRACTURES: SOME FELDSPAR CRYSTALS ARE DULL
MODERATELY WEATHERED	DISCOLORATION OR OXIDATION EXTENDS FROM FRACTURES, USUALLY THROUGHOUT; Fe-Mg MINERALS ARE "RUSTY", FELDSPAR CRYSTALS ARE "CLOUDY"
INTENSELY WEATHERED	DISCOLORATION OR OXIDATION THROUGHOUT; FELDSPAR AND Fe-Mg MINERALS ARE ALTERED TO CLAY TO SOME EXTENT, OR CHEMICAL ALTERATION PRODUCES IN SITU DISAGGREGATION
DECOMPOSED	DISCOLORATION OR OXIDATION THROUGHOUT, BUT RESISTANT MINERALS SUCH AS QUARTZ MAY BE UNALTERED; FELDSPAR AND Fe-Mg MINERALS ARE COMPLETELY ALTERED TO CLAY

drafting/masters/Boring Log Legend121714.dwg

Earth Systems Pacific

Boring No. 1
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: brown, moist, loose	0.0 - 5.0	○			
5			light brown, moist, medium dense	5.0 - 6.5	■	110.3	5.4	8 11 15
10			brown and gray with orange staining, very dense, trace clay	10.0 - 11.0	■	126.5	9.7	20 50/5.5
15	SM		SILTY SAND: gray, very moist, medium dense wet	15.0 - 16.5	●			7 11 12
17			End of Boring @ 16.5' Subsurface water encountered @ 15.5'					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 2

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

JOB NO.: 304918-001
DATE: 10/19/2021

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: gray-brown, slightly moist, loose, trace silt					
4			light brown					
5			medium dense	5.0 - 6.5	■	106.5	1.9	8 14 22
10			gray with orange staining, very moist, very dense	10.0 - 11.0	■	119.5	13.3	35 50/4
15	SC		CLAYEY SAND: gray with orange and red staining, very moist, very dense	15.0 - 16.0	■	121.0	11.9	25 50/4.5
20	SP		POORLY GRADED SAND: brown, very moist, medium dense	20.0 - 21.5	●			6 16 10
25	SP-SC		POORLY GRADED SAND WITH CLAY: brown, very moist, medium dense	25.0 - 26.5	●			7 9 9

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 2
PAGE 2 OF 2

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

JOB NO.: 304918-001
DATE: 10/19/2021

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
27	SP-SC		POORLY GRADED SAND WITH CLAY: same as above					
30	SP		POORLY GRADED SAND: light brown, very moist, medium dense	30.0 - 31.5	●			7 9 14
35			very dense	35.0 - 36.5	●			9 21 31
40			light gray, dense, lenses of silty sand	40.0 - 41.5	●			8 19 16
50	ML		SANDY SILT: light gray with orange staining, very moist, very stiff	50.0 - 51.5	●			9 14 16
52			End of Boring @ 51.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 3

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

JOB NO.: 304918-001
DATE: 10/19/2021

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: gray-brown, slightly moist, loose, trace silt					
4			orange-brown, medium dense					7
5				5.0 - 6.5	▬	105.5	1.7	12
6				5.0 - 8.0	○			17
10			moist, very dense	10.0 - 11.5	▬	116.4	10.1	10 34 50/5
15			dense	15.0 - 16.5	●			15 21 24
17			End of Boring @ 16.5' No subsurface water encountered					

LEGEND: ▬ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 4

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

JOB NO.: 304918-001
DATE: 10/19/2021

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM	SILTY SAND: brown, slightly moist, loose	0.0 - 4.0	○			
5		gray with orange staining, moist, very dense, decreasing silt content, slightly cemented	5.0 - 5.5	■	99.8	6.8	50/4
10	SP	POORLY GRADED SAND: light gray, slightly moist, very dense, slightly cemented	10.0 - 10.5	■	102.0	4.3	50/4.5
15			15.0 - 16.0	■	103.8	3.6	23 50/5
20			20.0 - 21.5	●			17 32 31
25		light brown, dense	25.0 - 26.5	●			11 16 23
26		End of Boring @ 26.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 5
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP	POORLY GRADED SAND: brown, slightly moist, loose					
5		moist, very dense	5.0 - 6.5	■	123.3	7.9	12 29 50/4
6	SM	SILTY SAND: gray with orange staining, moist, very dense					
10	SP	POORLY GRADED SAND: light brown with orange staining, moist, very dense	10.0 - 11.0	■	116.9	6.1	27 50/5.5
11		orange brown					
15			15.0 - 16.5	●			16 29 42
16		End of Boring @ 16.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 6
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: light brown, slightly moist, loose, trace silt	0.0 - 4.0	○			
4			light gray, moist					7
5			very dense	5.0 - 6.5	■	115.0	6.2	28
6			light gray with orange staining					50/5
10			gray, very moist	10.0 - 11.5	■	117.2	11.8	21 47 50/5
15	SC		CLAYEY SAND: gray with orange staining, very moist, dense, lenses of silty sand	15.0 - 16.5	■	115.6	12.1	8 21 39
20			brown with orange-brown staining, moist, medium dense	20.0 - 21.5	●			6 6 13
25				25.0 - 26.5	●			9 14 14
26			End of Boring @ 26.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 7
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM		SILTY SAND: gray-brown, slightly moist, loose					
2	SP		POORLY GRADED SAND: brown, slightly moist, loose					
5			orange-brown, moist, medium dense	5.0 - 6.5	■	100.6	2.2	6, 8, 10
10			light gray, moist, very dense	10.0 - 10.5	■	124.0	9.2	50/5.5
15	SC		CLAYEY SAND: gray with brown and orange staining, wet, dense ▽	15.0 - 16.5	■	109.4	18.2	29, 32, 19
20			medium dense	20.0 - 21.5	●			4, 5, 10
25			very moist, dense, decreasing clay content	25.0 - 26.5	●			12, 18, 20
26			End of Boring @ 26.5' Subsurface water encountered at 15', no water was present after drilling was completed					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 8
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: brown, slightly moist, loose					
5			orange-brown, moist, medium dense	5.0 - 6.5	■	111.0	2.2	12 19 28
10	SM		SILTY SAND: gray and brown, moist, very dense	10.0 - 11.0	■	120.6	8.1	31 50/3
15				15.0 - 16.5	●			13 41 50
17			End of Boring @ 16.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 9
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM		SILTY SAND: brown, slightly moist, loose	0.0 - 5.0	Grab			
5	SP		POORLY GRADED SAND: light brown, slightly moist, medium dense	5.0 - 6.5	Ring	111.9	0.8	10 17 20
				5.0 - 10.0	Grab			
10			orange-brown, moist, dense	10.0 - 11.5	Ring	106.3	2.4	12 23 38
15			very dense	15.0 - 16.5	Ring	103.9	2.6	25 42 50/5
20			brown, very moist, medium dense	20.0 - 21.5	SPT			6 11 15
24			wet, dense ▽					
25				25.0 - 26.5	SPT			21 23 23
26			End of Boring @ 26.5' Subsurface water encountered @ 24.0'					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 10
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM		SILTY SAND: light brown, dry, loose, trace fine gravel					
3			slightly moist, end gravel					
5	SP		POORLY GRADED SAND: gray with orange staining, moist, dense, trace clay	5.0 - 6.5	■	124.1	8.1	15 32 47
10			brown, moist, very dense, end clay	10.0 - 11.0	■	107.2	6.3	25 50/5.5
15	SM		SILTY SAND: brown, moist, dense	15.0 - 16.5	●			18 21 27
16.5			End of Boring @ 16.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 11
PAGE 1 OF 2
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM		SILTY SAND: brown, slightly moist, loose					
5	SP		POORLY GRADED SAND: light brown, moist, medium dense	5.0 - 6.5	■	100.6	1.8	6, 11, 14
10			brown	10.0 - 11.5	■	113.8	7.7	16, 17, 15
13			wet ▽					
15				15.0 - 16.5	■	94.8	32.2	20, 18, 26
20			gray, dense	20.0 - 21.5	●			19, 18, 13
25	CH		SANDYFAT CLAY: dark brown, wet, stiff	25.0 - 26.5	●		24.8	3, 6, 8

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 11
PAGE 2 OF 2
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
27	CH		SANDY FAT CLAY: same as above					
30	SC		CLAYEY SAND: brown, wet, medium dense	30.0 - 31.5	●			6 11 14
35	SP		POORLY GRADED SAND: brown, wet, medium dense, trace clay	35.0 - 36.5	●			6 10 14
40	CL		SANDY LEAN CLAY: dark gray, wet, very stiff, lenses of gray poorly graded sand	40.0 - 41.5	●			4 5 11
45	SP		POORLY GRADED SAND: light brown, wet, very dense	45.0 - 46.5	●			14 42 50/4.5
46			dark gray					
50	SM		SILTY SAND: light gray with orange staining, wet, very dense, very fine grained sand	50.0 - 51.5	●			16 31 26
52			End of Boring @ 51.5' Subsurface water encountered @ 13.0'					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 12
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: yellow-brown, slightly moist, loose	0.0 - 4.0	○			
5			very moist, medium dense	5.0 - 6.5	■	92.7	18.4	8 15 24
10			slightly moist, dense	10.0 - 11.0	■	105.5	2.7	12 22 33
15				15.0 - 16.5	●			10 14 17
16.5			End of Boring @ 16.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 13
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: gray-brown, slightly moist, loose					
3			light gray					
4				4.0 - 8.0	○			26
5			light gray with orange staining, moist, medium dense, trace clay	5.0 - 6.5	■	122.7	8.7	29 16
9			▽ wet					
10			light gray, dense	10.0 - 11.5	■	113.7	17.2	19 29 35
15	SM		SILTY SAND: gray-brown, wet, medium dense, trace clay	15.0 - 16.5	●			5 7 14
16.5			End of Boring @ 16.5' Subsurface water encountered @ 9.5'					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 14

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/19/2021

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: light gray-brown, slightly moist, loose					
5			light gray, medium dense	5.0 - 6.5	■	101.9	4.5	7 14 16
9			▽ wet					
10			brown, very dense	10.0 - 11.5	■	112.6	16.2	20 31 50
15	SC		CLAYEY SAND: gray with brown and orange staining, wet, dense	15.0 - 16.5	■	114.7	15.7	19 18 37
20	SP		POORLY GRADED SAND: brown, wet, medium dense	20.0 - 21.5	●			8 10 12
25	SM		SILTY SAND: brown, wet, medium dense	25.0 - 26.5	●			6 7 7
26			End of Boring @ 26.5' Subsurface water encountered @ 9.5'					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 15
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM		SILTY SAND: gray-brown, slightly moist, loose					
3	SP		POORLY GRADED SAND: orange-brown, slightly moist, medium dense					
5				5.0 - 6.5	■	105.6	2.5	7, 13, 17
10			dense	10.0 - 11.5	■	106.7	3.2	13, 25, 33
15			very moist, medium dense	15.0 - 16.5	●			9, 14, 16
16.5			End of Boring @ 16.5' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 16
PAGE 1 OF 2
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SP		POORLY GRADED SAND: orange-brown, slightly moist, loose					
5			medium dense	5.0 - 6.5	■	103.6	2.5	7 12 14
10				10.0 - 11.5	■	101.8	2.7	9 19 25
15				15.0 - 16.5	■	101.7	2.4	12 20 32
16			gray with orange staining, dense					
20			light gray, very moist, medium dense	20.0 - 21.5	●			8 11 13

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

Boring No. 16
PAGE 2 OF 2
JOB NO.: 304918-001
DATE: 10/18/2021

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
27	SP		POORLY GRADED SAND: same as above					
28			▽ wet					
29								
30	SM		SILTY SAND: gray, wet, medium dense, trace clay	30.0 - 31.5	●			9 8 6
31								
32								
33								
34								
35	SC		CLAYEY SAND: brown, wet, medium dense	35.0 - 36.5	●			7 10 14
36								
37								
38								
39								
40			gray	40.0 - 41.5	●			6 8 8
41			gray with orange-brown staining					
42								
43								
44								
45	SP		POORLY GRADED SAND: brown, wet, dense	45.0 - 46.5	●			7 15 23
46								
47								
48								
49								
50			very dense	50.0 - 51.5	●			18 40 50/6
51								
52			End of Boring @ 51.5' Subsurface water encountered @ 28.5'					
53								

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No. 17
PAGE 1 OF 1
JOB NO.: 304918-001
DATE: 10/18/2021

LOGGED BY: PWM
DRILL RIG: (2R) CME 75 with with Automatic Hammer
AUGER TYPE: 8" Hollow Stem

RICHARDS RANCH UNION VALLEY SITE
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SM		SILTY SAND: brown, slightly moist, loose	0.0 - 5.0	○			
5			medium dense	5.0 - 6.5	■	101.8	2.9	7 11 16
10			light gray	10.0 - 11.5	■	109.1	3.7	10 14 17
15			orange-brown and red-brown, moist, dense	15.0 - 16.5	■	102.9	10.4	15 24 33
			very moist					
20			light gray, wet ▽	20.0 - 21.5	●			10 17 27
			brown, medium dense					
25			SANDY FAT CLAY: gray, wet, very stiff	25.0 - 26.5	●			9 10 8
26	CH		End of Boring @ 26.5' Subsurface water encountered @ 20.0'					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

APPENDIX B

Laboratory Test Results

Richards Ranch Union Valley Site 304918-001

BULK DENSITY TEST RESULTS

ASTM D 2937-17 (modified for ring liners)

November 8, 2021

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
1	6.0 - 6.5	5.4	116.3	110.3
1	10.5 - 11.0	9.7	138.7	126.5
2	6.0 - 6.5	1.9	108.5	106.5
2	10.5 - 11.0	13.3	135.3	119.5
2	15.5 - 16.0	11.9	135.4	121.0
3	6.0 - 6.5	1.7	107.2	105.5
3	11.0 - 11.5	10.1	128.1	116.4
4	5.0 - 5.5	6.8	106.6	99.8
4	10.0 - 10.5	4.3	106.4	102.0
4	15.5 - 16.0	3.6	107.5	103.8
5	6.0 - 6.5	7.9	133.1	123.3
5	10.5 - 11.0	6.1	124.0	116.9
6	6.0 - 6.5	6.2	122.1	115.0
6	11.0 - 11.5	11.8	131.1	117.2
6	16.0 - 16.5	12.1	129.6	115.6
7	6.0 - 6.5	2.2	102.8	100.6
7	10.0 - 10.5	9.2	135.4	124.0
7	16.0 - 16.5	18.2	129.3	109.4
8	6.0 - 6.5	2.2	113.5	111.0
8	10.5 - 11.0	8.1	130.4	120.6
9	6.0 - 6.5	0.8	112.8	111.9
9	11.0 - 11.5	2.4	108.9	106.3
9	16.0 - 16.5	2.6	106.6	103.9
10	6.0 - 6.5	8.1	134.1	124.1
10	10.5 - 11.0	6.3	114.0	107.2
11	6.0 - 6.5	1.8	102.4	100.6
11	11.0 - 11.5	7.7	122.6	113.8
11	16.0 - 16.5	32.2	125.4	94.8
11	25.0 - 26.5	24.8		
12	6.0 - 6.5	18.4	109.8	92.7
12	11.0 - 11.5	2.7	108.3	105.5
13	6.0 - 6.5	8.7	133.4	122.7
13	11.0 - 11.5	17.2	133.2	113.7
14	6.0 - 6.5	4.5	106.5	101.9

Richards Ranch Union Valley Site 304918-001

BULK DENSITY TEST RESULTS

ASTM D 2937-17 (modified for ring liners)

November 8, 2021

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
14	11.0 - 11.5	16.2	130.9	112.6
14	16.0 - 16.5	15.7	132.7	114.7
15	6.0 - 6.5	2.5	108.3	105.6
15	11.0 - 11.5	3.2	110.1	106.7
16	6.0 - 6.5	2.5	106.2	103.6
16	11.0 - 11.5	2.7	104.5	101.8
16	16.0 - 16.5	2.4	104.1	101.7
17	6.0 - 6.5	2.9	104.7	101.8
17	11.0 - 11.5	3.7	113.1	109.1
17	16.0 - 16.5	10.4	113.6	102.9

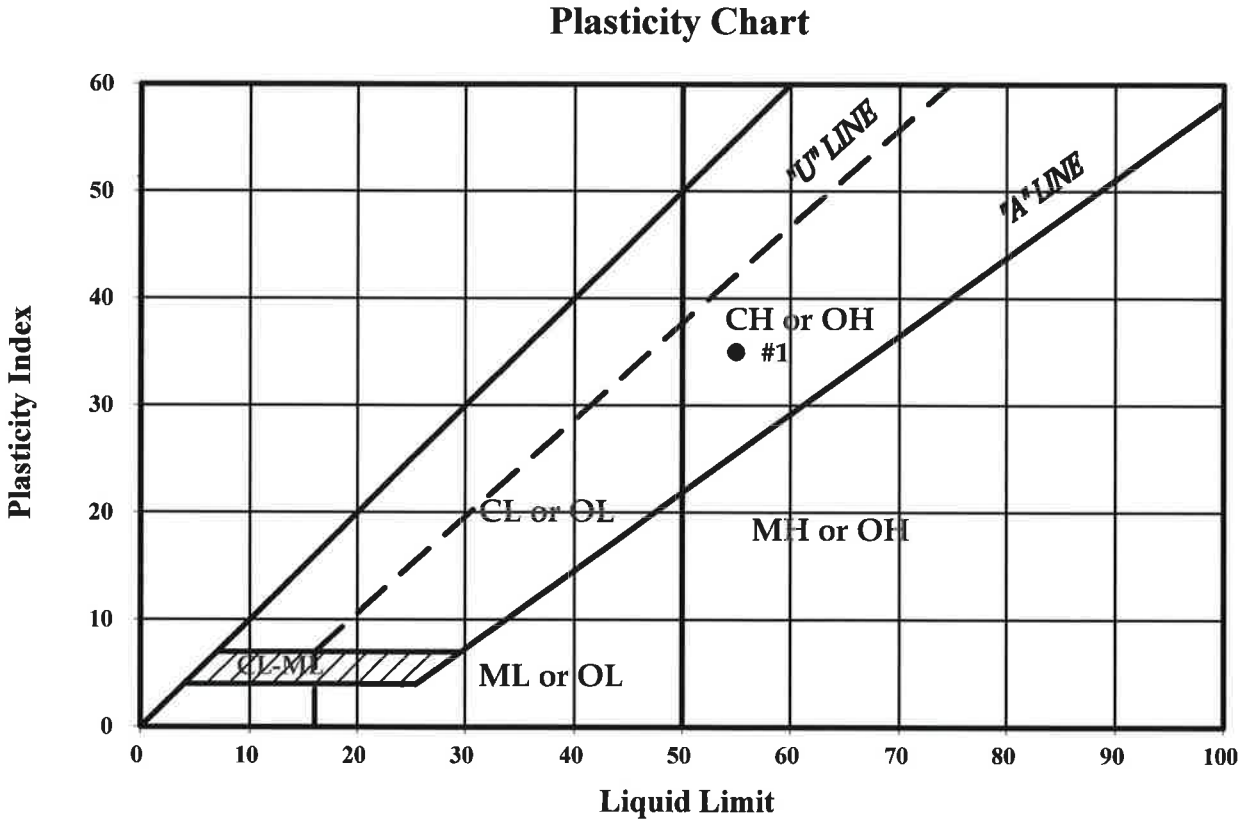
Richards Ranch Union Valley Site 304918-001

PLASTICITY INDEX

ASTM D 4318-17

November 8, 2021

Test No.:	1	2	3	4	5
Boring No.:	11				
Sample Depth:	25.0 - 26.5'				
Liquid Limit:	55				
Plastic Limit:	20				
Plasticity Index:	35				



Richards Ranch Union Valley Site 304918-001

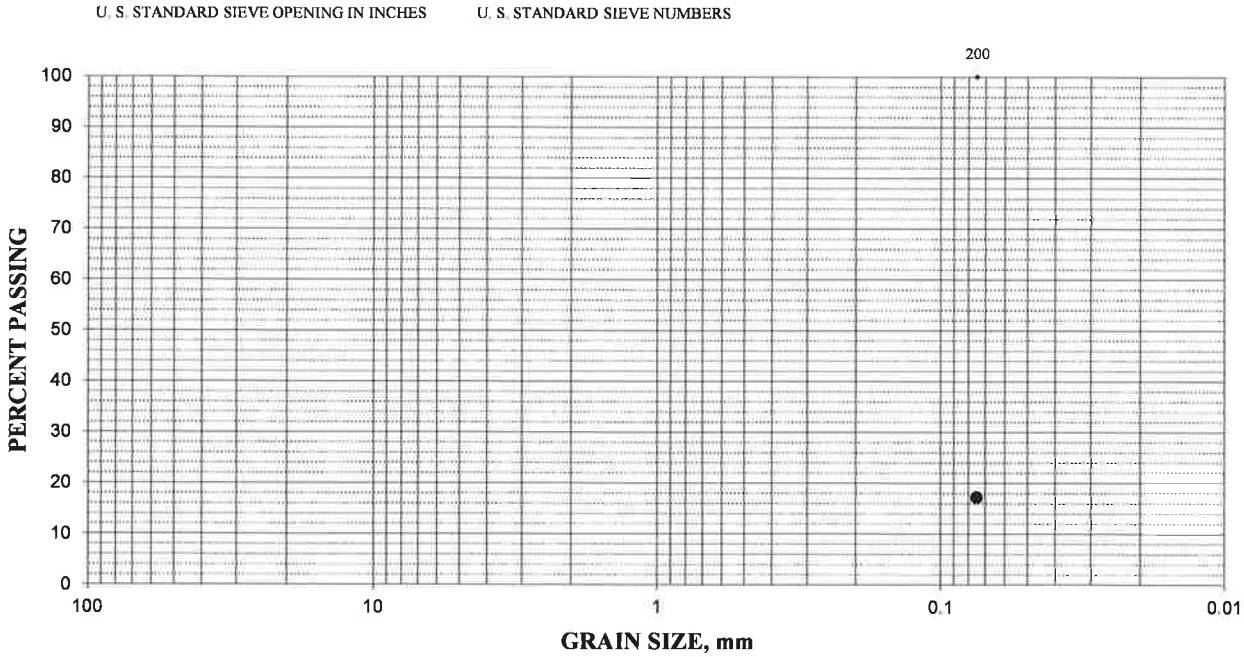
PARTICLE SIZE ANALYSIS

ASTM D 422-63/07; D 1140-17

Boring #4 @ 0.0 - 4.0'
Silty Sand (SM)

November 8, 2021

Sieve size	% Retained	% Passing
#200 (75-µm)	83	17



Richards Ranch Union Valley Site

304918-001

MOISTURE-DENSITY COMPACTION TEST

ASTM D 1557-12 (Modified)

PROCEDURE USED: A

PREPARATION METHOD: Moist

RAMMER TYPE: Mechanical

SPECIFIC GRAVITY: 2.65 (assumed)

November 8, 2021

Boring #4 @ 0.0 - 4.0'

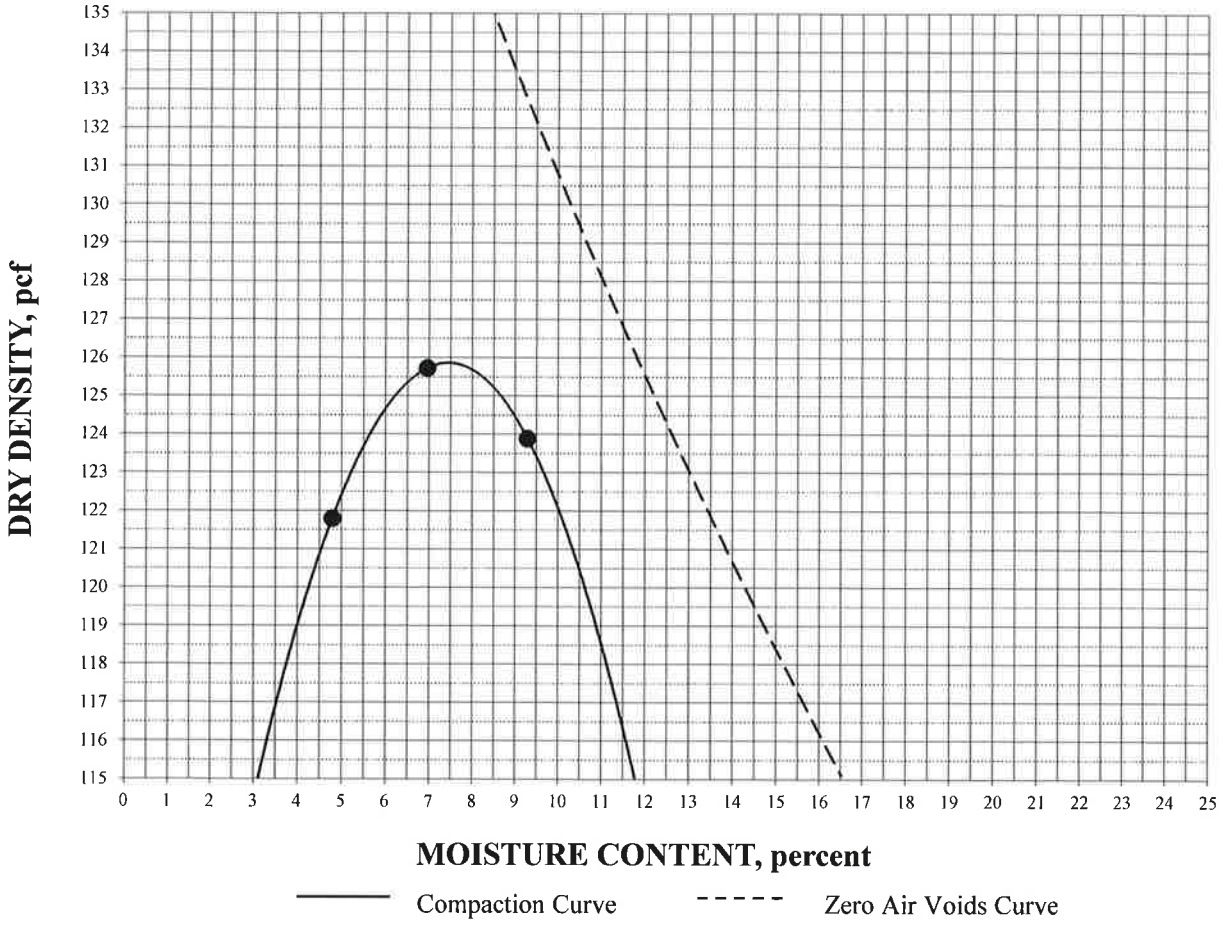
Brown Silty Sand (SM)

SIEVE DATA:

Sieve Size	% Retained (Cumulative)
3/4"	0
3/8"	0
#4	0

MAXIMUM DRY DENSITY: 125.9 pcf

OPTIMUM MOISTURE: 7.4%



Richards Ranch Union Valley Site 304918-001

DIRECT SHEAR

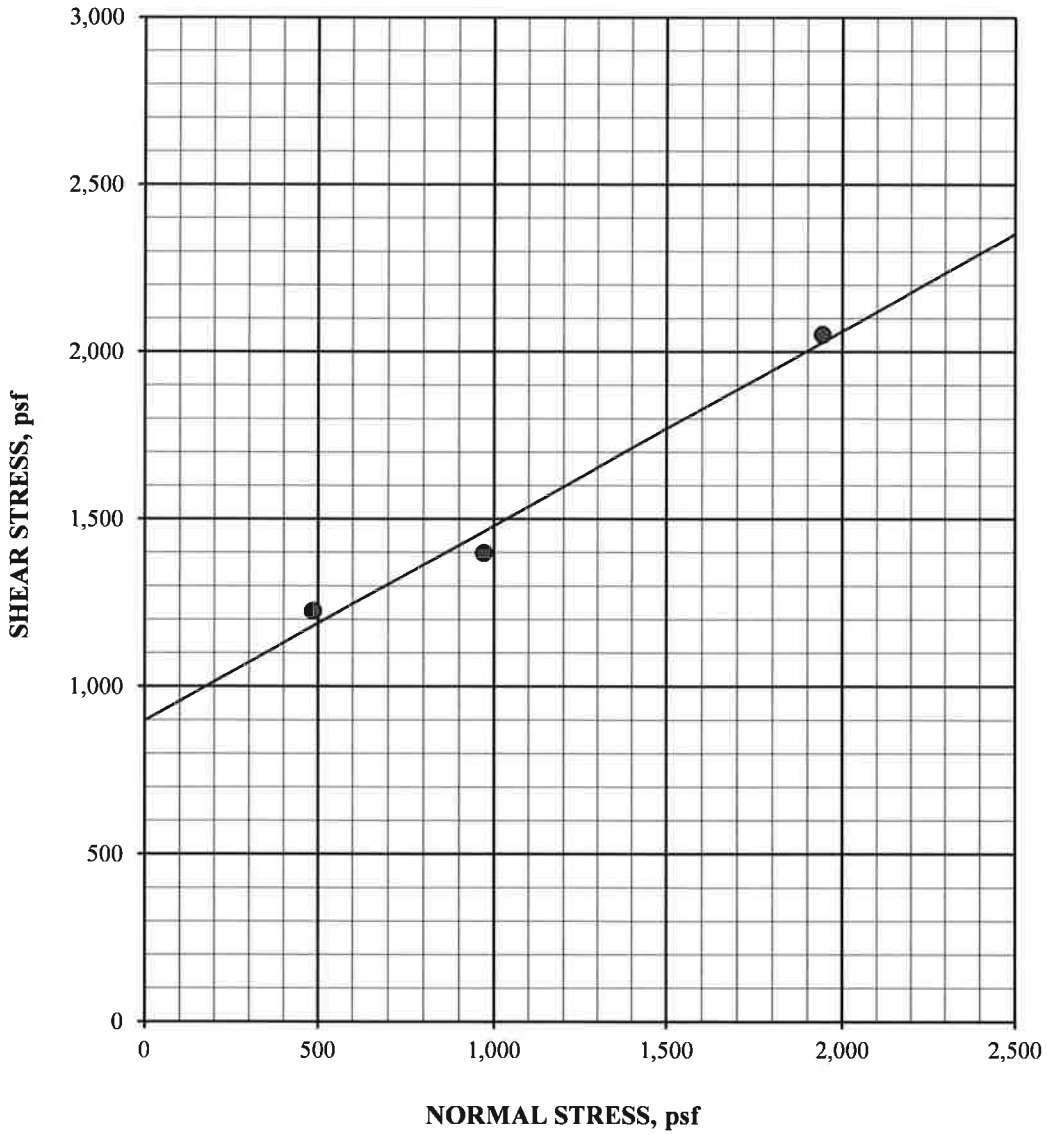
ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

November 8, 2021

Boring #4 @ 0.0 - 4.0'
Silty Sand (SM)
Compacted to 90% RC, saturated

INITIAL DRY DENSITY: 113.3 pcf
INITIAL MOISTURE CONTENT: 7.4 %
PEAK SHEAR ANGLE (Ø): 30°
COHESION (C): 899 psf

SHEAR vs. NORMAL STRESS



DIRECT SHEAR continued

ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

Boring #4 @ 0.0 - 4.0'

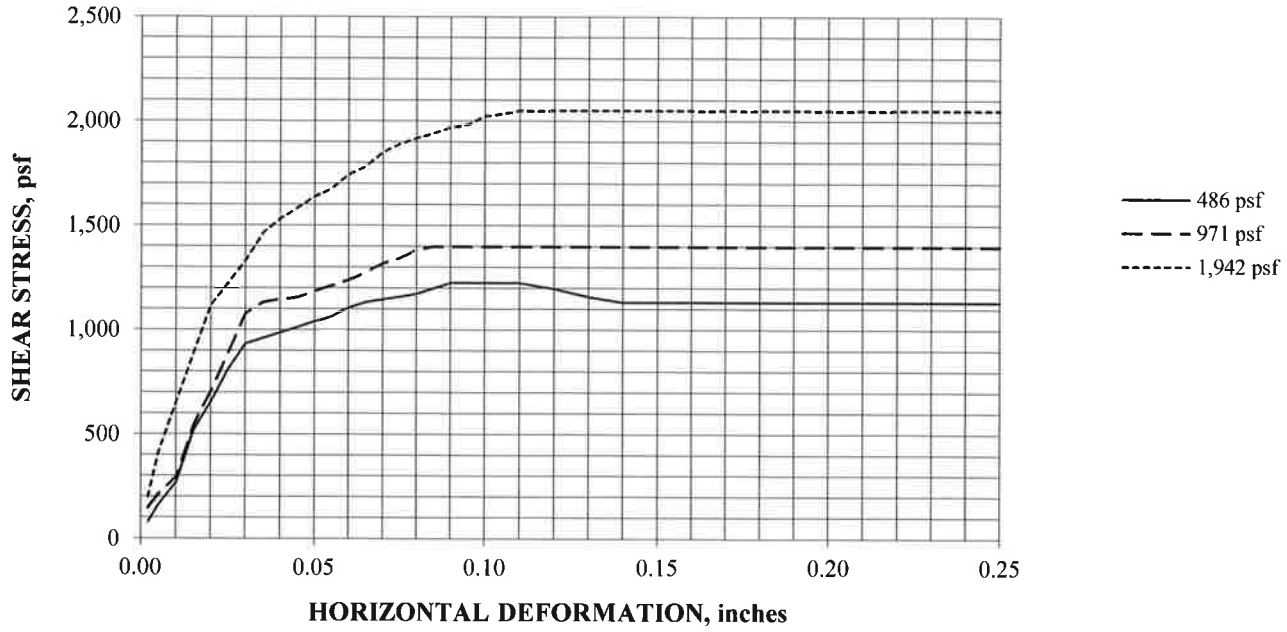
November 8, 2021

Silty Sand (SM)

Compacted to 90% RC, saturated

SPECIFIC GRAVITY: 2.65 (assumed)

SAMPLE NO.:	1	2	3	AVERAGE
INITIAL				
WATER CONTENT, %	7.4	7.4	7.4	7.4
DRY DENSITY, pcf	113.3	113.3	113.3	113.3
SATURATION, %	42.7	42.7	42.7	42.7
VOID RATIO	0.460	0.460	0.460	0.460
DIAMETER, inches	2.410	2.410	2.410	
HEIGHT, inches	1.00	1.00	1.00	
AT TEST				
WATER CONTENT, %	14.5	13.4	15.2	
DRY DENSITY, pcf	115.2	117.5	119.9	
SATURATION, %	88.3	87.1	100.0	
VOID RATIO	0.435	0.407	0.379	
HEIGHT, inches	0.98	0.96	0.95	



Richards Ranch Union Valley Site

304918-001

PARTICLE SIZE ANALYSIS

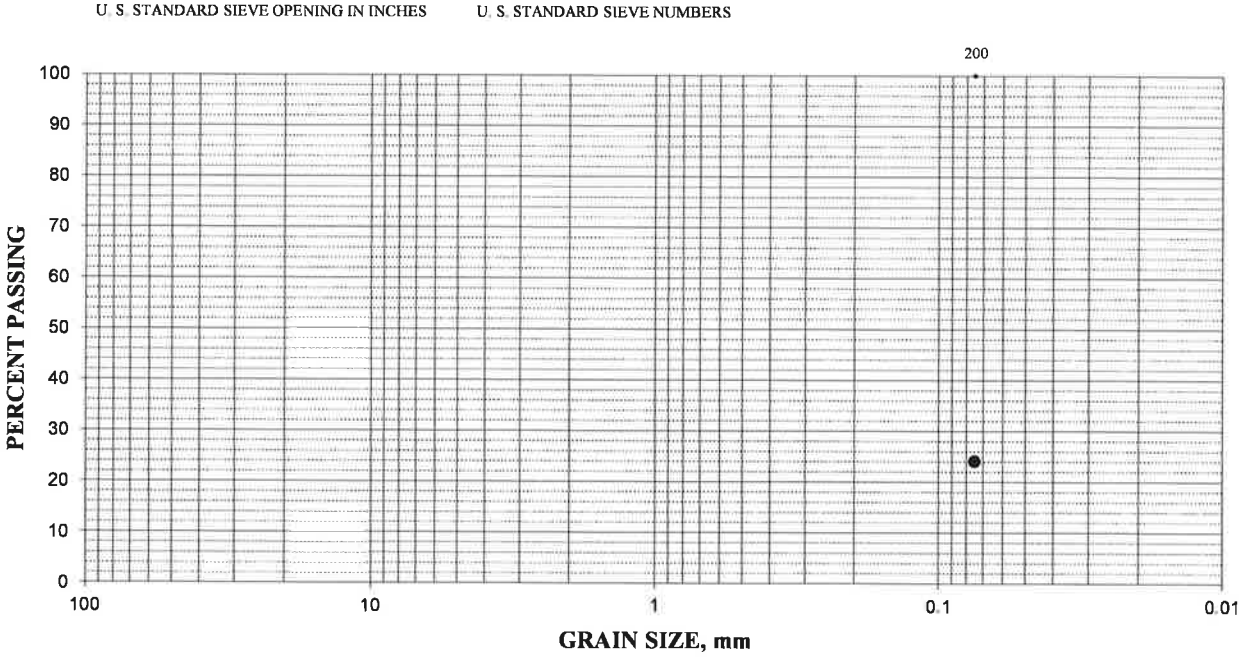
ASTM D 422-63/07; D 1140-17

Boring #6 @ 16.0 - 16.5'

November 8, 2021

Clayey Sand (SC)

Sieve size	% Retained	% Passing
#200 (75-µm)	76	24



Richards Ranch Union Valley Site 304918-001

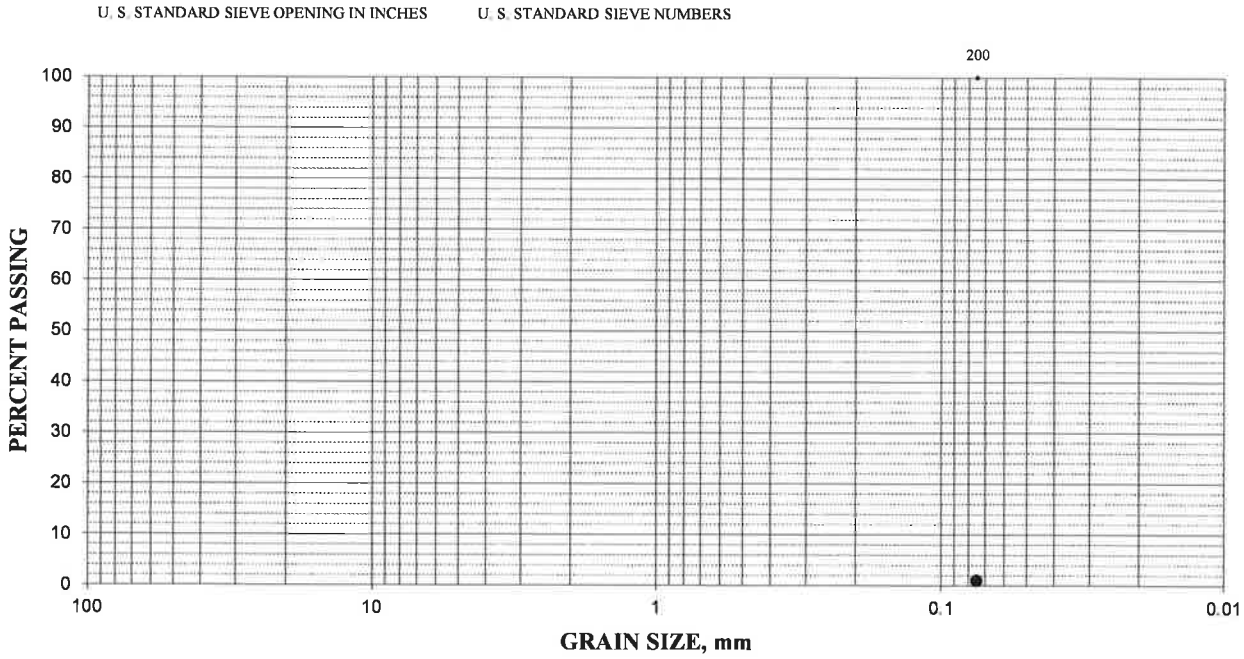
PARTICLE SIZE ANALYSIS

ASTM D 422-63/07; D 1140-17

Boring #12 @ 0.0 - 4.0'
Poorly Graded Sand (SP)
Cu = 1.4; Cc = 0.9

November 8, 2021

Sieve size	% Retained	% Passing
#200 (75-µm)	99.0	1.0



Richards Ranch Union Valley Site

304918-001

MOISTURE-DENSITY COMPACTION TEST

ASTM D 1557-12 (Modified)

PROCEDURE USED: A

PREPARATION METHOD: Moist

RAMMER TYPE: Mechanical

SPECIFIC GRAVITY: 2.65 (assumed)

November 8, 2021

Boring #12 @ 0.0 - 4.0'

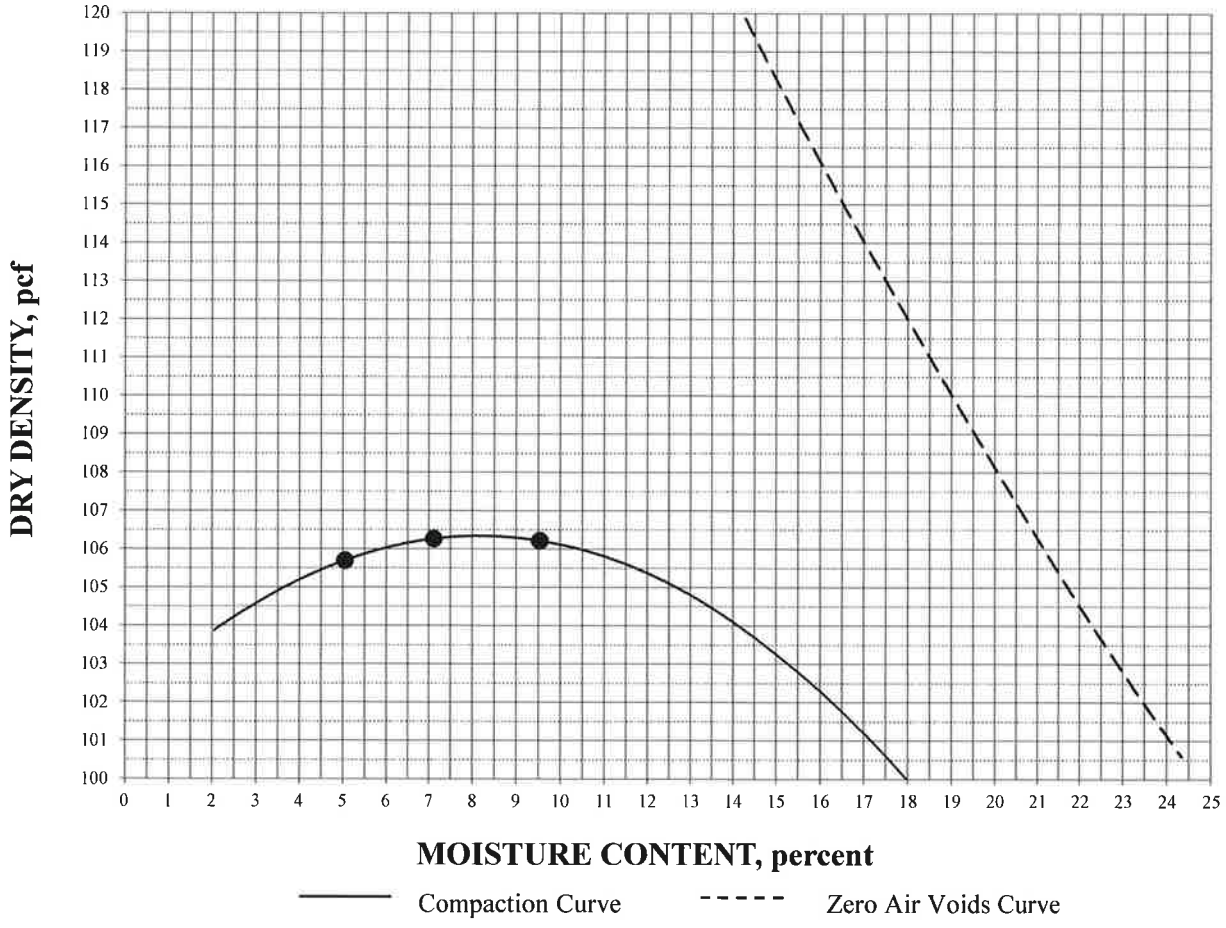
Yellow-Brown Poorly Graded Sand (SP)

SIEVE DATA:

Sieve Size	% Retained (Cumulative)
3/4"	0
3/8"	0
#4	0

MAXIMUM DRY DENSITY: 106.3 pcf

OPTIMUM MOISTURE: 8.2%



Richards Ranch Union Valley Site 304918-001

DIRECT SHEAR

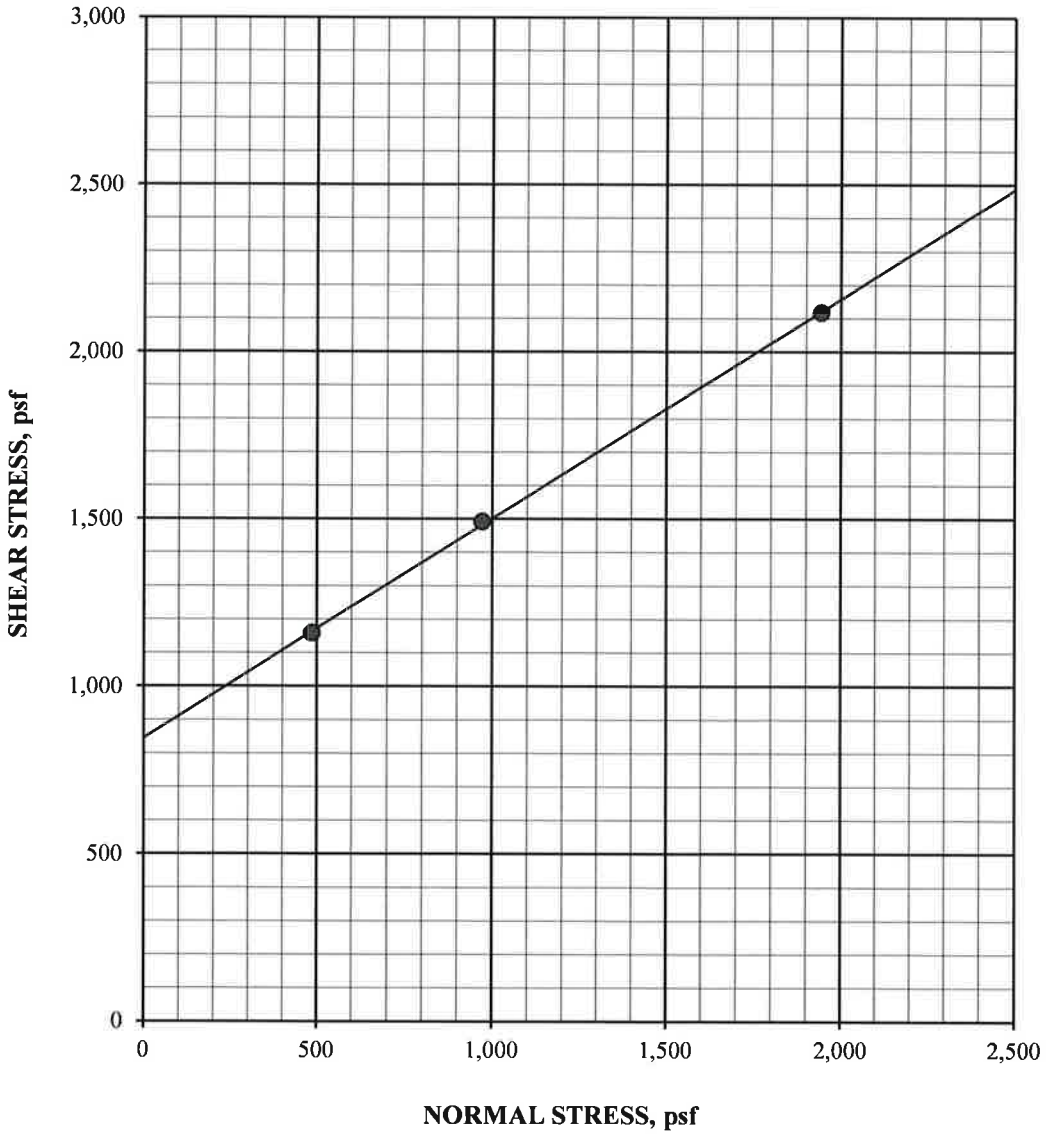
ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

November 8, 2021

Boring #12 @ 0.0 - 4.0'
Poorly Graded Sand (SP)
Compacted to 90% RC, saturated

INITIAL DRY DENSITY: 95.7 pcf
INITIAL MOISTURE CONTENT: 8.2 %
PEAK SHEAR ANGLE (Ø): 33°
COHESION (C): 846 psf

SHEAR vs. NORMAL STRESS



DIRECT SHEAR continued

ASTM D 3080/D3080M-11 (modified for consolidated, undrained conditions)

Boring #12 @ 0.0 - 4.0'

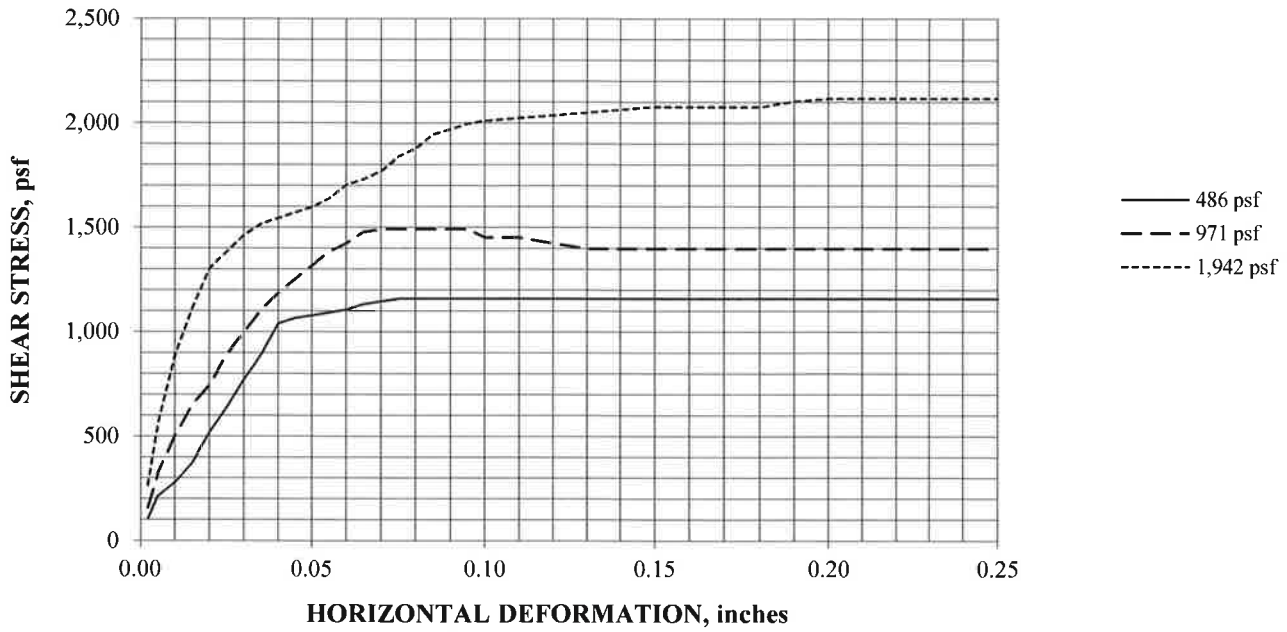
November 8, 2021

Poorly Graded Sand (SP)

Compacted to 90% RC, saturated

SPECIFIC GRAVITY: 2.65 (assumed)

SAMPLE NO.:	1	2	3	AVERAGE
INITIAL				
WATER CONTENT, %	8.2	8.2	8.2	8.2
DRY DENSITY, pcf	95.7	95.7	95.7	95.7
SATURATION, %	29.9	29.9	29.9	29.9
VOID RATIO	0.728	0.728	0.728	0.728
DIAMETER, inches	2.410	2.410	2.410	
HEIGHT, inches	1.00	1.00	1.00	
AT TEST				
WATER CONTENT, %	18.3	18.5	18.0	
DRY DENSITY, pcf	96.6	98.8	102.1	
SATURATION, %	68.2	72.7	77.0	
VOID RATIO	0.712	0.674	0.619	
HEIGHT, inches	0.99	0.97	0.94	



Richards Ranch Union Valley Site

304918-001

PARTICLE SIZE ANALYSIS

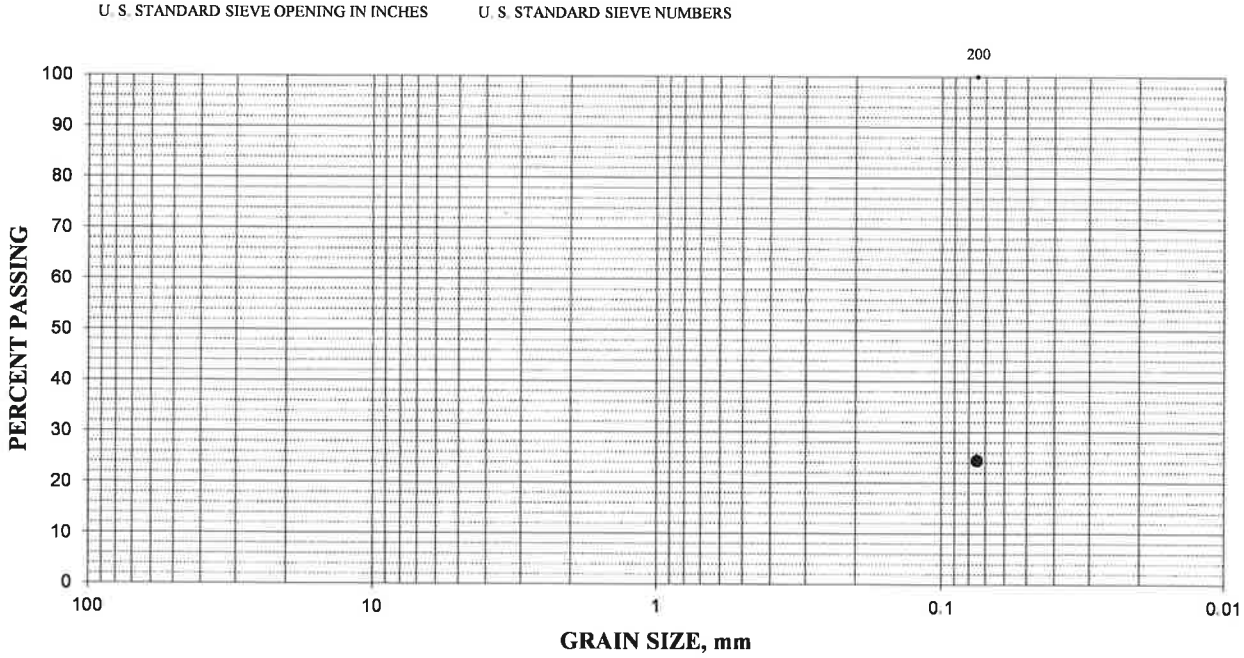
ASTM D 422-63/07; D 1140-17

Boring #14 @ 25.0 - 26.5'

November 8, 2021

Silty Sand (SM)

Sieve size	% Retained	% Passing
#200 (75-µm)	76	24



Richards Ranch Union Valley Site 304918-001

CONSOLIDATION TEST

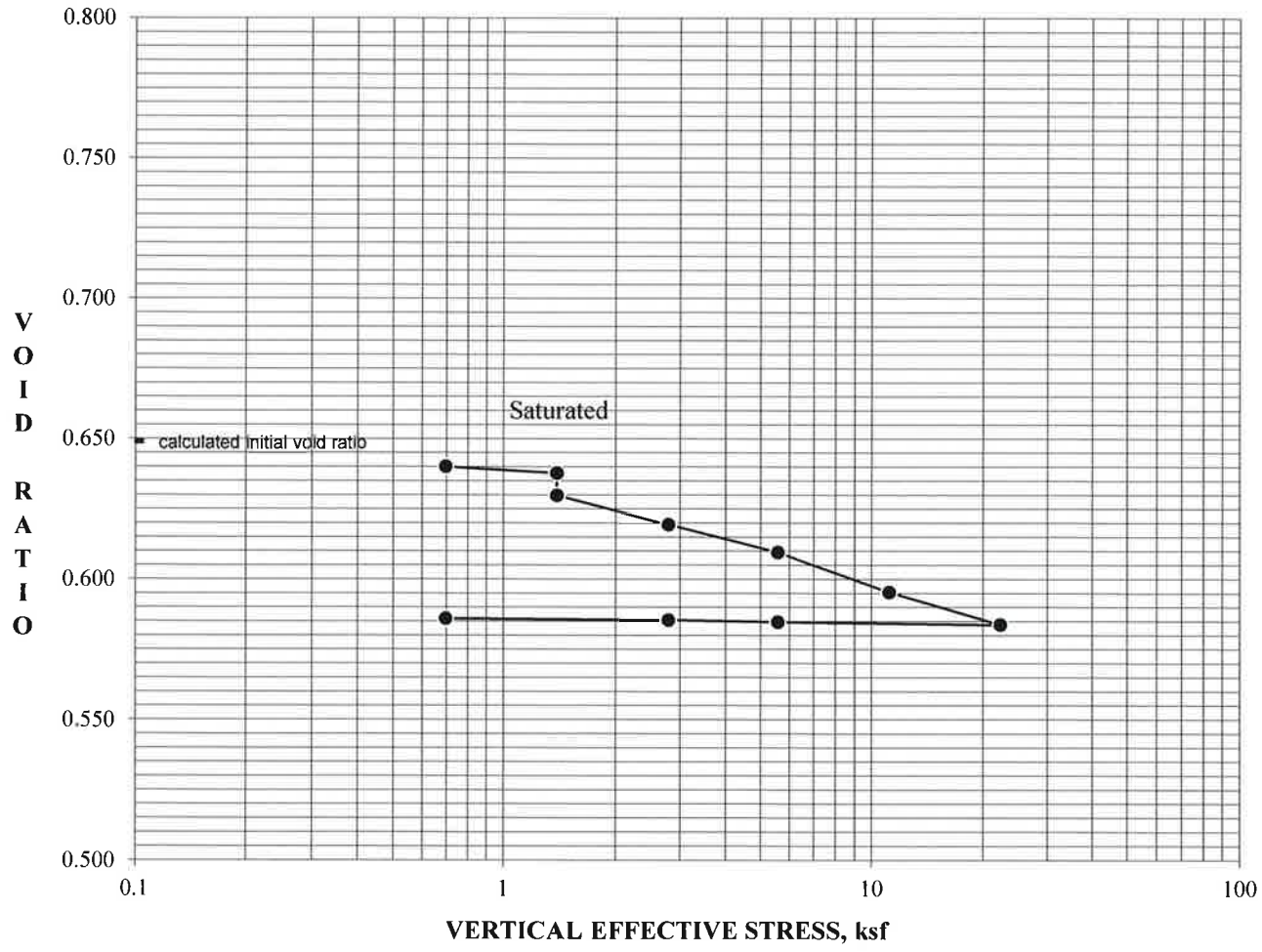
ASTM D 2435/D2435M-11(2020)

November 8, 2021

Boring #7 @ 6.0 - 6.5'
Poorly Graded Sand (SP)
Ring Sample

DRY DENSITY: 100.3 pcf
MOISTURE CONTENT: 2.2%
SPECIFIC GRAVITY: 2.65 (assumed)
INITIAL VOID RATIO: 0.649

VOID RATIO vs. NORMAL PRESSURE DIAGRAM



Richards Ranch Union Valley Site

304918-001

CONSOLIDATION TEST

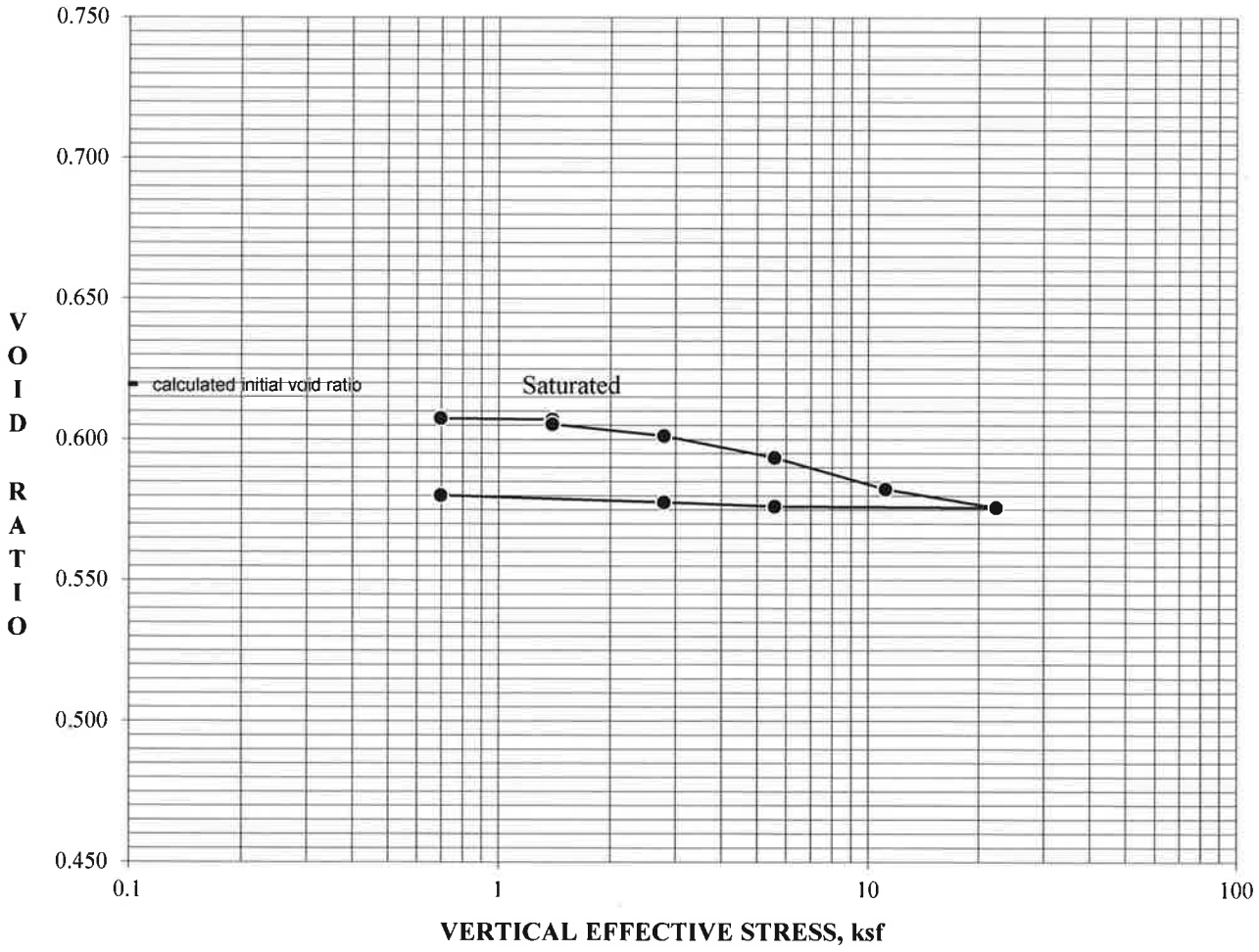
ASTM D 2435/D2435M-11(2020)

November 8, 2021

Boring #16 @ 6.0 - 6.5'
Poorly Graded Sand (SP)
Ring Sample

DRY DENSITY: 102.2 pcf
MOISTURE CONTENT: 2.5%
SPECIFIC GRAVITY: 2.65 (assumed)
INITIAL VOID RATIO: 0.619

VOID RATIO vs. NORMAL PRESSURE DIAGRAM



APPENDIX C

Corrosion Evaluation Report by CERCO Analytical, Inc.

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

5 November, 2021

Job No. 2110039
Cust. No.12651

Mr. Phillip Madrid, PE
Earth Systems Pacific
2049 Preisker Lane, Suite E
Santa Maria, CA 93454

Subject: Project No.: 304918-001
Project Name: Richards Ranch Union Valley Site
Corrosivity Analysis – ASTM Test Methods

Dear Mr. Madrid:

Pursuant to your request, CERCO Analytical has analyzed the soil samples submitted on October 28, 2021. Based on the analytical results, a brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurements, Sample No.001 is classified as "mildly corrosive" and Sample No.002 is classified as "negligibly corrosive". All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentrations reflect none detected with a reporting limit of 15 mg/kg.

The sulfate ion concentrations reflect none detected with a reporting limit of 15 mg/kg.

The pH of the soils are 5.54 and 6.32 which does present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures. Any soils with a pH of <6.0 is considered to be corrosive to buried iron, steel, mortar-coated steel and reinforced concrete structures. Therefore, corrosion prevention measures need to be considered for structures to be placed in this acidic soil.

The redox potentials are 270-mV and 320-mV. Both samples are indicative of potentially "slightly corrosive" soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc. at (925) 927-6630.*

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,
CERCO ANALYTICAL, INC.

Darren Moore

J. Darby Howard, Jr., P.E.
President

JDH/jdl
Enclosure

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

Client: Earth Systems Pacific
Client's Project No.: 304918-001
Client's Project Name: Richards Ranch Union Valley Site
Date Sampled: 10/18 & 19/21
Date Received: 28-Oct-21
Matrix: Soil
Authorization: Transmittal dated 10/21/21

Date of Report: 5-Nov-2021

Job/Sample No.	Sample I.D.	Redox (mV)	pH	Conductivity (umhos/cm)*	Resistivity (100% Saturation) (ohms-cm)	Sulfide (mg/kg)*	Chloride (mg/kg)*	Sulfate (mg/kg)*
2110039-001	B-4 @ 0-4'	270	6.32	-	10,000	-	N.D.	N.D.
2110039-002	B-12 @ 0-4'	320	5.54	-	66,000	-	N.D.	N.D.

Method:	ASTM D1498	ASTM D4972	ASTM D1125M	ASTM G57	ASTM D4658M	ASTM D4327	ASTM D4327
Reporting Limit:	-	-	10	-	50	15	15
Date Analyzed:	4-Nov-2021	4-Nov-2021	-	2-Nov-2021	-	4-Nov-2021	4-Nov-2021

Cheryl McMillen
Laboratory Director

* Results Reported on "As Received" Basis
N.D. = None detected

Quality Control Summary - **All laboratory quality control parameters were found to be within established limits**

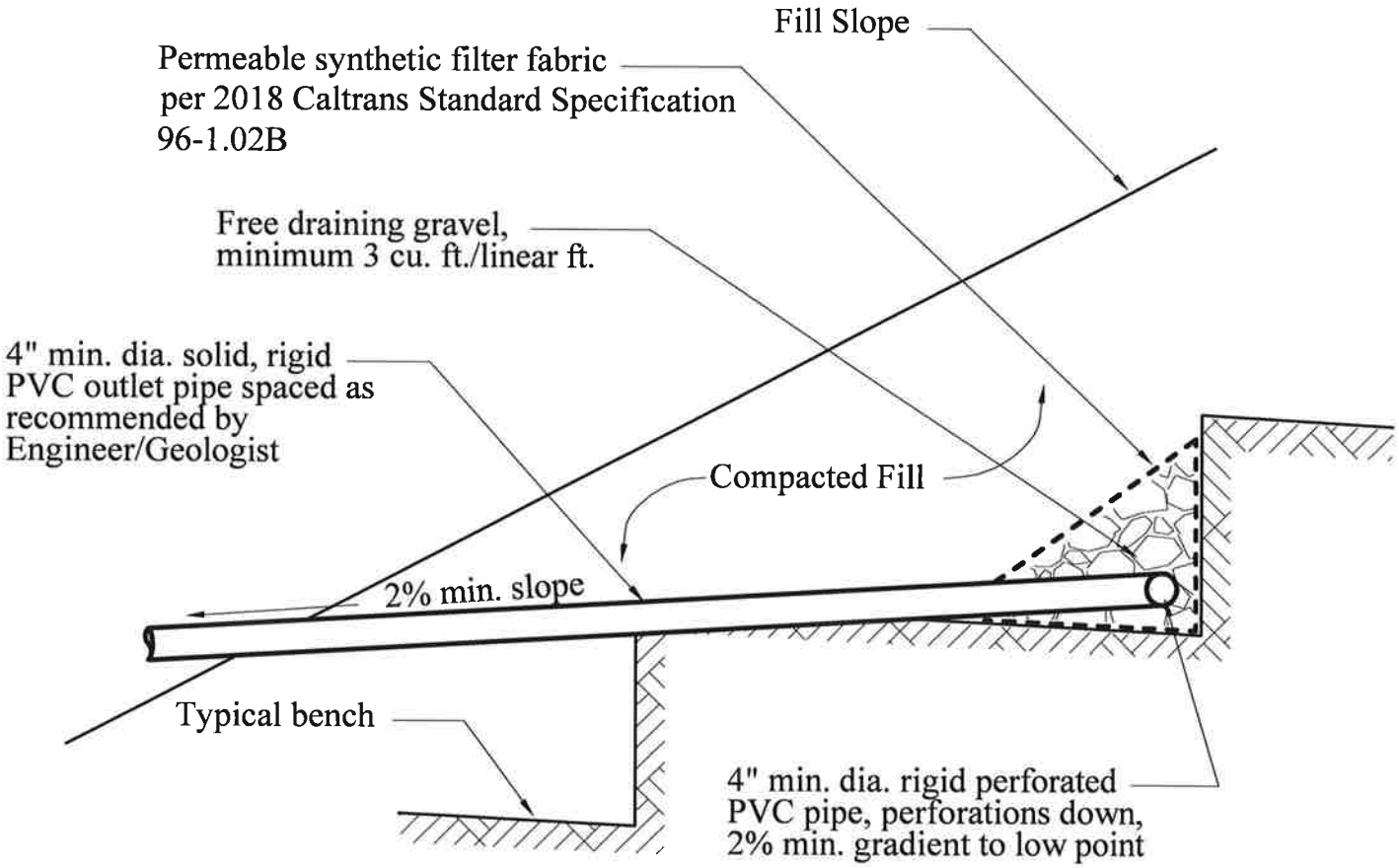
APPENDIX D

Typical Bench and Keyway Detail

Typical Backdrain Detail

BACK DRAIN DETAIL (Typical)

RICHARDS RANCH UNION VALLEY
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California



Note: A prefabricated panel drainage system (Advanedge, Miradrain, etc.) may be substituted for the gravel / pipe system, provided it is installed in accordance with the manufacturer's recommendations

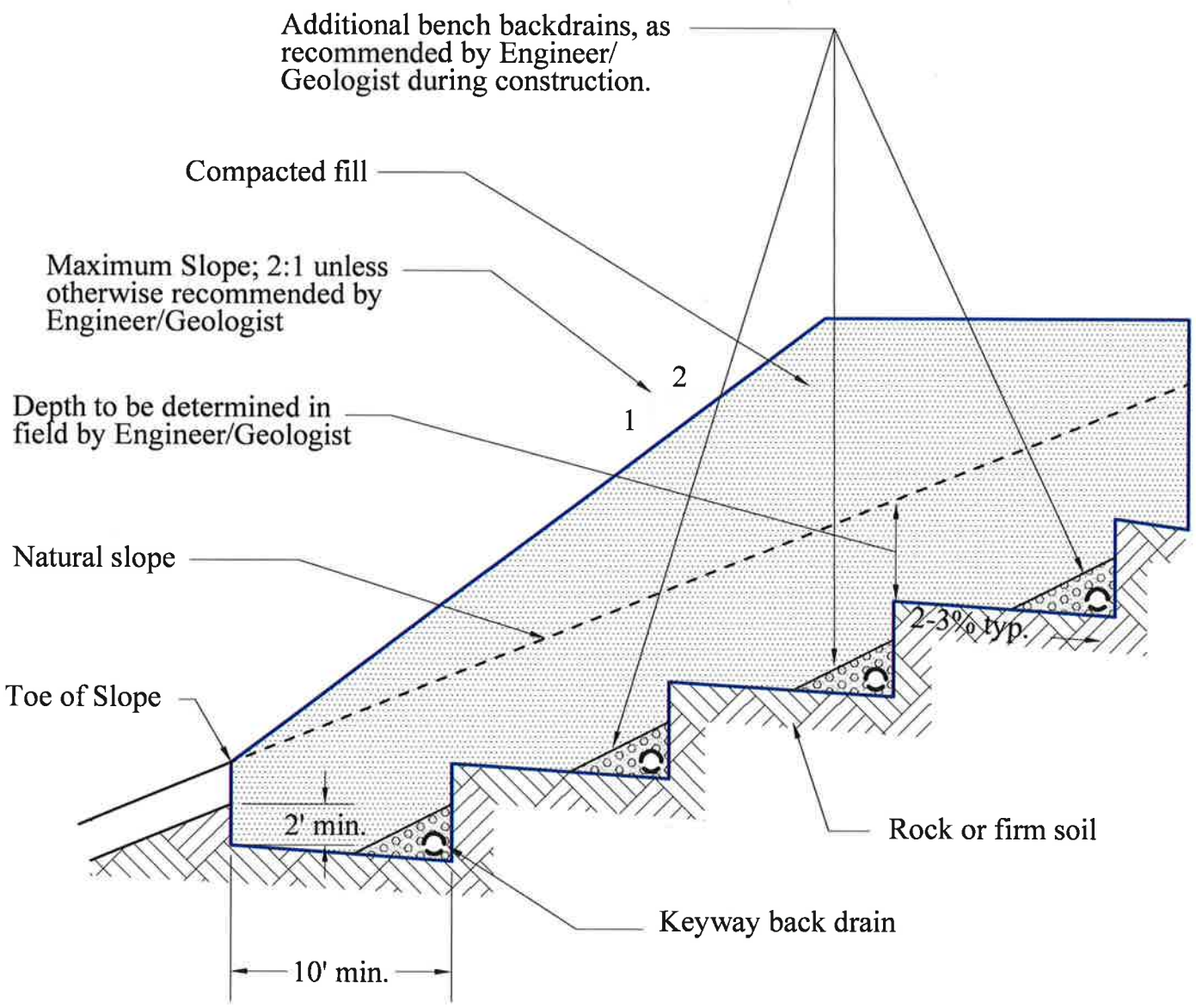
SCHEMATIC ONLY
NOT TO SCALE

Earth Systems
2049 Preisker Lane, Suite E
Santa Maria, California 93454
(805) 928-2991
E-mail: esc@earthsystems.com

ES File No.: 304918-001
SMK
November 2021
DRAIN-D01-V06.dwg

BENCH and KEYWAY DETAIL (Typical)

RICHARDS RANCH UNION VALLEY
East of South Broadway and Union Valley Parkway
Santa Maria Area of Santa Barbara County, California



SCHEMATIC ONLY
NOT TO SCALE

Earth Systems

2049 Preisker Lane, Suite E
Santa Maria, California 93454

(805) 928-2991
E-mail: esc@earthsystems.com

ES File No.: 304918-001

SMK

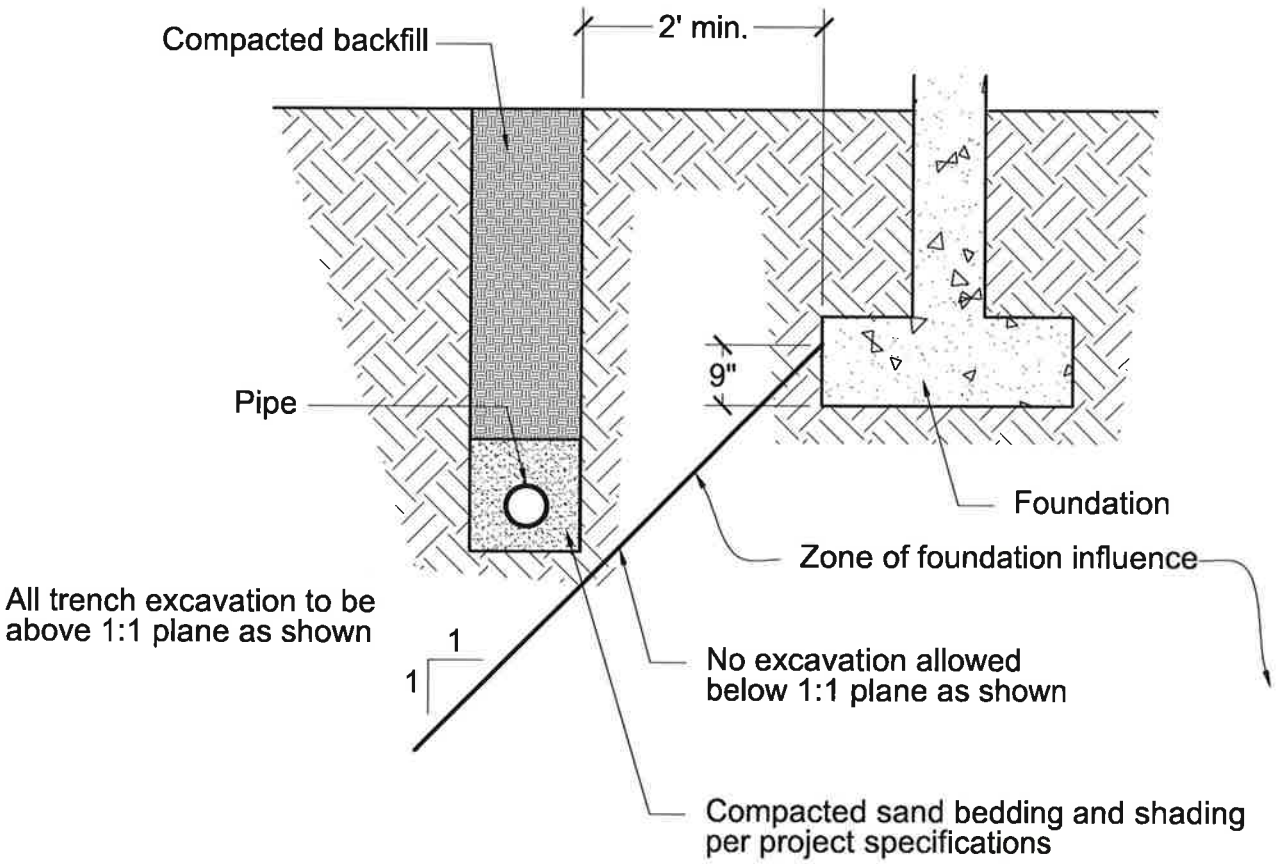
November 2021

BENCH-D01-V03.dwg

APPENDIX E

Typical Detail A: Pipe Placed Parallel to Foundations

TYPICAL DETAIL A:
PIPE PLACED PARALLEL TO FOUNDATIONS



SCHEMATIC ONLY
NOT TO SCALE

Earth Systems

2049 Preisker Lane, Suite E
Santa Maria, California 93454
(805) 928-2991 • FAX (805) 928-9253
E-mail: esc@earthsystems.com

APPENDIX I

Phase I Environmental Site Assessment



SIERRA DELTA CONSULTANTS LLC

A Full Service Consulting Company

PHASE I ENVIRONMENTAL SITE ASSESSMENT

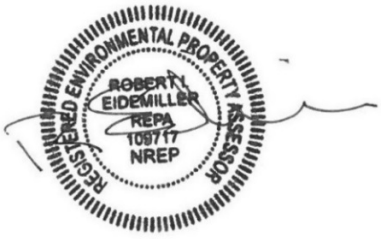
Approximately 43.64 acres of vacant land east of the intersection of
State Highway 135 and Union Valley Parkway
Orcutt, CA 93455
APN: 107-250-019 / 020 / 021 / 022

Prepared for

Richards Ranch LLC
P.O. Box 13914
San Luis Obispo, CA 93406

SDC Project Number: *MD3I.01* Report Date: *June 16, 2021*

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable Federal, State and Local Statutes, Regulations and Ordinances. I developed and performed the AAI in conformance with the federal rule.



Robert I. Eidemiller, Environmental Professional
Sierra Delta Consultants

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935 Riverside Avenue; Suite 21, Paso Robles, California 93446
Phone: 805-239-9293● Fax: 805-239-9309● Email: proposals@sierradeltallc.com
Tax Identification Number: 26-3979981●Business License Number: 05-2633

EXECUTIVE SUMMARY

SIERRA DELTA CONSULTANTS LLC ("SDC") performed a Phase I Environmental Site Assessment ("ESA") in conformance with the scope and limitations of ASTM Practice E1527-13 for the property identified as Assessor's Parcel Number(s) (APN(s): 107-250-019/020/021/022. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. The ESA was requested by Richards Ranch LLC and conducted between June 7, 2021 and June 16, 2021. No address is associated with the Subject Property which consits of: Approximately 43.64 acres of vacant land east of the intersection of Highway 135 and Union Valley Parkway in Orcutt, CA 93455.

Property Description

The Subject Property is comprised of approximately 43.64 acres of vacant land located east of the intersection of Highway 135 and Union Valley Parkway.

Findings

Recognized Environmental Conditions (RECs) are defined by the ASTM Standard Practice E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, at, or on a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

- ***SDC found that this assessment has revealed no evidence of RECs on or associated with the Subject Property.***

Historical Recognized Environmental Conditions (HRECs) are defined by the ASTM Standard Practice E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls.

- ***SDC found that this assessment has revealed no evidence of HRECs on or associated with the Subject Property.***

Controlled Recognized Environmental Conditions (CRECs) are defined by the ASTM Standard Practice E1527-13 as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation or required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

- ***SDC found that this assessment has revealed no evidence of CRECs on or associated with the Subject Property.***

Business Environmental Risks (BERs) are defined by the ASTM Standard Practice E1527-13 as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in the standard ASTM scope. BERs may affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the Subject Property.

- ***SDC found that this assessment has revealed no evidence of BERs on or associated with the Subject Property.***

It is SDC's opinion that no conditions indicative of current releases or threatened releases associated with the Subject Property were identified during the research and development of this report. It is SDC's opinion that the risk for contamination at the Subject Property is minimal and that no further investigation of the Subject Property is warranted at this time.

A completed questionnaire was not received by the date of this report; therefore SDC was unable to determine if the owner / knowledgeable party is aware of any recognized environmental conditions associated with the Subject Property. As per the ASTM E 1527-13 Standard, "Failure to conduct these inquiries could result in a determination that "all appropriate inquiry" is not complete"; therefore not providing CERCLA Liability Protection.

SDC recommends that the owner / knowledgeable party complete the questionnaire located in Appendix C.

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1.0 INTRODUCTION

This report contains the results of a Phase I Environmental Site Assessment ("ESA") conducted for the Subject Property. Sierra Delta Consultants LLC ("SDC") was retained by:

Richards Ranch LLC
P.O. Box 13914
San Luis Obispo, CA 93406

Authorization to proceed on the project was granted via email from Michael D. Stoltey on June 7, 2021. This report of findings completes the agreed upon scope of services.

1.1 Purpose

The purpose of this Phase I ESA was to identify recognized environmental conditions in connection with the Subject Property as defined by ASTM Standard E1527-13 at the time of the site reconnaissance. This practice is intended to permit the user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on Comprehensive Environmental Response Compensation and Liability Act (CERLCA) liability.

1.2 Detailed Scope of Services

This Phase I ESA was prepared according to the ASTM Standard E1527-13 which complies with the EPA's (AAI) All Appropriate Inquiries federal regulations. SDC utilized a level of care and skill ordinarily practiced by the environmental consulting profession currently providing similar services under similar circumstances. Significant additions, deletions or exceptions to the ASTM Standard E1527-13 are noted below or in the corresponding sections of this report. The scope of this assessment included an evaluation of the following:

- Physical setting characteristics of the Subject Property through a review of referenced sources which may include topographic maps and geologic, soils and hydrologic reports.

- Usage of the Subject Property and surrounding area through a review of referenced historical sources such as land title records, fire insurance maps, city directories, aerial photographs, prior reports and interviews.

- Observations and interviews regarding the Subject Property usage and conditions including: the use, treatment, storage, disposal or generation of hazardous substances, petroleum products, hazardous wastes, nonhazardous solid wastes and wastewater.

- Usage of adjoining and surrounding area properties and the likely impact of known or suspected releases of hazardous substances or petroleum products from those properties on the Subject Property.

- Information in referenced environmental agency databases and local environmental records, within the specified approximate minimum search distances from the Subject Property.

1.3 Significant Assumptions

There is the possibility that even with the proper application of these methodologies there may exist on the Subject Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. SDC believes that the information obtained from the record review and the interviews concerning the site is reliable. However, SDC cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all-inclusive or comprehensive results, but rather to provide the user with information relating to the Subject Property.

1.4 Limitations and Exceptions

SDC has prepared this Phase I ESA report using reasonable efforts to identify recognized environmental conditions associated with hazardous substances or petroleum products at the Subject Property. Findings contained within this report are based on information collected from observations made on the day of the site reconnaissance and from reasonably ascertainable information obtained from certain public agencies and other referenced sources.

The professional services performed do not guarantee compliance with federal, state or local laws, regulations and codes. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Regardless of the findings stated in this report, SDC is not responsible for consequences or conditions arising from facts not fully disclosed to SDC during the assessment.

The scope of this Phase I ESA is limited to: observations made during the site visit; observations made during the off-site reconnaissance; interviews with knowledgeable persons, interviews with public agency personnel, and reviews of readily available published and unpublished reports, literature, and historical sources. As a result, these conclusions are based on information supplied by others, and interpretations by qualified personnel. Any conclusions and/or recommendations made in this report are subject to modification if subsequent information is obtained by SDC.

It is impossible to predict events that may occur after the site visit, such as illegal dumping or disposal, accidental spillage or the inaccuracy of the published or unpublished reports, literature or documents referenced herein. There is no assessment thorough enough to completely exclude the presence of hazardous waste or substances at any site. Therefore, if none are identified as part of a limited scope of work, such a conclusion should not be construed as a guaranteed absence of such materials. It is merely the result of the assessment.

This report provides opinions of SDC concerning recognized environmental conditions at the Subject Property. It is possible, despite the use of reasonable care and interpretation, SDC may have failed to identify regulatory violations or the presence of hazardous substances, underground storage tanks, or other obscured or subsurface areas of potential environmental concern. SDC assumes no responsibility for conditions that were not specifically evaluated or conditions that were not generally recognized as environmentally unacceptable at the time this report was prepared.

This report was prepared according the ASTM Standard E1527-13 which complies with the EPA's (AAI) All Appropriate Inquiries federal regulations; however, SDC elected to diverge from the ASTM Standard E1527-13 Standard Practice for Environmental Site Assessments in the following areas:

- A 50-year Chain of Title report was not requested by the Client; therefore, only the title history available through the sources mentioned in this report were reviewed.

1.5 Special Terms and Conditions

The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described herein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the client. No subsurface exploratory drilling or sampling was done under the scope of this work. Unless specifically stated otherwise in the report, no chemical analysis has been performed during the course of this ESA. Section 4.6 of the ASTM Standard Practice for Phase I Environmental Site Assessments (E 1527-13) states that the Phase I ESA shall be valid for up to 180 days from the date of issuance.

1.6 User Reliance

This Report was prepared by Sierra Delta Consultants LLC ("Consultant") for the sole and exclusive use of Richards Ranch LLC. Nothing under the Agreement between Sierra Delta Consultants LLC and its Client, Richards Ranch LLC, shall be construed to give any rights or benefits to anyone other than Client and Consultant, and all duties and responsibilities undertaken pursuant to the Agreement will be for the sole and exclusive benefit of Client and Consultant and not for the benefit of any other party. In particular, Consultant does not intend, without its written consent, for this Report to be disseminated to anyone other than Client or to be used or relied upon by anyone other than its Client. Use of the Report by any other person is unauthorized and such use is at the sole risk of the user. Anyone using or relying upon this Report, agrees, by virtue of its use, to indemnify and hold harmless, Consultant from and against all claims and damages arising out of, or resulting from the performance of the work by Consultant involving this Report or pollution-related activities.

1.7 Non-Scope Considerations

Non-scope issues as per Section 13 of the ASTM E1527-13, which include, but are not limited to, asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance and wetlands were not addressed as they are non-scope issues.

1.8 Data Gaps

The report shall identify and comment on significant data gaps that affect the ability of the environmental professional to identify recognized environmental conditions and identify the sources of information that were consulted to address the data gaps. A data gap is a failure to achieve the historical research by the Environmental Site Assessment despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by the Environmental Site Assessment, including, but not limited to site reconnaissance and interviews. The ASTM standard states that a data gap by itself is not inherently significant, but is only significant if other information and/or professional experience raise reasonable concerns about the data gap.

In the event that data gaps are identified, SDC will endeavor to comment on the significance of those gaps. However, SDC cannot, and does not warrant or guarantee that no significant event, releases, or conditions arose during periods such as data gaps.

Aerial photographs were not available for the site prior to 1957 or at five year intervals, however, because of the availability of other data sources, the absence of earlier aerial photographs or at five year intervals is not considered to comprise a significant data gap.

2.0 SITE DESCRIPTION

The following sections describe the Subject Property.

2.1 Location and Legal Description

No address is associated with the Subject Property which consists of: Approximately 43.64 acres of vacant land east of the intersection of Highway 135 and Union Valley Parkway in Orcutt, CA 93455. The Subject Property identified as Assessor's Parcel Numbers (APNs): 107-250-019/020/021/022 is located in Santa Barbara County, CA.

A regional map is included herein as Figure 1. A vicinity map is included herein as Figure 2.

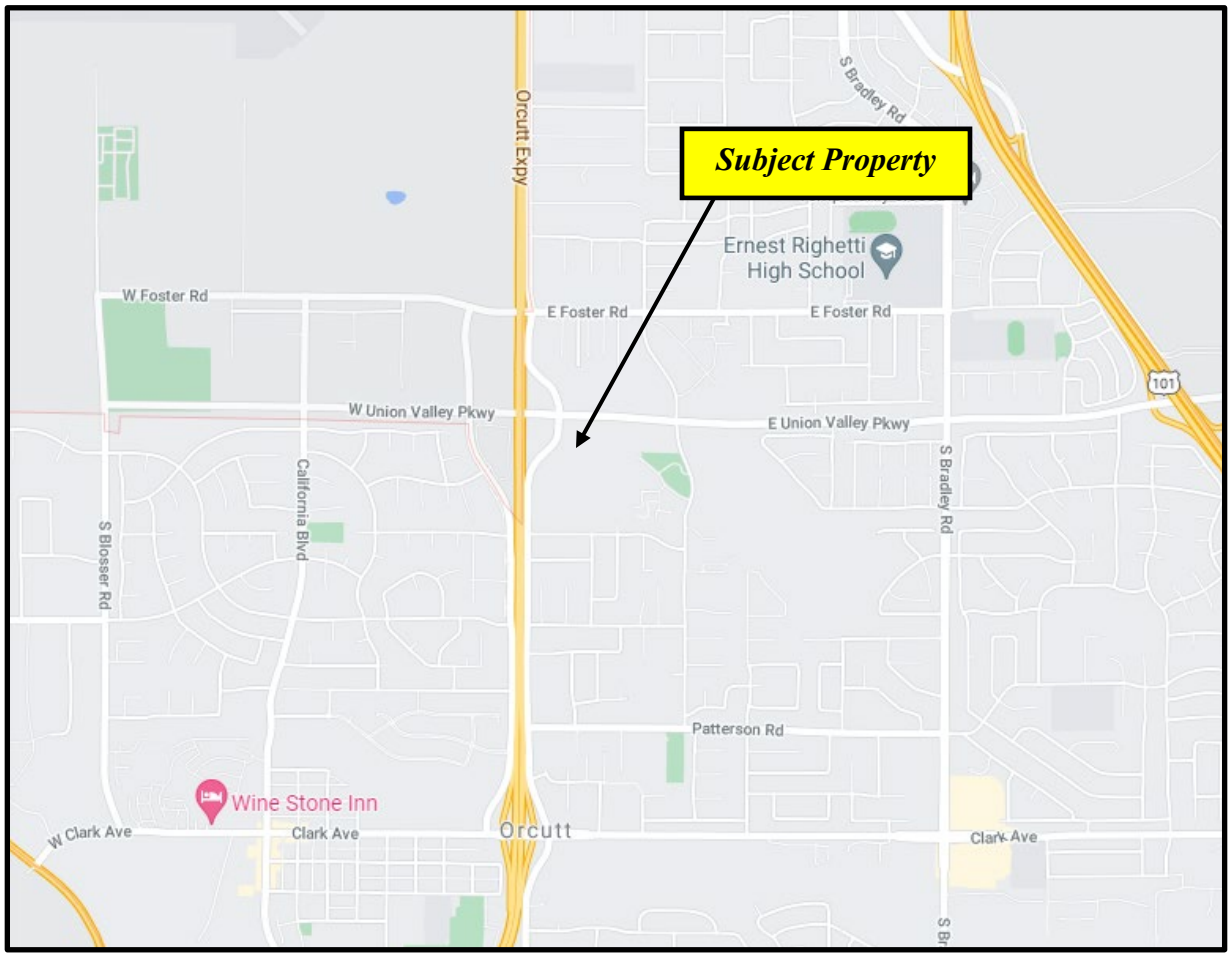
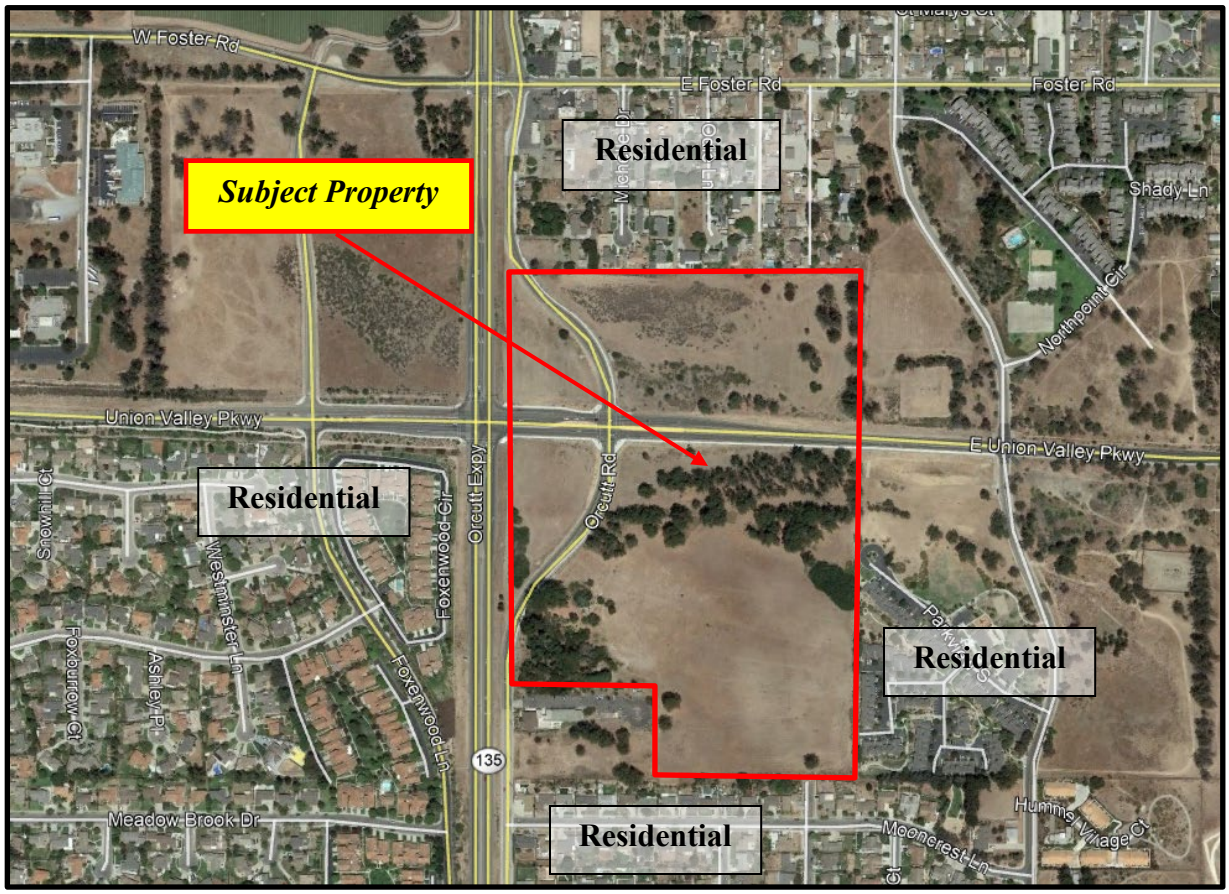


Figure 1: Regional Map.



**The aerial photograph is provided for reference and may not depict current site conditions. Property lines are approximations. No Scale.*

Figure 2: Vicinity Map (Google Earth, 2019).

2.2 Site and Vicinity General Characteristics

The Subject Property is located east of the intersection of Highway 135 and Union Valley Parkway in an area of primarily residential development.

2.3 Current Use of the Subject Property

The Subject Property is currently undeveloped land.

2.4 Description of Subject Property Improvements

The following section describes general conditions and features as noted during SDC's inspection of the Subject Property.

2.4.1 Hazardous Materials / Storage

No areas of hazardous materials storage were noted on the Subject Property.

2.4.2 Refuse Disposal

No signs of illegal dumping were observed at the time of the site reconnaissance.

2.4.3 Roads

The Subject Property can be accessed from Union Valley Parkway or Orcutt Road / Hwy 135.

2.4.4 Vegetation

No diseased or distressed vegetation was observed on the Subject Property at the time of the site reconnaissance.

2.4.5 Utilities

The following table lists utility providers for the area of the Subject Property.

Table 1: Utility providers for the Subject Property

Service	Provider
Water	City of Santa Maria
Sewer	City of Santa Maria
Power	Pacific Gas & Electric
Gas	The Gas Company

2.5 Current Use of the Adjoining Properties

The current uses for the adjoining properties are listed in Table 2.

Table 2: Current land uses for the adjoining properties

Direction	Land Use
North	Residential
South	Church & Residential
East	Residential & Vacant Land
West	Highway 135 followed by Residential & Vacant Land

3.0 PHYSICAL SETTING

3.1 Topography

The Subject Property is located within the Santa Maria Quadrangle of the USGS 7.5-minute topographic map series. The elevation of the Subject Property is approximately 345 feet above mean sea level. A topographic map is included herein as Figure 3.

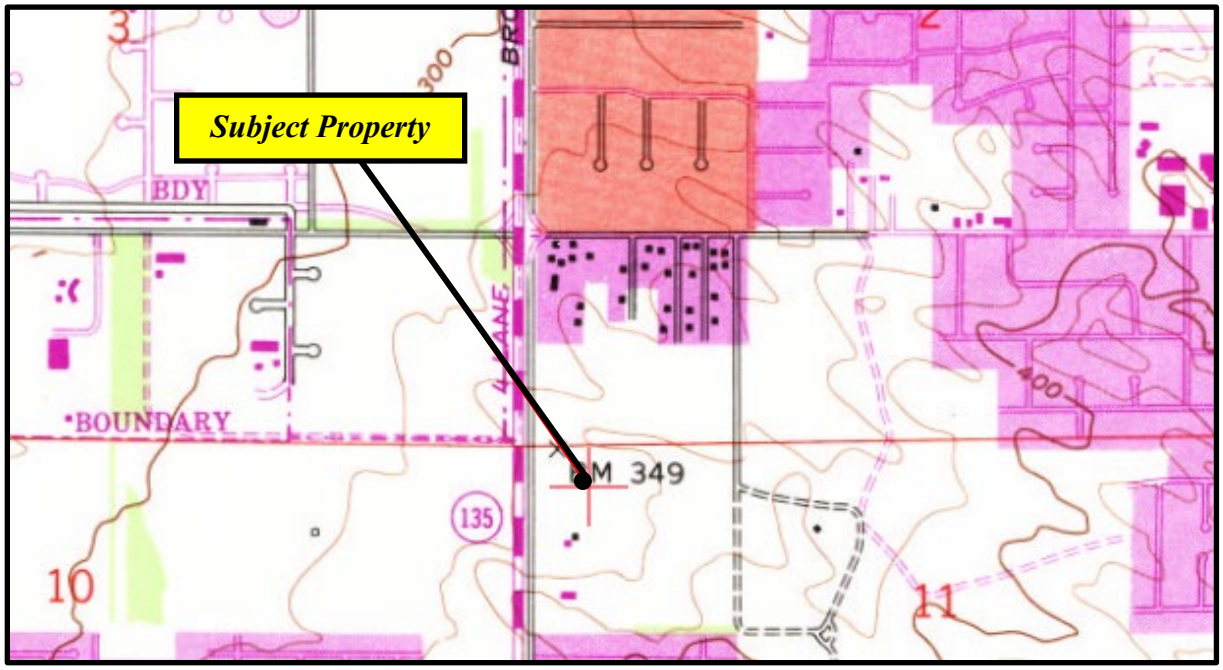


Figure 3: Topographic Map (USGS, 1982).

3.2 Regional Geology / Hydrology

The Subject Property is located within the Santa Maria Groundwater Basin. The Santa Maria Main Groundwater Basin is an alluvial basin of 170 mi2 that is bordered by the Nipomo Mesa and Sierra Madre Foothills to the north, the San Rafael Mountains to the east, the Solomon-Casmalia Hills to the south and the Pacific Ocean to the west. The Basin is situated in the northwest portion of Santa Barbara County and extends into the southwest portion of San Luis Obispo County. The Valley is approximately 28 miles long and 12 miles wide. Average rainfall varies from about 12 to 16 inches per year within the basin. Surface drainage is primarily from the Sisquoc and Santa Maria Rivers that traverse the north side of the basin from east to west. Orcutt Creek, Bradley Canyon, Cat Canyon and Foxen Canyon are the primary drainages on the south side of the basin. The aquifer is considered to be essentially continuous hydrologically with the exception of clay lenses that cause localized confinement. Depressions of the water table occur in areas of heavy pumping.

Groundwater is found in alluvium, dune sands, and the Orcutt, Paso Robles, Pismo, and Careaga Formations. Groundwater is unconfined throughout most of the basin except in the coastal portion where it is confined.

Depth to groundwater has been recorded as approximately 75 - 80 feet below ground surface based on monitoring well data in the area.

4.0 HISTORICAL RECORDS REVIEW

According to the ASTM Standard E1527-13 all obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. The following sections summarize historical research for the Subject Property and adjoining properties. For copies of the historical records mentioned below the reader is referred to Appendix D.

4.1 Aerial Photographs

SDC reviewed available aerial photographs of the Subject Property and surrounding areas. Aerial photographs were reviewed for the years 1956, 1968, 1994, 2009 and 2019. Aerial photographs were available online at UCSB Library FrameFinder and U.S.G.S. EarthExplorer. The most recent aerial photograph was viewed on Google Earth. The following is a summary of the observations and interpretations noted during the aerial photograph review:

2019
The Subject Property appears to be undeveloped.

1956 / 1968 / 1994 / 2009
The Subject Property appears to be primarily undeveloped, however structures were noted on the southwest portion of the property.

4.2 Historical USGS Topographic Maps

SDC reviewed available historical United States Geological Survey (USGS) Topographic Maps for information regarding past uses of the Subject Property. The USGS Topographic Map(s) were reviewed for the years 1947 and 1982.

- Review of the historical USGS Topographic Maps did not identify past uses indicating recognized environmental conditions at the Subject Property or surrounding area. A copy of the 1982 USGS Topographic Map is provided in the previous Figure 3.

4.3 Sanborn Fire Insurance Maps

In the late nineteenth century, the Sanborn Company began preparing maps of central business districts for use by fire insurance companies. These maps were updated and expanded geographically periodically through the twentieth century. The Sanborn maps often indicate construction materials of specific building structures and the location of fuel storage tanks.

- Sanborn maps were unavailable for the area of the Subject Property.

5.0 USER PROVIDED INFORMATION

The following section summarizes information provided by the user of this report (Richards Ranch LLC). In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

5.1 Title Records

Title records were provided for review by the User. SDC reviewed title information obtained from First American Title Company. Review of the title information did not identify any environmental liens associated with the Subject Property. For a copy of the property profile the reader is referred to Appendix A.

5.2 Environmental Liens or Activity and Use Limitations

SDC was not informed by the user of any environmental liens or activity and use limitations (AULs). Title documents did not identify any liens or AULs for the Subject Property.

5.3 Specialized Knowledge

SDC was not informed by the user of any specialized knowledge or experience related to the Subject Property or nearby properties.

5.4 Commonly Know or Reasonably Ascertainable Information

The user did not inform SDC of commonly known or reasonably ascertainable information about the Subject Property or nearby properties which aided in identifying recognized environmental conditions.

5.5 Valuation Reduction for Environmental Issues

The user did not indicate to SDC any information to suggest that the valuation of the Subject Property is significantly less than the valuation for comparable properties due to environmental factors.

5.6 Owner, Property Manager, and Occupant Information

A Site Questionnaire was not completed by the owner of the Subject Property.

A completed questionnaire was not received by the date of this report; therefore SDC was unable to determine if the owner / knowledgeable party is aware of any recognized environmental conditions associated with the Subject Property. As per the ASTM E 1527-13 Standard, "Failure to conduct these inquiries could result in a determination that "all appropriate inquiry" is not complete"; therefore not providing CERCLA Liability Protection.

SDC recommends that the owner / knowledgeable party complete the questionnaire located in Appendix C.

5.7 Reasons for Performing Phase I

SDC understands that the findings of this Phase I ESA will be used to evaluate a pending financial transaction associated with the Subject Property.

6.0 RECORDS REVIEW

Information in this section is based solely on the specific references contained within each subsection. Sources of information may include: commercially available and proprietary regulatory databases, regulatory agency files, personal interviews and telephone interviews. In some of the following subsections, the words up gradient, cross gradient, and down gradient refer to the presumed groundwater flow direction in relation to the Subject Property. These determinations are based subjectively on regional hydrogeologic information, topographic maps and local site conditions described in Section 4.3. Using the ASTM definition of migration, SDC considers the migration of hazardous substances or petroleum products in any form onto the Subject Property during the evaluation of each site listed within regulatory databases, which include solid, liquid, and vapor. For a copy of the regulatory database report obtained during the research and development of this Phase I ESA the reader is referred to Appendix E.

6.1 Regulatory Database Summary

Table 3: Regulatory Database Search Results Summary

Database	Search Radius (miles)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Sites	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Sites	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Sites (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	NA	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Sites	0.50	N	N	N

Database	Search Radius (miles)	Subject Property	Adjacent Properties	Sites of Concern
State/Tribal Leaking Underground Storage Tank Site (LUST) / SLICs	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
Additional Environmental Records (Local)	0.50	N	N	N
Records of Emergency Release Reports – CHMIRS, MCS, SPILLS90	Subject Property & Adjacent	N	N	N
Other Ascertainable Records / Hazardous Substances – HMMD, HAZNET, FINDS, ECHO, CUPA, CERS Listings	0.50	**Y**	N	N
EDR Historical Sites / Govt Archives – Auto, Gas, Cleaners, UST	0.25	N	N	N

**Sites may be listed in more than one database.*

6.1.1 Subject Property Listings

- **The Subject Property was listed in the CIWQS database during review of the regulatory database report. The listing is associated with a permit for storm water construction which was terminated in 2014.**

6.1.2 Adjacent Property Listings

- **Adjacent properties were not identified during review of the regulatory database report.**

6.1.3 Sites of Concern

- **No sites of concern were identified during review of the regulatory database report. All identified sites should be considered low risk to the Subject Property based on the responsible party being identified, site type, distance, cleanup status, lack of listings pertaining to any spills or releases of hazardous substances and/or gradient with respect to groundwater flow in the area.**

6.2 Regulatory Agencies

6.2.1 Health Department

The Santa Barbara County Environmental Health Services (EHS) is the agency that has been designated the Certified Unified Program Agency (CUPA) for the Subject Property. The CUPA identifies facilities that may have to prepare; a Hazardous Materials Business Plan, a Federal Risk Management Plan (RMP), or a California Accidental Release Prevention (CalARP) plan; or any combination of these plans. Additionally, the CUPA agency may provide oversight for the remediation of contaminated sites

- **SDC contacted the EHS for files pertaining to the Subject Property. No response was received by the date of this report.**

6.2.2 Air Pollution Control District

The Santa Barbara County Air Pollution Control District (APCD) maintains a database, which contains information on properties (or "sites") where airborne hazardous substances have been released, or where the potential for such a release exists.

- **SDC contacted the APCD for files pertaining to the Subject Property and reviewed the APCD permitted facilities map. No records were identified for the Subject Property.**

6.2.3 Regional Water Quality Agency

The Regional Water Quality Control Board (RWQCB) maintains the GeoTracker database. The GeoTracker database contains information on sites that impact, or have the potential to impact, water quality in California.

- **The Subject Property was not listed within the GeoTracker database.**

6.2.4 Department of Toxic Substances Control

The Department of Toxic Substances Control (DTSC) maintains the EnviroStor and Hazardous Waste Tracking System (HWTS) databases. EnviroStor contains information on environmental cleanups and permitted facilities in California. The HWTS provides information on hazardous waste manifesting.

- **The Subject Property was not listed within the EnviroStor or HWTS database.**

6.2.5 Oil and Gas Exploration

The Geologic Energy Management Division's (CalGEM) online mapping application Well Finder presents California's oil and gas industry information from the geographic perspective. Find and locate oil and gas wells and other types of related facilities throughout the state. Search by address, latitude/longitude, unique well number (also known as "API"), Public Land Survey System (PLSS) township/range/section, or by oil and gas field names. Dig deeper into individual well records. Explore where permits have been issued for oil and gas operations. Investigate wells by their type of use, such as oil and gas producers versus injectors.

- **No operating or abandoned oil or gas wells were identified on or adjacent to the Subject Property.**

6.2.6 CalEPA Regulated Site Portal

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. The portal was created to provide a more holistic view of regulated activities statewide. By combining data from a variety of state and federal databases, the portal provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials.

- **The CalEPA Regulated Site Portal was searched for records pertaining to the Subject Property. No records were identified.**

6.2.7 Planning Department

The County of Santa Barbara Planning Division is responsible establishing land use policies and plans and subsequently implementing them.

- **The Subject Property is currently zoned C-2: Commercial. No Activity Use Limitations (AULs) or Engineering Controls (ECs) were identified for the Subject Property.**

7.0 SITE RECONNAISSANCE

SDC conducted a site reconnaissance survey of the subject and adjacent properties on June 16, 2021. The following is a summary of the visual and/or physical observations made during the site reconnaissance.

7.1 Methodology and Limiting Conditions

The site reconnaissance consisted of visual and/or physical observations of: the Subject Property and improvements; adjoining sites as viewed from the Subject Property; and, the surrounding area based on visual observations made during the trip to and from the Subject Property. Unimproved portions of the Subject Property (if any) were observed along the perimeter and in a general grid pattern in safely accessible areas. Building exteriors (if any) were observed along the perimeter from the ground, unless described otherwise. Building interiors (if any) were observed as they were made safely accessible, unless described otherwise.

During the site reconnaissance, the entire property was surveyed.

7.2 General Site Settings and Summaries

The following table summarizes the general site settings including interior and exterior observation of structures (if any) along with additional information obtained during the research and development of this report.

Table 3: Subject Property Summary

Report Component	Summary
General Site Settings / Structures:	The Subject Property is currently undeveloped land.
Roads:	The Subject Property can be accessed from Union Valley Parkway or Orcutt Road / Hwy 135.
Topography:	The elevation of the Subject Property is approximately 345 feet above mean sea level.
Hazardous materials storage tanks and storage areas:	No areas of hazardous materials storage were noted on the Subject Property.
Refuse disposal:	No signs of illegal dumping were observed at the time of the site reconnaissance.
Stressed vegetation (from other than insufficient water):	No diseased or distressed vegetation was observed on the Subject Property at the time of the site reconnaissance.
Surface water flooding:	None noted by SDC during the site reconnaissance.
Odors:	No unusual odors were identified by SDC personnel during the site reconnaissance.
Pools of liquid:	None noted by SDC during the site reconnaissance.

Electrical or hydraulic equipment know or likely to contain Polychlorinated Biphenyls (PCBs):	None noted by SDC during the site reconnaissance.
Unidentified substance containers (including empty drum storage):	None noted by SDC during the site reconnaissance.
Stained soil and pavement, corrosion, and degradation of floors and walls:	None noted by SDC during the site reconnaissance.
Pits, ponds, lagoons, sumps:	None noted by SDC during the site reconnaissance.
Solid waste and waste water:	None noted by SDC during the site reconnaissance.
Wells (including dry wells, irrigation wells, injection wells, or monitoring wells):	None noted by SDC during the site reconnaissance.
Septic systems:	None noted by SDC during the site reconnaissance.
High voltage electrical lines:	None noted by SDC during the site reconnaissance.
High-pressure gas or fuel transmission lines:	None noted by SDC during the site reconnaissance.
Railroad tracks:	None noted by SDC during the site reconnaissance.
Potential off-site sources:	None noted by SDC during the site reconnaissance.
Inaccessible or Un-surveyed portions of Subject Property:	During the site reconnaissance, the entire property was surveyed.

8.0 INTERVIEWS

8.1 Interview with Owner / Representative

A Site Questionnaire was not completed by the owner of the Subject Property.

A completed questionnaire was not received by the date of this report; therefore SDC was unable to determine if the owner / knowledgeable party is aware of any recognized environmental conditions associated with the Subject Property. As per the ASTM E 1527-13 Standard, "Failure to conduct these inquiries could result in a determination that "all appropriate inquiry" is not complete"; therefore not providing CERCLA Liability Protection.

SDC recommends that the owner / knowledgeable party complete the questionnaire located in Appendix C.

8.2 Interview with Site Manager

A site manager was not interviewed.

8.3 Interview with Occupants

The Subject Property is undeveloped.

9.0 FINDINGS

9.1 Conclusions

The Subject Property is comprised of approximately 43.64 acres of vacant land located east of the intersection of Highway 135 and Union Valley Parkway.

Findings

Recognized Environmental Conditions (RECs) are defined by the ASTM Standard Practice E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, at, or on a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

- ***SDC found that this assessment has revealed no evidence of RECs on or associated with the Subject Property.***

Historical Recognized Environmental Conditions (HRECs) are defined by the ASTM Standard Practice E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls.

- ***SDC found that this assessment has revealed no evidence of HRECs on or associated with the Subject Property.***

Controlled Recognized Environmental Conditions (CRECs) are defined by the ASTM Standard Practice E1527-13 as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation or required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

- ***SDC found that this assessment has revealed no evidence of CRECs on or associated with the Subject Property.***

Business Environmental Risks (BERs) are defined by the ASTM Standard Practice E1527-13 as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in the standard ASTM scope. BERs may affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the Subject Property.

- ***SDC found that this assessment has revealed no evidence of BERs on or associated with the Subject Property.***

9.2 Recommendations

It is SDC's opinion that no conditions indicative of current releases or threatened releases associated with the Subject Property were identified during the research and development of this report. It is SDC's opinion that the risk for contamination at the Subject Property is minimal and that no further investigation of the Subject Property is warranted at this time.

A completed questionnaire was not received by the date of this report; therefore SDC was unable to determine if the owner / knowledgeable party is aware of any recognized environmental conditions associated with the Subject Property. As per the ASTM E 1527-13 Standard, "Failure to conduct these inquiries could result in a determination that "all appropriate inquiry" is not complete"; therefore not providing CERCLA Liability Protection.

SDC recommends that the owner / knowledgeable party complete the questionnaire located in Appendix C.

10.0 REFERENCES

CalEPA Regulated Site Portal. 2021. [Online]. Available at: https://siteportal.calepa.ca.gov/nsite/map/help

Department of Toxic Substance Control (DTSC). 2021. EnviroStor Database [Online]. Available at: https://www.envirostor.dtsc.ca.gov/public/

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Santa Barbara County Air Pollution Control District (APCD). 2021. 260 North San Antonio Road, Santa Barbara, CA, 93110. (805) 961-8800.

Santa Barbara County Environmental Health Services (EHS). 2021. 225 Camino Del Remedio, Santa Barbara, CA 93110. (805) 681-4901

USGS EarthExplorer, 2021. [Online]. Available at: https://earthexplorer.usgs.gov/

11.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

NAME & TITLE:	Robb Eidemiller Director of Consulting Services Division
PROJECT ASSIGNMENT:	Principal-in-Charge
FIRM ASSOCIATION:	Sierra Delta Consultants LLC
EXPERIENCE WITH FIRM:	35 years
WITH OTHER FIRMS:	15 years
EDUCATION:	M.S./1978/Geomorphology/Environmental Engineering/Louisiana State University
	B.A./1971/Geomorphology/ U.C.L.A.

ENVIRONMENTAL PROFESSIONAL STATEMENT:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

11.1 Experience and Qualifications

Mr. Eidemiller is Director of the Consulting Services Division of Sierra Delta Consultants LLC. He has over 40 years of project experience in the fields of project feasibility studies; environmental impact assessments and reports; baseline inventories; land use planning; permits acquisition; water resources development; project site location analyses; residential, commercial and industrial development plans; surface and subsurface mining reclamation plans; exploratory drilling and seismic exploration; hazardous waste definition and clean-up; and waste management.

Mr. Eidemiller's relevant experience would include being Principal-in-Charge for over 2000 Environmental Site Assessments (ESAs), Environmental Impact Statements (EISs) and Environmental Impact Reports (EIRs). Projects have involved oil and gas facilities, transmission lines, railroads, airports, sand and gravel operations, large and small housing projects, flood drainage projects, agricultural projects, golf courses, hotels, and commercial developments.

11.2 Sierra Delta Consultants LLC Profile

SDC was founded in 1985 and offers numerous environmental consulting services. The following sections provide a brief discussion of environmental services provided by SDC.

11.2.1 Phase I and II Environmental Site Assessments

The SDC Team conducts environmental site assessments for real estate transactions. These audits are an essential part of real estate and corporate transactions because they are the best way to identify environmental liabilities affecting the purchase, sale, lease, and financing of property.

The purpose of the assessment is to facilitate property transactions while providing some protection to the parties involved. Failure to address recent "Superfund" legislation regarding environmental contamination, liability, and clean-up responsibilities can result in property liens, staggering costs for remediation and liability for damages. We often recommend that the investigation be conducted at the request of the client's legal counsel to preserve confidentiality.

A comprehensive site history is conducted to assess current and past operations, and to discover any spills and discharges that may have occurred in the past. Regulatory permits, monitoring programs, and storage and handling procedures for by-products and wastes are reviewed. The site history may include examination of historical aerial photographs, site reconnaissance, and interviews with regulatory agencies and previous owners.

If indicated and warranted by the Phase I Environmental Site Assessment, additional testing may be conducted to delineate the level and extent of contamination (Phase II - Environmental Site Assessment). Sampling might include surface water, groundwater, soils, dust, insulation, and building atmospheres. Drilling may also be required around underground storage tanks. Samples are analyzed by an EPA approved laboratory and results reviewed by our staff. A confidential environmental audit report is presented to the client.

11.2.2 Environmental Studies

The SDC team possesses the technical skill and experience to design and conduct a variety of ecological and environmental investigations. Many of the investigations recently conducted have been, and are, conducted in conjunction with the planning of development projects. Areas of specialization would include:

11.2.2.1 Resources Management

SDC provides resource management services including:

- mitigation planning
- water resources management
- wildlife management
- grazing management
- hazardous waste management

- cultural resources management
- water rights surveys
- visual quality analyses
- floodplain reclamation
- wetland habitat development and restoration

11.2.2.2 Lake Management

SDC provides lake management services including:

- follow-up services
- lake O&M plans
- lake restoration
- leak detection
- odor control
- proper utilization of secondary effluent for golf course irrigation
- water budgets
- water quality analyses

11.2.2.3 Ecological Research

SDC provides ecological research including:

- aquatic and terrestrial ecology
- endangered species studies
- vegetation surveys and studies
- fisheries biology
- riparian habitat studies
- soil science
- wildlife biology
- water quality analysis

11.2.2.4 Wetland Regulation

SDC provides wetland services including:

- wetland boundary determination using the multi-parameter approach
- preliminary assessment of regulatory requirements
- preliminary project design consultation regarding regulatory compliance
- determination of Clean Water Act (wetlands) jurisdiction
- 404(b)(1) alternatives analysis
- preparation of U.S. Army Corps of Engineers 404 permit
- mitigation planning, project re-design and agency negotiation
- public hearing participation

- EIR/EIS contractor liaison and/or management
- water quality certification procurement and other associated permits, certifications, and authorizations as required

11.2.2.5 Environmental Assessments and Impact Statements

SDC provides Impact Assessment services including:

- habitat characterization
- in-field water quality sampling
- inventories including terrestrial vegetation, aquatic vegetation, invertebrates, fishes, large mammals, birds, reptiles and amphibians, bathymetry, hydraulics, background acoustics, visual/aesthetic setting
- statistical analyses/data processing
- laboratory analyses including total alkalinity, nitrogen and phosphorus in H2O and bottom samples, chlorophyll
- Geographic Information Systems (GIS)
- cultural resources surveys
- reports and impact statements
- public participation programs

APPENDIX A

Property Detail Report

CA

APN: 107-250-019

Santa Barbara County Data as of: 06/08/2021

Owner Information

Owner Name:	Wal-Mart Stores Inc		
Vesting:			
Mailing Address:	Property Tax #8013, Bentonville, AR 72712	Occupancy:	Unknown

Location Information

Legal Description:				County:	Santa Barbara, CA
APN:	107-250-019	Alternate APN:		Census Tract / Block:	
Munic / Twnshp:		Twnshp-Rng-Sec:		Legal Lot / Block:	
Subdivision:		Tract #:		Legal Book / Page:	
Neighborhood:		School District:	Orcutt Union Elementary School District		
Elementary School:	Patterson Road Ele...	Middle School:	Orcutt Junior High...	High School:	Ernest Righetti Hi...
Latitude:	34.87877	Longitude:	-120.43579		

Last Transfer / Conveyance - Current Owner

Transfer / Rec Date:	Price:	Transfer Doc #:	
Buyer Name:	Seller Name:	Deed Type:	

Last Market Sale

Sale / Rec Date:	Sale Price / Type:	Deed Type:	
Multi / Split Sale:	Price / Sq. Ft.:	New Construction:	
1st Mtg Amt / Type:	1st Mtg Rate / Type:	1st Mtg Doc #:	N/A
2nd Mtg Amt / Type:	2nd Mtg Rate / Type:	Sale Doc #:	N/A
Seller Name:			
Lender:		Title Company:	

Prior Sale Information

Sale / Rec Date:	Sale Price / Type:	Prior Deed Type:	
1st Mtg Amt / Type:	1st Mtg Rate / Type:	Prior Sale Doc #:	N/A
Prior Lender:			

Property Characteristics

Gross Living Area:		Total Rooms:	0	Year Built / Eff:	
Living Area:		Bedrooms:		Stories:	
Total Adj. Area:		Baths (F / H):		Parking Type:	
Above Grade:		Pool:		Garage #:	
Basement Area:		Fireplace:		Garage Area:	
Style:		Cooling:		Porch Type:	
Foundation:		Heating:		Patio Type:	
Quality:		Exterior Wall:		Roof Type:	
Condition:		Construction Type:		Roof Material:	

Site Information

Land Use:	Vacant Land (NEC)	Lot Area:	98,881 Sq. Ft.	Zoning:	
State Use:		Lot Width / Depth:		# of Buildings:	
County Use:	0000 - Vacant Land	Usable Lot:		Res / Comm Units:	
Site Influence:		Acres:	2.27	Water / Sewer Type:	
Flood Zone Code:	X	Flood Map #:	06083C0195F	Flood Map Date:	09/30/2005
Community Name:	Santa Barbara County Unincorporated Areas	Flood Panel #:	0195F	Inside SFHA:	False

Tax Information

Assessed Year:	2020	Assessed Value:	$743,894	Market Total Value:	
Tax Year:	2020	Land Value:	$743,894	Market Land Value:	
Tax Area:	080-041	Improvement Value:		Market Imprv Value:	
Property Tax:	$8,328.56	Improved %:		Market Imprv %:	
Exemption:		Delinquent Year:			

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PAYMENTS AS OF 06/14/2021

SEARCH PARAMETERS

ENTERED APN: 107-250-019

✓ **APN: 107-250-019** **BILL: 2020-1079834**

TRA: 80-041 - ORCUTT

MAIL: BENTONVILLE AR 72712

ASSESSED OWNER(S)		2020-21 ASSESSED VALUES
WAL-MART STORES INC	LAND	743,894
	TAXABLE	**743,894**

2020-21 TAXES	1ST INST	2ND INST	TOTAL TAX
STATUS	PAID	PAID	
PAYMENT DATE	12/10/2020	12/10/2020	
DELINQUENT DATE	12/10/2020	04/12/2021	
INSTALLMENT	4,164.28	4,164.28	8,328.56
PENALTY	416.42	446.42	862.84
BALANCE DUE	0.00	0.00	**0.00**

WARNINGS AND/OR COMMENTS

**** NO BONDS OR PRIOR YEAR DELQ TAXES ****

ASSESSMENT DETAIL

FUND	TYPE	AMOUNT	DESCRIPTION OF ASSESSMENT(S)
0000	GENERAL	7,438.94	COUNTY GENERAL FUND
8355	SCHOOL	195.20	SANTA MARIA JT UN HIGH BOND 2004
7456	SCHOOL	175.11	ORCUTT BOND 2016 INT/REDEM
8356	SCHOOL	168.94	SANTA MARIA JT HS BOND 2016-H
9421	SCHOOL	162.76	ALLAN HANCOCK CC BOND 2006
7451	SCHOOL	118.73	ORCUTT UNION ELEM BOND 1999
8351	SCHOOL	67.62	SANTA MARIA JT UN HIGH BOND 2000
2511	MAINTENANCE	1.26	ORCUTT FLOOD ZONE BEN ASSMT
		8,328.56	TOTAL OF SPECIAL ASSESSMENTS

ADDITIONAL PROPERTY INFORMATION

COUNTY USE CODE: 0000 **LOT SQ FEET:** 98,881

STANDARD LAND USE: RESIDENTIAL LOT

CURRENT OPEN ORDERS

TOF	COMPANY	ORDER	DATE
`0	FA	0000000	06/16/2021

CONDITIONS, DISCLAIMERS AND EXCLUSIONS:

This Tax Certificate/Tax Order Report does not constitute a report on or certification of: (1) mineral (productive and/or non-productive) taxes or leases; (2) personal property taxes; or (3) other non ad valorem taxes (such as paving liens, stand-by charges or maintenance assessments).

Data Trace Information Services LLC ("Data Trace") may have warranted the accuracy of this Tax Certificate/Tax Order Report to its customer (the "Data Trace Customer") pursuant to the terms and conditions of a written tax service agreement between Data Trace and said Data Trace Customer (the "Tax Service Agreement"). Any such warranty (hereinafter, "Data Trace Customer Warranty") does not: (a) extend to a third party bearer of this Tax Certificate/Tax Order Report; (b) cover any changes made to the records of the taxing authority after the "payments as of," "paid," or "payment" dates delineated above; and (c) cover any invalid tax information shown on the records of the taxing authority or resulting from an error by the Data Trace Customer (including, without limitation, submission of incorrect property information by said Data Trace Customer). DATA TRACE MAKES NO WARRANTIES (EXPRESS OR IMPLIED) WITH RESPECT TO THIS TAX CERTIFICATE/TAX ORDER REPORT OTHER THAN (WHERE APPLICABLE) THE DATA TRACE CUSTOMER WARRANTY. Any and all claims under a Data Trace Customer Warranty must be submitted to Data Trace by the corresponding Data Trace Customer and are subject to the terms and conditions set forth in the pertinent Tax Service Agreement (including, without limitation, the filing deadlines applicable to such claims). In some jurisdictions Data Trace's validation of a Tax Certificate/Tax Order Report is required to activate a Data Trace Customer Warranty.

END OF SEARCH

SR RECORDING REQUESTED BY:
Stewart Title of California, Inc.

When Recorded Mail Document To:

Wal-Mart Stores, Inc.
% J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

Escrow No. 5031619
Title Order No. 99512646

2006-0076277

Recorded
Official Records
County Of
SANTA BARBARA
JOSEPH E. HOLLAND
Recorder

REC FEE 19.00

08:01AM 28-Sep-2006

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Page 1 of 5

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UNO

SPACE ABOVE THIS LINE FOR RECORDER'S USE

TITLE OF DOCUMENT

Grant Deed

Assessor's Identification Number (AIN) : 107-250-11, 12 & 13

SPL

RECORDING REQUESTED BY
STEWART TITLE

When Recorded Return To:

Wal-Mart Stores, Inc.
c/o J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

MAIL TAX STATEMENTS TO:

Wal-Mart Stores, Inc.
Property Tax Dept. 8013, Mail Stop 0550
1301 S.E. 10th Street (ref Store No. 4576-00),
Bentonville, AR 72716

DOCUMENTARY TRANSFER TAX:

NOT OF PUBLIC RECORD, PURSUANT TO REVENUE AND TAXATION CODE SECTION 11932

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

RUTH ANN CARROLL ASISTIN AND KATHLEEN BRODIE, as Co-Successor Trustees of the Richards Family Trust of March 1, 1990, who acquired title as Ruth Ann Carroll and Kathleen Connell, Co-Successor Trustees of the Richards Family Trust,

do hereby GRANT to

WAL-MART STORES, INC., a Delaware corporation,

that certain real property in the City of Santa Maria, County of Santa Barbara, State of California, described on Exhibit "A", attached hereto and incorporated herein by reference.

RUTH ANN CARROLL ASISTIN AND
KATHLEEN BRODIE, as Co-Successor
Trustees of the Richards Family Trusts of
March 1, 1990

By: Ruth Ann Carroll Asistin
Ruth Ann Carroll Asistin
Dated: Aug 17, 2006

By: Kathleen Brodie
Kathleen Brodie
Dated: August 18, 2006

EXHIBIT "A"

LEGAL DESCRIPTION

All that certain real property located in the City of Santa Maria, County of Santa Barbara, State of California, more particularly described as follows:

PARCELS A, B AND C OF PARCEL MAP NO. 11691 IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, RECORDED IN BOOK 12 PAGE 57 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 17, 2006, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Ruth Ann Carroll Asisteri, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 18, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Kathleen Brodie, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

ILLEGIBLE NOTARY SEAL DECLARATION

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the notary seal on the document to which this statement is attached reads as follows:

Name of Notary:	Bette M. Petersen
Date Commission Expires:	September 27, 2006
County were Bond is filed:	Santa Barbara
Commission Number:	1373129

Manufacturer/Vendor Identification Number: NNA1

Place of Execution of this declaration: Anaheim, California

Date: September 15, 2006

Stewart Title of California
By: Bill Cuddyer

R747 1/92

Property Detail Report

CA

APN: 107-250-020

Santa Barbara County Data as of: 06/08/2021

Owner Information

Owner Name:	Wal-Mart Stores Inc		
Vesting:			
Mailing Address:	Property Tax #8013, Bentonville, AR 72712	Occupancy:	Unknown

Location Information

Legal Description:				County:	Santa Barbara, CA
APN:	107-250-020	Alternate APN:		Census Tract / Block:	
Munic / Twnshp:		Twnshp-Rng-Sec:		Legal Lot / Block:	
Subdivision:		Tract #:		Legal Book / Page:	
Neighborhood:		School District:	Orcutt Union Elementary School District		
Elementary School:	Patterson Road Ele...	Middle School:	Lakeview Junior Hi...	High School:	Ernest Righetti Hi...
Latitude:	34.88022	Longitude:	-120.43577		

Last Transfer / Conveyance - Current Owner

Transfer / Rec Date:		Price:		Transfer Doc #:	
Buyer Name:		Seller Name:		Deed Type:	

Last Market Sale

Sale / Rec Date:		Sale Price / Type:		Deed Type:	
Multi / Split Sale:		Price / Sq. Ft.:		New Construction:	
1st Mtg Amt / Type:		1st Mtg Rate / Type:		1st Mtg Doc #:	N/A
2nd Mtg Amt / Type:		2nd Mtg Rate / Type:		Sale Doc #:	N/A
Seller Name:					
Lender:				Title Company:	

Prior Sale Information

Sale / Rec Date:		Sale Price / Type:		Prior Deed Type:	
1st Mtg Amt / Type:		1st Mtg Rate / Type:		Prior Sale Doc #:	N/A
Prior Lender:					

Property Characteristics

Gross Living Area:		Total Rooms:	0	Year Built / Eff:	
Living Area:		Bedrooms:		Stories:	
Total Adj. Area:		Baths (F / H):		Parking Type:	
Above Grade:		Pool:		Garage #:	
Basement Area:		Fireplace:		Garage Area:	
Style:		Cooling:		Porch Type:	
Foundation:		Heating:		Patio Type:	
Quality:		Exterior Wall:		Roof Type:	
Condition:		Construction Type:		Roof Material:	

Site Information

Land Use:	Vacant Land (NEC)	Lot Area:	78,844 Sq. Ft.	Zoning:	
State Use:		Lot Width / Depth:		# of Buildings:	
County Use:	0000 - Vacant Land	Usable Lot:		Res / Comm Units:	
Site Influence:		Acres:	1.81	Water / Sewer Type:	
Flood Zone Code:	X	Flood Map #:	06083C0195F	Flood Map Date:	09/30/2005
Community Name:	Santa Barbara County Unincorporated Areas	Flood Panel #:	0195F	Inside SFHA:	False

Tax Information

Assessed Year:	2020	Assessed Value:	$594,772	Market Total Value:	
Tax Year:	2020	Land Value:	$594,772	Market Land Value:	
Tax Area:	080-041	Improvement Value:		Market Imprv Value:	
Property Tax:	$6,659.22	Improved %:		Market Imprv %:	
Exemption:		Delinquent Year:			

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PAYMENTS AS OF 06/14/2021

SEARCH PARAMETERS

ENTERED APN: 107-250-020

✓ **APN: 107-250-020** **BILL: 2020-1079835**

TRA: 80-041 - ORCUTT

MAIL: BENTONVILLE AR 72712

ASSESSED OWNER(S)		2020-21 ASSESSED VALUES
WAL-MART STORES INC	LAND	594,772
	TAXABLE	**594,772**

2020-21 TAXES	1ST INST	2ND INST	TOTAL TAX
STATUS	PAID	PAID	
PAYMENT DATE	12/10/2020	12/10/2020	
DELINQUENT DATE	12/10/2020	04/12/2021	
INSTALLMENT	3,329.61	3,329.61	6,659.22
PENALTY	332.96	362.96	695.92
BALANCE DUE	0.00	0.00	**0.00**

WARNINGS AND/OR COMMENTS

**** NO BONDS OR PRIOR YEAR DELQ TAXES ****

ASSESSMENT DETAIL

FUND	TYPE	AMOUNT	DESCRIPTION OF ASSESSMENT(S)
0000	GENERAL	5,947.73	COUNTY GENERAL FUND
8355	SCHOOL	156.07	SANTA MARIA JT UN HIGH BOND 2004
7456	SCHOOL	140.01	ORCUTT BOND 2016 INT/REDEM
8356	SCHOOL	135.07	SANTA MARIA JT HS BOND 2016-H
9421	SCHOOL	130.14	ALLAN HANCOCK CC BOND 2006
7451	SCHOOL	94.93	ORCUTT UNION ELEM BOND 1999
8351	SCHOOL	54.06	SANTA MARIA JT UN HIGH BOND 2000
2511	MAINTENANCE	1.21	ORCUTT FLOOD ZONE BEN ASSMT
		6,659.22	TOTAL OF SPECIAL ASSESSMENTS

ADDITIONAL PROPERTY INFORMATION

COUNTY USE CODE: 0000 **LOT SQ FEET:** 78,843

STANDARD LAND USE: RESIDENTIAL LOT

CONDITIONS, DISCLAIMERS AND EXCLUSIONS:

This Tax Certificate/Tax Order Report does not constitute a report on or certification of: (1) mineral (productive and/or non-productive) taxes or leases; (2) personal property taxes; or (3) other non ad valorem taxes (such as paving liens, stand-by charges or maintenance assessments).

Data Trace Information Services LLC ("Data Trace") may have warranted the accuracy of this Tax Certificate/Tax Order Report to its customer (the "Data Trace Customer") pursuant to the terms and conditions of a written tax service agreement between Data Trace and said Data Trace Customer (the "Tax Service Agreement"). Any such warranty (hereinafter, "Data Trace Customer Warranty") does not: (a) extend to a third party bearer of this Tax Certificate/Tax Order Report; (b) cover any changes made to the records of the taxing authority after the "payments as of," "paid," or "payment" dates delineated above; and (c) cover any invalid tax information shown on the records of the taxing authority or resulting from an error by the Data Trace Customer (including, without limitation, submission of incorrect property information by said Data Trace Customer). DATA TRACE MAKES NO WARRANTIES (EXPRESS OR IMPLIED) WITH RESPECT TO THIS TAX CERTIFICATE/TAX ORDER REPORT OTHER THAN (WHERE APPLICABLE) THE DATA TRACE CUSTOMER WARRANTY. Any and all claims under a Data Trace Customer Warranty must be submitted to Data Trace by the corresponding Data Trace Customer and are subject to the terms and conditions set forth in the pertinent Tax Service Agreement (including, without limitation, the filing deadlines applicable to such claims). In some jurisdictions Data Trace's validation of a Tax Certificate/Tax Order Report is required to activate a Data Trace Customer Warranty.

END OF SEARCH

SR RECORDING REQUESTED BY:
Stewart Title of California, Inc.

When Recorded Mail Document To:

Wal-Mart Stores, Inc.
% J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

Escrow No. 5031619
Title Order No. 99512646

2006-0076277

Recorded
Official Records
County Of
SANTA BARBARA
JOSEPH E. HOLLAND
Recorder

REC FEE 19.00

08:01AM 28-Sep-2006

FGH
Page 1 of 5

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UNO

SPACE ABOVE THIS LINE FOR RECORDER'S USE

TITLE OF DOCUMENT

Grant Deed

Assessor's Identification Number (AIN) : 107-250-11, 12 & 13

SPL

RECORDING REQUESTED BY
STEWART TITLE

When Recorded Return To:

Wal-Mart Stores, Inc.
c/o J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

MAIL TAX STATEMENTS TO:

Wal-Mart Stores, Inc.
Property Tax Dept. 8013, Mail Stop 0550
1301 S.E. 10th Street (ref Store No. 4576-00),
Bentonville, AR 72716

DOCUMENTARY TRANSFER TAX:

NOT OF PUBLIC RECORD, PURSUANT TO REVENUE AND TAXATION CODE SECTION 11932

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

RUTH ANN CARROLL ASISTIN AND KATHLEEN BRODIE, as Co-Successor Trustees of the Richards Family Trust of March 1, 1990, who acquired title as Ruth Ann Carroll and Kathleen Connell, Co-Successor Trustees of the Richards Family Trust,

do hereby GRANT to

WAL-MART STORES, INC., a Delaware corporation,

that certain real property in the City of Santa Maria, County of Santa Barbara, State of California, described on Exhibit "A", attached hereto and incorporated herein by reference.

RUTH ANN CARROLL ASISTIN AND
KATHLEEN BRODIE, as Co-Successor
Trustees of the Richards Family Trusts of
March 1, 1990

By: Ruth Ann Carroll Asistin
Ruth Ann Carroll Asistin
Dated: Aug 17, 2006

By: Kathleen Brodie
Kathleen Brodie
Dated: August 18, 2006

EXHIBIT "A"

LEGAL DESCRIPTION

All that certain real property located in the City of Santa Maria, County of Santa Barbara, State of California, more particularly described as follows:

PARCELS A, B AND C OF PARCEL MAP NO. 11691 IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, RECORDED IN BOOK 12 PAGE 57 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 17, 2006, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Ruth Ann Carroll Asisteri, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 18, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Kathleen Brodie, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

ILLEGIBLE NOTARY SEAL DECLARATION

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the notary seal on the document to which this statement is attached reads as follows:

Name of Notary:	Bette M. Petersen
Date Commission Expires:	September 27, 2006
County were Bond is filed:	Santa Barbara
Commission Number:	1373129

Manufacturer/Vendor Identification Number: NNA1

Place of Execution of this declaration: Anaheim, California

Date: September 15, 2006

Stewart Title of California
By: Bill Cuddyer

R747 1/92

Property Detail Report

CA

APN: 107-250-021

Santa Barbara County Data as of: 06/08/2021

Owner Information

Owner Name:	Wal-Mart Stores Inc		
Vesting:			
Mailing Address:	Property Tax #8013, Bentonville, AR 72712	Occupancy:	Unknown

Location Information

Legal Description:				County:	Santa Barbara, CA
APN:	107-250-021	Alternate APN:		Census Tract / Block:	
Munic / Twnshp:		Twnshp-Rng-Sec:		Legal Lot / Block:	
Subdivision:		Tract #:		Legal Book / Page:	
Neighborhood:		School District:	Orcutt Union Elementary School District		
Elementary School:	Patterson Road Ele...	Middle School:	Lakeview Junior Hi...	High School:	Ernest Righetti Hi...
Latitude:	34.88046	Longitude:	-120.43355		

Last Transfer / Conveyance - Current Owner

Transfer / Rec Date:		Price:	Transfer Doc #:
Buyer Name:		Seller Name:	Deed Type:

Last Market Sale

Sale / Rec Date:		Sale Price / Type:	Deed Type:	
Multi / Split Sale:		Price / Sq. Ft.:	New Construction:	
1st Mtg Amt / Type:		1st Mtg Rate / Type:	1st Mtg Doc #:	N/A
2nd Mtg Amt / Type:		2nd Mtg Rate / Type:	Sale Doc #:	N/A
Seller Name:				
Lender:			Title Company:	

Prior Sale Information

Sale / Rec Date:		Sale Price / Type:	Prior Deed Type:	
1st Mtg Amt / Type:		1st Mtg Rate / Type:	Prior Sale Doc #:	N/A
Prior Lender:				

Property Characteristics

Gross Living Area:		Total Rooms:	0	Year Built / Eff:	
Living Area:		Bedrooms:		Stories:	
Total Adj. Area:		Baths (F / H):		Parking Type:	
Above Grade:		Pool:		Garage #:	
Basement Area:		Fireplace:		Garage Area:	
Style:		Cooling:		Porch Type:	
Foundation:		Heating:		Patio Type:	
Quality:		Exterior Wall:		Roof Type:	
Condition:		Construction Type:		Roof Material:	

Site Information

Land Use:	Vacant Land (NEC)	Lot Area:	529,690 Sq. Ft.	Zoning:	
State Use:		Lot Width / Depth:		# of Buildings:	
County Use:	0000 - Vacant Land	Usable Lot:		Res / Comm Units:	
Site Influence:		Acres:	12.16	Water / Sewer Type:	
Flood Zone Code:	X	Flood Map #:	06083C0195F	Flood Map Date:	09/30/2005
Community Name:	Santa Barbara County Unincorporated Areas	Flood Panel #:	0195F	Inside SFHA:	False

Tax Information

Assessed Year:	2020	Assessed Value:	$3,993,250	Market Total Value:	
Tax Year:	2020	Land Value:	$3,993,250	Market Land Value:	
Tax Area:	080-041	Improvement Value:		Market Imprv Value:	
Property Tax:	$44,703.66	Improved %:		Market Imprv %:	
Exemption:		Delinquent Year:			

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PAYMENTS AS OF 06/14/2021

SEARCH PARAMETERS

ENTERED APN: 107-250-021

✓ **APN: 107-250-021** **BILL: 2020-1079836**

TRA: 80-041 - ORCUTT

MAIL: BENTONVILLE AR 72712

ASSESSED OWNER(S)		2020-21 ASSESSED VALUES
WAL-MART STORES INC	LAND	3,993,250
	TAXABLE	**3,993,250**

2020-21 TAXES	1ST INST	2ND INST	TOTAL TAX
STATUS	PAID	PAID	
PAYMENT DATE	12/10/2020	04/08/2021	
DELINQUENT DATE	12/10/2020	04/12/2021	
INSTALLMENT	22,351.83	22,351.83	44,703.66
PENALTY	2,235.18	2,265.18	4,500.36
BALANCE DUE	0.00	0.00	**0.00**

WARNINGS AND/OR COMMENTS

**** NO BONDS OR PRIOR YEAR DELQ TAXES ****

ASSESSMENT DETAIL

FUND	TYPE	AMOUNT	DESCRIPTION OF ASSESSMENT(S)
0000	GENERAL	39,932.51	COUNTY GENERAL FUND
8355	SCHOOL	1,047.83	SANTA MARIA JT UN HIGH BOND 2004
7456	SCHOOL	940.01	ORCUTT BOND 2016 INT/REDEM
8356	SCHOOL	906.87	SANTA MARIA JT HS BOND 2016-H
9421	SCHOOL	873.72	ALLAN HANCOCK CC BOND 2006
7451	SCHOOL	637.32	ORCUTT UNION ELEM BOND 1999
8351	SCHOOL	362.99	SANTA MARIA JT UN HIGH BOND 2000
2511	MAINTENANCE	2.41	ORCUTT FLOOD ZONE BEN ASSMT
		44,703.66	TOTAL OF SPECIAL ASSESSMENTS

ADDITIONAL PROPERTY INFORMATION

COUNTY USE CODE: 0000 **LOT SQ FEET:** 529,689

STANDARD LAND USE: RESIDENTIAL LOT

CONDITIONS, DISCLAIMERS AND EXCLUSIONS:

This Tax Certificate/Tax Order Report does not constitute a report on or certification of: (1) mineral (productive and/or non-productive) taxes or leases; (2) personal property taxes; or (3) other non ad valorem taxes (such as paving liens, stand-by charges or maintenance assessments).

Data Trace Information Services LLC ("Data Trace") may have warranted the accuracy of this Tax Certificate/Tax Order Report to its customer (the "Data Trace Customer") pursuant to the terms and conditions of a written tax service agreement between Data Trace and said Data Trace Customer (the "Tax Service Agreement"). Any such warranty (hereinafter, "Data Trace Customer Warranty") does not: (a) extend to a third party bearer of this Tax Certificate/Tax Order Report; (b) cover any changes made to the records of the taxing authority after the "payments as of," "paid," or "payment" dates delineated above; and (c) cover any invalid tax information shown on the records of the taxing authority or resulting from an error by the Data Trace Customer (including, without limitation, submission of incorrect property information by said Data Trace Customer). DATA TRACE MAKES NO WARRANTIES (EXPRESS OR IMPLIED) WITH RESPECT TO THIS TAX CERTIFICATE/TAX ORDER REPORT OTHER THAN (WHERE APPLICABLE) THE DATA TRACE CUSTOMER WARRANTY. Any and all claims under a Data Trace Customer Warranty must be submitted to Data Trace by the corresponding Data Trace Customer and are subject to the terms and conditions set forth in the pertinent Tax Service Agreement (including, without limitation, the filing deadlines applicable to such claims). In some jurisdictions Data Trace's validation of a Tax Certificate/Tax Order Report is required to activate a Data Trace Customer Warranty.

END OF SEARCH

SR RECORDING REQUESTED BY:
Stewart Title of California, Inc.

When Recorded Mail Document To:

Wal-Mart Stores, Inc.
% J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

Escrow No. 5031619
Title Order No. 99512646

2006-0076277

Recorded
Official Records
County Of
SANTA BARBARA
JOSEPH E. HOLLAND
Recorder

REC FEE 19.00

08:01AM 28-Sep-2006

FGH
Page 1 of 5

5 unin
UNO

SPACE ABOVE THIS LINE FOR RECORDER'S USE

TITLE OF DOCUMENT

Grant Deed

Assessor's Identification Number (AIN) : 107-250-11, 12 & 13

SPL

RECORDING REQUESTED BY
STEWART TITLE

When Recorded Return To:

Wal-Mart Stores, Inc.
c/o J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

MAIL TAX STATEMENTS TO:

Wal-Mart Stores, Inc.
Property Tax Dept. 8013, Mail Stop 0550
1301 S.E. 10th Street (ref Store No. 4576-00),
Bentonville, AR 72716

DOCUMENTARY TRANSFER TAX:

NOT OF PUBLIC RECORD, PURSUANT TO REVENUE AND TAXATION CODE SECTION 11932

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

RUTH ANN CARROLL ASISTIN AND KATHLEEN BRODIE, as Co-Successor Trustees of the Richards Family Trust of March 1, 1990, who acquired title as Ruth Ann Carroll and Kathleen Connell, Co-Successor Trustees of the Richards Family Trust,

do hereby GRANT to

WAL-MART STORES, INC., a Delaware corporation,

that certain real property in the City of Santa Maria, County of Santa Barbara, State of California, described on Exhibit "A", attached hereto and incorporated herein by reference.

RUTH ANN CARROLL ASISTIN AND
KATHLEEN BRODIE, as Co-Successor
Trustees of the Richards Family Trusts of
March 1, 1990

By: Ruth Ann Carroll Asistin
Ruth Ann Carroll Asistin
Dated: Aug 17, 2006

By: Kathleen Brodie
Kathleen Brodie
Dated: August 18, 2006

EXHIBIT "A"

LEGAL DESCRIPTION

All that certain real property located in the City of Santa Maria, County of Santa Barbara, State of California, more particularly described as follows:

PARCELS A, B AND C OF PARCEL MAP NO. 11691 IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, RECORDED IN BOOK 12 PAGE 57 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 17, 2006, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Ruth Ann Carroll Asisteri, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 18, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Kathleen Brodie, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

ILLEGIBLE NOTARY SEAL DECLARATION

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the notary seal on the document to which this statement is attached reads as follows:

Name of Notary:	Bette M. Petersen
Date Commission Expires:	September 27, 2006
County were Bond is filed:	Santa Barbara
Commission Number:	1373129

Manufacturer/Vendor Identification Number: NNA1

Place of Execution of this declaration: Anaheim, California

Date: September 15, 2006

Stewart Title of California
By: Bill Cuddyer

R747 1/92

Property Detail Report

CA

APN: 107-250-022

Santa Barbara County Data as of: 06/08/2021

Owner Information

Owner Name:	Wal-Mart Stores Inc		
Vesting:			
Mailing Address:	Property Tax #8013, Bentonville, AR 72712	Occupancy:	Unknown

Location Information

Legal Description:				County:	Santa Barbara, CA
APN:	107-250-022	Alternate APN:		Census Tract / Block:	
Munic / Twnshp:		Twnshp-Rng-Sec:		Legal Lot / Block:	
Subdivision:		Tract #:		Legal Book / Page:	
Neighborhood:		School District:	Orcutt Union Elementary School District		
Elementary School:	Patterson Road Ele...	Middle School:	Orcutt Junior High...	High School:	Ernest Righetti Hi...
Latitude:	34.87764	Longitude:	-120.43358		

Last Transfer / Conveyance - Current Owner

Transfer / Rec Date:	Price:	Transfer Doc #:	
Buyer Name:	Seller Name:	Deed Type:	

Last Market Sale

Sale / Rec Date:	Sale Price / Type:	Deed Type:	
Multi / Split Sale:	Price / Sq. Ft.:	New Construction:	
1st Mtg Amt / Type:	1st Mtg Rate / Type:	1st Mtg Doc #:	N/A
2nd Mtg Amt / Type:	2nd Mtg Rate / Type:	Sale Doc #:	N/A
Seller Name:			
Lender:		Title Company:	

Prior Sale Information

Sale / Rec Date:	Sale Price / Type:	Prior Deed Type:	
1st Mtg Amt / Type:	1st Mtg Rate / Type:	Prior Sale Doc #:	N/A
Prior Lender:			

Property Characteristics

Gross Living Area:		Total Rooms:	0	Year Built / Eff:	
Living Area:		Bedrooms:		Stories:	
Total Adj. Area:		Baths (F / H):		Parking Type:	
Above Grade:		Pool:		Garage #:	
Basement Area:		Fireplace:		Garage Area:	
Style:		Cooling:		Porch Type:	
Foundation:		Heating:		Patio Type:	
Quality:		Exterior Wall:		Roof Type:	
Condition:		Construction Type:		Roof Material:	

Site Information

Land Use:	Vacant Land (NEC)	Lot Area:	1,193,544 Sq. Ft.	Zoning:	
State Use:		Lot Width / Depth:		# of Buildings:	
County Use:	0000 - Vacant Land	Usable Lot:		Res / Comm Units:	
Site Influence:		Acres:	27.4	Water / Sewer Type:	
Flood Zone Code:	X	Flood Map #:	06083C0195F	Flood Map Date:	09/30/2005
Community Name:	Santa Barbara County Unincorporated Areas	Flood Panel #:	0195F	Inside SFHA:	False

Tax Information

Assessed Year:	2020	Assessed Value:	$9,048,608	Market Total Value:	
Tax Year:	2020	Land Value:	$9,048,608	Market Land Value:	
Tax Area:	080-041	Improvement Value:		Market Imprv Value:	
Property Tax:	$101,296.12	Improved %:		Market Imprv %:	
Exemption:		Delinquent Year:			

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PAYMENTS AS OF 06/14/2021

SEARCH PARAMETERS

ENTERED APN: 107-250-022

✓ **APN: 107-250-022** **BILL: 2020-1079837**

TRA: 80-041 - ORCUTT

MAIL: BENTONVILLE AR 72712

ASSESSED OWNER(S)		2020-21 ASSESSED VALUES
WAL-MART STORES INC	LAND	9,048,608
	TAXABLE	**9,048,608**

2020-21 TAXES	1ST INST	2ND INST	TOTAL TAX
STATUS	PAID	PAID	
PAYMENT DATE	12/10/2020	04/08/2021	
DELINQUENT DATE	12/10/2020	04/12/2021	
INSTALLMENT	50,648.06	50,648.06	101,296.12
PENALTY	5,064.80	5,094.80	10,159.60
BALANCE DUE	0.00	0.00	**0.00**

WARNINGS AND/OR COMMENTS

**** NO BONDS OR PRIOR YEAR DELQ TAXES ****

ASSESSMENT DETAIL

FUND	TYPE	AMOUNT	DESCRIPTION OF ASSESSMENT(S)
0000	GENERAL	90,486.09	COUNTY GENERAL FUND
8355	SCHOOL	2,374.35	SANTA MARIA JT UN HIGH BOND 2004
7456	SCHOOL	2,130.04	ORCUTT BOND 2016 INT/REDEM
8356	SCHOOL	2,054.94	SANTA MARIA JT HS BOND 2016-H
9421	SCHOOL	1,979.84	ALLAN HANCOCK CC BOND 2006
7451	SCHOOL	1,444.16	ORCUTT UNION ELEM BOND 1999
8351	SCHOOL	822.52	SANTA MARIA JT UN HIGH BOND 2000
2511	MAINTENANCE	4.18	ORCUTT FLOOD ZONE BEN ASSMT
		101,296.12	TOTAL OF SPECIAL ASSESSMENTS

ADDITIONAL PROPERTY INFORMATION

COUNTY USE CODE: 0000 **LOT SQ FEET:** 1,193,544

STANDARD LAND USE: RESIDENTIAL LOT

CONDITIONS, DISCLAIMERS AND EXCLUSIONS:

This Tax Certificate/Tax Order Report does not constitute a report on or certification of: (1) mineral (productive and/or non-productive) taxes or leases; (2) personal property taxes; or (3) other non ad valorem taxes (such as paving liens, stand-by charges or maintenance assessments).

Data Trace Information Services LLC ("Data Trace") may have warranted the accuracy of this Tax Certificate/Tax Order Report to its customer (the "Data Trace Customer") pursuant to the terms and conditions of a written tax service agreement between Data Trace and said Data Trace Customer (the "Tax Service Agreement"). Any such warranty (hereinafter, "Data Trace Customer Warranty") does not: (a) extend to a third party bearer of this Tax Certificate/Tax Order Report; (b) cover any changes made to the records of the taxing authority after the "payments as of," "paid," or "payment" dates delineated above; and (c) cover any invalid tax information shown on the records of the taxing authority or resulting from an error by the Data Trace Customer (including, without limitation, submission of incorrect property information by said Data Trace Customer). DATA TRACE MAKES NO WARRANTIES (EXPRESS OR IMPLIED) WITH RESPECT TO THIS TAX CERTIFICATE/TAX ORDER REPORT OTHER THAN (WHERE APPLICABLE) THE DATA TRACE CUSTOMER WARRANTY. Any and all claims under a Data Trace Customer Warranty must be submitted to Data Trace by the corresponding Data Trace Customer and are subject to the terms and conditions set forth in the pertinent Tax Service Agreement (including, without limitation, the filing deadlines applicable to such claims). In some jurisdictions Data Trace's validation of a Tax Certificate/Tax Order Report is required to activate a Data Trace Customer Warranty.

END OF SEARCH

SR RECORDING REQUESTED BY:
Stewart Title of California, Inc.

When Recorded Mail Document To:

Wal-Mart Stores, Inc.
% J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

Escrow No. 5031619
Title Order No. 99512646

2006-0076277

Recorded
Official Records
County Of
SANTA BARBARA
JOSEPH E. HOLLAND
Recorder

REC FEE 19.00

08:01AM 28-Sep-2006

FGH
Page 1 of 5

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UNO

SPACE ABOVE THIS LINE FOR RECORDER'S USE

TITLE OF DOCUMENT

Grant Deed

Assessor's Identification Number (AIN) : 107-250-11, 12 & 13

SPL

RECORDING REQUESTED BY
STEWART TITLE

When Recorded Return To:

Wal-Mart Stores, Inc.
c/o J. Matthew Wilcox, Esq.
Gresham Savage Nolan & Tilden
550 E. Hospitality Lane, Suite 300
San Bernardino, CA 92408-4205

MAIL TAX STATEMENTS TO:

Wal-Mart Stores, Inc.
Property Tax Dept. 8013, Mail Stop 0550
1301 S.E. 10th Street (ref Store No. 4576-00),
Bentonville, AR 72716

DOCUMENTARY TRANSFER TAX:

NOT OF PUBLIC RECORD, PURSUANT TO REVENUE AND TAXATION CODE SECTION 11932

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

RUTH ANN CARROLL ASISTIN AND KATHLEEN BRODIE, as Co-Successor Trustees of the Richards Family Trust of March 1, 1990, who acquired title as Ruth Ann Carroll and Kathleen Connell, Co-Successor Trustees of the Richards Family Trust,

do hereby GRANT to

WAL-MART STORES, INC., a Delaware corporation,

that certain real property in the City of Santa Maria, County of Santa Barbara, State of California, described on Exhibit "A", attached hereto and incorporated herein by reference.

RUTH ANN CARROLL ASISTIN AND
KATHLEEN BRODIE, as Co-Successor
Trustees of the Richards Family Trusts of
March 1, 1990

By: Ruth Ann Carroll Asistin
Ruth Ann Carroll Asistin
Dated: Aug 17, 2006

By: Kathleen Brodie
Kathleen Brodie
Dated: August 18, 2006

EXHIBIT "A"

LEGAL DESCRIPTION

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PARCELS A, B AND C OF PARCEL MAP NO. 11691 IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, RECORDED IN BOOK 12 PAGE 57 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 17, 2006, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Ruth Ann Carroll Asisteri, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

STATE OF California)
)
COUNTY OF Santa Barbara)

On August 18, 2006, before me, Bette M Petersen, a Notary Public, in and for said County and State, personally appeared Kathleen Brodie, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

BETTE M. PETERSEN
Commission # 1373129
Notary Public - California
Santa Barbara County
My Comm. Expires Sep 27, 2006

Bette M. Petersen
, Notary Public

ILLEGIBLE NOTARY SEAL DECLARATION

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the notary seal on the document to which this statement is attached reads as follows:

Name of Notary:	Bette M. Petersen
Date Commission Expires:	September 27, 2006
County were Bond is filed:	Santa Barbara
Commission Number:	1373129

Manufacturer/Vendor Identification Number: NNA1

Place of Execution of this declaration: Anaheim, California

Date: September 15, 2006

Stewart Title of California
By: Bill Cuddyer

R747 1/92

POR. N/2 SEC 11 T9N R34W SBB&M

107–25

NOTICE

Assessor Parcels are for tax assessment purposes only and do not indicate either parcel legality or a valid building site.

LINE TABLE					
NO.	BEARING	DISTANCE	NO.	BEARING	DISTANCE
L 1	N1°42'06"E	266.84	L 34	N41°10'11"E	31.25
L 2	N32°30'25"E	9.77	L 35	N6°53'09"W	28.50
L 3	N32°30'25"E	39.34	L 36	N20°15'47"W	73.54
L 4	N35°21'21"E	70.38	L 37	N47°49'14"W	43.14
L 5	N12°25'36"E	24.29	L 38	N26°20'49"W	56.80
L 6	N42°58'45"E	28.02	L 39	N37°13'07"W	87.62
L 7	N65°28'03"E	32.88	L 40	N33°35'45"W	66.02
L 8	N42°49'43"E	89.17	L 41	N45°33'53"W	89.50
L 9	N37°19'49"E	43.20	L 42	N34°13'44"W	65.38
L 10	N28°20'57"E	100.55	L 43	N26°45'57"W	32.54
L 11	N20°01'13"E	65.96	L 44	N1°42'06"E	33.95
L 12	N11°25'26"E	109.18	L 45	S89°47'05"E	335.11
L 13	N43°24'40"W	40.67	L 46	N1°42'06"E	68.15
L 14	S89°47'05"E	84.10	L 47	N85°18'31"W	284.61
L 15	S1°42'06"W	255.77	L 48	S1°42'06"W	98.64
L 16	S33°54'06"W	42.71	L 49	N33°54'06"E	55.32
L 17	S40°19'43"W	93.62	L 50	N22°54'57"E	60.92
L 18	S43°10'34"W	109.53	L 51	N10°56'50"E	116.98
L 19	S44°15'25"W	73.64	L 52	N48°28'49"E	50.38
L 20	S49°33'01"W	68.92	L 53	N87°07'17"W	107.06
L 21	S31°08'27"W	82.73	L 54	S80°30'20"E	115.26
L 22	S20°47'25"W	79.30	L 55	N44°32'00"W	59.18
L 23	S11°49'38"W	78.26	L 56	N24°31'44"W	27.94
L 24	S88°27'25"E	52.27	L 57	N11°04'15"W	52.19
L 25	S22°31'32"E	12.93	L 58	N5°10'33"W	50.48
L 26	S37°54'49"E	120.36	L 59	N19°31'34"W	52.08
L 27	S52°57'08"E	72.98	L 60	N28°25'10"W	45.17
L 28	S63°03'08"E	40.67	L 61	S63°19'54"E	41.63
L 29	S53°52'41"E	46.93	L 62	S2°10'06"W	85.04
L 30	S41°59'16"E	82.86	L 63	S1°57'22"W	60.54
L 31	S28°25'01"E	16.76	L 64	N80°48'58"W	134.35
L 32	S1°42'06"W	238.99	L 65	N84°26'37"W	117.99
L 33	N80°30'20"W	51.24	L 66	N1°42'06"E	72.10

08/12/1988 R.M. Bk. 153, Pg. 70–77 , Tract 13,715 Phase 1
02/19/2016 R.M. Bk. 207, Pg. 14–22 , Tract 14,739

Assessor's Map Bk, 107–Pg, 25
County of Santa Barbara, Calif.

08/19 change Meehan Ln to Pendula Ln

APPENDIX B



Photo 1: View across the Subject Property.



Photo 2: View across the Subject Property.



Photo 3: View of the intersection of Orcutt Road and Union Valley Parkway.



Photo 4: View across the Subject Property.



Photo 5: View across the Subject Property.



Photo 6: View across the Subject Property.

APPENDIX C

SITE QUESTIONNAIRE

STREET ADDRESS: _____

CITY: _____ **STATE / ZIP CODE:**_____

Upon reviewing this questionnaire please contact the Sierra Delta Consultants LLC (SDC) Representative listed below if you have any questions. Please answer the questions to the best of your knowledge.

MR. JOHN WALKER - PHONE: (805) 239-4752 / john@sierradeltallc.com

Please return completed questionnaire to Sierra Delta Consultants via email, or fax to (805) 239-9309

QUESTIONNAIRE COMPLETED BY:_____

I AM THE SUBJECT PROPERTY'S: ***(PLEASE SELECT ONE)***

OWNER PROPERTY MANAGER LEGAL REPRESENTATIVE OTHER:_____

ADDRESS: _____

PHONE NUMBER: _____**FAX NUMBER**_____

NAME OF UTILITY PROVIDERS FOR THE SUBJECT PROPERTY:

POWER: _____ **GAS:** _____

WATER: _____ **SEWER:** _____

Has an environmental investigation previously been completed for the Subject Property?_____

- ***If YES, please provide a copy to SDC for review at your earliest opportunity.***

In the space below please provide information regarding the <u>current use</u> of the Subject Property:

In the space below please provide information regarding the <u>historical use</u> of the Subject Property: (i.e. prior to current use, when the property was first built upon)

In the space below please note the current uses of adjacent properties to the north, south, east, and west:

N:

S:

E:

W:

	QUESTIONS	YES	NO	COMMENTS / DETAILS
1.	Is the **Subject Property** currently used for industrial purposes?	☐	☐	
1A.	Did you observe evidence or have prior knowledge the **Subject Property** had been used for industrial purposes **in the past**?	☐	☐	
2.	Is the **Subject Property** *currently* used as a gasoline station, dry cleaner, photo development lab, junkyard, landfill; or a facility used for motor repair, commercial printing waste management, waste storage, waste processing, or recycling (**if applicable, identify which**)?	☐	☐	
2A.	Has the **Subject Property** been utilized as one of the above *in the past*? (**if applicable, identify which**)?	☐	☐	
3.	Are there **currently** any containers (greater than 5 gallons (19L) in volume, 50 gallons (190L) in the aggregate), storing pesticides, paints, gasoline, or other chemicals; or damaged/discarded automotive/industrial batteries, located on the **Subject Property**?	☐	☐	
3A.	Did you observe evidence or have prior knowledge of **past use or storage** of containers storing pesticides, paints, gasoline, or other chemicals; or damaged and/or discarded automotive/industrial batteries; on the **Subject Property**?	☐	☐	
4.	Are there **currently** any industrial drums (typically 55gallons (208L)), or sacks of chemicals located on the **Subject Property**?	☐	☐	
4A.	Did you observe evidence or have prior knowledge, of a **past presence** of industrial drums (typically 55 gallons (208L)), or sacks of chemicals on the **Subject Property**?	☐	☐	
5.	Did you observe evidence or have prior knowledge of the presence of fill dirt, from a **contaminated site**, on the **Subject Property**?	☐	☐	
5A.	Did you observe evidence or have prior knowledge of the presence of fill dirt, **from an unknown origin**, on the **Subject Property**?	☐	☐	

	QUESTIONS	YES	NO	COMMENTS / DETAILS
6.	Are there **currently** any pits, ponds, or lagoons located on the **Subject Property** in connection with waste treatment or waste disposal?	☐	☐	
6A.	Did you observe evidence or have prior knowledge of **a past presence** of any pits, ponds, or lagoons used in connection with waste treatment/disposal, located on the **Subject Property**?	☐	☐	
7.	Are there **currently** areas of stained soil on the **Subject Property**?	☐	☐	
7A.	Did you observe evidence or have prior knowledge of areas of stained soil on the **Subject Property in the past**?	☐	☐	
8.	Are there **currently** any registered, or unregistered storage tanks, (aboveground or underground), or waste oil clarifiers/separators located on the **Subject Property**? (if yes, please give details)	☐	☐	
8A.	Did you observe evidence or have **prior knowledge** of ***past*** registered, or unregistered storage tanks, (aboveground or underground), or waste oil clarifiers/separators located on the **Subject Property**? (if yes, please give details)	☐	☐	
9.	Are there **currently** any vent-pipes, fill-pipes, or access ways indicating a fill-pipe, protruding from the ground on the Subject Property; or adjacent to any structure located on the **Subject Property**?	☐	☐	
9A	Did you observe evidence or have **prior knowledge** of the existence of ***past*** vent-pipes, fill-pipes, or access ways indicating a fill-pipe, on the Subject Property; or adjacent to any structure on the **Subject Property**?	☐	☐	
10.	Are there **currently** any indications of leaks, spills, foul odors, or staining (from sources other than water), associated with flooring, drains, walls, ceilings, or exposed grounds on the **Subject Property**?	☐	☐	
10A.	Did you observe evidence or have **prior knowledge** of ***past*** leaks, spills, foul odors, or staining (from sources other than water) on the **Subject Property**?	☐	☐	
10B.	Do you have knowledge of any Environmental Clean-ups performed or required to be performed on the **Subject Property**?	☐	☐	

	QUESTIONS	YES	NO	COMMENTS / DETAILS
11.	If the **Subject Property** is served by a **private well or non-public water system**; did you observe evidence or have knowledge the well or non-public water system contained contaminants that would have exceeded guidelines applicable to water systems?	☐	☐	
12.	Does the owner/occupant of the **Subject Property** have knowledge of ***environmental liens***, or government notification, relating to past or recurrent violations of environmental laws, pertaining to the Subject Property or to areas adjacent to any structure located on the Subject Property?	☐	☐	
13.	Has the owner/occupant of the **Subject Property** been informed or have knowledge of the ***current*** existence of hazardous substances or petroleum products on the Subject Property or any structure located on the Subject Property?	☐	☐	
13A.	Has the owner/occupant of the **Subject Property** been informed or have knowledge of the ***prior existence*** of hazardous substances or petroleum products, on the Subject Property, or any structure located on the Subject Property?	☐	☐	
14.	Has the owner/occupant of the **Subject Property** been informed of ***current*** **environmental violations** regarding the Subject Property or any structure located on the Subject Property?	☐	☐	
14A.	Has the owner/occupant of the **Subject Property** been informed of or have knowledge of ***past*** **environmental violations** regarding the Subject Property or any structure located on the Subject Property?	☐	☐	
15.	Does the owner/occupant of the **Subject Property** have knowledge of an Environmental Site Assessment of the Subject Property recommending further assessment due to potential contamination from the presence of hazardous substances?	☐	☐	
15A.	Is the owner/occupant of the **Subject Property** aware of past, pending, threatened lawsuits or administrative proceedings by an owner or occupant of the Subject Property concerning the release or threatened release of hazardous substances or petroleum products?	☐	☐	

	QUESTIONS	YES	NO	COMMENTS / DETAILS
16.	Does the **Subject Property** discharge wastewater (not including sanitary waste or storm water) onto, or adjacent to the Subject Property; and/or into a **storm water drainage system** and/or into a **sanitary sewer system**?	☐	☐	
17.	Did you observe evidence or have prior knowledge of hazardous substances, petroleum products, unidentified waste materials, tires, automotive/industrial batteries, or any other waste materials have been dumped above grade, buried, and/or burned on the **Subject Property**?	☐	☐	
18.	Is there a transformer, capacitor, or any hydraulic equipment located on the **Subject Property**? If present, do you know if the equipment contains PCB's?	☐	☐	
19.	Are you aware of any activity and use limitations (AULs), such as **engineering controls**, land use restrictions or **institutional controls** that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?	☐	☐	
20.	Do you have any specialized knowledge or experience related to the **property** or nearby properties? For example, are you involved in the same line of business as the current or former **occupants** of the **property** or an adjoining **property** so that you would have specialized knowledge of the chemical and processes used by this type of business?	☐	☐	
21.	Based on your knowledge and experience related to the **property** are there any obvious indicators that point to the presence or likely presence of contamination at the property?	☐	☐	
22.	Based upon your knowledge is there a difference between the purchase price and fair market value of the property? If you conclude there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?	☐	☐	
ADJACENT PROPERTIES The following questions pertain to properties contiguous to the Subject Property. Please answer the questions to the best of your knowledge.				
23.	Are **Adjoining Properties** currently used for industrial purposes? (*if yes, please give details*)	☐	☐	
23A.	Did you observe evidence or have prior knowledge of **past industrial usage** of **Adjoining Properties**? (*if yes, please give details*)	☐	☐	

	QUESTIONS	YES	NO	COMMENTS / DETAILS
24.	Are there **currently** any containers / drums (greater than 5 gallons (19L) in volume, 50 gallons (190L) in the aggregate), storing pesticides, paints, gasoline, or other chemicals; or damaged/discarded automotive/industrial batteries, located on the **Adjacent Property**?	☐	☐	
24A.	Did you observe evidence or have **prior knowledge of past use** or storage of containers storing pesticides, paints, or other chemicals; or damaged and/or discarded automotive/industrial batteries; on the **Adjacent Property**?	☐	☐	
25.	Are there **currently** any industrial drums (typically 55gallons (208L)), or sacks of chemicals located on the **Adjacent Property**?	☐	☐	
25A.	Did you observe evidence or have prior knowledge, of a **past presence** of industrial drums (typically 55 gallons (208L)), or sacks of chemicals on the **Adjacent Property**?	☐	☐	
26.	Did you observe evidence or have prior knowledge of the presence of fill dirt, from a **contaminated site**, on the **Adjacent Property**?	☐	☐	
26A.	Did you observe evidence or have prior knowledge of the presence of fill dirt, **from an unknown origin**, on the **Adjacent Property**?	☐	☐	
27.	Are there **currently** any pits, ponds, or lagoons located on the **Adjacent Property** in connection with waste treatment or waste disposal?	☐	☐	
27A.	Did you observe evidence or have prior knowledge of **a past presence** of any pits, ponds, or lagoons used in connection with waste treatment/disposal, located on the **Adjacent Property**?	☐	☐	
28.	Are there **currently** areas of stained soils on the **Adjacent Property**?	☐	☐	

	QUESTIONS	YES	NO	COMMENTS / DETAILS
28A.	Did you observe evidence or have prior knowledge of areas of stained soils on the **Adjacent Property in the past**?	☐	☐	
29.	Are there **currently** any storage tanks, (aboveground or underground), located on the **Adjacent Property**? *(if yes, please give details*)	☐	☐	
29A.	Did you observe evidence or have **prior knowledge** of ***past*** storage tanks, (aboveground or underground), located on the **Adjacent Property**? (*if yes, please give details*)	☐	☐	
30.	Are there **currently** any vent-pipes, fill-pipes, or access ways indicating a fill-pipe, protruding from the ground on Adjacent Properties; or adjacent to any structure located on the **Adjacent Property**?	☐	☐	
30A.	Did you observe evidence or have **prior knowledge** of the existence of ***past*** vent-pipes, fill-pipes, or access ways indicating a fill-pipe, on the Adjacent Properties; or adjacent to any structure on the **Adjacent Property**?	☐	☐	
31.	Are there **currently** any indications of leaks, spills, foul odors, or staining (*from sources other than water*), associated with flooring, drains, walls, ceilings, or exposed grounds on the **Adjacent Property**?	☐	☐	
31A.	Did you observe evidence or have **prior knowledge** of ***past*** leaks, spills, foul odors, or staining (*from sources other than water)* on the **Adjacent Property**?	☐	☐	

I acknowledge that I have read this questionnaire and have responded to the issues and questions to the best of my knowledge. I have prepared the answers to this questionnaire jointly with the bank and its representatives and I have made a full disclosure of my knowledge of suspected or actual environmental concerns regarding this property. The undersigned owner(s) and/or operator(s) acknowledge(s) and agree(s) that intentionally falsifying or concealing any material fact with regard to the subject matter of this Environmental Questionnaire may, in addition to other penalties, result in prosecution under applicable law including 18 U.S.C. section 1001.

Name: (Printed) _____

Signature: _____ **Date:** _____

APPENDIX D

HISTORICAL DOCUMENTATION

AERIAL PHOTOGRAPHS: 1956, 1968, 1994, 2009 and 2019

USGS TOPOGRAPHIC MAPS: 1947, 1982

SANBORN FIRE INSURANCE MAPS: No Coverage



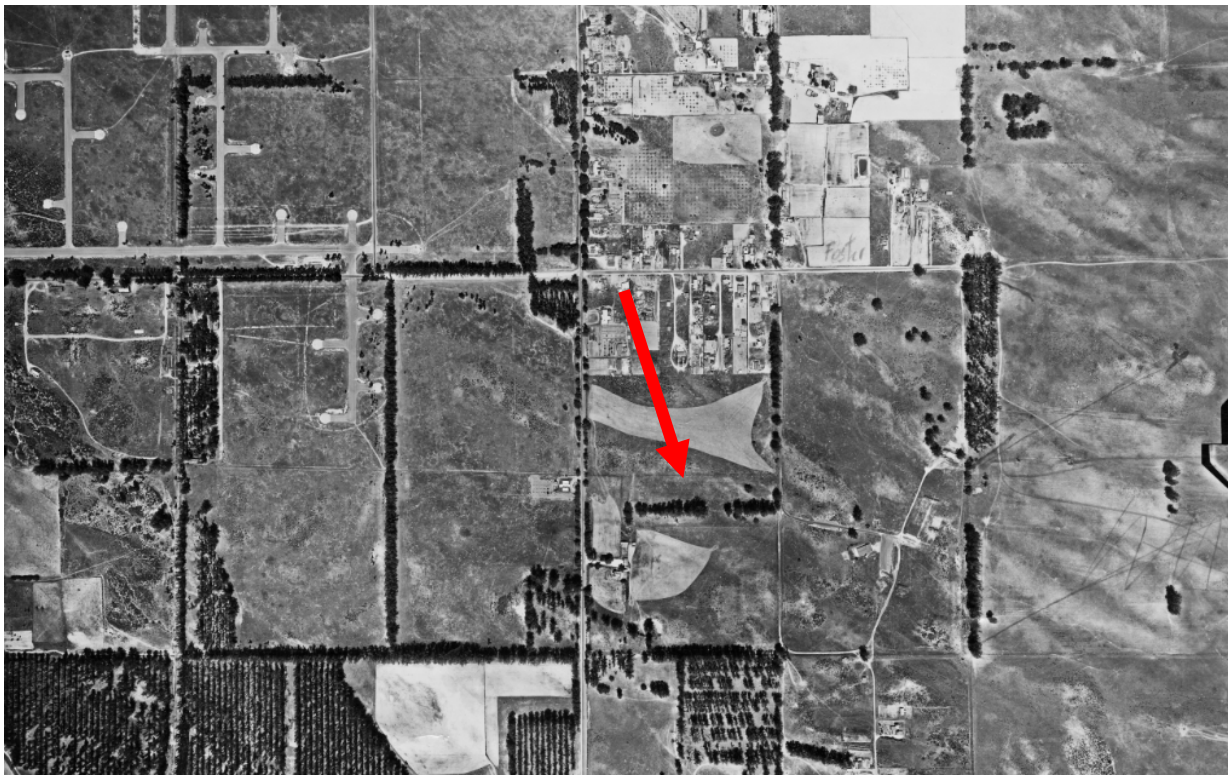
2019


135
Northpoint Cir
E Union Valley Pkwy
Foxenwood Cir
Westminster Ln
Parkview S
Humms Village Ct
2009


135
Northpoint Cir
E Union Valley Pkwy
Foxenwood Cir
Westminster Ln
Parkview S
Humms Village Ct
1994



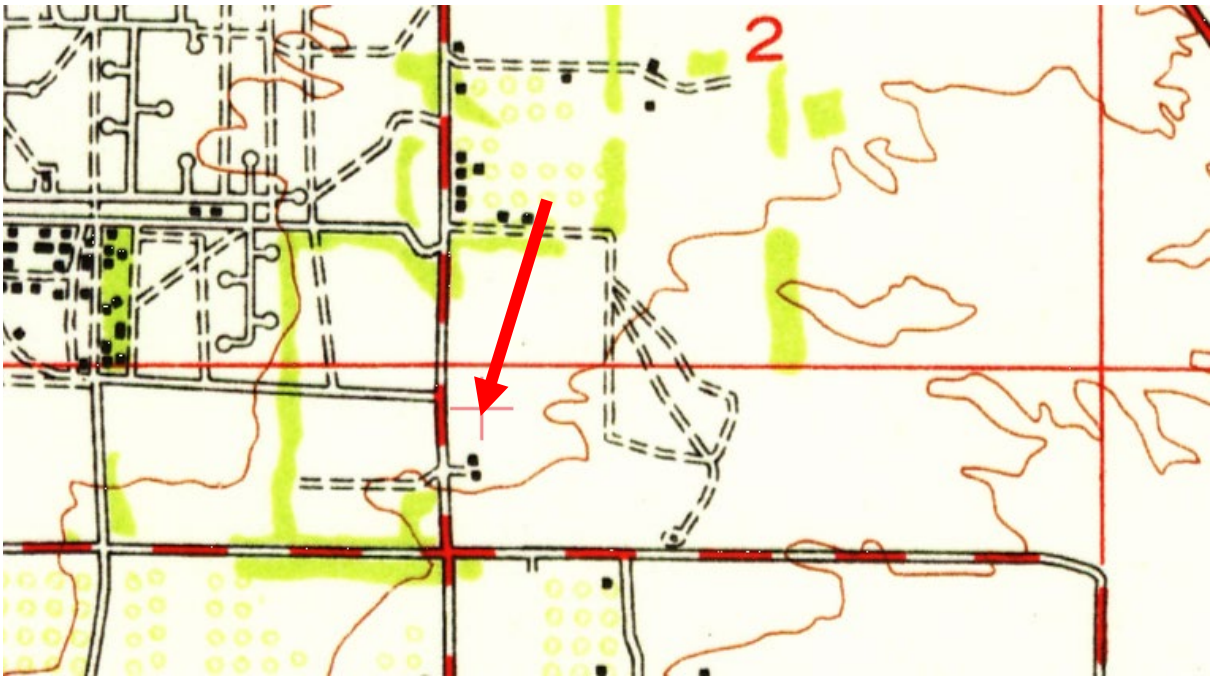
1968



1956



1982



1947

APPENDIX E

MD3I.01
No Site Address
Orcutt, CA 93455

Inquiry Number: 6529736.2s
June 09, 2021

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Map Findings Summary	4
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Orphan Summary	67
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GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NO SITE ADDRESS
ORCUTT, CA 93455

COORDINATES

Latitude (North):	34.8786970 - 34° 52' 43.30''
Longitude (West):	120.4338920 - 120° 26' 2.01''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	734539.4
UTM Y (Meters):	3862398.5
Elevation:	360 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5603138 SANTA MARIA, CA
Version Date:	2012
South Map:	5603024 ORCUTT, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140603, 20140926
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NO SITE ADDRESS
ORCUTT, CA 93455

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	UNION VALLEY PARKWAY	UNION VALLEY PARKWAY	CIWQS	Higher	1 ft.
2	CRYSTAL SAUCEDA	136 MOONCREST LANE	RCRA NonGen / NLR	Higher	462, 0.087, SSW
A3	GREKA - NORTH ORCUTT	4310 HUMMEL DR	AST	Higher	1175, 0.223, East
A4	GREKA - NORTH ORCUTT	4310 HUMMEL DR	CUPA Listings	Higher	1175, 0.223, East
5	ARCO STATION	3618 BROADWAY	HIST CORTESE	Lower	1784, 0.338, NNW
B6	SANTA BARBARA CO AGR	624 W FOSTER RD	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, HIST UST, RCRA	Lower	3036, 0.575, WNW
B7	SANTA BARBARA COUNTY	624 WEST FOSTER ROAD	ENVIROSTOR, HIST UST	Lower	3036, 0.575, WNW
8	DELTA HIGH SCHOOL	251 EAST CLARK AVENU	ENVIROSTOR, SCH, CERS	Lower	5021, 0.951, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL	National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY	Federal Facility Site Information listing
SEMS	Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE	Superfund Enterprise Management System Archive

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF	RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS	Land Use Control Information System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROLS	Institutional Controls Sites List

Federal ERNS list

ERNS	Emergency Response Notification System

EXECUTIVE SUMMARY

State- and tribal - equivalent NPL

RESPONSE State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF Solid Waste Information System

State and tribal leaking storage tank lists

LUST Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
INDIAN UST Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
HIST Cal-Sites Historical Calsites Database
SCH School Property Evaluation Program
CDL Clandestine Drug Labs
Toxic Pits Toxic Pits Cleanup Act Sites
CERS HAZ WASTE CERS HAZ WASTE

US CDL ---- National Clandestine Laboratory Register
PFAS ---- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST ---- SWEEPS UST Listing
HIST UST ---- Hazardous Substance Storage Container Database
CA FID UST ---- Facility Inventory Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites

US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CERS	CERS
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
MINES MRDS	Mineral Resources Data System
HWTS	Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SANTA BARBARA CO AGR EPA ID:: CAD000775676	***624 W FOSTER RD***	***WNW 1/2 - 1 (0.575 mi.)***	***B6***	***13***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/25/2021 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SANTA BARBARA COUNTY Facility Id: 80001339	***624 WEST FOSTER ROAD***	***WNW 1/2 - 1 (0.575 mi.)***	***B7***	***60***

Status: No Further Action

DELTA HIGH SCHOOL	***251 EAST CLARK AVENU***	***SW 1/2 - 1 (0.951 mi.)***	***8***	***62***

Facility Id: 60001014
Status: No Further Action

State and tribal registered storage tank lists

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GREKA - NORTH ORCUTT	4310 HUMMEL DR	E 1/8 - 1/4 (0.223 mi.)	A3	12

Database: AST, Date of Government Version: 07/06/2016

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CRYSTAL SAUCEDA	136 MOONCREST LANE	SSW 0 - 1/8 (0.087 mi.)	2	9

EPA ID:: CAC002984315

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there is 1 CUPA Listings site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GREKA - NORTH ORCUTT	4310 HUMMEL DR	E 1/8 - 1/4 (0.223 mi.)	A4	12

Database: CUPA SANTA BARBARA, Date of Government Version: 09/08/2011
Current Status: 2

EXECUTIVE SUMMARY

Facility Id: FA0012496

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO STATION Reg Id: 3137	3618 BROADWAY	NNW 1/4 - 1/2 (0.338 mi.)	5	13

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 02/16/2021 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SANTA BARBARA CO AGR EPA ID: CAD000775676 Cleanup Status: PROTECTIVE FILER	***624 W FOSTER RD***	***WNW 1/2 - 1 (0.575 mi.)***	***B6***	***13***

CIWQS: The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

A review of the CIWQS list, as provided by EDR, and dated 11/30/2020 has revealed that there is 1 CIWQS site within approximately 0.001 miles of the target property.

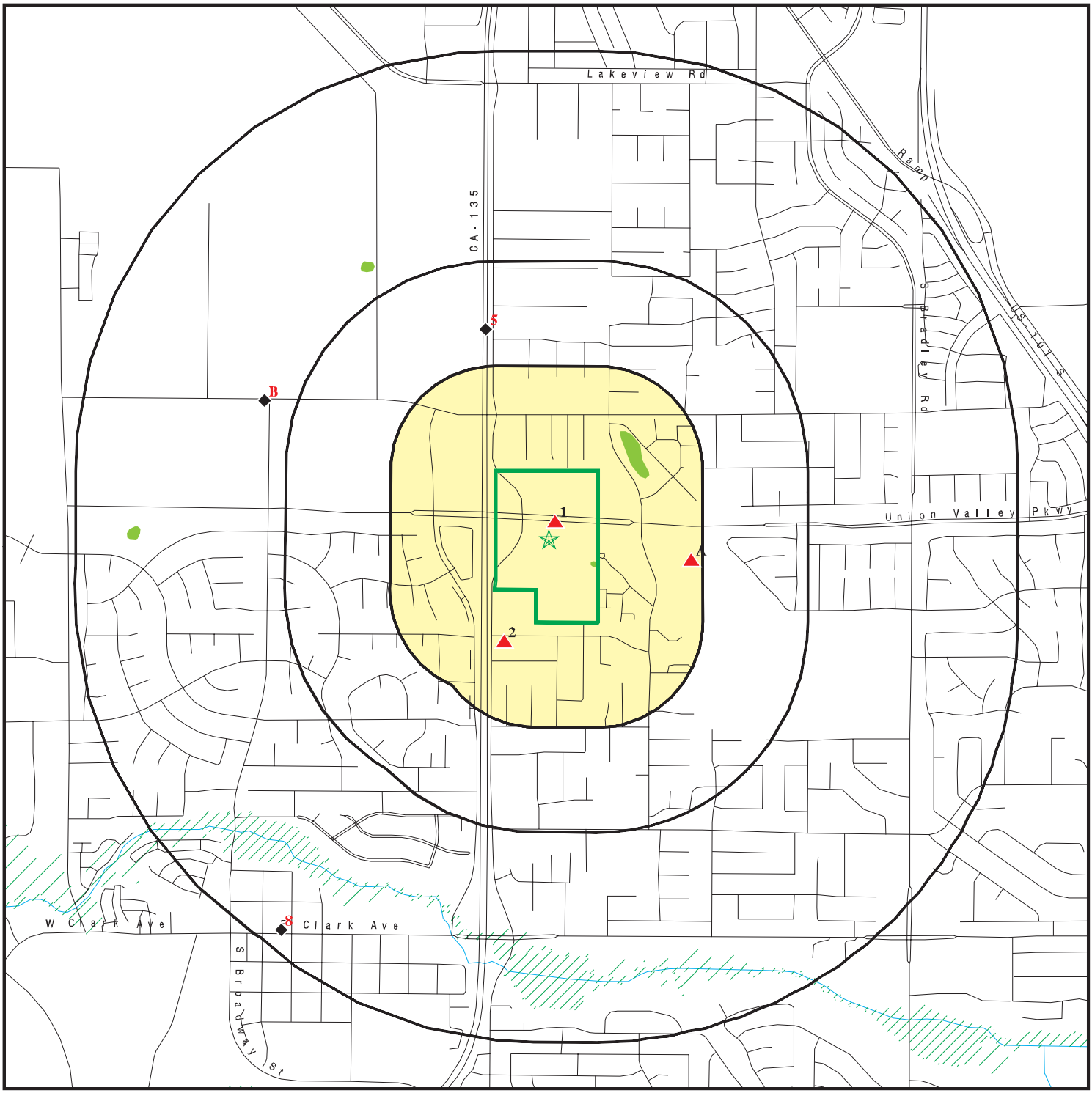
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION VALLEY PARKWAY	UNION VALLEY PARKWAY	0 - 1/8 (0.000 mi.)	1	9

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
FRAZIER DUMP	ENVIROSTOR

OVERVIEW MAP - 6529736.2S



0 1/4 1/2 1 Miles

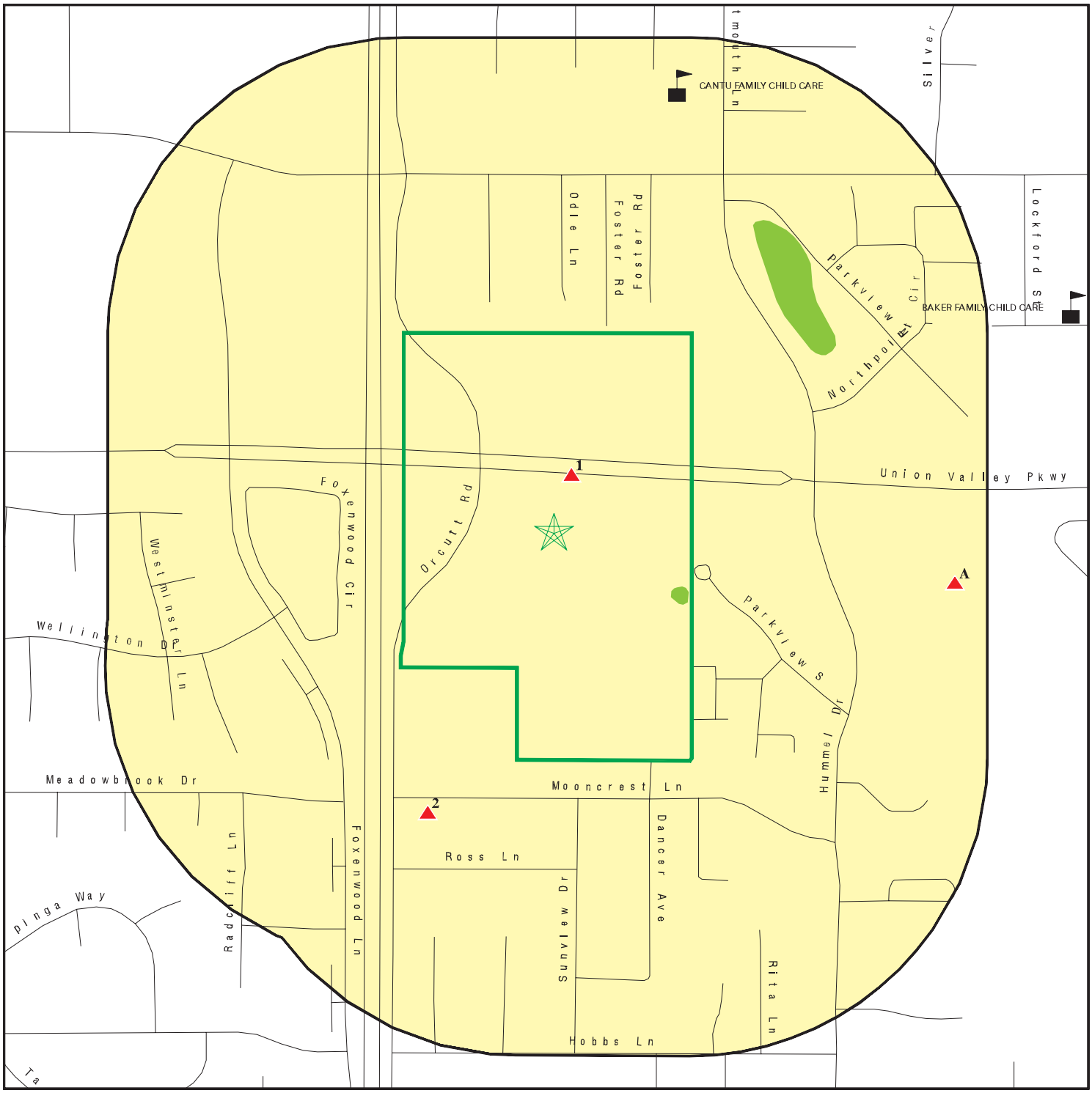
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: MD3I.01 ADDRESS: No Site Address Orcutt CA 93455 LAT/LONG: 34.878697 / 120.433892	CLIENT: Sierra Delta CONTACT: John Walker INQUIRY #: 6529736.2s DATE: June 09, 2021 3:36 pm

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DETAIL MAP - 6529736.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: MD3I.01	CLIENT: Sierra Delta
ADDRESS: No Site Address Orcutt CA 93455	CONTACT: John Walker
LAT/LONG: 34.878697 / 120.433892	INQUIRY #: 6529736.2s DATE: June 09, 2021 3:37 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	1	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		1	NR	NR	NR	NR	1
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	2	2	1	4	0	9

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
< 1/8
1 ft.

UNION VALLEY PARKWAY EXTENSION
UNION VALLEY PARKWAY BETWEEN HIGHWAY 135 AND HUMMEL DRIVE
ORCUTT, CA 93455

CIWQS **S116498188**
N/A

Relative: Higher
Actual: 363 ft.

CIWQS:

Name:	UNION VALLEY PARKWAY EXTENSION
Address:	UNION VALLEY PARKWAY BETWEEN HIGHWAY 135 AND HUMMEL DRIVE
City,State,Zip:	ORCUTT, CA 93455
Agency:	County Of Santa Barbara Department of Public Works
Agency Address:	123 East Anapamu Street, Santa Barbara, CA 93101
Place/Project Type:	Construction - Transportation
SIC/NAICS:	Not reported
Region:	3
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	3 42C366006
NPDES Number:	CAS000002
Adoption Date:	01/01/1900
Effective Date:	03/28/2013
Termination Date:	04/08/2014
Expiration/Review Date:	01/01/1900
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.879389
Longitude:	-120.433633

2
SSW
< 1/8
0.087 mi.
462 ft.

CRYSTAL SAUCEDA
136 MOONCREST LANE
SANTA MARIA, CA 93455

RCRA NonGen / NLR **1024764447**
CAC002984315

Relative: Higher
Actual: 378 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		2018-10-10 00:00:00.0
Handler Name:	CRYSTAL SAUCEDA	
Handler Address:		136 MOONCREST LANE
Handler City,State,Zip:		SANTA MARIA, CA 93455
EPA ID:		CAC002984315
Contact Name:		CRYSTAL SAUCEDA
Contact Address:		136 MOONCREST LANE
Contact City,State,Zip:		SANTA MARIA, CA 93455
Contact Telephone:		925-789-0633
Contact Fax:		Not reported
Contact Email:		DEZARAE@VTENV.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported

CRYSTAL SAUCEDA (Continued) **1024764447**

State District:	Not reported
Mailing Address:	136 MOONCREST LANE
Mailing City,State,Zip:	SANTA MARIA, CA 93455
Owner Name:	CRYSTAL SAUCEDA
Owner Type:	Other
Operator Name:	CRYSTAL SAUCEDA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-11-20 16:29:36.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

CRYSTAL SAUCEDA (Continued) **1024764447**

Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	CRYSTAL SAUCEDA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	136 MOONCREST LANE
Owner/Operator City,State,Zip:	SANTA MARIA, CA 93455
Owner/Operator Telephone:	925-789-0633
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CRYSTAL SAUCEDA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	136 MOONCREST LANE
Owner/Operator City,State,Zip:	SANTA MARIA, CA 93455
Owner/Operator Telephone:	925-789-0633
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2018-10-10 00:00:00.0
Handler Name: CRYSTAL SAUCEDA	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

A3 **GREKA - NORTH ORCUTT** **AST** **A100338980**
East **4310 HUMMEL DR** **N/A**
1/8-1/4 **SANTA MARIA, CA**
0.223 mi.
1175 ft. **Site 1 of 2 in cluster A**

Relative: **Higher**

Actual: **380 ft.**

AST:

Name:	GREKA - NORTH ORCUTT
Address:	4310 HUMMEL DR
City/Zip:	SANTA MARIA,
Certified Unified Program Agencies:	Santa Barbara
Owner:	GREKA OIL & GAS INC
Total Gallons:	42,000
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

A4 **GREKA - NORTH ORCUTT-CLOSED** **CUPA Listings** **S110742121**
East **4310 HUMMEL DR** **N/A**
1/8-1/4 **SANTA MARIA, CA 93455**
0.223 mi.
1175 ft. **Site 2 of 2 in cluster A**

Relative: **Higher**

Actual: **380 ft.**

CUPA SANTA BARBARA:

Name:	GREKA - NORTH ORCUTT-CLOSED
Address:	4310 HUMMEL DR
City,State,Zip:	SANTA MARIA, CA 93455
Facility Id:	FA0012496
Region:	SANTA BARBARA
Cross Street:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Mailing Name:	GREKA OIL & GAS INC
Mailing Care Of:	Not reported
Mailing Address:	PO BOX 5489
Mailing City:	SANTA MARIA
Mailing State:	CA
Mailing Zip Code:	934565489
Record Id:	PR0505644

GREKA - NORTH ORCUTT-CLOSED (Continued) **S110742121**

Pe #: 2162
Current Status: 2

5
NNW
1/4-1/2
0.338 mi.
1784 ft.

ARCO STATION
3618 BROADWAY
SANTA MARIA, CA

HIST CORTESE **S104233939**
N/A

Relative:
Lower

Actual:
309 ft.

HIST CORTESE:
edr_fname: Arco Station
edr_fadd1: 3618 Broadway
City,State,Zip: SANTA MARIA, CA
Region: CORTESE
Facility County Code: 42
Reg By: LTNKA
Reg Id: 3137

B6
WNW
1/2-1
0.575 mi.
3036 ft.

SANTA BARBARA CO AGRI COMM
624 W FOSTER RD
SANTA MARIA, CA 93455

Site 1 of 2 in cluster B

SEMS-ARCHIVE **1000394953**
CORRACTS **CAD000775676**
RCRA-TSDF
HIST UST
RCRA NonGen / NLR
HWP
CERS

Relative:
Lower

Actual:
282 ft.

SEMS Archive:
Site ID: 0900283
EPA ID: CAD000775676
Name: SANTA BARBARA CO AGRI COMM
Address: 624 W FOSTER RD
Address 2: Not reported
City,State,Zip: SANTA MARIA, CA 93455
Cong District: 19
FIPS Code: 06083
FF: N
NPL: Not on the NPL
Non NPL Status: Deferred to RCRA (Subtitle C)

SEMS Archive Detail:
Region: 09
Site ID: 0900283
EPA ID: CAD000775676
Site Name: SANTA BARBARA CO AGRI COMM
NPL: N
FF: N
OU: 00
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1996-01-23 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0900283

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

EPA ID: CAD000775676
Site Name: SANTA BARBARA CO AGRI COMM
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1990-08-24 04:00:00
Finish Date: 1990-08-24 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0900283
EPA ID: CAD000775676
Site Name: SANTA BARBARA CO AGRI COMM
NPL: N
FF: N
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: Not reported
Finish Date: 1991-03-28 05:00:00
Qual: D
Current Action Lead: EPA Perf

CORRACTS:
Name: SANTA BARBARA CO AGRI COMM
Address: 624 W FOSTER RD
Address 2: Not reported
EPA ID: CAD000775676
Area Name: ENTIRE FACILITY
Corrective Action: CA PRIORITIZATION-LOW CA PRIORITY
Actual Date: 00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

RCRA NonGen / NLR:
Date Form Received by Agency: 1993-06-02 00:00:00.0
Handler Name: SANTA BARBARA CO AGRI COMM
Handler Address: 624 W FOSTER RD
Handler City,State,Zip: SANTA MARIA, CA 93455
EPA ID: CAD000775676
Contact Name: Not reported
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Land Type:	County
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Converter
State District Owner:	CA
State District:	3
Mailing Address:	263 CAMINO DEL REMEDIO
Mailing City,State,Zip:	SANTA BARBARA, CA 93110
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	SANTA BARBARA CTY AGRICULTURAL COMM OFF
Operator Type:	County
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Storage
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Storage
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Storage
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Storage
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	Yes
Corrective Action Priority Ranking:	Low
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-09-17 13:59:47.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SANTA BARBARA CTY AGRICULTURAL COMM OFF
Legal Status:	County
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	624 WEST FOSTER ROAD
Owner/Operator City,State,Zip:	SANTA MARIA, CA 93455
Owner/Operator Telephone:	805-937-2011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SANTA BARBARA CTY AGRICULTURAL COMM OFF
Legal Status:	County
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	624 WEST FOSTER ROAD
Owner/Operator City,State,Zip:	CITY NOT REPORTED, CA 99999
Owner/Operator Telephone:	805-937-2011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1993-06-02 00:00:00.0
Handler Name:	SANTA BARBARA CO AGRI COMM
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1980-08-19 00:00:00.0
Handler Name:	SANTA BARBARA CO AGRI COMM
Federal Waste Generator Description:	Not a generator, verified

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 32532
NAICS Description: PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

Facility Has Received Notices of Violation:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-08-11 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Financial Requirements
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Closure/Post-Closure

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	002
Date of Enforcement Action:	1988-09-15 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type:	STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	1985-09-19 00:00:00.0
Actual Return to Compliance Date:	1986-09-23 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Financial Requirements
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-08-11 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1986-09-23 00:00:00.0
Actual Return to Compliance Date:	1986-11-19 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1989-06-30 00:00:00.0
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Enforcement Identifier: 005
Date of Enforcement Action: 1989-08-11 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1989-04-05 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	002
Date of Enforcement Action:	1988-09-15 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1988-05-25 00:00:00.0
Actual Return to Compliance Date: 1989-05-30 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-05-10 00:00:00.0
Enforcement Identifier: 003
Date of Enforcement Action: 1989-04-05 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date Violation was Determined:	1985-09-19 00:00:00.0
Actual Return to Compliance Date:	1989-07-31 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1987-09-22 00:00:00.0
Actual Return to Compliance Date:	1988-05-25 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 1986-11-19 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1985-04-15 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1989-06-30 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1989-06-30 00:00:00.0

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1985-04-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1985-09-19 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Actual Return to Compliance Date:	1986-09-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1986-11-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1986-09-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1986-11-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Former Citation: Not reported

Evaluation Date: 1989-06-30 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1986-11-26 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1988-05-25 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1989-05-30 00:00:00.0
Scheduled Compliance Date: 1989-05-10 00:00:00.0
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1989-06-30 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1988-05-25 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1985-09-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-07-31 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1987-09-22 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-05-25 00:00:00.0
Scheduled Compliance Date:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

HIST UST:

Name:	PESTICIDE FACILITY
Address:	624 WEST FOSTER ROAD
City,State,Zip:	SANTA MARIA, CA 93454
File Number:	0002C972
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C972.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

RCRA NonGen / NLR:

Date Form Received by Agency:	1993-06-02 00:00:00.0
Handler Name:	SANTA BARBARA CO AGRI COMM
Handler Address:	624 W FOSTER RD
Handler City,State,Zip:	SANTA MARIA, CA 93455
EPA ID:	CAD000775676
Contact Name:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Contact Address:	Not reported
Contact City,State,Zip:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	County
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Converter
State District Owner:	CA
State District:	3
Mailing Address:	263 CAMINO DEL REMEDIO
Mailing City,State,Zip:	SANTA BARBARA, CA 93110
Owner Name:	Not reported
Owner Type:	Not reported
Operator Name:	SANTA BARBARA CTY AGRICULTURAL COMM OFF
Operator Type:	County
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Storage
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Storage
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Storage
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Storage
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	Yes
Corrective Action Priority Ranking:	Low

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-09-17 13:59:47.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SANTA BARBARA CTY AGRICULTURAL COMM OFF
Legal Status:	County
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	624 WEST FOSTER ROAD
Owner/Operator City,State,Zip:	SANTA MARIA, CA 93455
Owner/Operator Telephone:	805-937-2011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SANTA BARBARA CTY AGRICULTURAL COMM OFF
Legal Status:	County
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	624 WEST FOSTER ROAD
Owner/Operator City,State,Zip:	CITY NOT REPORTED, CA 99999
Owner/Operator Telephone:	805-937-2011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1993-06-02 00:00:00.0
Handler Name:	SANTA BARBARA CO AGRI COMM
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1980-08-19 00:00:00.0
Handler Name: SANTA BARBARA CO AGRI COMM
Federal Waste Generator Description: Not a generator, verified
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 32532
NAICS Description: PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

Facility Has Received Notices of Violation:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-08-11 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1989-06-30 00:00:00.0
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - Closure/Post-Closure
Date Violation was Determined: 1988-05-25 00:00:00.0
Actual Return to Compliance Date: 1989-05-30 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-05-10 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - Closure/Post-Closure
Date Violation was Determined: 1988-05-25 00:00:00.0
Actual Return to Compliance Date: 1989-05-30 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-05-10 00:00:00.0
Enforcement Identifier: 002
Date of Enforcement Action: 1988-09-15 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1985-09-19 00:00:00.0
Actual Return to Compliance Date:	1986-09-23 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Financial Requirements
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-08-11 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1989-06-30 00:00:00.0
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1986-09-23 00:00:00.0
Actual Return to Compliance Date:	1986-11-19 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1989-06-30 00:00:00.0
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Enforcement Identifier: 005
Date of Enforcement Action: 1989-08-11 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1989-04-05 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-06-30 00:00:00.0
Actual Return to Compliance Date: 1989-09-14 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-09-11 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1988-05-25 00:00:00.0
Actual Return to Compliance Date: 1989-05-30 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-05-10 00:00:00.0
Enforcement Identifier: 002
Date of Enforcement Action: 1988-09-15 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1988-05-25 00:00:00.0
Actual Return to Compliance Date: 1989-05-30 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-05-10 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1988-05-25 00:00:00.0
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Enforcement Identifier:	003
Date of Enforcement Action:	1989-04-05 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	1985-09-19 00:00:00.0
Actual Return to Compliance Date:	1989-07-31 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	1987-09-22 00:00:00.0
Actual Return to Compliance Date:	1988-05-25 00:00:00.0
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 1986-11-19 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1985-04-15 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1989-06-30 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1989-09-14 00:00:00.0

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1985-04-15 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Evaluation Date:	1985-09-19 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1986-09-23 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1986-11-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1986-09-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1986-11-19 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1986-11-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-06-30 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-09-14 00:00:00.0
Scheduled Compliance Date:	1989-09-11 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-05-25 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-05-30 00:00:00.0
Scheduled Compliance Date:	1989-05-10 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1985-09-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1989-07-31 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-09-22 00:00:00.0
Evaluation Responsible Agency:	EPA

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-05-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

HWP:

EPA ID:	CAD000775676
Name:	SANTA BARBARA CTY AGRICULTURAL COMM
Address:	624 WEST FOSTER ROAD
Cleanup Status:	PROTECTIVE FILER
Latitude:	34.88264
Longitude:	-120.4443
Facility Type:	Historical - Non-Operating
Facility Size:	Not reported
Supervisor:	Not reported
Site Code:	300447
Senate District:	19
Assembly District:	35
Public Information Officer:	Not reported
Commercial Offsite Facility Types:	Not reported
Quarterly Update:	Not reported
Project Manager Lead:	Not reported
Project Manager:	Not reported
Permit Type:	Not reported
Permit Effective Date:	Not reported
Permit Expiration Date:	Not reported
Calenviroscreen Score:	16-20%
Total Planned Hours:	Not reported
Total Planned Amount:	Not reported
Total Actual Hours:	Not reported

Activities:

EPA ID:	CAD000775676
Facility Type:	Historical - Non-Operating
Facility Name:	SANTA BARBARA CTY AGRICULTURAL COMM

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Status:	PROTECTIVE FILER
Activity Type:	Protective Filer Status
Permit Being Renewed:	Not reported
Permit Being Modified:	Not reported
Final Date:	Not reported
Type:	Not reported
Title Description:	Not reported
Due Date:	Not reported
Comments:	Not reported
Unit Names:	CONTAIN1, TANKSTR1
Event Description:	Protective Filer Status - PROTECTIVE FILER (RECEIVED)
Actual Date:	08/18/1989

EPA ID:	CAD000775676
Facility Type:	Historical - Non-Operating
Facility Name:	SANTA BARBARA CTY AGRICULTURAL COMM
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Facility Status:	PROTECTIVE FILER
Activity Type:	Protective Filer Status
Permit Being Renewed:	Not reported
Permit Being Modified:	Not reported
Final Date:	Not reported
Type:	Not reported
Title Description:	Not reported
Due Date:	Not reported
Comments:	Not reported
Unit Names:	CONTAIN1, TANKSTR1
Event Description:	Protective Filer Status - PROTECTIVE FILER (APPROVED)
Actual Date:	08/18/1989

Alias:

EPA ID:	CAD000775676
Facility Type:	Historical - Non-Operating
Facility Name:	SANTA BARBARA CTY AGRICULTURAL COMM
Facility Status:	PROTECTIVE FILER
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Alias Type:	FRS
Alias:	110000609164

EPA ID:	CAD000775676
Facility Type:	Historical - Non-Operating
Facility Name:	SANTA BARBARA CTY AGRICULTURAL COMM
Facility Status:	PROTECTIVE FILER
Project Manager:	Not reported
Project Manager Lead:	Not reported
Supervisor:	Not reported
Alias Type:	Project Code (Site Code)
Alias:	300447

SANTA BARBARA CO AGRI COMM (Continued) **1000394953**

CERS:

Name:	SANTA BARBARA CTY AGRICULTURAL COMM
Address:	624 WEST FOSTER ROAD
City,State,Zip:	SANTA MARIA, CA 934550000
Site ID:	234586
CERS ID:	CAD000775676
CERS Description:	Hazardous Waste

Affiliation:

Affiliation Type Desc:	Facility Contact
Entity Name:	SANTA BARBARA CTY AGRICULTURAL
Entity Title:	Not reported
Affiliation Address:	624 WEST FOSTER ROAD
Affiliation City:	SANTA MARIA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	934550000
Affiliation Phone:	8059372011

Affiliation Type Desc:	Facility Owner
Entity Name:	SANTA BARBARA CNTY AGRICULTURA
Entity Title:	Not reported
Affiliation Address:	624 W FOSTER RD STE E
Affiliation City:	SANTA MARIA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	934550000
Affiliation Phone:	8059346200

B7 **SANTA BARBARA COUNTY AGRICULTURAL COMM** **ENVIROSTOR** **U001585995**
WNW **624 WEST FOSTER ROAD** **HIST UST** **N/A**
1/2-1 **SANTA MARIA, CA 93455**
0.575 mi.
3036 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
282 ft.

ENVIROSTOR:

Name:	SANTA BARBARA COUNTY AGRICULTURAL COMM
Address:	624 WEST FOSTER ROAD
City,State,Zip:	SANTA MARIA, CA 934550000
Facility ID:	80001339
Status:	No Further Action
Status Date:	11/24/2020
Site Code:	300447
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	0.25
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	WM
Program Manager:	Viktoriya Anashkina
Supervisor:	Jose Diaz
Division Branch:	Cleanup Chatsworth
Assembly:	35
Senate:	19
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED

SANTA BARBARA COUNTY AGRICULTURAL COMM (Continued) **U001585995**

Funding: Not reported
Latitude: 34.88264
Longitude: -120.4443
APN: NONE SPECIFIED
Past Use: DISTRIBUTOR - CHEMICAL, PESTICIDE/INSECTIDE/RODENTICIDE STORAGE, UNDERGROUND STORAGE TANKS
Potential COC: Sodium fluoroacetate Strychnine Warfarin Zinc phosphide
Confirmed COC: 30521-NO 30524-NO 30592-NO 30595-NO
Potential Description: SOIL, CSS
Alias Name: CAD000775676
Alias Type: EPA Identification Number
Alias Name: 110000609164
Alias Type: EPA (FRS #)
Alias Name: 300447
Alias Type: Project Code (Site Code)
Alias Name: 80001339
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 03/28/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/04/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Information Request Letter
Completed Date: 07/30/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/04/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 11/24/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2020
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported

SANTA BARBARA COUNTY AGRICULTURAL COMM (Continued) **U001585995**

Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HIST UST:
Name: PESTICIDE FACILITY
Address: 624 W FOSTER RD
City,State,Zip: SANTA MARIA, CA 93454
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000029942
Facility Type: Other
Other Type: AGRI. COMMISSIONER
Contact Name: JOE P. BETZ
Telephone: 8059372011
Owner Name: SANTA BARBARA COUNTY
Owner Address: 105 EAST ANAPAMU STREET
Owner City,St,Zip: SANTA BARBARA, CA 93101
Total Tanks: 0001

Tank Num: 001
Container Num: SM-1
Year Installed: 1978
Tank Capacity: 00006000
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 8
Leak Detection: Sensor Instrument

---

8 **DELTA HIGH SCHOOL** **ENVIROSTOR** **S109422413**
SW **251 EAST CLARK AVENUE** **SCH** **N/A**
1/2-1 **ORCUTT, CA 93455** **CERS**
0.951 mi.
5021 ft.

Relative:
Lower

Actual:
341 ft.

ENVIROSTOR:
Name: DELTA HIGH SCHOOL
Address: 251 EAST CLARK AVENUE
City,State,Zip: ORCUTT, CA 93455
Facility ID: 60001014
Status: No Further Action
Status Date: 03/19/2009
Site Code: 304613
Site Type: School Investigation
Site Type Detailed: School
Acres: 3.2
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 35

DELTA HIGH SCHOOL (Continued) **S109422413**

Senate: 19
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.8655
Longitude: -120.4338
APN: 103-080-049
Past Use: SCHOOL - HIGH SCHOOL
Potential COC: Chlordane DDE Lead Polychlorinated biphenyls (PCBs
Confirmed COC: Chlordane 30018-NO Lead DDE
Potential Description: SOIL
Alias Name: 103-080-049
Alias Type: APN
Alias Name: 304613
Alias Type: Project Code (Site Code)
Alias Name: 60001014
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 01/07/2009
Comments: DTSC approved the Phase I Environmental Site Assessment with a Phase I Addendum recommendation. organochlorine pesticides,(OCPs)from termiticide application and polychlorinated biphenyls (PCBs) from electrical transformers, are the only recognized environmental conditions.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Addendum
Completed Date: 03/18/2009
Comments: DTSC approved the Phase I Addendum report with a No Further Action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/15/2009
Comments: Via email, DTSC concurred with the sampling strategy.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/02/2009
Comments: On February 2, 2009, Phase I Addendum field activities were conducted. Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/19/2009
Comments: DTSC prepared the project closeout Cost Recovery Unit Memorandum.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DELTA HIGH SCHOOL (Continued) **S109422413**

Completed Document Type: Correspondence
Completed Date: 10/14/2010
Comments: A letter, dated October 14, 2010, notified the District that a refund of the remaining credit balance for the Site will be issued.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: DELTA HIGH SCHOOL
Address: 251 EAST CLARK AVENUE
City,State,Zip: ORCUTT, CA 93455
Facility ID: 60001014
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 3.2
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 304613
Assembly: 35
Senate: 19
Special Program Status: Not reported
Status: No Further Action
Status Date: 03/19/2009
Restricted Use: NO
Funding: School District
Latitude: 34.8655
Longitude: -120.4338
APN: 103-080-049
Past Use: SCHOOL - HIGH SCHOOL
Potential COC: Chlordane, DDE, Lead, Polychlorinated biphenyls (PCBs
Confirmed COC: Chlordane, 30018-NO, Lead, DDE
Potential Description: SOIL
Alias Name: 103-080-049
Alias Type: APN
Alias Name: 304613
Alias Type: Project Code (Site Code)
Alias Name: 60001014
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DELTA HIGH SCHOOL (Continued) **S109422413**

Completed Document Type:	Phase 1
Completed Date:	01/07/2009
Comments:	DTSC approved the Phase I Environmental Site Assessment with a Phase I Addendum recommendation. organochlorine pesticides,(OCPs)from termiticide application and polychlorinated biphenyls (PCBs) from electrical transformers, are the only recognized environmental conditions.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1 Addendum
Completed Date:	03/18/2009
Comments:	DTSC approved the Phase I Addendum report with a No Further Action determination.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	01/15/2009
Comments:	Via email, DTSC concurred with the sampling strategy.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	02/02/2009
Comments:	On February 2, 2009, Phase I Addendum field activities were conducted. Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	03/19/2009
Comments:	DTSC prepared the project closeout Cost Recovery Unit Memorandum.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/14/2010
Comments:	A letter, dated October 14, 2010, notified the District that a refund of the remaining credit balance for the Site will be issued.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

CERS:

Name:	DELTA HIGH SCHOOL
Address:	251 EAST CLARK AVENUE
City,State,Zip:	ORCUTT, CA 93455
Site ID:	336677
CERS ID:	60001014

DELTA HIGH SCHOOL (Continued) **S109422413**

CERS Description: School Investigation

Affiliation:

Affiliation Type Desc: Supervisor
Entity Name: SHAHIR HADDAD
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Lead Project Manager
Entity Name: CHRISTINE CHIU
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: CYPRESS
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SANTA MARIA	S100182939	FRAZIER DUMP	HIGHWAY 166, 1.5 MILES WEST OF	93455	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/30/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 39

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/15/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 7

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 83

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/05/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 04/01/2021
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/02/2020
Date Data Arrived at EDR: 12/18/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 12/22/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/22/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/16/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/22/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/22/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/16/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/24/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/17/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 60

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/22/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/05/2021
Number of Days to Update: 50
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/11/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 61
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/07/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 68

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/26/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/11/2020
Date Data Arrived at EDR: 12/11/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 81

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 33

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/02/2021
Date Data Arrived at EDR: 01/08/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 03/09/2021
Number of Days to Update: 82

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/23/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/04/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/25/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 06/28/2021
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/09/2021
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/13/2021
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 82

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/07/2021
Number of Days to Update: 79

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/05/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/08/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 05/04/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/07/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/12/2021
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/19/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/09/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/17/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/24/2020
Number of Days to Update: 8

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 80

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/10/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/29/2020
Date Data Arrived at EDR: 10/30/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/10/2021
Date Data Arrived at EDR: 02/12/2021
Date Made Active in Reports: 03/11/2021
Number of Days to Update: 27

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/11/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 04/16/2021
Date Made Active in Reports: 04/21/2021
Number of Days to Update: 5

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 10/19/2020
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/26/2021
Number of Days to Update: 73

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/07/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 09/11/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 77

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/23/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/21/2020
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 79

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/04/2021
Date Data Arrived at EDR: 02/09/2021
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 9

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/08/2021
Date Data Arrived at EDR: 01/12/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 72

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/03/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/02/2021
Date Made Active in Reports: 04/20/2021
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 03/10/2021
Number of Days to Update: 55

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/07/2021
Next Scheduled EDR Contact: 09/26/2021
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/01/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/19/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 06/07/2021
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/03/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/21/2021
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/06/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/12/2021
Next Scheduled EDR Contact: 06/21/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 12/03/2020
Date Made Active in Reports: 02/18/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/12/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 12/15/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 12/23/2020
Number of Days to Update: 7

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/05/2021
Date Data Arrived at EDR: 01/06/2021
Date Made Active in Reports: 03/18/2021
Number of Days to Update: 71

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/19/2021
Next Scheduled EDR Contact: 07/05/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/09/2021
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 05/05/2021
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/27/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/28/2020
Date Data Arrived at EDR: 01/29/2021
Date Made Active in Reports: 04/22/2021
Number of Days to Update: 83
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/25/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/05/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/29/2021
Date Data Arrived at EDR: 04/21/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 2
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/19/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/21/2020
Date Data Arrived at EDR: 12/23/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 12
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/26/2021
Next Scheduled EDR Contact: 07/12/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 20

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/24/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 10/05/2020
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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APPENDIX J

Noise and Groundborne Vibration Impact Assessment

In January 2024, the project transportation consultant, Associate Transportation Engineers (ATE), provided refined segment volumes for the project area roadways for the “Existing Plus Project” and “Cumulative Plus Project” scenarios. While the differences between the segment volumes included in the September 2022 Noise and Groundborne Vibration Impact Assessment and the segment volumes provided by ATE in January 2024 were minimal, updated noise modeling occurred to verify that changes to the analysis results would be minimal and would not result in changes to the analysis conclusions. The January 2024 modelling results are provided within the following pages, which is then followed by the September 2022 Noise and Groundborne Vibration Impact Assessment.

This remodeling has been reflected in Section 4.10 of the Final EIR. However, it was determined to not be necessary to update and revise the September 2022 Noise and Groundborne Vibration Impact Assessment given the inconsequential nature of the differences.

NOISE MEASUREMENT SURVEY FORM

SHEET 1 OF 2

DATE:	4/6/2022 & 4/12/2022
PROJECT:	Santa Maria Richards Ranch
LOCATION:	Orcutt/Santa Maria
MONITORING STAFF:	Trevor Burmester

***LOCATION MAP:** (Include a map of noise measurement locations AND photographs for measurement locations on attached worksheet. Include additional sheets as necessary. Where possible include GPS coordinates.)*



NOISE MEASUREMENT CONDITIONS & EQUIPMENT

MET CONDITIONS & MONITORING EQUIPMENT:	TEMP: 82 F. | HUMIDITY: 21% | WIND SPEED: 9MPH | WIND DIR: NNE | GROUND: Soft					
	CLOUD COVER BY CLASS (OC=OVERCAST):	2	(1. HEAVY OC, 2. LIGHT OC, 3. SUNNY, 4. CLEAR NIGHT, 5. OC NIGHT)			
	MET. METER:					
NOISE MONITORING EQUIPMENT:	LARSON DAVIS SLM MODEL:			S/N:		
	MICROPHONE:			S/N:		
	CALIBRATOR:			S/N:		
NOISE MONITORING SETUP:	WITHIN 10 FT OF REFLECTIVE SURFACE?:	NO	MICROPHONE HEIGHT AGL (FT):	5		
	CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS:	Yes	METER SETTINGS:	A-WHT	SLOW	

NOISE & TRAFFIC MEASUREMENTS

MEASUREMENT LOCATION	MEASUREMENT DATE/TIME	DURATION (Minutes)	MEASUREMENT LOCATION	PRIMARY NOISE SOURCES NOTED	MEASURED NOISE LEVELS LEQ	LMIN	LMAX	
LT1	4/12/22 9:57am	24 Hours	Lat 34.879042, Long -120.431864	Traffic from UVP, Orcutt Rd, and Birds	68.86 CNEL			
LT2	4/12/22 10:07am	24 hours	Lat 34.876905, Long -120.435990	Traffic from Orcutt Expy and Orcutt Rd.	64.46 CNEL			
ST1	4/6/22 10:15am	10 Min	Lat 34.879221, Long -120.431946	Traffic from UVP, Orcutt Rd, and Birds	68.8 dB			
ST2	4/6/22 10:34am	10 Min	Lat 34.876777, Long -120.434603	Traffic in Distance and Birds	49.1 dB			
ST3	4/6/22 10:52am	10 Min	Lat 34.875916, Long -120.432504	Traffic in Distance, Wind, and Birds	48.2 dB			
ST4	4/6/22 11:05am	10 Min	Lat 34.878065, Long -120.431599	Traffic in Distance and Birds	50.2 dB			
ST5	4/6/22 11:24am	10 Min	Lat 34.881147, Long -120.434223	Traffic in Distance and Birds	46.6 dB			
ST6	4/6/22 11:35am	10 Min	Lat 34.880433, Long -120.435298	Traffic along Orcutt Rd, Orcutt Expy, and Planes	61.1 dB			
ST7	4/12/22 10:57am	10 Min	Lat 34.877398, Long -120.436328	Traffic along Orcutt Expy	68.1 dB			

TRAFFIC COUNTS LOCATION	TRAFFIC COUNTS DATE/TIME	DURATION (Minutes)	TRAFFIC DIRECTION/ LANE ASSIGNMENT	VEHICLE CLASSIFICATION LDV	MDV	HDV	MC	BUS	AVG. VEHICLE SPEEDS HOV	MAIN	TRUCK
ST1	4/6/22 10:15am	5 Min	UVP-Both Directions	64	4	2	0	0	0	0	0
ST6	4/6/22 11:35am	5 Min	Orcutt Rd- Both Directions	8	0	0	0	0	0	0	0

VEHICLE COUNTS: ☐ MANUALLY ☐ VIDEO

VEHICLE SPEEDS: ☐ IN TRAFFIC ☐ RADAR

AMBIENT
AIR QUALITY & NOISE CONSULTING

NOISE MEASUREMENT SURVEY FORM

SHEET	2	OF	2

DATE:	4/6/2022
PROJECT:	Santa Maria Richards Ranch
LOCATION:	Santa Maria/Orcutt
MONITORING STAFF:	Trevor Burmester

SITE PHOTO(S): (Refer to data sheets for noise measurement locations)

MEASUREMENT LOCATION 1



MEASUREMENT LOCATION 2



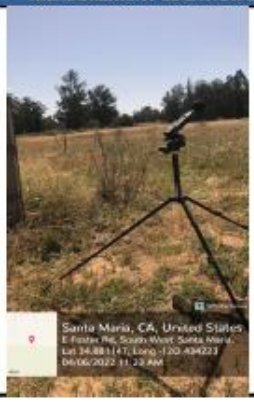
MEASUREMENT LOCATION 3



MEASUREMENT LOCATION 4



MEASUREMENT LOCATION 5



MEASUREMENT LOCATION 6



Predicted Traffic Noise Levels - Existing										
	Existing Noise Level - dBA CNEL/Ldn									
Roadways	Avg Lanes	Avg Speeds	Active Half-Width	AM Vol	ADT	at 50ft NTLCL	Distance to Contours 55 CNEL	60 CNEL	65 CNEL	70 CNEL
Foster Rd (West Rd Orcutt Expressway)	2	40	6	470	4,700	62.6	320.5	101.5	0	0
Foster Rd (East of Orcutt Expressway	2	40	6	732	7,320	64.53	499.1	157.9	0	0
Orcutt Expressway (North of Foster Rd)	4	55	29.75	2,664	26,640	72.36	4024.9	1273.2	403.7	130.7
Orcutt Expressway (South of Foster Rd)	4	55	29.75	2,272	22,720	71.67	3432.7	1086	344.6	112.6
Foxenwood Ln (North of UVP)	2	45	6	93	930	56.81	85.2	0	0	0
Foxenwood Ln (South of UVP)	2	45	6	314	3,140	62.12	286.9	90.9	0	0
UVP (West of Foxenwood Ln)	4	45	27	486	4,860	62.88	443.4	142.5	0	0
UVP (East of Foxenwood Ln)	4	45	27	771	7,710	64.89	702.6	223.7	75.2	0
Orcutt Expressway (North of UVP)	4	55	29.75	2,272	22,720	71.67	3432.7	1086	344.6	112.6
Orcutt Expressway (South of UVP)	4	55	29.75	2,269	22,690	71.66	3428.2	1084.6	344.2	112.4
UVP (West of Orcutt Expressway)	4	45	34.66	775	7,750	64.61	705.8	225.6	78.6	0
UVP (East of Orcutt Expressway)	4	45	42	1,436	14,360	67.03	1305.7	414.9	137.1	0
Orcutt Rd (North of UVP)	2	40	6	180	1,800	58.43	122.9	0	0	0
Orcutt Rd (Sorth of UVP)	2	40	6	474	4,740	62.64	323.3	102.4	0	0
UVP (West of Orcutt Rd)	4	45	32.85	1,425	14,250	67.32	1296.9	411.3	133.8	0
UVP (East of Orcutt Rd)	4	45	33.22	1,319	13,190	66.97	1200.5	381	124.5	0
Hummel Dr (North of UVP)	2	40	6	58	580	53.52	0	0	0	0
Hummel Dr (South of UVP)	2	40	6	109	1,090	56.26	74.6	0	0	0
UVP (West of Hummel Rd)	3	45	12	1,319	13,190	67.97	1203.7	380.9	121	0
UVP (East of Hummel Rd)	3	45	12	1,358	13,580	68.09	1239.3	392.1	124.5	0
Bradley Rd (North of UVP)	4	45	21	544	5,440	63.64	496.3	158.2	0	0
Bradley Rd (South of UVP)	4	45	21	753	7,530	65.05	686.6	218	71.8	0
UVP (West of Bradley Rd)	4	45	31	1,046	10,460	66.05	952.4	302.6	100.1	0
UVP (East of Bradley Rd)	4	45	31	1,135	11,350	66.4	1033.4	328.1	107.9	0
NTLCL=Near Travel Lane Centerline										
ADT calculated based on pk-hr volumes and a k-factor of 0.10.										

	Predicted Traffic Noise Levels - Weekdays										
	Existing Plus Project - dBA CNEL/Ldn										
Roadways	Avg Lanes	Avg Speeds	Active Half-Width	AM Vol	ADT	at 50ft NTLCL	Distance to Contours 55	60	65	70	Change at 50ft NTLCL
Foster Rd (West Rd Orcutt Expressway)	2	40	6	484	4840	62.73	330	104.5	0	0	0.13
Foster Rd (East of Orcutt Expressway	2	40	6	732	7320	64.53	499.1	157.9	0	0	0
Orcutt Expressway (North of Foster Rd)	4	55	29.75	2,854	28540	72.66	43120	1364	432.3	139.6	0.3
Orcutt Expressway (South of Foster Rd)	4	55	29.75	2,476	24760	72.04	3740.9	1183.4	375.3	122	0.37
Foxenwood Ln (North of UVP)	2	45	6	93	930	56.84	85.2	0	0	0	0.03
Foxenwood Ln (South of UVP)	2	45	6	337	3370	62.43	307.9	97.6	0	0	0.31
UVP (West of Foxenwood Ln)	4	45	27	556	5560	63.47	507	162.4	57.4	0	0.59
UVP (East of Foxenwood Ln)	4	45	27	864	8640	65.38	787.2	250.3	83.2	0	0.49
Orcutt Expressway (North of UVP)	4	55	29.75	2,470	24700	72.03	3731.9	1180.6	374.4	121.7	0.36
Orcutt Expressway (South of UVP)	4	55	29.75	2,341	23410	71.8	3537	118.9	355	115.8	0.14
UVP (West of Orcutt Expressway)	4	45	34.66	868	8680	65.1	790.3	252.1	86.2	0	0.49
UVP (East of Orcutt Expressway)	4	45	42	2,139	21390	68.76	19944.2	616.2	198.9	74.5	1.73
Orcutt Rd (North of UVP)	2	40	6	576	5760	63.49	392.8	124.3	0	0	5.06
Orcutt Rd (Sorth of UVP)	2	40	6	916	9160	65.5	624.5	197.6	62.7	0	2.86
UVP (West of Orcutt Rd)	4	45	32.85	2,138	21380	69.08	1945.3	616	197.3	69.7	1.76
UVP (East of Orcutt Rd)	4	45	33.22	1,770	17700	68.25	1610.5	510.3	164.4	60.8	1.28
Hummel Dr (North of UVP)	2	40	6	91	910	55.47	62.3	0	0	0	1.95
Hummel Dr (South of UVP)	2	40	6	142	1420	57.4	97	0	0	0	1.14
UVP (West of Hummel Rd)	3	45	12	1,648	16480	68.93	1504	475.8	150.9	0	0.96
UVP (East of Hummel Rd)	3	45	12	1,621	16210	68.86	1479.3	468	148.4	0	0.77
Bradley Rd (North of UVP)	4	45	21	591	5910	64	539	171.6	57.8	0	0.36
Bradley Rd (South of UVP)	4	45	21	812	8120	65.38	740.3	235	76.9	0	0.33
UVP (West of Bradley Rd)	4	45	31	1,309	13090	67.02	1191.7	378	123.1	0	0.97
UVP (East of Bradley Rd)	4	45	31	1,292	12920	66.96	1176.2	373.1	121.6	0	0.56
NTLCL=Near Travel Lane Centerline											
ADT calculated based on pk-hr volumes and a k-factor of 0.10.											

Predicted Traffic Noise Levels - Cumulative									
	Cumulative Noise Level - dBA CNEL/Ldn								
	Avg	Avg			at 50ft	Distance to Contours			
Roadways	Lanes	Speeds	AM Vol	ADT	NTLCL	55 CNEL	60 CNEL	65 CNEL	70 CNEL
Foster Rd (West Rd Orcutt Expressway)	2	40	923	9,230	65.53	629.3	199.1	63.2	0
Foster Rd (East of Orcutt Expressway	2	40	803	8,030	64.93	547.5	173.2	55.1	0
Orcutt Expressway (North of Foster Rd)	4	55	3,127	31,270	73.05	4724.4	1494.4	473.5	152.4
Orcutt Expressway (South of Foster Rd)	4	55	2,476	24,760	72.04	3740.9	1183.4	375.3	122
Foxenwood Ln (North of UVP)	2	45	311	3,110	62.08	284.2	90.1	0	0
Foxenwood Ln (South of UVP)	2	45	325	3,250	62.27	297	94.1	0	0
UVP (West of Foxenwood Ln)	4	45	553	5,530	63.44	504.3	161.5	57.1	0
UVP (East of Foxenwood Ln)	4	45	1,011	10,110	66.06	921	292.4	95.9	0
Orcutt Expressway (North of UVP)	4	55	2,486	24,860	72.06	3756	1118.2	376.8	122.5
Orcutt Expressway (South of UVP)	4	55	2,512	25,120	72.1	3795.3	1200.6	380.7	123.7
UVP (West of Orcutt Expressway)	4	45	1,136	11,360	66.27	1033.9	328.6	109	0
UVP (East of Orcutt Expressway)	4	45	1,612	16,120	67.53	1465.6	465.2	152.4	0
Orcutt Rd (North of UVP)	2	40	192	1,920	57.71	131.1	0	0	0
Orcutt Rd (Sorth of UVP)	2	40	482	4,820	62.71	328.7	104.1	0	0
UVP (West of Orcutt Rd)	4	45	1,601	16,010	67.82	1457	461.8	149.3	0
UVP (East of Orcutt Rd)	4	45	1,499	14,990	67.52	1364.2	432.6	140.4	0
Hummel Dr (North of UVP)	2	40	134	1,340	57.15	91.6	0	0	0
Hummel Dr (South of UVP)	2	40	240	2,400	59.68	163.7	52.1	0	0
UVP (West of Hummel Rd)	3	45	1,537	15,370	68.63	1402.7	443.7	140.8	0
UVP (East of Hummel Rd)	3	45	1,613	16,130	68.84	1472	465.7	147.7	0
Bradley Rd (North of UVP)	4	45	633	6,330	64.3	577.3	183.6	61.4	0
Bradley Rd (South of UVP)	4	45	901	9,010	65.83	821.4	260.5	84.8	0
UVP (West of Bradley Rd)	4	45	1,223	12,230	66.73	1113.4	353.4	115.6	0
UVP (East of Bradley Rd)	4	45	1,285	12,850	66.94	1169.8	371.1	121	0
NTLCL=Near Travel Lane Centerline									
ADT calculated based on pk-hr volumes and a k-factor of 0.10.									

	Predicted Traffic Noise Levels - Weekdays										
	Cumulative Plus Project - dBA CNEL/Ldn										Change
	Avg	Avg	Active				Distance to Contours				at 50ft
Roadways	Lanes	Speeds	Half-	AM Vol	ADT	at 50ft NTLCL	55	60	65	70	NTLCL
Foster Rd (West Rd Orcutt Expressway)	2	40	6	937	9,370	65.6	638.8	202.1	64.2	0	0.07
Foster Rd (East of Orcutt Expressway	2	40	6	803	8,030	64.93	547.5	173.2	55.1	0	0
Orcutt Expressway (North of Foster Rd)	4	55	29.75	3,317	33,170	73.31	5011.5	1585.2	502.1	161.3	0.26
Orcutt Expressway (South of Foster Rd)	4	55	29.75	2,680	26,800	72.38	4049.1	1280.9	406.1	131.5	0.34
Foxenwood Ln (North of UVP)	2	45	6	311	3,110	62.08	284.2	90.1	0	0	0
Foxenwood Ln (South of UVP)	2	45	6	348	3,480	62.57	318	100.7	0	0	0.3
UVP (West of Foxenwood Ln)	4	45	27	623	6,230	63.96	567.9	181.4	62.8		0.52
UVP (East of Foxenwood Ln)	4	45	27	1,104	11,040	66.44	1005.6	319.1	104.1	0	0.38
Orcutt Expressway (North of UVP)	4	55	29.75	2,684	26,840	72.39	4055.2	1282.8	406.7	131.7	0.33
Orcutt Expressway (South of UVP)	4	55	29.75	2,584	25,840	72.23	3904.1	1235	391.6	127	0.13
UVP (West of Orcutt Expressway)	4	45	34.66	1,229	12,290	66.61	1118.5	355.3	117.1	0	0.34
UVP (East of Orcutt Expressway)	4	45	42	2,315	23,150	69.1	2104.1	666.6	214.6	78.7	1.57
Orcutt Rd (North of UVP)	2	40	6	588	5,880	63.58	400.9	126.9	0	0	5.87
Orcutt Rd (Sorth of UVP)	2	40	6	924	9,240	65.54	629.9	199.3	63.3	0	2.83
UVP (West of Orcutt Rd)	4	45	32.85	2,314	23,140	69.42	2105.4	666.6	213.1	74.2	1.6
UVP (East of Orcutt Rd)	4	45	33.22	1,950	19,500	68.67	1774.2	562	180.5	65.2	1.15
Hummel Dr (North of UVP)	2	40	6	167	1,670	58.11	114	0	0	0	0.96
Hummel Dr (South of UVP)	2	40	6	273	2,730	60.24	186.2	59.2	0	0	0.56
UVP (West of Hummel Rd)	3	45	12	1,866	18,660	69.47	1702.7	538.6	170.7	55.2	0.84
UVP (East of Hummel Rd)	3	45	12	1,876	18,760	69.5	1711.9	541.5	171.6	55.5	0.66
Bradley Rd (North of UVP)	4	45	21	680	6,800	64.61	620.1	197.1	65.4	0	0.31
Bradley Rd (South of UVP)	4	45	21	960	9,600	66.11	875.1	277.5	90	0	0.28
UVP (West of Bradley Rd)	4	45	31	1,486	14,860	67.57	1352.7	428.8	138.8	0	0.84
UVP (East of Bradley Rd)	4	45	31	1,442	14,420	67.44	1312.7	416.2	134.9	0	0.5
NTLCL=Near Travel Lane Centerline											
ADT calculated based on pk-hr volumes and a k-factor of 0.10.											

NOISE & GROUNDBORNE VIBRATION IMPACT ASSESSMENT

FOR THE PROPOSED

RICHARDS RANCH PROJECT

SANTA MARIA, CA

SEPTEMBER 2022

PREPARED FOR:
SWCA ENVIRONMENTAL CONSULTANTS, INC.
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APPENDICES

Appendix A: Noise Measurement Survey
Appendix B: Traffic Noise and Construction Vibration Modeling

LIST OF COMMON TERMS & ACRONYMS

ANSI	Acoustical National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dB	Decibels
dBA	A-Weighted Decibels
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
Hz	Hertz
in/sec	Inches per Second
L_{dn}	Day-Night Average Sound Level
L_{eq}	Equivalent Sound Level
L_{max}	Maximum Sound Level
Ppv	Peak Particle Velocity
SEL	Sound-Exposure Level
U.S. EPA	United States Environmental Protection Agency

INTRODUCTION

This report discusses the existing noise setting and identifies potential noise impacts associated with the proposed Richards Ranch Annexation Project. Noise mitigation measure are recommended where the predicted noise levels would exceed applicable noise standards.

PROJECT DESCRIPTION

The proposed Richards Ranch Annexation Project would include the annexation, pre-zoning, and a conceptual development plan for approximately 43.75 acres of property located in unincorporated Santa Barbara County (County) by the City of Santa Maria (City). The conceptual development is a mixed commercial/residential project which includes a total of 495 residential units, including 400 apartments and 95 townhomes and an approximate buildout of 130,000 square feet of commercial uses. As identified in the Santa Barbara County Orcutt Community Plan, the current land use designation is Mixed Commercial/Residential, which provides for general commercial, office, and professional, and residential uses. All four parcels have a zoning designation of Retail Commercial (C-2). The proposed project's site plan is depicted in Figure 1 and Figure 2.

ACOUSTIC FUNDAMENTALS

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Sound is mechanical energy transmitted in the form of a wave because of a disturbance or vibration. Sound levels are described in terms of both amplitude and frequency.

Amplitude

Amplitude is defined as the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a sound source of 65 dB, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference perceptible to the average person.

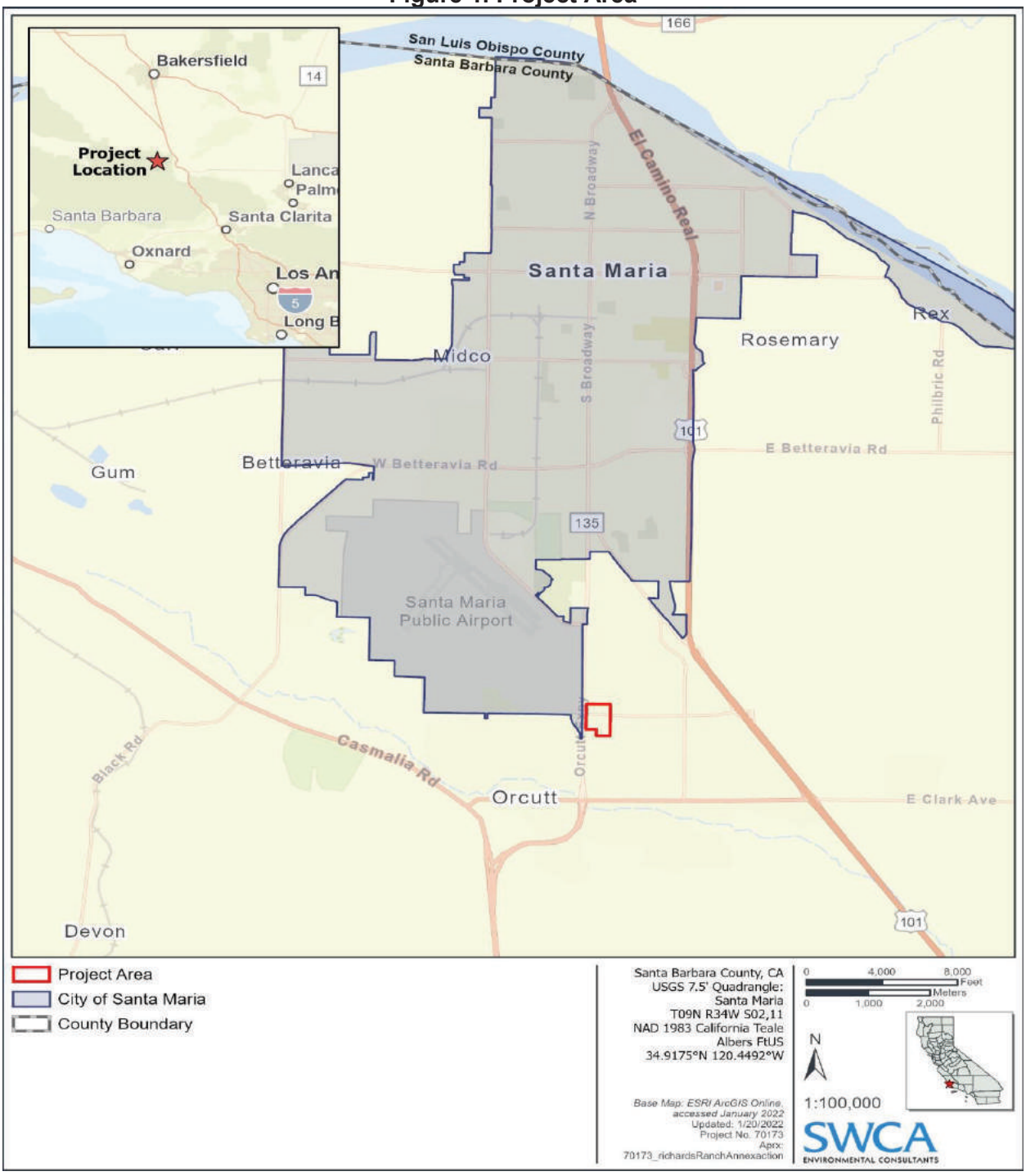
Frequency

The frequency of a sound is defined as the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to the sound of different frequencies. For instance, the human ear is more sensitive to sound in the higher portion of this range than in the lower and sound waves below 16 Hz or above 20,000 Hz cannot be heard at all. To approximate the sensitivity of the human ear to changes in frequency, environmental sound is usually measured in what is referred to as "A-weighted decibels" (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA (U.S. EPA 1971). Common community noise sources and associated noise levels, in dBA, are depicted in Figure 3.

Addition of Decibels

Because dBs are logarithmic units, sound levels cannot be added or subtracted through ordinary arithmetic. Under the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces a sound level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the dB scale, three sources of equal loudness together would produce an increase of 5 dB.

Figure 1. Project Area



Source: SWCA 2022

Figure 2. Project Site Plan



Source: SWCA 2022

SOUND PROPAGATION & ATTENUATION

Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level decreases (attenuates) at a rate of approximately 6 dBs for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path, and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dBs for each doubling of distance from a line source, depending on ground surface characteristics. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water,), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 decibels per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation for soft surfaces results in an overall attenuation rate of 4.5 dBs per doubling of distance from the source.

Atmospheric Effects

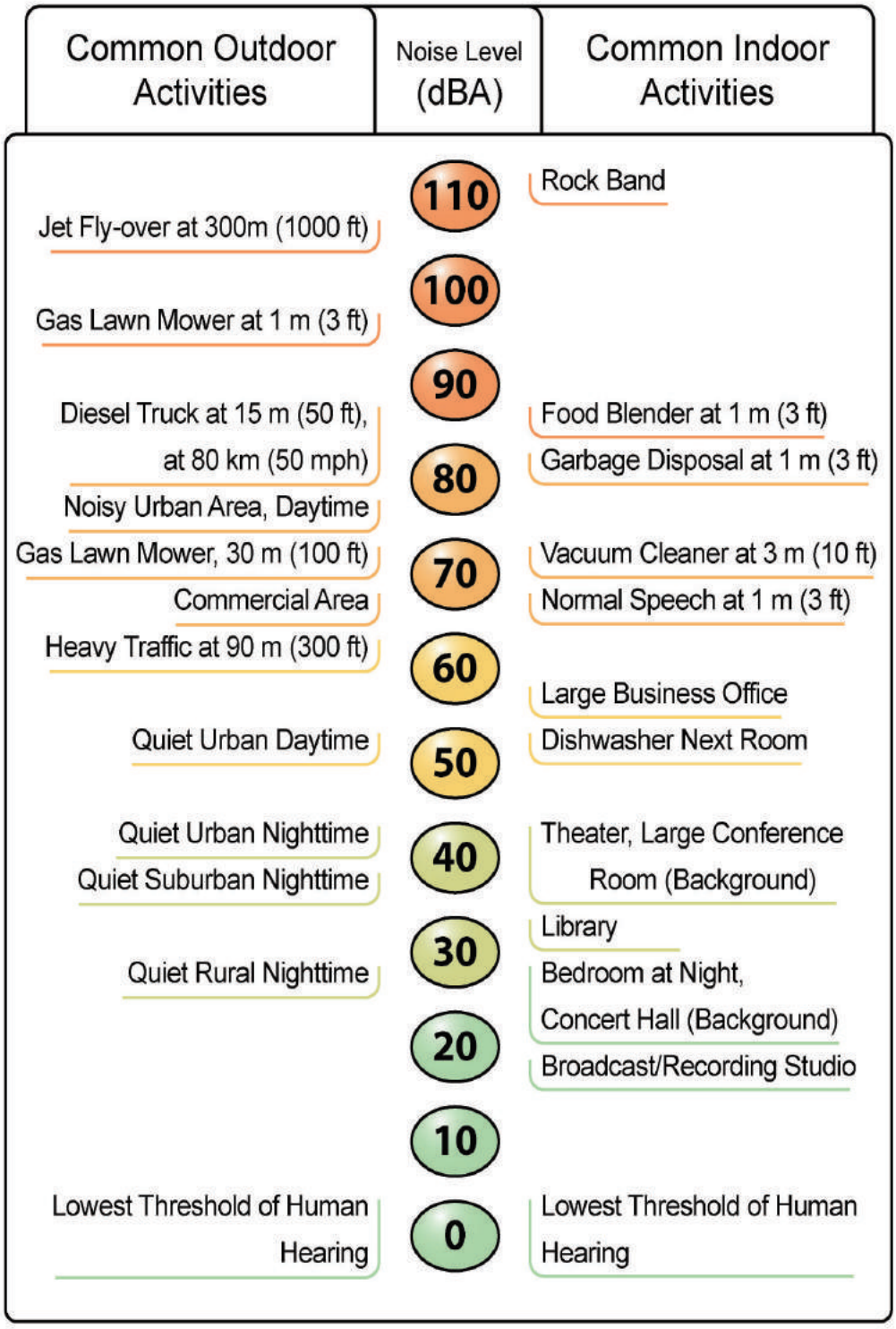
Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) from the highway due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in a minimum of 5 dB noise reduction. Taller barriers provide increased noise reduction.

Noise reductions afforded by building construction can vary depending on construction materials and techniques. Standard construction practices typically provide approximately 15 dBA exterior-to-interior noise reductions for building facades, with windows open, and approximately 20-30 dBA with windows closed. The absorptive characteristics of interior rooms, such as carpeted floors, draperies, and furniture, can result in further reductions in interior noise.

Figure 3. Common Noise Levels



Source: Caltrans 2018

Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound-pressure level in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude with higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies, which is referred to as the "A-weighted" sound level (expressed in units of dBA). The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in conjunction with environmental noise.

The intensity of environmental noise fluctuates over time, and several descriptors of time-averaged noise levels are typically used. For the evaluation of environmental noise, the most commonly used descriptors are equivalent sound level (L_{eq}), day-night average sound level (L_{dn}), community noise equivalent level (CNEL), and sound-exposure level (SEL). The energy-equivalent sound level, L_{eq}, is a measure of the average energy content (intensity) of noise over any given period. Many communities use 24-hour descriptors of noise levels to regulate noise. The day-night average sound level, L_{dn}, is the 24-hour average of the noise intensity, with a 10-dBA "penalty" added for nighttime noise (10 p.m. to 7 a.m.) to account for the greater sensitivity to noise during this period. CNEL, the community equivalent noise level, is similar to L_{dn} but adds an additional 5-dBA penalty for evening noise (7 p.m. to 10 p.m.) Another descriptor that is commonly discussed is the sound-exposure level, expressed as SEL. The SEL describes a receiver's cumulative noise exposure from a single noise event, which is defined as an acoustical event of short duration (0.5 seconds), such as a backup beeper, the sound of an airplane traveling overhead, or a train whistle. Common noise level descriptors are summarized in Table 1.

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases. The acceptability of noise and the threat to public well-being are the basis for land use planning policies preventing exposure to excessive community noise levels.

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted: the so-called "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged.

Table 1. Common Acoustical Descriptors

Descriptor	Definition
Energy Equivalent Noise Level (L_{eq})	The mean (average) energy noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value (in dBA) is calculated.
Minimum Noise Level (L_{min})	The minimum instantaneous noise level during a specific period of time.
Maximum Noise Level (L_{max})	The maximum instantaneous noise level during a specific period of time.
Day-Night Average Noise Level (DNL or L_{dn})	The DNL was first recommended by the United States Environmental Protection Agency (U.S. EPA) in 1974 as a "simple, uniform and appropriate way" of measuring long term environmental noise. DNL takes into account both the frequency of occurrence and duration of all noise events during a 24-hour period with a 10 dBA "penalty" for noise events that occur between the more noise-sensitive hours of 10:00 p.m. and 7:00 a.m. In other words, 10 dBA is "added" to noise events that occur in the nighttime hours to account for increases sensitivity to noise during these hours.
Community Noise Equivalent Level (CNEL)	The CNEL is similar to the L_{dn} described above, but with an additional 5 dBA "penalty" added to noise events that occur between the hours of 7:00 p.m. to 10:00 p.m. The calculated CNEL is typically approximately 0.5 dBA higher than the calculated L_{dn}.
Sound Exposure Level (SEL)	The level of sound accumulated over a given time interval or event. Technically, the sound exposure level is the level of the time-integrated mean square A-weighted sound for a stated time interval or event, with a reference time of one second.

Regarding increases in A-weighted noise levels, knowledge of the following relationships will be helpful in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans;
- Outside of the laboratory, a change of 3 dB is considered a just-perceivable difference;
- A change in sound level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial;
- A change of 10 dB is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

A limitation of using a single noise-level increase value to evaluate noise impacts, as discussed above, is that it fails to account for pre-project noise conditions. With this in mind, the Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (i.e., CNEL, L_{dn}). FICON-recommended noise evaluation criteria are summarized in Table 2 (FICON 2000).

Table 2. FICON Recommended Criteria for Evaluation of Increases in Ambient Noise Levels

Ambient Noise Level Without Project	Increase Required for Significant Impact
< 60 dB	5.0 dB, or greater
60-65 dB	3.0 dB, or greater
> 65 dB	1.5 dB, or greater
Source: FICON 2000	

As depicted in Table 2, an increase in the traffic noise level of 5.0, or greater, would typically be considered to result in increased levels of annoyance where existing ambient noise levels are less than 60 dB. Within areas where the ambient noise level ranges from 60 to 65 dB, increased levels of annoyance would be anticipated at increases of 3 dB, or greater. Increases of 1.5 dB, or greater, could result in increased levels of annoyance in areas where the ambient noise level exceeds 65 dB. The rationale for the FICON-recommended criteria is that as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant increases in annoyance (FICON 2000).

Effects of Noise on Human Activities

The extent to which environmental noise is deemed to result in increased levels of annoyance, activity interference, and sleep disruption varies greatly from individual to individual depending on various factors, including the loudness or suddenness of the noise, the information value of the noise (e.g., aircraft overflights, child crying, fire alarm), and an individual's sleep state and sleep habits. Over time, adaptation to noise events and increased levels of noise may also occur. In terms of land use compatibility, environmental noise is often evaluated in terms of the potential for noise events to result in increased levels of annoyance, sleep disruption, or interference with speech communication, activities, and learning. Noise-related effects on human activities are discussed in more detail, as follows:

Speech Communication

For most noise-sensitive land uses, an interior noise level of 45 dB L_{eq} is typically identified for the protection of speech communication in order to provide for 100-percent intelligibility of speech sounds. Assuming a minimum 20-dB reduction in sound level between outdoors and indoors, with windows closed, this interior noise level of 45 dB L_{eq} would equate to an exterior noise level of 65 dBA L_{eq}. For outdoor voice communication, exterior noise levels of 60 dBA L_{eq} allows normal conversation at distances up to 2 meters with 95 percent sentence intelligibility (U.S. EPA 1974.) Based on this information, speech interference begins to become a problem when steady noise levels reach approximately 60 to 65 dBA.

Annoyance & Sleep Disruption

With regard to potential increases in annoyance, activity interference, and sleep disruption, land use compatibility determinations are typically based on the use of the cumulative noise exposure metrics (i.e., CNEL or L_{dn}). Perhaps the most comprehensive and widely accepted evaluation of the relationship between noise exposure and the extent of annoyance was originally developed by Theodore J. Schultz in 1978. In 1978 the research findings of Theodore J. Schultz provided support for L_{dn} as the descriptor for environmental noise. Research conducted by Schultz identified a correlation between the cumulative noise exposure metric and individuals who were highly annoyed by transportation noise. The Schultz curve, expressing this correlation, became a basis for noise standards. When expressed graphically, this relationship is typically referred to as the Schultz curve. The Schultz curve indicates that approximately 13 percent of the population is highly annoyed at a noise level of 65 dBA L_{dn}. It also indicates that the percentage of people describing themselves as being highly annoyed accelerates smoothly between 55 and 70 dBA L_{dn}. A noise level of 65 dBA L_{dn} is a commonly referenced dividing point between lower and higher rates of people describing themselves as being highly annoyed.

The Schultz curve and associated research became the basis for many of the noise criteria subsequently established for federal, state, and local entities. Most federal and state of California regulations and policies related to transportation noise sources establish a noise level of 65 dBA CNEL/L_{dn} as the basic limit of acceptable noise exposure for residential and other noise-sensitive land uses. For instance, with respect to aircraft noise, both the Federal Aviation Administration (FAA) and the State of California have identified a noise level of 65 dBA L_{dn} as the dividing point between normally compatible and normally incompatible residential land use generally applied for determination of land use compatibility. For noise-sensitive land uses exposed to aircraft noise, noise levels in excess of 65 dBA CNEL/L_{dn} are typically considered to result in a potentially significant increase in levels of annoyance.

Allowing for an average exterior-to-interior noise reduction of 20 dB, an exterior noise level of 65 dBA CNEL/L_{dn} would equate to an interior noise level of 45 dBA CNEL/L_{dn}. An interior noise level of 45 dB CNEL/L_{dn} is generally considered sufficient to protect against activity interference at most noise-sensitive land uses, including residential dwellings, and would also be sufficient to protect against sleep interference (U.S. EPA 1974.)

The cumulative noise exposure metric is currently the only noise metric for which there is a substantial body of research data and regulatory guidance defining the relationship between noise exposure, people's reactions, and land use compatibility. However, when evaluating environmental noise impacts involving intermittent noise events, such as aircraft overflights and train pass byes, the use of cumulative noise metrics may not provide a thorough understanding of the resultant impact. The general public often finds it difficult to understand the relationship between intermittent noise events and cumulative noise exposure metrics. In such instances, supplemental use of other noise metrics, such as the L_{eq} or maximum sound level (L_{max}) descriptor, may be helpful as a means of increasing public understanding regarding the relationship between these metrics and the extent of the resultant noise impact.

AFFECTED ENVIRONMENT

Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The nearest noise-sensitive land uses include a church approximately 175 feet southwest of the project site and residential zones to the south, east, and north ranging between 35 to 45 feet from the project site (see Figure 2).

Ambient Noise Environment

To document existing ambient noise levels in the project area, short-term ambient noise measurements were conducted on April 6, 2022, using a Larson Davis Laboratories, Type I, Model 820 integrating sound-level meter. The meter was calibrated before use and is certified to be in compliance with Acoustical National Standards Institute (ANSI) specifications. Measured ambient daytime noise levels are summarized in Table 3 and measurement location are displayed in Figure 4.

Table 3. Summary of Measured Ambient Noise Levels

Location	Monitoring Period (24-hour time)	Measured Daytime Noise Levels (dBA L_{eq})
ST1: Approximately 25 ft South of Union Valley Parkway	10:15-10:25	68.8
ST2: Eastside of Gloria Dei Church Parking Lot	10:34-10:44	49.1
ST3: North End of Dancer Ave	10:52-11:02	48.2
ST4: Roundabout at end of Parkview St	11:05-11:15	50.2
ST5: South end of Michell Dr.	11:24-11:34	46.6
ST6: Edge of Orcutt Rd	11:36-11:46	61.1
ST7: Edge of Orcutt Rd 50ft from Expressway	10:51-11:01	68.1

dBA = A-weighted decibel; L_{eq} = Equivalent sound level; ST = Short-term noise measurement

Ambient noise measurements were conducted on April 6, 2022, using a Larson Davis Laboratories, Type I, Model 820 integrating sound level meter placed at a height of 5 feet.

Based on the measurements conducted, daytime average-hourly noise levels in the project vicinity ranged from the mid-40s to high-60s (in dBA L_{eq}). Ambient noise levels within the project area are predominantly influenced by vehicle traffic on area roadways. To a lesser extent, birds, and the occasional airplane overflight also contribute to the ambient noise environment.

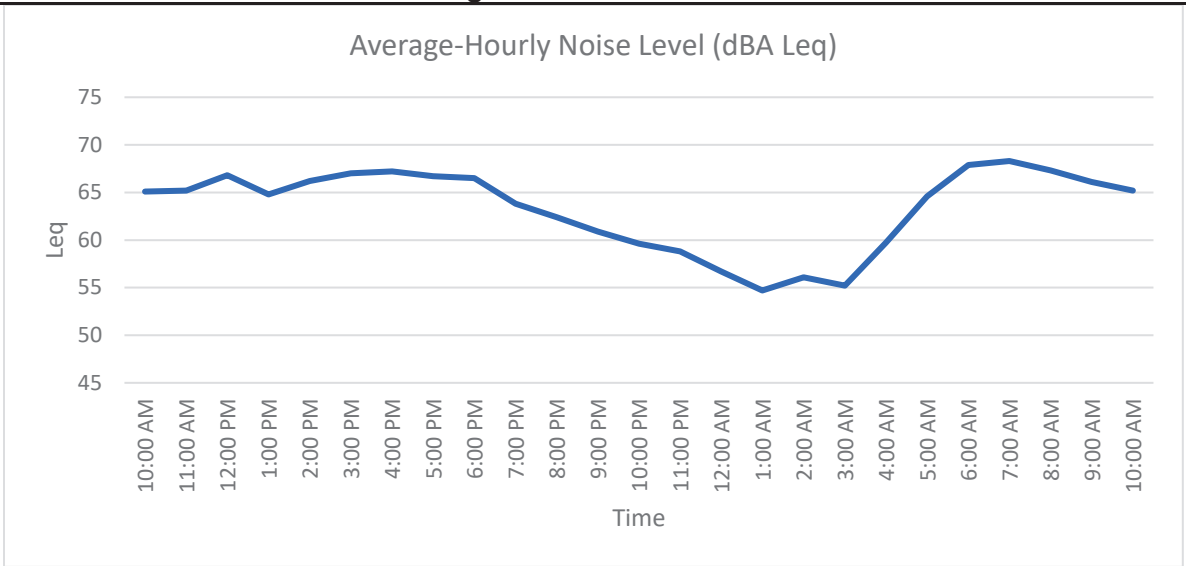
In addition to the short-term noise measurement surveys, two long-term (24-hour) noise measurements were conducted, which are identified in Figure 4 as noise measurement locations LT1 and LT2. Noise measurement LT1 was conducted near the Northeastern boundary of the project site, approximately 30 yards from the edge of Union Valley Pkwy. Noise levels at this location were primarily affected by vehicle traffic on Union Valley Pkwy. Measured long-term noise levels are summarized in Table 4. As noted in Table 4, measured average-hourly noise levels ranged from approximately 54.7 dBA L_{eq} during the nighttime hours to approximately 68.3 dBA L_{eq} during the daytime hours. Measured nighttime noise levels were approximately 13 dBA lower than the highest measured daytime noise level. The measured average-daily noise level was 68.86 dBA CNEL.

Long-term measurement LT2 was taken near the southwest boundary of the proposed residential development, approximately 18 yards east of Orcutt Rd and 43 yards east of Orcutt Expy. Noise levels at this location were primarily affected by vehicle traffic on Orcutt Expy and Orcutt Rd. Measured long-term noise levels are summarized in Table 5. As noted in Table 5, measured average-hourly noise levels ranged from approximately 48.7 dBA L_{eq} during the nighttime hours to approximately 67.6 dBA L_{eq} during the daytime hours. Measured nighttime noise levels were approximately 5 to 19 dBA lower than the highest measured daytime noise level. The measured average-daily noise level, including penalties applied to the more noise-sensitive evening and nighttime hours, was approximately 65 dBA CNEL.

Figure 4. Noise Measurement Locations



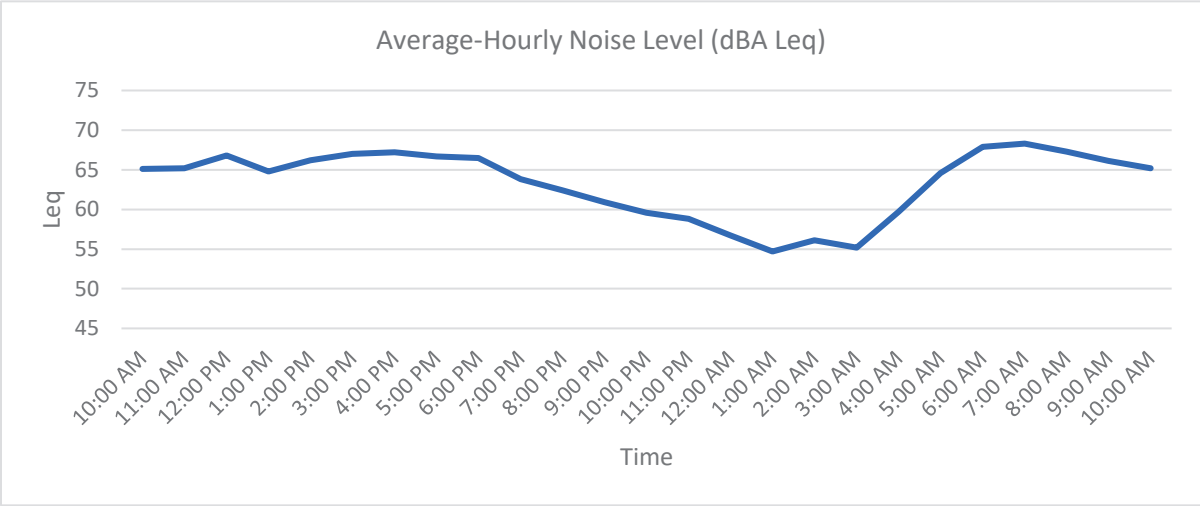
Table 4. Long-Term Measurement Data LT1



Hour Beginning	Average (dBA L_{eq}[h])	Difference from Loudest Hour (dB)
10:00	65.1	-3.2
11:00	65.2	-3.1
12:00	66.8	-1.5
13:00	64.8	-3.5
14:00	66.2	-2.1
15:00	67	-1.3
16:00	67.2	-1.1
17:00	66.7	-1.6
18:00	66.5	-1.8
19:00	63.8	-4.5
20:00	62.4	-5.9
21:00	60.9	-7.4
22:00	59.6	-8.7
23:00	58.8	-9.5
24:00	56.7	-11.6
1:00	54.7	-13.6
2:00	56.1	-12.2
3:00	55.2	-13.1
4:00	59.7	-8.6
5:00	64.6	-3.7
6:00	67.9	-0.4
7:00	**68.3**	0
8:00	67.3	-1
9:00	66.1	-2.2
10:00	65.2	-3.1

Note: Highest hourly noise level is bolded.
Noise measurements were conducted on April 12-13, 2022 using a Piccolo II sound meter.
Refer to Figure 4 for measurement locations.

Table 5. Long-Term Measurement Data LT2



Hour Beginning	Average (dBA L_{eq}[h])	Difference from Loudest Hour (dB)
10:07	58.2	-9.4
11:07	57.1	-10.5
12:07	59.9	-7.7
13:07	62.1	-5.5
14:07	65.9	-1.7
15:07	**67.6**	0
16:07	65.8	-1.8
17:07	64.4	-3.2
18:07	61.4	-6.2
19:07	62.5	-5.1
20:07	59.1	-8.5
21:07	58.7	-8.9
22:07	55.3	-12.3
23:07	56.2	-11.4
24:07	50	-17.6
1:07	49.6	-18
2:07	48.7	-18.9
3:07	51.4	-16.2
4:07	55.1	-12.5
5:07	58.9	-8.7
6:07	62.5	-5.1
7:07	62.9	-4.7
8:07	61	-6.6
9:07	58.4	-9.2
10:07	57	-10.6

Note: Highest hourly noise level is bolded.
Noise measurements were conducted on April 12-13, 2022 using a Piccolo II sound meter.
Refer to Figure 4 for measurement locations.

REGULATORY FRAMEWORK

Noise

City of Santa Maria General Plan

The City of Santa Maria has established policies in the Noise Element of the General Plan to guide the development of new land uses with respect to noise exposure. Table 6 summarizes the City's noise standards for various types of new development projects. These noise standards represent the maximum acceptable noise level, are used to determine noise impacts.

Table 6. City of Santa Maria Interior and Exterior Noise Standards

Land Uses		Standard (dB CNEL)	
Categories	**Uses**	**Interior**	**Exterior**
Residential	Single Family, Duplex, Multiple Family, Mobile Home	45	60
Commercial	Retail, Restaurant, Professional Offices	55	65
Industrial	Manufacturing, Utilities, Warehousing, Agriculture	65	70
Noise-Sensitive Land Uses	Motel, Hospital, School, Nursing Home, Church, Library, and other	45	60
Open Space	Passive Outdoor Recreation	-	65

dB = Decibel; CNEL = Community noise equivalent level

1. The Commercial Exterior Noise Standard is a noise level of 65 dB CNEL or less, or which does not interfere with normal business activity.

2. Where commercial development proposes outside activities such as patio dining, outside play and picnic areas, the noise standards shall not apply to those outdoor areas.

3. The Industrial Exterior Noise Standard is a noise level of 70 dB CNEL or less, or which does not interfere with normal business activity.

4. Exception to allow elevated noise levels in outdoor living areas. Outdoor living areas such as patios and balconies may be incorporated into multifamily development projects ("Duplex" and "Multiple Family", and mixed use projects which incorporate these uses) in areas which experience elevated noise levels. These noise levels may not exceed the "Normally Unacceptable" Community Noise Exposure levels (75 dB and above). Furthermore, prospective buyers and future occupants of dwellings shall be provided the following notice: This property is presently located in an urban area which periodically and regularly experiences elevated noise levels. Potential sources of this noise may be automobile traffic, railroad operations, flying aircraft, industrial/commercial uses and general human activity in an urban environment. You may wish to consider what noise level annoyances, if any, are associated with the property before you complete your purchase and/or rental agreement and determine whether they are acceptable to you.

Source: City of Santa Maria 2009

The City's General Plan also generally limits short-term construction activities to between the hours of 7:00 a.m. and 6 p.m., on weekdays, and between 8:00 a.m. and 5:00 p.m. on Saturdays. Noise-generating construction activities are typically prohibited on Sundays (City of Santa Maria 2009).

City of Santa Maria Municipal Code

The City of Santa Maria has established policies in Chapter 5-5 (Noise Regulations) of the Municipal Code to prohibit unnecessary, excessive and annoying noises from all sources. Table 7 summarizes the City's ambient base noise levels for existing land uses. These noise standards represent the maximum acceptable noise level, are used to determine noise impacts. Persons operating equipment or performing any outside construction or repair work on buildings, structures or projects within a residential zone, or within a radius of five hundred (500) feet therefrom, shall be required to obtain a permit from the Noise Control Officer only if they exceed the noise standards. This permit would cover short-term or occasional, non-routine operations (City of Santa Maria 2020).

Table 7. City of Santa Maria Ambient Base Noise Level

Zones	Range of Intensities (dBA L_{eq})							
	Ambient Base		Fifteen Minutes		Five Minutes		One Minute	
	Day	Night	Day	Night	Day	Night	Day	Night
Residential	55	45	60	50	65	55	70	60
Commercial	65	60	70	65	75	70	80	75
Industrial	75	70	80	75	85	80	90	85

dBA = A-weighted decibels; L_{eq} = Equivalent sound level
Source: City of Santa Maria 2020

County of Santa Barbara Noise Element

The County of Santa Barbara has established policies in the Noise Element of the General Plan to guide the development of new land uses with respect to noise exposure. In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs. For residential land uses, the County's noise standard is 5 dB higher than the City of Santa Maria's normally-acceptable noise level of 60 dBA.

Groundborne Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of amplitude and frequency. A person's perception of the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. Measurements in terms of velocity are expressed as peak particle velocity (ppv) with units of inches per second (in/sec).

There are no federal, state, or local regulatory standards for groundborne vibration. However, the California Department of Transportation (Caltrans) has developed vibration criteria based on potential structural damage risks and human annoyance. Caltrans-recommended criteria for the evaluation of groundborne vibration levels, with regard to structural damage and human annoyance, are summarized in Table 8. The criteria apply to continuous vibration sources, which include vehicle traffic and most construction activities. All damage criteria for buildings are in terms of ground motion at the buildings' foundations. No allowance is included for the amplifying effects of structural components (Caltrans 2020).

As indicated in Table 8, the threshold at which there is a risk to normal structures from continuous events is 0.3 in/sec ppv for older residential structures and 0.5 in/sec ppv for newer building construction. With regard to human perception, vibration levels would begin to become distinctly perceptible at levels of 0.04 in/sec ppv for continuous events. Continuous vibration levels are considered potentially annoying for people in buildings at levels of 0.2 in/sec ppv.

Table 8. Summary of Groundborne Vibration Levels and Potential Effects

Vibration Level (in/sec ppv)	Human Reaction	Effect on Buildings
0.006 - 0.019	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected.
0.1	Level at which continuous vibrations begin to annoy people.	Virtually no risk of "architectural" damage to normal buildings.
0.2	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relatively short periods of vibrations).	Threshold at which there is a risk of "architectural" damage to fragile buildings.
0.3 - 0.6	Vibrations become distinctly perceptible at 0.04 in/sec ppv and considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Potential risk of "architectural" damage may occur at levels above 0.3 in/sec ppv for older residential structures and above 0.5 in/sec ppv for newer structures.

in/sec = Inch per second; ppv = Peak particle velocity

The vibration levels are based on ppv in the vertical direction for continuous vibration sources, which includes most construction activities.

Source: Caltrans 2020

IMPACT ANALYSIS

Thresholds of Significance

Criteria for determining the significance of air quality impacts were developed based on information contained in the California Environmental Quality Act (CEQA) Guidelines (Appendix G). According to those guidelines, a project may have a significant effect on the environment if it would result in the following conditions:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or

b) Generation of excessive groundborne vibration or groundborne noise levels; or

c) 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 private-use airport, that exposes people residing or working in the project area to excessive noise levels.

The CEQA Guidelines do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." As discussed previously in this section, a noise level increase of 3 dBA is barely perceptible to most people, an increase of 5 dBA is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. For purposes of this analysis, a substantial increase in ambient noise levels would be defined as an increase of 5 dBA or greater for an ambient noise level of less than 60 dB; a 3 dB, or greater, increase in an ambient noise level of 60-65 dB; or a 1.5 dB greater, increase in an ambient noise level above 65 dB. In order for a receptor to have a significant impact there would need to be a substantial increase that would also exceed the City's applicable noise standards. The City's applicable noise standards are summarized in Table 6 for new land uses. As previously discussed, the City's noise standards are equivalent to or more conservative than those recommended by the County. The City's noise standards for non-transportation noise sources are summarized in Table 7.

The CEQA Guidelines also do not define the levels at which groundborne vibration levels would be considered excessive. For this reason, Caltrans recommended groundborne vibration thresholds were used for the evaluation of impacts based on increased potential for structural damage and human annoyance, as identified in Table 8. For purposes of this analysis, risks of architectural damage (i.e., minor cracking of plaster walls and ceilings) would be considered potentially significant if construction-generated ground

vibration levels at nearby structures would exceed 0.5 in/sec ppv. Ground vibration in excess of 0.2 in/sec ppv would be expected to result in a potential for significant short-term increases in levels of annoyance for occupants of nearby buildings.

Methodology

Construction Impacts

Short-term noise impacts associated with construction activities were analyzed based on typical construction equipment noise levels and distances to the nearest noise-sensitive land usage. Noise levels were predicted based on representative off-road equipment noise levels derived from the Federal Highway Administration's (FHWA) Roadway Construction Noise Model based on average equipment usage rates and assuming a noise-attenuation rate of 6 dB per doubling of distance from the source.

Operational Impacts

Roadway Traffic Noise

Traffic noise levels were calculated using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) based on California vehicle reference noise levels and traffic data obtained from the traffic analysis prepared for this project. Additional input data included day/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway widths. The project's contribution to traffic noise levels along area roadways was determined by comparing the predicted noise levels with and without project-generated traffic. Predicted noise levels were compared to applicable City noise standards for determination of impact significance. The compatibility of proposed land uses were compared to the City's noise standards for new land uses (Table 6).

Non-Transportation Noise

Noise levels associated with vehicle parking areas were calculated in accordance with FTA's Transit Noise and Vibration Impact Assessment Guidelines (2018) assuming a reference noise level of 92 dBA SEL. Average-hourly noise levels associated with vehicle parking-related activities were calculated based on the conservative assumption that all parking spaces would be accessed over a one-hour period. Noise levels generated by other on-site noise sources, including on-site building mechanical equipment, loading docks, Heating, Ventilation, and Air Conditioning (HVAC) units, carwash, and drive-thru operations were assessed based on representative manufacturer and measured data obtained from similar sources. Predicted noise levels associate with on-site sources were compared to the City's noise standards for non-transportation noise sources (Table 7).

Project Impacts and Mitigation Measures

Impact N-A. Would the project result in a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction-Related Noise Levels

Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., land clearing, grading, excavation, and erection) of the activity. Noise generated by construction equipment, including earthmovers, material handlers, and portable generators, can reach high levels. Noise levels commonly associated with off-road equipment anticipated to be used during project construction are summarized in Table 9.

As noted in Table 9, instantaneous noise levels generated by individual pieces of off-road equipment typically range from approximately 77 to 90 dBA L_{max} at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Based on typical off-road equipment usage rates,

average-hourly noise levels for individual equipment would be approximately 83 dBA L_{eq}, or less, at 50 feet. Assuming that multiple pieces of equipment could be operating simultaneously, predicted average-hourly noise levels could reach levels of approximately 85 dBA at 50 feet.

Table 9. Typical Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA) at 50 Feet from Source	
	L_{max}	L_{eq}
Air Compressor	78	74
Backhoe	78	74
Concrete Mixer	79	75
Crane, Mobile	81	73
Dozer	82	78
Grader	85	81
Loader	79	71
Paver	77	74
Roller	80	73
Saw	90	83

dBA = A-weighted decibels; L_{max} = Maximum sound level; L_{eq} = Equivalent sound level
Source: FHWA Roadway Construction Noise Model

The nearest noise-sensitive receivers to the project site include existing residences 35 feet to the east, residences 35 feet to the north, and a church 175 feet to the south. Assuming an average-hourly construction noise level of 85 dBA L_{eq} at 50 feet and that construction activities were to occur at the nearest property boundary, predicted noise levels would be approximately 88 dBA L_{eq} at the nearest residence and approximately 74 dBA L_{eq} at the church to the south. The City has not adopted noise standards that apply to short-term construction activities. However, based on screening noise criteria commonly recommended by federal agencies, construction activities would generally be considered to have a potentially significant impact if average-hourly daytime noise levels would exceed 80 dBA L_{eq} at noise-sensitive land uses, such as residential land uses (FTA 2018). With regard to residential land uses, activities occurring during the more noise-sensitive nighttime hours are of particular concern given the potential for sleep disruption and increased levels of annoyance for building occupants. For these reasons, this impact would be considered **potentially significant**.

Mitigation Measures

N-1: The following measures shall be implemented to reduce construction-generated noise levels:

a) Construction activity shall be limited to the hours between 7:00 a.m. and 6:00 p.m. on weekdays, and between 8:00 a.m. and 5:00 p.m. on Saturdays in accordance with the City's Noise Element. No noise-generating construction activities are allowed to occur on Sundays or state or federal holidays. Construction equipment maintenance shall be limited to the same hours. Non-noise-generating construction activities without mechanical equipment are not subject to these restrictions.
b) Control noise at all construction sites through the provision of mufflers and the physical separation of machinery maintenance areas from adjacent residential and noise sensitive land uses.
c) Construction activities shall comply with the City of Santa Maria noise-control ordinance requirements, including obtaining a permit if deemed necessary.

Significance After Mitigation

Implementation of the above mitigation measures would limit construction activities to less noise-sensitive periods of the day. The use of mufflers would reduce construction equipment noise levels by approximately 10 dBA. With the implementation of the above mitigation measures and given that construction activities would be short-term and intermittent, this impact would be considered **less than significant**.

Operational Noise Levels

Long-term, permanent increases in ambient noise levels would be primarily associated with potential increases in vehicle traffic on nearby roadways, as well as on-site activities. Noise levels commonly associated with these sources and potential impacts to nearby land uses are discussed as follows:

Vehicular Roadway Traffic

Existing Conditions

Predicted existing traffic noise levels, with and without the implementation of the proposed project, are summarized in Table 10. In comparison to existing traffic noise levels, the proposed project would result in a predicted increase in traffic noise levels of 0.03 to 5.03 dBA along nearby roadways.

As noted in Table 10, increases in vehicle traffic along Orcutt Road, north of Union Valley Parkway would result in a substantial increase in associated noise levels. However, traffic noise along this segment of Orcutt Road would still be dominated by noise produced from the parallel Orcutt Expressway. As noted in Table 10, this portion of Orcutt Expressway is not projected to experience a substantial increase in noise levels with project implementation. Combined increases in traffic noise levels at the nearest existing residences, taking into account noise emanating from Orcutt Expressway and Orcutt Road, would be 0.7 dB. Implementation of the proposed project would not result in substantial increases in traffic noise levels at existing noise-sensitive land uses located along primarily affected roadway segments. As a result, this impact would be considered **less than significant**.

Table 10. Predicted Increase in Traffic Noise Levels Existing

Roadway Segment	Predicted Noise Level at 50 feet from Centerline of Near Travel Lane (dBA CNEL/L_{dn})[1]			Substantial Increase?[3]	Significant Impact?[4]
	Existing Without Project	Existing Plus Project	Difference[2]		
Foxenwood Lane (North of UVP)	56.81	56.84	0.03	No	No
Foxenwood Lane (South of UVP)	62.12	62.38	0.26	No	No
Union Valley Parkway (West of Orcutt Expy.)	64.61	65.02	0.41	No	No
Union Valley Parkway (East of Orcutt Expy.)	67.03	68.71	1.68	No	No
Orcutt Expressway (North of UVP)	71.67	71.98	0.31	No	No
Orcutt Expressway (South of UVP)	71.66	71.77	0.11	No	No
Orcutt Road (North of UVP)	58.43	63.46	5.03	Yes[5]	No
Orcutt Road (South of UVP)	62.64	64.52	1.88	No	No
Hummel Drive (North of UVP)	53.52	57.98	4.46	No	No
Hummel Drive (South of UVP)	56.26	60.16	3.9	No	No
Union Valley Parkway (West of Hummel Dr.)	67.97	68.9	0.93	No	No
Union Valley Parkway (East of Hummel Dr.)	68.09	68.96	0.87	No	No

UVP=Union Valley Parkway; Expy=Expressway; Dr=Drive

1. Traffic noise levels were calculated using FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), based on data obtained from the traffic analysis prepared for this project.
2. Difference in noise levels reflect the incremental increase attributable to the proposed project.
3. A substantial increase in noise levels is an increase of 5 dBA or greater for a noise level of less than 60 dB, a 3 dB or greater increase in a noise level of 60-65 dB, or a 1.5 dB or greater increase in a noise level greater than 65dB
4. A significant impact is defined as a substantial increase in noise levels that would exceed the City's applicable noise standards at nearby existing noise-sensitive land uses.
5. Roadway is within the projected noise contours of Orcutt Expressway, which is not projected to have a substantial increase in noise levels. As a result, no substantial increase in noise levels at existing residential land uses located along this segment would occur.

Future Conditions

Predicted future traffic noise levels, with and without the implementation of the proposed project, are summarized in Table 11. In comparison to future traffic noise levels, the proposed project would result in a predicted increase in traffic noise levels of 0.1 to 5.57 dBA along nearby roadways.

As noted in Table 11, increases in vehicle traffic along Orcutt Road, north of Union Valley Parkway would result in a substantial increase in associated noise levels. However, traffic noise along this segment of Orcutt Road would still be dominated by noise produced from the parallel Orcutt Expressway. As noted in Table 11, this portion of Orcutt Expressway is not projected to experience a substantial increase in noise levels with project implementation. Combined increases in traffic noise levels at the nearest existing residences, taking into account noise emanating from Orcutt Expressway and Orcutt Road, would be 0.6 dB. Implementation of the proposed project would not result in substantial increases in traffic noise levels at existing noise-sensitive land uses located along primarily affected roadway segments. As a result, this impact would be considered **less than significant**.

Table 11. Predicted Increase in Traffic Noise Levels Cumulative

Roadway Segment	Predicted Noise Level at 50 feet from Centerline of Near Travel Lane (dBA CNEL/L_{dn})[1]			Substantial Increase?[3]	Significant Impact?[4]
	Cumulative without Project	Cumulative with Project	Difference[2]		
Foxenwood Lane (North of UVP)	62.08	63.29	1.21	No	No
Foxenwood Lane (South of UVP)	62.27	62.52	0.25	No	No
Union Valley Parkway (West of Orcutt Expy.)	66.27	66.56	0.29	No	No
Union Valley Parkway (East of Orcutt Expy.)	67.53	69.06	1.53	No	No
Orcutt Expressway (North of UVP)	72.06	72.34	0.28	No	No
Orcutt Expressway (South of UVP)	72.1	72.2	0.1	No	No
Orcutt Road (North of UVP)	57.71	63.28	5.57	Yes[5]	No
Orcutt Road (South of UVP)	62.71	64.57	1.86	No	No
Hummel Drive (North of UVP)	57.15	57.98	0.83	No	No
Hummel Drive (South of UVP)	59.68	60.16	0.48	No	No
Union Valley Parkway (West of Hummel Dr.)	68.63	69.36	0.73	No	No
Union Valley Parkway (East of Hummel Dr.)	67.84	69.4	0.56	No	No

UVP=Union Valley Parkway; Expy=Expressway; Dr=Drive
1. Traffic noise levels were calculated using FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), based on data obtained from the traffic analysis prepared for this project.
2. Difference in noise levels reflect the incremental increase attributable to the proposed project.
3. A substantial increase in noise levels is an increase of 5 dBA or greater for a noise level of less than 60 dB, a 3 dB or greater increase in a noise level of 60-65 dB, or a 1.5 dB or greater increase in a noise level greater than 65dB
4. A significant impact is defined as a substantial increase in noise levels that would exceed the City's applicable noise standards at nearby existing noise-sensitive land uses.
5. Roadway is within the projected noise contours of Orcutt Expressway, which is not projected to have a substantial increase in noise levels. As a result, no substantial increase in noise levels at existing residential land uses located along this segment would occur.

Residential Building Mechanical Equipment

Proposed structures would be anticipated to include the use of building mechanical equipment, such as air conditioning units and exhaust fans. The specific building mechanical equipment to be installed and the locations of such equipment have not yet been identified. Building mechanical equipment (e.g., air conditioning units, exhaust fans) would typically be located within the structures, enclosed, or placed on rooftop areas away from direct public exposure. Exterior air conditioning units and exhaust fans for residential land uses can generate noise levels up to approximately 65 dBA L_{eq} at 10 feet. Based on this noise level and assuming that equipment is exposed and within line-of-sight of nearby land uses, predicted operational noise levels at the nearest existing residence, located at a distance of approximately 35 feet, would be approximately 54 dBA L_{eq}. Predicted operational noise levels associated with residential mechanical equipment would not exceed the City of Santa Maria noise standards for daytime, but would exceed the night-time noise standard of 45 dBA L_{eq} (refer to Table 7). As a result, this impact would be considered **potentially significant**.

Commercial-Use HVAC Units

Proposed commercial development will likely include HVAC units on the roof of proposed land uses. Noise levels associated with larger air conditioning units, can range from 60 to 79 dBA L_{eq} at 5 feet. While the exact location of the HVAC Units is unknown, a conservative approach assumed that HVAC Units could be located on the north side of commercial buildings closest to the property line of the nearest residence which is located approximately 40 feet from proposed commercial structures. Assuming a maximum noise level of 79 dBA L_{eq} at 5 feet and an average noise attenuation rate of 6 dBA per doubling of distance from the source, predicted operational noise levels associated with HVAC units at the nearest residential land use would be approximately 61 dBA L_{eq}. Predicted operational noise levels would exceed the City of Santa Maria's daytime and nighttime noise standards of 55 and 45 dBA L_{eq}, respectively (refer to Table 7). As a result, this impact would be considered **potentially significant**.

Commercial-Use Loading Docks

The proposed project includes commercial uses with loading docks located near the northern boundary of the project site (refer to Figure 4). Based on representative noise measurement data obtained from similar commercial uses, noise levels associated with outdoor loading dock operations and material handling activities can generate noise levels of approximately 66 dBA L_{eq} at 25 feet. The nearest residential land uses are located approximately 42 feet from the nearest proposed loading dock area. Based on this distance and assuming an activity noise level of 66 dBA L_{eq} at 25 feet, predicted noise levels at the nearest residential land use would be 61 dBA. Depending on the specific uses proposed, site design, and hours of operation, predicted noise levels associated with proposed commercial land uses could potentially exceed the City's daytime and nighttime noise standards of 55 and 45 dBA L_{eq}, respectively (refer to Table 7). As a result, noise generated by loading dock operations would be considered to have a **potentially significant impact**.

Drive-Thru Restaurant

The proposed project includes a drive-thru restaurant located near the northwestern boundary of the project site (refer to Figure 4). Noise levels associated with the drive-thru were largely attributable to the operation of the speaker box. Based on noise measurement data obtained from similar drive-thru operations, operational noise levels associated with speaker boxes and vehicle idling typically average approximately 55 dBA L_{eq} at 30 feet from the speaker box. The exact location of the drive-thru speaker box is currently unknown. The nearest noise-sensitive land use is a residential dwelling located adjacent to and north of the project site, approximately 25 feet from the centerline of the drive-thru. Based on the noise levels noted above and assuming an average noise attenuation rate of 6 dBA per doubling of distance from the source, predicted noise levels at the property line of this nearest residence would be approximately 57 dBA L_{eq}. Predicted noise levels associated with drive-thru activities would exceed the City's daytime and nighttime noise standards of 55 and 45 dBA L_{eq}, respectively (refer to Table 7). As a result, noise associated with the drive-thru operations would be considered to have a **potentially significant impact.**

Car Wash

The proposed project includes a proposed car wash, which is located south of E. Union Valley Parkway, near the western boundary of the project site, west of Orcutt Road (refer to Figure 4). Noise levels associated with car wash operations are largely attributable to the operation of dryer units. To a lesser extent the operation of vacuum motors and water sprayers also contribute to carwash operational noise levels. Based on noise measurement data obtained from various carwash operations, predicted noise levels associated with carwash activities can result in reach up to approximately 87.2 dBA L_{eq} at 10 feet from the exit of a carwash. The nearest noise-sensitive land uses is proposed multifamily housing located approximately 250 feet to the east of the car wash. Assuming an operational noise level of 87.2 dBA L_{eq} at 10 feet and an average noise attenuation rate of 6 dBA per doubling of distance from the source, predicted operational noise levels at the nearest proposed residential land uses would be approximately 59 dBA L_{eq}. Predicted noise levels associated with car wash activities would exceed the City's daytime and nighttime noise standards of 55 and 45 dBA L_{eq}, respectively (refer to Table 7). As a result, noise associated with the proposed car wash would be considered to have a **potentially significant impact**.

Vehicle Parking Lot

The proposed project includes the construction of various on-site parking areas. The largest parking area is located north of E. Union Valley Parkway and would consist of approximately 462 parking spaces for commercial buildings, based on CalEEmod assumptions for acreage. Based on a conservative assumption that all parking spaces would be accessed over a one-hour period, predicted noise levels at the nearest residential land use, which are located adjacent to and north of the project site, would be approximately 43 dBA L_{eq}. Predicted noise levels associated with on-site parking lot activities would not exceed the City of Santa Maria noise standards. As a result, this impact would be considered **less than significant**.

Commercial-Use Mechanical Equipment

Noise sources commonly associated with commercial and retail uses may include mechanical equipment such as back-up power generators, trash compactors, and refrigeration condensing units. Noise levels associated with these types of equipment can vary depending on various factors, including equipment size, location, and hours of operation. Based on measurement data obtained from representative equipment, operational noise levels associated with back-up power generators can reach levels of approximately 79 dBA L_{eq} at 50 feet (FTA 2018. FHWA 2008). Refrigeration condensers and trash compactors can generate noise levels of up to approximately 60 dBA L_{eq} at 50 feet. The installation and location of mechanical equipment is currently unknown. However, depending on operational characteristics and location, predicted noise levels could potentially exceed the City's daytime and nighttime noise standards of 55 and 45 dBA L_{eq}, respectively (refer to Table 7). As a result, noise generated by commercial-use mechanical equipment would be considered to have a **potentially significant impact**.

Compatibility of Proposed Land Uses with Predicted Future Traffic Noise Levels

As previously discussed, ambient noise levels at the project site are primarily influenced by vehicle traffic on the Orcutt Expressway and Union Valley Parkway. Orcutt Expressway extends in a general north-to-south direction along the western boundary of the project site. Union Valley Parkway extends through the center of the project site in a general west-to-east direction. Predicted future traffic noise contours for Union Valley Parkway and Orcutt Expressway are depicted in Figure 5.

Based on the traffic noise modeling conducted, predicted 70, 65, and 60 dBA CNEL noise contours for Orcutt Expressway would extend to approximately 120 feet, 370 feet, and 1,150 feet from the roadway centerline, respectively. The predicted future 65 and 60 dBA CNEL noise contours for Union Valley Parkway Road would extend to approximately 115 feet and 355 feet from the roadway centerline.

As depicted in Figure 5, predicted traffic noise levels at proposed multi-family land uses throughout most of the project site would be projected to exceed the City's exterior noise standard of 60 dBA CNEL/L_{dn}. Assuming an average exterior-to-interior noise reduction of 25 dBA, which is typical for new development, predicted interior noise levels at proposed residential land uses that exceed an exterior noise level of 60 dBA CNEL/L_{dn} would be projected to also exceed the City's interior noise standard of 45 dBA CNEL/L_{dn}. In addition, the proposed project also includes proposed parks, which are generally located south of E. Union Valley Parkway near the northeastern boundary of the proposed residential development, and east of Orcutt Road, west of the proposed residential development (refer to Figure 5). Predicted traffic noise levels at these proposed parks would be projected to exceed the City's exterior noise standard of 65 dBA CNEL/L_{dn}. No noise-sensitive non-residential land uses, such as hospitals or office buildings, are proposed. Because predicted future traffic noise levels at planned multi-family residential and park land uses would exceed applicable City's noise standards, this impact is considered **potentially significant**.

Figure 5. Predicted On-Site Traffic Noise Level Contours (dBA CNEL)



Mitigation Measures

Noise-1: The following mitigation measures shall be implemented to reduce long-term exposure to transportation and non-transportation noise:

a. A noise barrier shall be constructed along the western and northern portions of the proposed residential development, which is generally located south of E. Union Valley Parkway and east of Orcutt Road. The barrier shall be constructed to minimum height of six to eight feet above ground level. Recommended barrier locations and heights are depicted in Figure 6. Noise barriers may consist of walls, earthen berms, or a combination of the two. Barrier walls should be constructed of masonry block, or material of similar density and usage, with no visible air gaps at the base of the barrier or between construction materials.

b. A noise barrier shall be constructed along the northern boundary of the commercial land uses, which are generally located north of E. Union Valley Parkway and east of Orcutt Road of the project. The barrier shall be constructed to a minimum height of eight feet above ground level. Barrier walls should be constructed of masonry block, or material of similar density and usage, with no visible air gaps at the base of the barrier or between construction materials.

c. Loading docks shall be fitted with door seals and bumpers. The installation of dock seals would reduce loading dock noise levels by approximately 5 dBA, or more. When the loading dock is not in use, loading dock doors shall remain closed.

d. Commercial-use loading docks within 300 feet, drive-thru's within 90 feet, and carwash operations located within 1,400 feet of nearby residential land uses shall be limited to the daytime hours, unless otherwise approved by the City planning department. Prior to approval of nighttime operations, an acoustical assessment shall be prepared to evaluate potential noise impacts to nearby existing and proposed noise-sensitive land uses for operations proposed to occur during the nighttime hours. Where the acoustical assessment determines that operational noise levels would exceed the City's applicable night-time noise standards, site-design features and/or noise-reduction measures shall be incorporated sufficient to reduce operational noise levels to below the City's applicable night-time noise standards. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, hourly limitations, or equipment enclosures. The emphasis of such measures shall be placed upon site planning and project design. (Refer to Table 7 of this report for applicable City noise standards.)

e. The City shall require acoustical assessments to be prepared for the installation of major stationary noise sources (e.g., back-up power generators, air conditioning units, refrigeration condensers, trash compactors) to be located within exterior areas of proposed commercial uses. The acoustical assessments shall evaluate potential noise impacts to nearby existing and proposed noise-sensitive land uses. Where the acoustical analysis determines that stationary-source noise levels would exceed the City's applicable noise standards, site-design features/noise-reduction measures shall be incorporated sufficient to reduce operational noise levels to below applicable noise standards. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, hourly limitations, or equipment enclosures. The emphasis of such measures shall be placed upon site planning and project design. (Refer to Table 7 of this report for applicable City noise standards.)

f. An acoustical assessment shall be prepared for exterior commercial-use air conditioning units located within 300 feet of a noise-sensitive land use, and residential-use air conditioning units located within 105 feet of a noise-sensitive sensitive land use. The acoustical assessment shall evaluate operational noise levels in comparison to the City's daytime and nighttime noise standards. Where the acoustical assessment determines that operational noise levels would exceed the City's applicable noise standards, site-design features and/or noise-reduction measures shall be incorporated sufficient to reduce operational noise levels to below the City's applicable noise standards. Such measures may include locating equipment on rooftop areas, incorporation of additional shielding, selection of low-noise generation equipment, and/or incorporation of rooftop parapets.

Figure 6. Recommended Noise Barrier Locations



Locations are approximate. Not to scale.

Significance After Mitigation

Residential-Use AC Units

Implementation of MM Noise-1f would require an acoustical assessment to be prepared for residential-use air conditioning units. Where it is determined that noise levels would exceed applicable City noise standards, further site design features/noise-reduction measures shall be incorporated sufficient to reduce operational noise levels to below applicable noise standards. With mitigation, this impact would be considered **less than significant**.

Commercial-Use HVAC Units

Implementation of MM Noise-1f. would require an acoustical assessment to be prepared for commercial-use air conditioning units. Where it is determined that noise levels would exceed applicable City noise standards, further site design features/ noise-reduction measures shall be incorporated sufficient to reduce operational noise levels to below applicable noise standards. With mitigation, this impact would be considered **less than significant**.

Commercial-Use Loading Docks

Implementation of MM Noise-1b would require the installation of an 8-foot barrier along the northern project site boundary. With mitigation loading dock activity noise levels would be reduced by approximately 6 dBA. Implementation of MM Noise-1c would require the installation of dock seals, which would further reduce loading dock noise levels by a minimum of approximately 5 dBA. With mitigation, noise levels associated with loading dock activities would not exceed the City's daytime noise standard of 50 dBA L_{eq}. In accordance with MM Noise-1d loading dock activities would be limited to the daytime hours, unless otherwise approved by the City planning department. Prior to approval of nighttime operations, an acoustical assessment would be required for nighttime activities sufficient to demonstrate compliance with the City's nighttime noise standards. With mitigation, this impact would be considered **less than significant**.

Drive-Thru Restaurant

MM Noise-1b would require the installation of a noise barrier that would extend along Orcutt Road to heights ranging from six to eight feet above ground level (refer to Figure 6 for proposed barrier locations and heights). The proposed barrier would reduce operational noise levels at the nearest residential land uses by a minimum of 5 dBA to an estimated 52 dBA L_{eq}, or less, at the nearest residential land use. If drive-thru operation extends into the night, this noise level would exceed city standards. Depending on operational schedule, MM Noise-1d maybe required to reduce operational noise levels to below applicable nighttime noise standards. With mitigation, this impact would be considered **less than significant**.

Car Wash

The impact of the proposed carwash on the western side of the property would be reduced by the implementation of MM Noise-1a. Installations of a 6-foot barrier would reduce the noise level by 5 dBA to an estimated 54 dBA at the nearest residential land use. With mitigation, predicted operational noise levels would not exceed the City's daytime noise standard. In accordance with MM Noise-1d carwash operations would be limited to the daytime hours, unless otherwise approved by the City planning department. Prior to approval of nighttime operations, an acoustical assessment would be required for any nighttime operations sufficient to demonstrate compliance with the City's nighttime noise standards. With mitigation, this impact would be considered **less than significant**.

Commercial-Use Mechanical Equipment

Implementation of MM Noise-1e would require the preparation of noise assessments for commercial-use mechanical equipment (e.g., back-up power generators, trash compactors, and refrigeration condensers) would be reduced by MM Noise-1e. This will ensure any additional stationary source will receive and

acoustical assessment prior to installation to ensure noise levels would not exceed applicable noise standards. As a result, this impact would be considered **less than significant**.

Compatibility of Proposed Land Uses with Predicted Future Traffic Noise Levels

The impact of traffic noise levels would be reduced with implementation of Mitigation Measure (MM) Noise-1a, the installation of recommended noise barriers (refer to Figure 6), would reduce traffic noise levels by approximately 5 to 6 dBA. With mitigation, predicted future traffic noise levels at proposed residential land uses would be reduced to 60 dBA CNEL/L_{dn}, or less. Predicted future traffic noise levels at proposed park uses would be reduced to 65 dBA CNEL/L_{dn}, or less. With mitigation, proposed land uses would be consistent with the City noise standards and this impact would be considered **less than significant**.

Impact N-B. Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term construction activities. Groundborne vibration levels associated with representative construction equipment likely to be required during project construction are summarized in Table 12. As depicted, construction-generated vibration levels would range from approximately 0.003 to 0.21 in/sec ppv at 25 feet. The highest vibration levels would be associated with the use of vibratory rollers.

Table 12. Representative Vibration Levels for Construction Equipment

Equipment	Vibration Level at 25 Feet (in/sec, ppv)
Vibratory Roller	0.21
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozers/Tractors	0.003

in/sec = Inch per second; ppv = Peak particle velocity
Source: FTA 2018

The nearest existing structures are residential structures located approximately 35 feet to the east, residences 35 feet to the north, and a church 175 feet to the south. Predicted groundborne vibration levels at these nearby structures are summarized in Table 13. As shown in Table 13, predicted construction vibration levels at nearby structures would not exceed the minimum recommended criteria for structural damage or human annoyance (0.5 and 0.2 in/sec ppv, respectively). Predicted groundborne vibration levels at the nearest off-site structures associated with construction activities would not exceed commonly applied thresholds for potential structural damage or human annoyance. As a result, this impact would be considered **less than significant**.

Table 13. Predicted Groundborne Vibration Levels at Nearby Structures

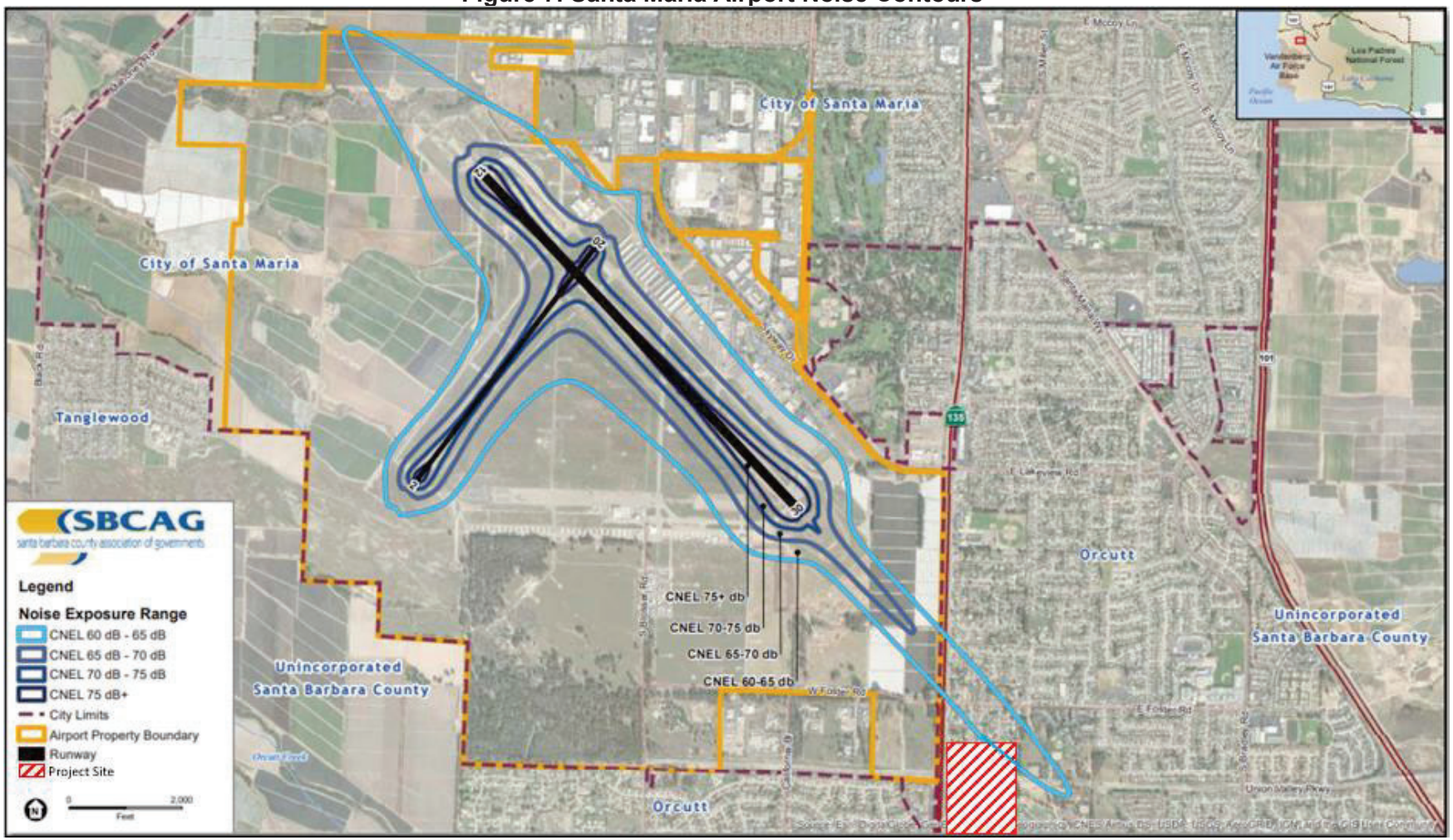
Nearby Land Use Structures	Distance from Project Boundary (feet)	Vibration Level (in/sec, ppv)
Residential	35	0.136
Residential	35	0.136
Church	175	0.017

in/sec = Inch per second; ppv = Peak particle velocity
Based on the highest construction equipment vibration levels anticipated for this project (0.21 in/sec ppv).

Impact N-C. 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 expose people residing or working in the project area to excessive noise levels? and for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport is the Santa Maria Airport, which is located approximately 1 mile northwest of the project site. The northeast corner of the project site consisting of proposed commercial development is located within the 60 dBA CNEL noise contour. However, the proposed residential portion of the project site is not located within the projected 60 dBA CNEL noise contour of the airport. Refer to Figure 7 for noise contours of the Santa Maria Airport. Figure 8 depicts the projected airport noise contours overlaid onto the project site. The proposed project would not result in exposure of individuals to aircraft noise levels that would exceed applicable noise standards. In addition, predicted aircraft noise levels at the project site would be largely masked by roadway traffic noise emanating from area roadways. As a result, this impact would be considered **less than significant.**

Figure 7. Santa Maria Airport Noise Contours



Source: Santa Barbara Municipal Airport Master Plan Final EIR, 2017

Figure 8. Santa Maria Airport Noise Contours – Project Site Plan



Source: Santa Barbara Municipal Airport Master Plan Final EIR, 2017

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APPENDIX A

Ambient Noise Monitoring

NOISE MEASUREMENT SURVEY FORM

SHEET 1 OF 2

DATE:	4/6/2022 & 4/12/2022
PROJECT:	Santa Maria Richards Ranch
LOCATION:	Orcutt/Santa Maria
MONITORING STAFF:	Trevor Burmester

LOCATION MAP: *(include a map of noise measurement locations AND photographs for measurement locations on attached worksheet. Include additional sheets as necessary. Where possible include GPS coordinates.)*



NOISE MEASUREMENT CONDITIONS & EQUIPMENT

MET CONDITIONS & MONITORING EQUIPMENT:	TEMP: 82 F. | HUMIDITY: 23% | WIND SPEED: 9MPH | WIND DIR: NNE | GROUND: Soft					
	CLOUD COVER BY CLASS (OC=OVERCAST):	2	(1. HEAVY OC, 2. LIGHT OC, 3. SUNNY, 4. CLEAR NIGHT, 5. OC NIGHT)			
	MET. METER:					
NOISE MONITORING EQUIPMENT:	LARSON DAVIS SLM MODEL:			S/N:		
	MICROPHONE:			S/N:		
	CALIBRATOR:			S/N:		
NOISE MONITORING SETUP:	WITHIN 10 FT OF REFLECTIVE SURFACE?:	NO	MICROPHONE HEIGHT AGL (FT):	5		
	CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS:	Yes	METER SETTINGS:	A-WHT	SLOW	

NOISE & TRAFFIC MEASUREMENTS

MEASUREMENT		DURATION			MEASURED NOISE LEVELS			
LOCATION	DATE/TIME	(Minutes)	MEASUREMENT LOCATION	PRIMARY NOISE SOURCES NOTED	LEQ	LMIN	LMAX	
LT1	4/12/22 9:57am	24 Hours	Lat 34.879042, Long -120.431864	Traffic from UVP, Orcutt Rd, and Birds	68.86 CNEL			
LT2	4/12/22 10:07am	24 hours	Lat 34.876905, Long -120.435990	Traffic from Orcutt Expy and Orcutt Rd.	64.46 CNEL			
ST1	4/6/22 10:15am	10 Min	Lat 34.879221, Long -120.431946	Traffic from UVP, Orcutt Rd, and Birds	68.8 dB			
ST2	4/6/22 10:34am	10 Min	Lat 34.876777, Long -120.434603	Traffic in Distance and Birds	49.1 dB			
ST3	4/6/22 10:52am	10 Min	Lat 34.875916, Long -120.432504	Traffic in Distance, Wind, and Birds	48.2 dB			
ST4	4/6/22 11:05am	10 Min	Lat 34.878065, Long -120.431599	Traffic in Distance and Birds	50.2 dB			
ST5	4/6/22 11:24am	10 Min	Lat 34.881147, Long -120.434223	Traffic in Distance and Birds	46.6 dB			
ST6	4/6/22 11:35am	10 Min	Lat 34.880433, Long -120.435298	Traffic along Orcutt Rd, Orcutt Expy, and Planes	61.1 dB			
ST7	4/12/22 10:57am	10 Min	Lat 34.877398, Long -120.436328	Traffic along Orcutt Expy	68.1 dB			

TRAFFIC COUNTS		DURATION	TRAFFIC DIRECTION/	VEHICLE CLASSIFICATION					AVG. VEHICLE SPEEDS		
LOCATION	DATE/TIME	(Minutes)	LANE ASSIGNMENT	LDV	MDV	HDV	MC	BUS	HOV	MAIN	TRUCK
ST1	4/6/22 10:15am	5 Min	UVP-Both Directions	64	4	2	0	0	0	0	0
ST6	4/6/22 11:35am	5 Min	Orcutt Rd- Both Directions	8	0	0	0	0	0	0	0

VEHICLE COUNTS: ☐ MANUALLY ☐ VIDEO

VEHICLE SPEEDS: ☐ IN TRAFFIC ☐ RADAR

NOISE MEASUREMENT SURVEY FORM

SHEET	2	OF	2

DATE:	4/6/2022
PROJECT:	Santa Maria Richards Ranch
LOCATION:	Santa Maria/Orcutt
MONITORING STAFF:	Trevor Burmester

SITE PHOTO(S): (Refer to data sheets for noise measurement locations)

MEASUREMENT LOCATION 1



MEASUREMENT LOCATION 2



MEASUREMENT LOCATION 3



MEASUREMENT LOCATION 4



MEASUREMENT LOCATION 5



MEASUREMENT LOCATION 6



APPENDIX B

Noise Modeling & Supportive Documentation

Predicted Traffic Noise Levels - Existing									
	Existing Noise Level - dBA CNEL/Ldn								
	Avg	Avg			at 50ft	Distance to Contours			
Roadways	Lanes	Speeds	AM Vol	ADT	NTLCL	55 CNEL	60 CNEL	65 CNEL	70 CNEL
Foster Rd (West Rd Orcutt Expressway)	2	40	470	4,700	62.6	320.5	101.5	0	0
Foster Rd (East of Orcutt Expressway	2	40	732	7,320	64.53	499.1	157.9	0	0
Orcutt Expressway (North of Foster Rd)	4	55	2,664	26,640	72.36	4024.9	1273.2	403.7	130.7
Orcutt Expressway (South of Foster Rd)	4	55	2,272	22,720	71.67	3432.7	1086	344.6	112.6
Foxenwood Ln (North of UVP)	2	45	93	930	56.81	85.2	0	0	0
Foxenwood Ln (South of UVP)	2	45	314	3,140	62.12	286.9	90.9	0	0
UVP (West of Foxenwood Ln)	4	45	486	4,860	62.88	443.4	142.5	0	0
UVP (East of Foxenwood Ln)	4	45	771	7,710	64.89	702.6	223.7	75.2	0
Orcutt Expressway (North of UVP)	4	55	2,272	22,720	71.67	3432.7	1086	344.6	112.6
Orcutt Expressway (South of UVP)	4	55	2,269	22,690	71.66	3428.2	1084.6	344.2	112.4
UVP (West of Orcutt Expressway)	4	45	775	7,750	64.61	705.8	225.6	78.6	0
UVP (East of Orcutt Expressway)	4	45	1,436	14,360	67.03	1305.7	414.9	137.1	0
Orcutt Rd (North of UVP)	2	40	180	1,800	58.43	122.9	0	0	0
Orcutt Rd (Sorth of UVP)	2	40	474	4,740	62.64	323.3	102.4	0	0
UVP (West of Orcutt Rd)	4	45	1,425	14,250	67.32	1296.9	411.3	133.8	0
UVP (East of Orcutt Rd)	4	45	1,319	13,190	66.97	1200.5	381	124.5	0
Hummel Dr (North of UVP)	2	40	58	580	53.52	0	0	0	0
Hummel Dr (South of UVP)	2	40	109	1,090	56.26	74.6	0	0	0
UVP (West of Hummel Rd)	3	45	1,319	13,190	67.97	1203.7	380.9	121	0
UVP (East of Hummel Rd)	3	45	1,358	13,580	68.09	1239.3	392.1	124.5	0
Bradley Rd (North of UVP)	4	45	544	5,440	63.64	496.3	158.2	0	0
Bradley Rd (South of UVP)	4	45	753	7,530	65.05	686.6	218	71.8	0
UVP (West of Bradley Rd)	4	45	1,046	10,460	66.05	952.4	302.6	100.1	0
UVP (East of Bradley Rd)	4	45	1,135	11,350	66.4	1033.4	328.1	107.9	0
NTLCL=Near Travel Lane Centerline									
ADT calculated based on pk-hr volumes and a k-factor of 0.10.									

	Predicted Traffic Noise Levels - Weekdays									
	Existing Plus Project - dBA CNEL/Ldn									
	Avg	Avg			at 50ft	Distance to Contours				
Roadways	Lanes	Speeds	AM Vol	ADT	NTLCL	55	60	65	70	Change at 50ft NTLCL
Foster Rd (West Rd Orcutt Expressway)	2	40	499	4,990	62.86	340.3	107.8	0	0	0.26
Foster Rd (East of Orcutt Expressway	2	40	732	7,320	64.53	499.1	157.9	0	0	0
Orcutt Expressway (North of Foster Rd)	4	55	2,828	28,280	72.62	4272.7	1351.6	428.4	138.4	0.26
Orcutt Expressway (South of Foster Rd)	4	55	2,448	24,480	71.99	3698.6	1170.1	371.1	120.7	0.32
Foxenwood Ln (North of UVP)	2	45	93	930	56.84	85.2	0	0	0	0.03
Foxenwood Ln (South of UVP)	2	45	333	3,330	62.38	304.3	96.4	0	0	0.26
UVP (West of Foxenwood Ln)	4	45	545	5,450	63.38	497	159.3	0	0	0.5
UVP (East of Foxenwood Ln)	4	45	849	8,490	65.3	773.5	246	81.9	0	0.41
Orcutt Expressway (North of UVP)	4	55	2,442	24,420	71.98	3689.6	1167.2	370.2	120.4	0.31
Orcutt Expressway (South of UVP)	4	55	2,328	23,280	71.77	3517.3	1112.7	353	115.2	0.11
UVP (West of Orcutt Expressway)	4	45	853	8,530	65.02	776.7	247.8	85	0	0.41
UVP (East of Orcutt Expressway)	4	45	2,116	21,160	68.71	1923.3	609.6	196.8	73.9	1.68
Orcutt Rd (North of UVP)	2	40	573	5,730	63.46	390.7	123.7	0	0	5.03
Orcutt Rd (Sorth of UVP)	2	40	731	7,310	64.52	498.4	157.7	0	0	1.88
UVP (West of Orcutt Rd)	4	45	2,050	20,500	68.9	1865.3	590.7	189.4	67.5	1.58
UVP (East of Orcutt Rd)	4	45	1,539	15,390	67.64	1400.6	444.1	143.9	0	0.67
Hummel Dr (North of UVP)	2	40	162	1,620	57.98	110.6	0	0	0	4.46
Hummel Dr (South of UVP)	2	40	268	2,680	60.16	182.8	58.1	0	0	3.9
UVP (West of Hummel Rd)	3	45	1,637	16,370	68.9	1493.9	472.6	149.9	0	0.93
UVP (East of Hummel Rd)	3	45	1,657	16,570	68.96	1512.2	478.4	151.7	0	0.87
Bradley Rd (North of UVP)	4	45	583	5,830	63.94	531.7	169.3	57.1	0	0.3
Bradley Rd (South of UVP)	4	45	802	8,020	65.33	731.2	232.1	73.1	0	0.28
UVP (West of Bradley Rd)	4	45	1,270	12,700	66.89	1156.2	366.8	119.7	0	0.84
UVP (East of Bradley Rd)	4	45	1,271	12,710	66.89	1157.1	367.1	119.8	0	0.49
NTLCL=Near Travel Lane Centerline										
ADT calculated based on pk-hr volumes and a k-factor of 0.10.										

Predicted Traffic Noise Levels - Cumulative									
	Cumulative Noise Level - dBA CNEL/Ldn								
	Avg	Avg			at 50ft	Distance to Contours			
Roadways	Lanes	Speeds	AM Vol	ADT	NTLCL	55 CNEL	60 CNEL	65 CNEL	70 CNEL
Foster Rd (West Rd Orcutt Expressway)	2	40	923	9,230	65.53	629.3	199.1	63.2	0
Foster Rd (East of Orcutt Expressway	2	40	803	8,030	64.93	547.5	173.2	55.1	0
Orcutt Expressway (North of Foster Rd)	4	55	3,127	31,270	73.05	4724.4	1494.4	473.5	152.4
Orcutt Expressway (South of Foster Rd)	4	55	2,476	24,760	72.04	3740.9	1183.4	375.3	122
Foxenwood Ln (North of UVP)	2	45	311	3,110	62.08	284.2	90.1	0	0
Foxenwood Ln (South of UVP)	2	45	325	3,250	62.27	297	94.1	0	0
UVP (West of Foxenwood Ln)	4	45	553	5,530	63.44	504.3	161.5	57.1	0
UVP (East of Foxenwood Ln)	4	45	1,011	10,110	66.06	921	292.4	95.9	0
Orcutt Expressway (North of UVP)	4	55	2,486	24,860	72.06	3756	1118.2	376.8	122.5
Orcutt Expressway (South of UVP)	4	55	2,512	25,120	72.1	3795.3	1200.6	380.7	123.7
UVP (West of Orcutt Expressway)	4	45	1,136	11,360	66.27	1033.9	328.6	109	0
UVP (East of Orcutt Expressway)	4	45	1,612	16,120	67.53	1465.6	465.2	152.4	0
Orcutt Rd (North of UVP)	2	40	192	1,920	57.71	131.1	0	0	0
Orcutt Rd (Sorth of UVP)	2	40	482	4,820	62.71	328.7	104.1	0	0
UVP (West of Orcutt Rd)	4	45	1,601	16,010	67.82	1457	461.8	149.3	0
UVP (East of Orcutt Rd)	4	45	1,499	14,990	67.52	1364.2	432.6	140.4	0
Hummel Dr (North of UVP)	2	40	134	1,340	57.15	91.6	0	0	0
Hummel Dr (South of UVP)	2	40	240	2,400	59.68	163.7	52.1	0	0
UVP (West of Hummel Rd)	3	45	1,537	15,370	68.63	1402.7	443.7	140.8	0
UVP (East of Hummel Rd)	3	45	1,613	16,130	68.84	1472	465.7	147.7	0
Bradley Rd (North of UVP)	4	45	633	6,330	64.3	577.3	183.6	61.4	0
Bradley Rd (South of UVP)	4	45	901	9,010	65.83	821.4	260.5	84.8	0
UVP (West of Bradley Rd)	4	45	1,223	12,230	66.73	1113.4	353.4	115.6	0
UVP (East of Bradley Rd)	4	45	1,285	12,850	66.94	1169.8	371.1	121	0
NTLCL=Near Travel Lane Centerline									
ADT calculated based on pk-hr volumes and a k-factor of 0.10.									

	Predicted Traffic Noise Levels - Weekdays									
	Cumulative Plus Project - dBA CNEL/Ldn									Change
	Avg	Avg			at 50ft	Distance to Contours				at 50ft
Roadways	Lanes	Speeds	AM Vol	ADT	NTLCL	55	60	65	70	NTLCL
Foster Rd (West Rd Orcutt Expressway)	2	40	938	9,380	65.6	639.5	202.3	64.2	0	0.07
Foster Rd (East of Orcutt Expressway	2	40	803	8,030	64.93	547.5	173.2	55.1	0	0
Orcutt Expressway (North of Foster Rd)	4	55	3,291	32,910	73.28	4972.2	1572.7	498.2	160.1	0.23
Orcutt Expressway (South of Foster Rd)	4	55	2,652	26,520	72.34	4006.8	1267.5	401.8	130.2	0.3
Foxenwood Ln (North of UVP)	2	45	411	4,110	63.29	375.5	118.9	0	0	1.21
Foxenwood Ln (South of UVP)	2	45	344	3,440	62.52	314.3	99.6	0	0	0.25
UVP (West of Foxenwood Ln)	4	45	612	6,120	63.88	557.9	178.3	61.9	0	0.44
UVP (East of Foxenwood Ln)	4	45	1,089	10,890	66.39	992	314.8	102.8	0	0.33
Orcutt Expressway (North of UVP)	4	55	2,653	26,530	72.34	4008.3	1268	402	130.2	0.28
Orcutt Expressway (South of UVP)	4	55	2,571	25,710	72.2	3884.4	1228.8	389.6	126.4	0.1
UVP (West of Orcutt Expressway)	4	45	1,216	12,160	66.56	1106.7	351.5	115.9	0	0.29
UVP (East of Orcutt Expressway)	4	45	2,292	22,920	69.06	2083.2	660	212.5	78.1	1.53
Orcutt Rd (North of UVP)	2	40	549	5,490	63.28	374.4	118.5	0	0	5.57
Orcutt Rd (Sorth of UVP)	2	40	739	7,390	64.57	503.8	159.4	50.7	0	1.86
UVP (West of Orcutt Rd)	4	45	2,226	22,260	69.26	2025.4	641.3	205.2	72	1.44
UVP (East of Orcutt Rd)	4	45	1,836	18,360	68.4	1670.6	529.3	170.3	62.4	0.88
Hummel Dr (North of UVP)	2	40	162	1,620	57.98	110.6	0	0	0	0.83
Hummel Dr (South of UVP)	2	40	268	2,680	60.16	182.8	58.1	0	0	0.48
UVP (West of Hummel Rd)	3	45	1,817	18,170	69.36	1658	524.5	166.3	53.8	0.73
UVP (East of Hummel Rd)	3	45	1,837	18,370	69.4	1676.3	530.3	168.1	54.4	0.56
Bradley Rd (North of UVP)	4	45	672	6,720	64.56	612.8	194.8	64.8	0	0.26
Bradley Rd (South of UVP)	4	45	950	9,500	66.06	866	274.6	89.1	0	0.23
UVP (West of Bradley Rd)	4	45	1,447	14,470	67.46	1317.2	417.6	135.3	0	0.73
UVP (East of Bradley Rd)	4	45	1,421	14,210	67.38	1293.6	410.2	133	0	0.44
NTLCL=Near Travel Lane Centerline										
ADT calculated based on pk-hr volumes and a k-factor of 0.10.										

APPENDIX K

Water Supply Assessment

FINAL

WATER SUPPLY ASSESSMENT

RICHARDS RANCH

CITY OF SANTA MARIA

April 2022

TODD GROUNDWATER

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Alameda, CA 94501
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Figure 1. Santa Maria Groundwater Basin

Figure 2. Project Plan

Attachments

Attachment A. GSWC Preliminary Can/Will Serve Letter

Attachment B. City of Santa Maria Supplemental Water

1. INTRODUCTION

This Water Supply Assessment (WSA) was prepared for the Richards Ranch (Project), proposed to be located in the Orcutt area of unincorporated Santa Barbara County. The City of Santa Maria is currently considering annexation of the property pending the Environmental Impact Report (EIR). If annexed and approved, the Project will include 400 apartments units, 95 townhomes, and commercial areas.

This WSA provides technical support to the City of Santa Maria (City), the lead agency, in complying with the California Environmental Quality Act (CEQA) and developing an EIR for the Project. The WSA focuses on availability of sustainable water supply for the proposed Project. The property is currently in the Orcutt Service Area of Golden State Water Company (GSWC), which is anticipated to serve the project. GSWC has provided a preliminary will serve letter, included as **Attachment A**. Additional studies may be needed to ensure adequate infrastructure is in place for the Project.

The Project would be located in northwestern Santa Barbara County within the Santa Maria Groundwater Basin and just outside the City of Santa Maria (**Figure 1**)[1]. MD3 Investments is the Project proponent. The Project area boundary is located east of Orcutt Expressway, along Union Valley Parkway (**Figure 2**). The Project would encompass 16.24 acres of commercial uses including a grocery store, restaurants, gas stations, and mini storage and 27.4 acres of residential area including 400 apartments and 95 townhomes. The land is currently vacant.

As shown in **Figure 1**, the Project area is located within the Santa Maria Valley Management Area (SMVMA) of the adjudicated Santa Maria Groundwater Basin. Current conditions of the SMVMA are documented in the 2020 Annual Report of Hydrogeologic Conditions, Water Requirements, Supplies, and Disposition (LSCE, 2021).

1.1. BACKGROUND

The California Water Code Section 10910 (also termed Senate Bill 610 or SB610) requires that a Water Supply Assessment (WSA) be prepared for a project that is subject to the California Environmental Quality Act (CEQA) and is considered a project subject to SB610 as defined in Water Code Section 10912. Under the California Water Code Section 10912, a residential or commercial "project" is any of the following:

- A proposed residential development of more than 500 dwelling units
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 units square feet of floor space
- A mixed-use project that includes one or more of the projects specified in Section 10912

[1] All figures and tables are presented at the end of this WSA.

- A project that would demand an amount of water equal to, or greater than, the amount of water required by a 500-dwelling unit project.

The Richards Ranch Project includes 495 residential units and additional commercial uses. The total water demand will exceed the threshold for the amount of water required by a 500-dwelling unit project. A WSA is needed for this Project.

1.2. PURPOSE AND ORGANIZATION

The purpose of this WSA is to document the SMVMA, GSWC service area, and the City's available water demand and supply, including that of the proposed Project. This comparison, conducted for both normal and drought conditions in five-year increments to 2045, is the basis for an assessment of water supply sufficiency in accordance with California Water Code Section 10910 (SB610).

The WSA incorporates current and future water supply and demand information from the GSWC 2020 Urban Water Management Plan (UWMP) (Tully and Young, 2021), City of Santa Maria UWMP (Provost and Pritchard, 2021), SMVMA Annual Report (LSCE, 2021) and other available regional documents regarding water supplies, current water use, and estimated water use of the Project. The analysis extends to 2045, addresses water demands in five-year increments, and provides information consistent with SB610 WSA requirements.

This WSA is organized to be easily read and understood, as follows:

- Section 1 introduces the Project and provides background information.
- Section 2 provides a regulatory background for the use of water resources for the Project.
- Sections 3 and 4 discuss water demand. Section 3 provides Project information and focuses on the current and proposed water demands. Section 4 provides the context of the area's current and projected water demands in normal and drought years.
- Section 5 documents the area's existing and future supplies and allocation of those supplies. The Project is in an adjudicated basin where groundwater use is controlled by a court judgment. Additional agreements are needed to ensure that water supply is available for the Project.
- Section 6 discusses the Project water supply.
- Section 7 contains a comparison of water supply and demand (in normal and drought years) that fulfills the intent of SB610.
- Section 8 summarizes the WSA conclusions.

2. GROUNDWATER RIGHTS AND MANAGEMENT

The following section summarizes water rights and management as applicable to the use of water resources for the Richards Ranch Project.

2.1. GROUNDWATER RIGHTS IN CALIFORNIA

In California, the State Water Resources Control Board (SWRCB) administers water rights law. A water right is legal permission to use a reasonable amount of water for beneficial purposes. Statutory and case law in California distinguish between groundwater and surface water. Groundwater is considered either percolating or a subterranean stream flowing through known and defined channels. The SWRCB issues permits for diversion of subterranean stream water, which generally moves through permeable streambed material following the course of a stream. However, most groundwater in California is considered to be percolating groundwater which is not regulated by the SWRCB unless it is being used for wasteful or unreasonable purposes or the use harms state resources. Although not regulated by the State, some groundwater use can be regulated by local entities such as a county, groundwater management district, or Groundwater Sustainability Agency (see information on Sustainable Groundwater Management Act below).

Overlying groundwater rights allow a landowner to use percolating groundwater on the overlying property. Overlying rights are usually not limited by history or frequency of use and are considered correlative rights where they are of equal priority to one another. If supply insufficiency exists, the water may be apportioned among the landowners by a court decree. If groundwater is used elsewhere, it becomes an appropriative groundwater right; for example, municipal use is considered an appropriative groundwater right. Appropriative rights are limited by historical use and priority is determined on a first-in-time, first-in-right basis between appropriators. Appropriative groundwater rights are junior to overlying groundwater rights. A third type of groundwater right is a prescriptive groundwater right and is acquired through open use and claim of groundwater from an existing prior right. The use must be continuous and uninterrupted for a period of five years and is granted by a court.

Groundwater rights can also be quantified through adjudication. State courts and occasionally the SWRCB can adjudicate a groundwater basin if competing demands become too great and lawsuits arise. In an adjudicated basin, water rights are allocated to the users based on complex legal and factual issues. There are 22 adjudicated groundwater basins in California. The Project is in the Santa Maria Valley Management Area (SMVMA) which is part of the adjudicated Santa Maria Groundwater Basin.

2.2. SANTA MARIA GROUNDWATER BASIN ADJUDICATION

The Santa Maria Groundwater Basin entered into adjudication, a legal process that allocated natural supply to producers in the basin to address the water supply shortages. The adjudication was established through the 2005 Stipulated Judgment by the Superior Court

of the State of California, County of Santa Clara (Stipulation). The Groundwater Basin was divided into three Management Areas: SMVMA, Northern Cities Management Area, and the Nipomo Management Area as shown in **Figure 1**. The Stipulation requires that the Twitchell Management Authority (TWA) complete an annual report to assess and account for water demand and supply.

2.3. SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Sustainable Groundwater Management Act (SGMA), enacted as of January 1, 2015, provides a framework for sustainable management of groundwater resources by local agencies and lays out a process and timeline for local agencies to achieve sustainability. SGMA is directed at groundwater basins or subbasins that have been designated by California Department of Water Resources (DWR) as medium- or high-priority. Of the 515 groundwater basins in California, 127 were assigned high and medium priority. The Project site overlies the Santa Maria Groundwater Basin (DWR Basin 3-012), which has been designated high priority (DWR, 2018).

SGMA has different requirements for basins that have been, or are being, adjudicated. Among other requirements, watermasters or local agencies in adjudicated basins must submit to DWR an annual report containing the following information to the extent available for the portion of the basin subject to the adjudication:

- Groundwater elevation data (unless otherwise submitted pursuant to Water Code Section 10932)
- Annual aggregated data identifying groundwater extraction for the preceding water year
- Surface water supply used for or available for use for groundwater recharge or in-lieu use
- Total water use
- Change in groundwater storage
- The annual report submitted to the court.

Luhdorff & Scalmanini Consulting Engineers (LSCE) prepares the annual report on behalf of the TWA for the SMVMA (LSCE, 2021). The other management areas submit separate annual reports.

2.4. MANAGEMENT PLANNING

The Project area is addressed in several water supply-related planning documents including the Annual Reports of the SMVWA and GSWC Orcutt Service Area Urban Water Management Plan (UWMP) (Tully and Young, 2021).

The Annual Reports are prepared to comply with the adjudication judgment. The most recent report states the Basin is not in a state of water shortage but notes that groundwater pumping increased in the past year due in part to the reduced imported supplies. The

Annual Report recommends augmented groundwater recharge to alleviate groundwater level declines in the SMVMA.

The UWMP (Tully and Young, 2021) was prepared for GSWC for the Orcutt Service Area. UWMPs are intended to guide water management planning activities over a 20-year period. The GSWC UWMP documents water sources, water demands, water reliability planning, and water demand management through 2045.

3. PROJECT DESCRIPTION AND WATER DEMANDS

This section addresses water demands for the existing property and presents water demand estimates for the proposed project. The next section, Section 4, *Water Demand*, presents the area's current and projected demands.

3.1. CURRENT SITE WATER USE

The Project site is currently vacant, and no water use is assumed.

3.2. PROPOSED PROJECT WATER DEMAND

The proposed Project water demand comprises two main uses: residential and commercial; these are summarized in **Table 1**. Demands were calculated by GSWC and are consistent with their methodology to estimate supplemental water for all new users requesting water service (GSWC, 2022). The GSWC analysis includes the following factors, used in **Table 1**:

- Apartments – 0.23 AFY per unit.
- Townhomes – 0.25 AFY per unit.
- Commercial (retail/grocer) – 3.3 AFY total. This includes water uses for 10.06 acres of retail and the grocery store.
- Commercial – 0.11 AFY per 1,000 sq. ft. This includes water uses for the restaurants.
- Mini storage – 0.11 AFY per 1,000 sq. ft.

Given the above, total water use for the proposed Project is estimated to be 149.05 AFY (**Table 1**).

This estimate is higher than the demand calculated using the County of Santa Barbara Environmental Threshold and Guidelines (Santa Barbara County, 2021), which amounted to 121 AFY. The Environmental Thresholds were originally developed in 1995 to standardize the use and application of various environmental impact thresholds across the entire county. While the demand based on the 1995 County Guidelines is likely conservative (not updated with recent plumbing code changes, indoor water conservation practices, and drought tolerant landscape designs), the higher project demand calculated using the GSWC water demand estimates is specific to GSWC and the project. The GSWC estimate is somewhat more conservative and may overestimate future demand of the Project, but the GSWC estimate is project specific and is deemed reasonable.

The County of Santa Barbara thresholds allow projects to claim a consumptive use factor (CUF). This factor adjusts the gross water demand to account for return flows to the groundwater basin (either from irrigation return flows or wastewater percolation). The CUF in the Orcutt area is 0.70 and accounts for the Orcutt formation (clay layer that impedes infiltration (Santa Barbara County, 2021). GSWC also considers the consumptive use factor in their estimated water demand (**Table 1**). The adjusted consumptive use of the Project is 104 AFY.

4. WATER DEMAND

This section summarizes the current and projected water demands for the GSWC Orcutt Service Area. The subsections below describe the factors affecting total water demand, including population and climate under normal climatic conditions and during droughts.

4.1. CLIMATE

Climate has a significant influence on water demand on a seasonal and annual basis and is regularly tracked and reported in UWMPs, among other documents. Climate change effects also are identified.

Climate data are available from the California Irrigation Management Information System (CIMIS), which includes stations throughout California to record precipitation, evapotranspiration, and temperature. The Santa Maria II station is located three miles northwest of the Project Area. Average annual precipitation in the area from 1981-2019 was approximately 13.3 inches (PRISM, 2022). **Table 2** summarizes representative climate data from the Orcutt UWMP, including average monthly and annual rainfall, temperature, and evapotranspiration (ETo). The groundwater basin has experienced several years of drought. In the last 10 years, the average precipitation was only 7.6 inches compared to the 13.3 inches recorded as the long-term average.

In addition to short-term variability, climate change affects global and local climate patterns. Potential climate changes that may affect the Orcutt area water supply and use include (Tully and Young, 2021):

- Higher temperatures and heat waves that increase water demand
- Decrease in precipitation
- More intense individual storm events
- Increased flooding
- Less coastal fog
- Change in runoff patterns that can affect water storage planning
- Increased evaporation will create a generally drier climate
- Increased burn area from wildfires
- Groundwater basins likely to receive less replenishment.

4.2. POPULATION

Current and projected population estimates for the Orcutt Service Area are shown in **Table 3**. These estimates are from the GSWC 2020 UWMP (Tully and Young, 2021) and reflect the projected development of the area consistent with the Land Use Element of the General Plan 2016 (Santa Barbara County, 2016) and the Orcutt Community Plan (Santa Barbara County, 2020).

4.3. CURRENT AND PROJECTED WATER DEMAND

The GSWC Orcutt UWMP details the water demand for the Orcutt Service Area (Tully and Young, 2021). Current and projected annual demands are summarized in **Table 4** in 5-year increments to 2045. By 2045, total water demands are expected to increase by 21 percent, driven by increases in residential and commercial uses.

The Orcutt Community Plan (OCP) included the project site, Richards Ranch, as one of 43 Key Sites, in other words, underdeveloped parcels that have the greatest potential for development which would have "community-wide influence." The OCP includes information about potential development but includes specifics for a previously proposed project, not the one currently under consideration (Santa Barbara County, 2020). GSWC does not include undeveloped properties in their future demand projections.

5. WATER SUPPLY

The Richards Ranch Project is located in the SMVMA of the Santa Maria Groundwater Basin (Basin) (see **Figure 1**). Water production rights within the SMVMA watershed were adjudicated in 2008. Water supply in Basin includes State Water Project (SWP) imported water, return flows from SWP, Twitchell Dam, and groundwater.

5.1. GEOLOGY AND GROUNDWATER BASINS

The Basin is bounded on the north by the San Luis and Santa Lucia Ranges, on the east by the San Rafael Mountains, on the south and southwest by the Solomon and Casmalia hills, and on the west by the Pacific Ocean. An adjacent groundwater basin, San Antonio Creek Valley Groundwater Basin, is located to the south (DWR 2004).

In the Orcutt area, the aquifer consists of dune sands, the Orcutt Formation and the Paso Robles/Careaga Formations. Detailed cross sections are presented in the 2020 Annual Report (LSCE, 2021). Groundwater is unconfined throughout most of the Basin except in the coastal portion where it is confined.

The Holocene and Pleistocene dune deposits consist of well-rounded, fine- to coarse-grained sand. Holocene dune deposits, typically found along a coastal belt but also are present in the Orcutt area, attain a maximum thickness of 100 feet. The Pleistocene age Orcutt Formation consists of sand and interbeds of coarse gravel, with minor amounts of silt and clay restricted in the upper parts of the unit. The Orcutt Formation can reach a maximum thickness of 225 feet. The Paso Robles/Careaga Formations underlie the Orcutt Formation and typically consist of unconsolidated to poorly consolidated coarse to fine-grained gravel, sand, silt, and clay. The Careaga Formation is described as unconsolidated deposits of fine- to medium-grained, marine sand with some silt. Thickness of this unit ranges from 50 to 2,250 feet thick in the groundwater basin and is approximately 2,000 feet thick in the Orcutt area (DWR, 2004).

The Santa Maria fault, east of Orcutt, displaces Pliocene units vertically by about 150 feet, and a steepening of the hydraulic gradient near the trace of this fault indicates that this fault is a partial barrier to groundwater flow (SBCWA, 1977).

5.1.1. Groundwater Levels and Flow

Groundwater levels in the Santa Maria Groundwater Basin have varied over time responding to climate conditions, availability of surface water, and changes in groundwater pumping. Groundwater levels beneath Santa Maria Valley generally declined during 1945 through 1977, recovered by about 1986, declined again until about 1992, then recovered to near historical high levels by 1998 (DWR, 2002).

Groundwater levels declined again around 2002, due to reduced releases from Twitchell Reservoir on the Cuyama River north of Santa Maria Valley. There were no Twitchell

Reservoir releases in 11 of the last 19 years, including 2013 through 2016. This reduction in groundwater recharge from the reservoir releases resulted in groundwater declines. Releases resumed for part of the year in 2017 and 2018 and the entire year of 2019. Years with sufficient recharge helped replenish groundwater storage (LSCE, 2021)

Shallow and deep groundwater levels across most of the SMVMA remained slightly above historical low levels in 2020. This includes along the coast where groundwater levels are well above sea level, indicating that the conditions conducive to sea water intrusion are absent. As such, the groundwater level conditions observed in 2020 in the SMVMA do not meet Stipulation provisions defining a condition of severe water shortage.

5.1.2. Groundwater Quality

Groundwater quality monitoring in the region is conducted primarily by the water retailers including the City and GSWC. The U.S. Geological Survey also collects water quality samples but the number of wells monitored was decreased in 2020. Groundwater character in this Basin is variable and classified as a mixed–ion type, where there is no dominant cation or anion (DWR, 2002). The general mineral concentrations in groundwater have remained stable in SMVMA. Groundwater quality is generally better and with less fluctuation in the deep aquifer zone compared to the shallow zone. Total dissolved solids (TDS) in the Orcutt area ranges from 700 to 1,000 milligrams per liter (mg/L), with deeper wells showing lower concentrations (LSCE, 2021).

Historically, the Santa Maria Valley Groundwater Basin has been characterized by high nitrate concentrations, particularly in the vicinity of the City and Guadalupe (DWR, 2002). In 2020, nitrate in wells in the Orcutt area ranged from 5 to 44 mg/L, below the California primary maximum contaminant level (MCL) of 45 mg/L (as NO_3) (LSCE, 2021).

5.2. CURRENT AND PROJECTED BASIN WATER SUPPLY

Water supplies in SMVMA include groundwater, SWP water deliveries, SWP return flows, and Twitchell Dam supplies. Groundwater was the sole water supply for SMVMA before 1997. The Basin was adjudicated in 2008 and the Stipulation set forth terms and conditions for a physical solution addressing the overall management of Basin water resources (including rights to use groundwater), SWP water and associated return flows, developed groundwater yield resulting from the operation of Twitchell and Lopez reservoirs, use of Basin storage space, and the ongoing monitoring and management of these resources, consistent with common law water rights priorities. The Stipulation defines overlying rights for stipulating parties as “the prior and paramount right to use Native Groundwater.” Additional Appropriative Rights were defined for parties with rights to Native Groundwater “that is surplus to reasonable and beneficial uses of the Stipulating Parties that are Overlying Owners” (Stipulation, 2005). Since the adjudication, pumping has ranging from 85,778 AFY (1998) to 134,962 AFY (2008).

State Water Project deliveries vary based on hydrologic conditions state-wide. Deliveries have ranged from 1,766 AFY (2014) to 13,781 AFY (2006) since they began in 1997. In 2020, imported water represented 5 percent of total supplies to the SMVMA. However, imported water has served up to 13 percent (2006) of the total supply in wet years (LSCE, 2021).

5.2.1. Adjudication Status

The Stipulation delineates four specific criteria that, when all are met in any given year, define a condition of severe water shortage in the SMVMA; those four criteria are:

- chronic decline in groundwater levels (over period of not less than five years);
- groundwater levels below lowest recorded levels;
- groundwater level decline not caused by drought; and
- material increase in groundwater use during the five-year period.

While groundwater levels in the SMVMA have gradually declined overall since about 2002, they remain above the lowest recorded levels. Furthermore, this observed lowering of water levels in recent years is most likely caused by drought, as the last ten years have been marked by extreme drought.

6. PROJECT WATER SUPPLY

Golden State Water Company (GSWC) will be the retailer for the Project. The 2020 UWMP documents the existing sources of supply for the Orcutt area including SWP water, SWP return flows, groundwater pumping, and supplemental water from the City. The 2020 UWMP of the GSWC's Orcutt Service Area documents sufficient supply to meet current and future demands for the Orcutt area. However, as with demand, the Project was not explicitly included in the UWMP. While GSWC has already purchased some supplemental water from the City, additional supplemental water would need to be acquired. The water supply for the Orcutt Service Area in normal periods is detailed in **Table 5.**

GSWC plans to serve the Project and has provided a preliminary will serve letter (**Attachment A**). Because of the adjudication, any new GSWC customers must provide for supplemental water in the Basin. The City has adequate supplemental water from their existing allocation to provide for this Project when annexed. The City's requirements to serve supplemental water are found in **Attachment B**.

6.1. STATE WATER PROJECT

SWP water originates in the Feather River watershed in Northern California, is captured in Lake Oroville, and flows via the Sacramento-San Joaquin Delta, the California Aqueduct and the Coastal Branch Extension into Central Coast Water Authority (CCWA)'s treatment and conveyance facilities.

GSWC holds a subcontract with the CCWA to acquire SWP supplies for service in the GSWC Orcutt and Tanglewood service areas. GSWC has an SWP Table A allotment via CCWA of 550 AFY (consisting of 500 AF and a 50 acre-foot "drought buffer"). However, the allotment is subject to reductions in dry years. SWP deliveries to GSWC's Orcutt Service Area have ranged from 40 AFY to 520 AFY between 2016 and 2020.

Future deliveries are likely to be reduced, as documented in DWR's 2019 SWP Delivery Capability Report (DCR) (DWR, 2020). DWR estimates the long-term average reliability of the SWP at 58 percent through its planning horizon of 2045. Future SWP to GSWC Orcutt's area is projected as 58 percent of 550 AF or 319 AFY. **Table 5** shows the projected Table A SWP deliveries in normal years.

The DCR also estimates the expected reliability during single dry and multiple dry years. GSWC applied the reliability forecasting tin the DCR by using a percent of their Table A allocations based on dry and multiple year conditions:

- Single Dry Year/ Multi Dry Year 1 – 35 percent
- Multi Dry Year 2 – 5 percent
- Multi Dry Year 3 – 5 percent
- Multi Dry Year 4 – 20 percent
- Multi Dry Year 5 – 35 percent.

6.2. STATE WATER PROJECT RETURN FLOWS

The Stipulation includes details on rights that municipal water purveyors in the SMVMA have including rights to recover return flows from delivered SWP supplies (by pumping "commingled groundwater"). The rights are limited in time to recovery in the following year, and do not carry over or otherwise accumulate in the Basin. The Stipulation documents that GSWC has the rights to return flows of 45 percent of the delivered SWP.

Tables 5, 6, and **7** summarize SWP water supply for a normal year, a single dry year, and five consecutive dry years to 2045, respectively. As described in the GSWC UWMP, the single lowest historical SWP allocation occurred in 2014 at 5 percent and, with an abundance of caution, GSWC uses 5 percent of the 550-acre-foot allotment or 28 AFY as the single dry year allocation through 2045. Two such extreme drought years are also embedded in the multi-year droughts (dry years 2 and 3). SWP Allocation Return Flows are calculated as 45 percent of the SWP Table A Allocations in these tables.

6.3. GROUNDWATER

The Stipulation provides GSWC certain rights to water in the Basin. These rights include: a recognition of GSWC's highest historical use of native groundwater from the Basin, the right to recapture a preset portion of the return flows from GSWC's use of SWP in the Basin (see Section 6.2), and a 10,000 AFY share of the developed groundwater yield resulting from Twitchell Reservoir operations.

GSWC's highest historical use of native groundwater is based on their pumping in 1996, which was 9,960 AF. The pumping from GSWC over the past five years has ranged from 5,773 AFY to 6,788 AFY. However, GSWC retains its right to pump its entire allocation as seen in the distribution of future pumping estimates on **Tables 5**, **6**, and **7**, where the maximum historical amount of 9,960 AFY is assumed for all years. The Stipulation also establishes certain preset water shortage response measures in anticipation of reduced availability of groundwater.

6.4. SUPPLEMENTAL WATER – CITY OF SANTA MARIA

6.4.1. Existing Agreements

GSWC has existing agreements to obtain additional imported water from the City and uses SWP water wheeled through the City. In the UWMP, this is documented as 1,000 AFY of future City of Santa Maria supply and is shown in **Table 5** as Santa Maria Supplemental. There is no expected decrease in dry years (**Tables 6** and **7**)**.**

6.4.2. Additional Supplemental Water for the Project

Per the Stipulation, new GSWC customers must provide for supplemental water in the Basin. Water could be purchased from an existing water rights holder in the SMVMA. The City of

Santa Maria considers requests for supplemental water through an online application (City of Santa Maria, 2022). To request supplemental water, an applicant must submit:

- Can & Will Serve Letter (to be issued by Golden State Water Company)
- Signed Application including:
    - Project description
    - Quantity of water (in AF)
    - Name and mailing address of Developer
- Final Site Plan

If approved, an agreement to purchase supplemental water will be prepared and deposit is required to secure the water. As of February 24, 2022, the rate of supplemental water was $64,688 per AF as documented in **Attachment B**. The complete list of requirements to request supplemental water also is included in **Attachment B**.

The City has adequate supplemental water from their existing allocation to provide for this Project when annexed. Agreement details would need to be formalized and would occur after annexation.

7. COMPARISON OF SUPPLY AND DEMAND

The WSA must compare supply and demand for the groundwater basin where the Project is located. **Tables 5, 6** and **7** show water supply projections for the GSWC Orcutt Service Area in five-year increments to 2045 for normal, single-dry and multiple-dry years, respectively.

Tables 5, 6 and **7** are based on the assumptions that GSWC can purchase supplemental water from the City to serve the Project, that there will be no reduction in GSWC's groundwater rights, and that available supply is sufficient to meet the service area demand. Under the driest conditions (second and third multiple dry years) available supply would be 11,000 AFY, which is more than sufficient to serve the Project (104 AFY) and the water demand of the service area (6,776 AFY) in 2045.

8. CONCLUSIONS

Findings of this WSA are summarized below.

- The Richards Ranch Project is located in a currently unincorporated area of Santa Barbara County.
- The Project area encompasses 16.24 acres of commercial uses including a grocery store, restaurants, gas stations, and mini storage and 27.4 acres of residential area including apartments and townhomes.
- A WSA as per SB610 is required because of the extent of development.
- The Project area overlies an adjudicated basin (Santa Maria Groundwater Basin) and is within the Santa Maria Valley Management Area (SMVMA).
- GSWC will be the Project retailer and has provided a preliminary will serve letter in **Attachment A.**
- Water source options for the Project include local groundwater from GSWC and supplemental water from the City of Santa Maria.
- In general, water levels and water quality have been stable in the SMVMA.
- Sufficient water supplies are available to serve the Project's demands assuming successful negotiation between GSWC and the City for the provision of supplemental water for the Project.

Contingent upon successful negotiations among the Project proponent, Golden State Water Company, and the City of Santa Maria, sufficient supplies are available to supply the Project.

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TABLES

Table 1
Project Water Demands
Richards Ranch

Proposed Project Water Use	Water Duty Factor (AFY/unit)	Number of Units	Gross Demand (AFY)	Consumptive Use Factor	Water Demand (AFY)
400 Apartment Units at 20/acr	0.23	400	92	0.7	64.4
95 Townhomes 10/acr	0.25	95	23.75	0.7	16.63
10.06 acres of Retail/Grocer	3.3	1	3.3	0.7	2.31
4.14 acres of Retail/Food (180,338sf/1000sf)	0.11	180	20	0.7	13.89
2 acres of mini storage (87,120sf/1000sf)	0.11	87	10	0.7	6.71
TOTAL WATER USE			149.05	0.7	103.94

Source: Golden State Water Company 2022

Table 2
Climate Data

	Average Rainfall (inches)	Average ETo (inches)	Average Temperature (°F)
January	3.00	2.1	57.6
February	3.30	2.70	57.70
March	2.30	3.90	58.70
April	0.60	4.8	61.1
May	0.30	5.60	63.30
June	0.00	5.6	66
July	0.00	5.6	69.2
August	0.00	5.1	69.4
September	0.20	4.3	69.6
October	0.50	3.6	66.9
November	0.90	2.3	61.5
December	2.20	1.8	57.3
Average Calendar Year Total	**13.30**	**47.40**	**63.2**
Monthly Average	**1.11**	**3.95**	**63.2**

Source: GSWC Orcutt UWMP 2020 Figure 2-2

Table 3
Population Projections

	2020	2025	2030	2035	2040	2045
GSWC Orcutt Service Area	32,361	34,113	35,959	37,906	39,958	42,121

Source: GSWC Orcutt UWMP 2020 Table 2-1

Table 4
Water Demand in Orcutt Service Area (AFY)

Water Use Categories	2020	2025	2030	2035	2040	2045
Single Family	4,297	4,201	4,313	4,427	4,544	4,664
Multi Family	203	213	219	225	231	237
Commercial/Institutional	664	787	808	829	851	873
Industrial	1	1	1	1	1	1
Landscape	208	205	210	216	221	227
Other	0	0	0	0	0	0
Water Loss	1,108	698	716	735	754	774
Total Production/Demand	**5,608**	**6,105**	**6,267**	**6,433**	**6,602**	**6,776**

Source: GSWC Orcutt UWMP 2020 Table 4-5

Table 5
Water Supplies in Orcutt Service Area - Normal Year (AFY)

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	319	319	319	319	319
SWP Allocation Return Flows	144	144	144	144	144
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,423**	**11,423**	**11,423**	**11,423**	**11,423**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

Table 6
Water Supplies in Orcutt Service Area - Single Dry Year (AFY)

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	28	28	28	28	28
SWP Allocation Return Flows	12	12	12	12	12
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,000**	**11,000**	**11,000**	**11,000**	**11,000**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

Table 7
Water Supplies in Orcutt Service Area - Multiple Dry-Years (AFY)

Multiple Dry Year 1

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	193	193	193	193	193
SWP Allocation Return Flows	87	87	87	87	87
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,240**	**11,240**	**11,240**	**11,240**	**11,240**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

Multiple Dry Year 2

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	28	28	28	28	28
SWP Allocation Return Flows	12	12	12	12	12
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,000**	**11,000**	**11,000**	**11,000**	**11,000**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

Multiple Dry Year 3

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	28	28	28	28	28
SWP Allocation Return Flows	12	12	12	12	12
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,000**	**11,000**	**11,000**	**11,000**	**11,000**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

Multiple Dry Year 4

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	110	110	110	110	110
SWP Allocation Return Flows	50	50	50	50	50
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,120**	**11,120**	**11,120**	**11,120**	**11,120**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

Multiple Dry Year 5

Water Supply Source	2025	2030	2035	2040	2045
SWP Allocation Table A	193	193	193	193	193
SWP Allocation Return Flows	87	87	87	87	87
Groundwater	9,960	9,960	9,960	9,960	9,960
Santa Maria Supplemental	1,000	1,000	1,000	1,000	1,000
Total Supply	**11,240**	**11,240**	**11,240**	**11,240**	**11,240**

Source: GSWC Orcutt UWMP 2020 Tables 3-3,3-9,3-11, and 3-13

FIGURES

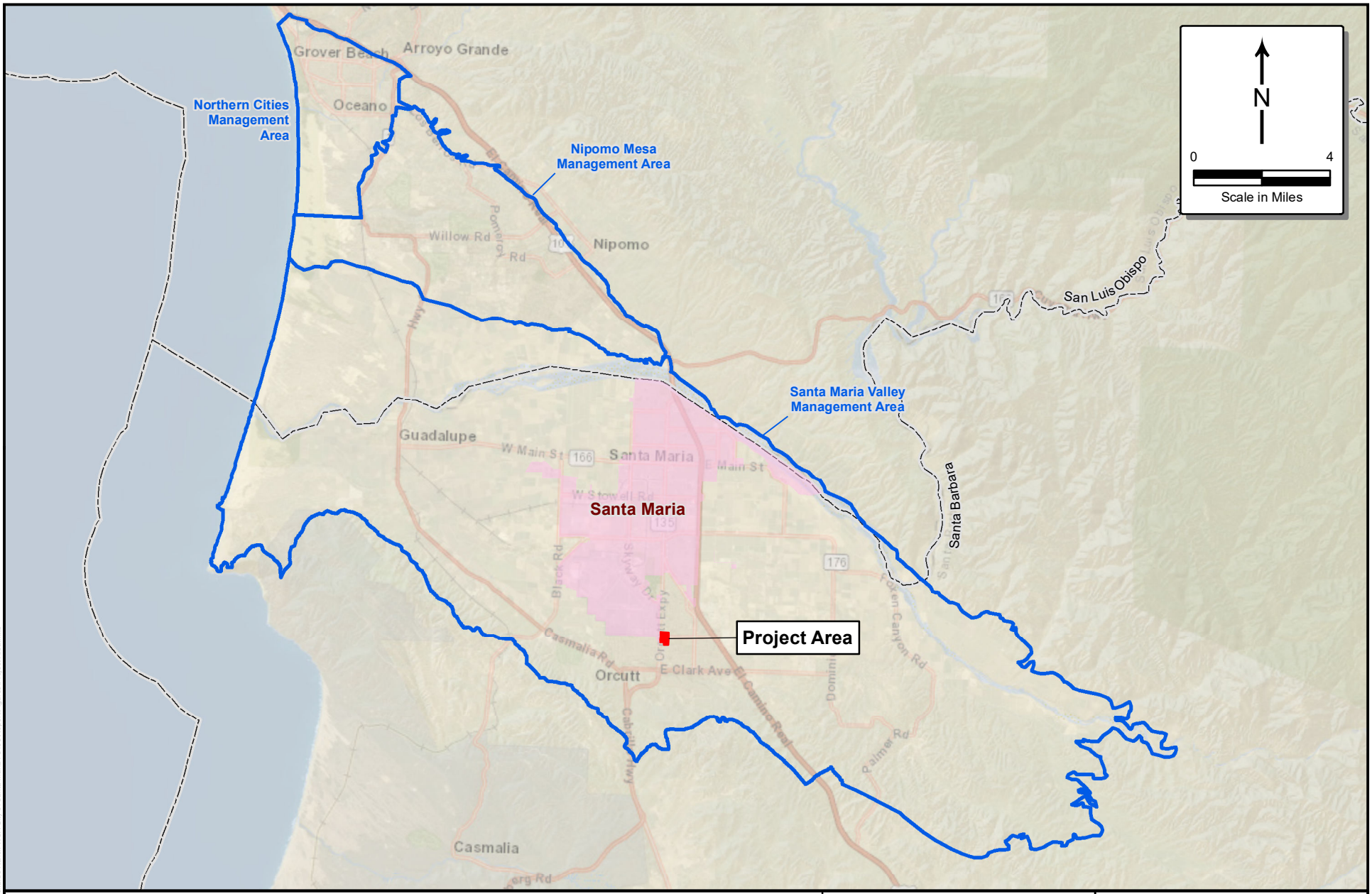


Figure 1
Santa Maria Groundwater Basin



0 75 150 300

1" = 150'-0" 11 X 17 SHEET

Source:
RRM Design Group, 01/10/2022

March 2022

TODD GROUNDWATER

Figure 2
Project Plan

Attachment A

Golden State Water Company

Can/Will Serve Letter

Golden State
Water Company
A Subsidiary of American States Water Company

March 23, 2022

Michael Stoltey
Richards Ranch LLC
893 Marsh St # 13914
San Luis Obispo, CA 93401

RE: PRELIMINARY CAN AND WILL SERVE LETTER
Key Site 26 – Richards Ranch APN 107-250-019 - 107-250-022
43.7-acre Commercial and Residential Development

This letter is to inform you that Golden State Water Company (GSWC) will be able to provide domestic and fire protection water service to the proposed 43.7-acre commercial and residential development known as Key Site 26 or Richard's Ranch located at APN 107-250-019 through APN 107-250-022 in GSWC's Orcutt System ("Project"), subject to the requirements listed below. As a general matter, GSWC's ability to extend water service to new customers is done pursuant California Public Utilities Commission's approved rules and regulations applicable to GSWC.

A. Water Supplies

Applicants requesting a new service connection, a new water meter or an increase in the size of their existing service connection and/or exiting water meter resulting in increased demand within the Santa Maria Customer Service Area, as defined on the Service Area Maps, must provide a source of supplemental water to offset the increased water demand, pursuant to the Court adopted Stipulation in *Santa Maria Valley Water Conservation District v City of Santa Maria, et al.* (and related actions), Lead Case No. CV 770214, Superior Court of the State California, County of Santa Clara, in January 2008, and Commission Decision No. 13-05-011. Where and when available, applicants may remit payment to a third party public agency a water resource demand offset fee in lieu of providing a source of supplemental water, provided such fee fully offsets the cost of, and results in the dedication to GSWC, a source of supplemental water sufficient to meet the water demands of the service requested. **The supplemental water requirement applies to this Project.**

It is the Applicant's responsibility to secure supplemental water to supply the Project, and to assign that supplemental water to GSWC for delivery. This letter DOES NOT provide the Applicant with a commitment from GSWC to provide a supplemental water supply to the Project.

GSWC does not currently have available any additional supplemental water supply sources that satisfy the County's supplemental water requirement. The applicant can purchase supplemental water through the City of Santa Maria. Once the Applicant has entered into an agreement with the City of Santa Maria for the purchase of supplemental water to satisfy the County's supplemental water requirement, GSWC will assume the responsibility to take delivery of the supplemental water obtained from the City. GSWC will prepare and provide the necessary documents, once the Applicant provides to GSWC a copy of its agreement with the City of Santa Maria.

B. Special Facilities

Special facilities may be required to provide water service and fire protection to the Project. Special facilities are specific system upgrades that are required to provide water service based on the Project's impact to the GSWC's existing system. Special facilities might include new booster station, storage, well, or other tangible infrastructure necessary to ensure adequate water service and fire flow protection. A main extension contract will be required to provide water service for this project. A more detailed analysis of the Project impact on the existing system and the need and identification of additional special facilities will be determined when an application and development drawings are submitted to:

Golden State Water Company
New Business Department
160 Via Verde Dr., Suite 100
San Dimas, CA 91773
or to: Heather.Cole@gswater.com

All costs associated with improvements to or new main extensions, water supply, water storage and any additional water appurtenances will be paid by the applicant and contributed to GSWC without refund unless otherwise noted in written agreements. Upon completion of proper arrangements for construction of special facilities and providing suitable water supplies, GSWC will provide water service to the Project, under the same terms and conditions as its existing customers. At that time, GSWC will issue a formal CWSL for the Project.

To ensure the ongoing integrity of the GSWC local groundwater supply, as a condition of service, GSWC will require the dedication to GSWC of any local groundwater rights associated with the Project property. GSWC will provide the necessary documentation to effect this dedication concurrent with the execution of an agreement regarding the construction of special facilities associated with the Project.

This Can and Will Serve commitment expires one year from the date of this letter. If construction of the Project has not started within one year, a time extension may be requested. Such time extension will be subject to any requirements in place at the

time of the request.

Sincerely,

Larry Dees, P.E.
Operations Engineer
Coastal/Northern District

cc: Mark Zimmer, GSWC
Mike Babb, GSWC

Attachment B

City of Santa Maria

Supplemental Water

CITY OF SANTA MARIA
UTILITIES DEPARTMENT
Business Services • Regulatory Compliance
Solid Waste Services • Water Resources

2065 EAST MAIN STREET • SANTA MARIA, CALIFORNIA 93454-8026 • 805-925-0951, EXT. 7270 • FAX 805-928-7240

SUPPLEMENTAL WATER PURCHASE REQUIREMENTS

Supplemental water is required for new development projects served by Golden State Water Company. To request supplemental water, submit the following items to the City of Santa Maria:

- **A.** Can & Will Serve Letter issued by Golden State Water Company;
- **B.** Signed Application* from the Individual or Developer requesting to purchase supplemental water from the City that contains the following:
  - **(1)** Project description, address, and APN;
  - **(2)** Quantity* of supplemental water required in acre-feet (AF);
  - **(3)** Full Legal Name of the Individual or Developer who will enter into the agreement to purchase supplemental water;
    - **i.** If **NOT** an Individual, the Developer must also:
      1. Submit a corporate resolution or other legal document authorizing the signer to enter into agreements; and
      2. Specify the type of company (Corporation, S-Corporation, etc.) and State where the company formed.
  - **(4)** Mailing Address and Contact Name for mailing the Agreement and Correspondence along with a contact phone number and email address; and
- **C.** Attachment of the Final Site Plan for the project.

After receipt of the above, the City of Santa Maria will consider the sale of supplemental water for the project. If approved, an agreement to purchase supplemental water will be sent to the Individual or Developer for execution in the presence of a notary. That agreement must be returned to the City of Santa Maria with a minimum 10% deposit to reserve the supplemental water for the project. The only payment form accepted for supplemental water is a cashier's check.

CURRENT RATE FOR SUPPLEMENTAL WATER: $64,688 PER AF

All agreements are subject to then-current rates at the time the agreement is executed.

The balance of the purchase amount (total amount due less deposit) must be paid within three years of the effective date of the agreement, and in any event, **prior to Golden State Water Company setting new or upsizing existing water service**, *before* the final map is recorded, and *prior* to issuance of the final land use permit.

For more information, or to submit a request for supplemental water:

Website:	http://bit.ly/CSMSuppWtrPurch
Mailing Address:	City of Santa Maria, Utilities Department, 2065 E. Main St., Santa Maria, CA 93454
More Information:	Mgt Analyst Michelle Ruiz, mruiz@cityofsantamaria.org, (805) 925-0951 ext. 7266

City of Santa Maria
UTILITIES DEPARTMENT

APPLICATION TO PURCHASE SUPPLEMENTAL WATER FOR NEW URBAN USE

Directions: Legibly complete all fields (print), sign, and submit with required attachments* to City of Santa Maria Utilities Department, 2065 East Main Street, Santa Maria, CA 93454.

REQUESTER INFORMATION

Legal name	
Email address	
Contact phone number	

PROJECT INFORMATION

Residential or non-residential use?		
Brief description of project		
Physical address		
Assessor's parcel number		
Quantity in acre-feet of supplemental water required for project		
Can & Will Serve Letter* from Golden State Water Company ***attached***?	☐ Yes	☐ No
Approximate size of project in square feet		
Project site plans* ***attached***?	☐ Yes	☐ No

CONTRACT INFORMATION

Legal name and titles of party(ies) who will enter into agreement		
Relationship to requester		
Name and mailing address to send agreement and related correspondence		
Contact phone number		
Fax number		
Email address		
If a company:		
Specify type (Corporation, S-Corporation, etc.) and State where company formed		
Document** authorizing above party(ies) to enter into contracts ***attached***?	☐ Yes	☐ No

**Developers or companies entering into an agreement are required to submit an authorizing document (i.e., corporate resolution or letter signed by the Board). *Property owners and individuals are not required to submit this attachment.*

Requester Signature

Date Signed